



Blackstone River Valley National Historical Park Draft General Management Plan and Environmental Assessment

September 2023



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A GUIDE TO THIS DOCUMENT

PART I: DRAFT GENERAL MANAGEMENT PLAN

This general management plan sets the framework for the National Park Service to manage Blackstone River Valley National Historical Park. This plan is organized into three chapters:

- **Chapter 1: Introduction to the Plan** describes the park, the need for the plan, and the general management plan's relationship to the park planning portfolio.
- **Chapter 2: Park Management Vision** outlines the general management direction for the park, including desired conditions and management areas. Desired conditions are defined as statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area.
- **Chapter 3: Management Strategies and Actions** identifies management strategies and actions to achieve and maintain desired conditions for the park.

PART II: ENVIRONMENTAL ASSESSMENT

The environmental assessment analyzes the environmental impacts associated with management actions subject to National Environmental Policy Act compliance. The environmental assessment is organized into four chapters:

- **Chapter 1: Purpose and Need** articulates a purpose and need for action and describes the project area.
- **Chapter 2: Proposed Action** presents the National Park Service's proposed action.
- **Chapter 3: Impacts on Park Resources** discusses current and future conditions of the environment and assesses the effects to resources that are present and that could be impacted by the proposed action.
- **Chapter 4: Consultation and Coordination** lists agencies and persons consulted during development of the plan and the NEPA process.

Appendixes: The appendixes provide supporting information, analyses, and management resources for the general management plan and environmental assessment:

- Appendix A: Foundation Elements
- Appendix B: Indicators, Thresholds, and Visitor Capacity
- Appendix C: References

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PART 1

DRAFT GENERAL MANAGEMENT PLAN



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Chapter 1

Introduction to the Plan



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CHAPTER 1: INTRODUCTION TO THE PLAN

NATIONAL PARK SERVICE GENERAL MANAGEMENT PLANNING

Rationale for General Management Planning

The National Parks and Recreation Act of 1978 and National Park Service (NPS) *Management Policies 2006* require each unit of the national park system to have a general management plan (GMP). Director's Order 2: *Park Planning* (2021) specifies that a general management plan refers to (1) a stand-alone general management plan or (2) the planning documents in a park's planning portfolio that collectively meet the statutory requirements for a general management plan. These statutory requirements, as described in the National Parks and Recreation Act, include the following:

- measures for resource preservation
- indications of the types and general intensities of development (visitor circulation and transportation patterns, systems, and modes), including general locations, timing of implementation, and anticipated costs
- identification and implementation of commitments for visitor carrying capacities
- indications of potential boundary modifications and the reasons for the modifications

The purpose of general management planning is to ensure that a national park system unit has a clearly defined direction for resource preservation and visitor use to best achieve the NPS mandate to preserve resources unimpaired for the enjoyment, education, and inspiration of future generations. In addition, general management planning makes the National Park Service more effective, collaborative, and accountable by:

- providing a balance between continuity and adaptability in decision making by defining the desired conditions to be achieved and maintained in a park unit and providing a touchstone that allows NPS managers and staff to adapt their actions to changing situations, while staying focused on what is most important about the park unit.
- analyzing the park unit in relation to the surrounding ecosystem, cultural setting, and community, which helps NPS managers and staff understand how the park unit can interrelate with neighbors and others in ways that are ecologically, socially, and economically sustainable. Decisions made within such a larger context are more likely to be successful over time.
- affording everyone who has a stake in decisions affecting a park unit an opportunity to be involved in the planning process and to understand the decisions that are made. Park units are often the focus of intense public interest and public involvement throughout the planning process. Involving all interested parties in GMP development provides opportunities for NPS managers and staff to interact with the public to learn about their concerns, expectations, and values and to share

information about the park unit's purpose and significance and the opportunities and constraints for management of park lands.

The ultimate outcome of general management planning for park units is an agreement among the National Park Service, its partners, and the public on why each area is managed as part of the national park system, what resource conditions and visitor experiences should exist, and how those conditions can best be achieved and maintained over time.

General management plans are intended to be long-term documents that establish and articulate a management philosophy and framework for decision making and problem solving in national park system units. General management plans usually provide guidance for 15 to 20 years.

Blackstone River Valley National Historical Park was established by Congress in 2014 to help preserve, protect, and interpret nationally significant resources that exemplify the industrial heritage of the larger Blackstone River Valley. This document, along with the previously published foundation document and other plans, collectively comprise the park's planning portfolio meeting the statutory requirements for the general management plan.

Other Laws and Policies Related to NPS Management

This section discusses some of the most pertinent servicewide laws and policies related to planning and managing the park. Importantly, that the park must comply with these laws and policies regardless of this GMP planning effort.

The National Park Service must comply with laws and policies to protect environmental quality and resources, preserve cultural resources, and provide public services. Applicable laws and policies related to resource management include the Clean Water Act of 1972; the Endangered Species Act of 1973; the National Historic Preservation Act of 1966, as amended; the Native American Graves Protection and Repatriation Act of 1990; and Executive Order 11990, "Protection of Wetlands." Laws and policies related to public services and access include the Americans with Disabilities Act of 1990, the Architectural Barriers Act Accessibility Act Standards, the Final Outdoor Developed Area Guidelines, the Rehabilitation Act of 1973, and the Fair Housing Act.

Some of these laws and policies are applicable solely or primarily to units of the national park system, including the 1916 Organic Act that created the National Park Service; the General Authorities Act of 1970; the act of March 27, 1978, relating to the management of the national park system; and the National Parks Omnibus Management Act of 1998. The NPS Organic Act (16 United States Code [USC] 1) provides the central management direction for all units of the national park system:

[P]romote and regulate the use of the Federal areas known as national parks, monuments, and reservations. . . by such means and measure as to 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 wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The national park system 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 inter-related 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 system. Further, amendments state that NPS management of park units should not “derogate . . . the purposes and values for which these various areas have been established.”

The National Park Service also has established policies for all units under its stewardship. A guidance manual titled *NPS Management Policies 2006* identifies and explains these policies. This general management plan incorporates and complies with the provisions of these mandates and policies.

Compliance with the National Environmental Policy Act

This general management plan is subject to the requirements of the National Environmental Policy Act (NEPA), implementing regulations found in 40 Code of Federal Regulations (CFR) Parts 1500–1508; Director’s Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-Making* (NPS 2011); and the NPS NEPA Handbook (NPS 2015).

What Is in This Plan

This plan includes high-level guidance for Blackstone River National Historical Park. The plan is broken into three primary components: introduction to the plan, park management vision, and management strategies and actions. Additionally, indicators, thresholds, and visitor capacity are addressed in appendix B.

Chapter 1: Introduction to the Plan – This section provides an overview of the park, its resources, and current conditions, as well as the purpose and need for the planning effort. This section also describes how this plan meets the statutory requirements of a general management plan.

Chapter 2: General Management Direction – This section provides the vision for future management and the general management direction using desired conditions and zoning. This section addresses the question of what the National Park Service is managing and where the agency is managing for those desired conditions.

Chapter 3: Management Strategies and Actions – This section describes high-level management strategies that may be applied to achieve desired conditions and the management vision laid out in chapter 2.

Collectively, these sections, in addition to the appendixes, provide the high-level management direction from which the park will tier future planning and compliance.

BACKGROUND AND OVERVIEW

Park Purpose and Significance

The park purpose statement conveys the reasons that the area was set aside as a national park. Grounded in an analysis of park legislation and legislative history, purpose statements also provide primary criteria against which the appropriateness of plan recommendations, operational decisions, and actions are tested.

The purpose of Blackstone River Valley National Historical Park is as follows:

The purpose of Blackstone River Valley National Historical Park is to preserve, protect, and interpret the nationally significant historical and cultural resources of the Blackstone River Valley including lands, waterways, and structures that exemplify our nation's industrial heritage, and to support and enhance the network of partners in the protection, management, and operation of related resources and facilities throughout the John H. Chafee Blackstone River Valley National Heritage Corridor.

Significance statements capture the essence of the national park system unit's importance to the nation's natural and cultural heritage. They describe the unit's distinctiveness and describe why an area is important within regional, national, and global contexts. These statements help managers focus their efforts and limited funding on protection and enjoyment of attributes that are directly related to the purpose of the park unit.

The following significance statements have been identified for Blackstone River Valley National Historical Park.

- The historic structures and waterways woven throughout the urban and rural landscape of the Blackstone River Valley, particularly the survival of representative elements of entire 18th- and 19th-century production systems, are an outstanding example of an industrialized landscape developed over a period of 150 years. The national historical park is part of a larger cultural landscape that makes up Blackstone River Valley National Heritage Corridor. The corridor, approximately 600 square miles, provides the context in which the story of the American Industrial Revolution is told.

- Old Slater Mill, the first successful water-powered cotton-spinning mill in the United States, together with the hundreds of 19th-century factories and their associated mill villages located throughout the Blackstone River Valley, collectively illustrate the influence of Samuel Slater and the creation and evolution of the Rhode Island System of Manufacture, a dynamic force in American industrial history from 1790 to 1950.
- Slatersville was the first planned mill village in the United States and the first example of a Rhode Island System of Manufacture village. Its component parts and spatial organization, including housing, civic amenities, and commercial resources clustered around a factory and a power canal system, were duplicated throughout the Blackstone River Valley, and served as a model for industrial development across the nation. The Rhode Island System of Manufacture focused on hiring entire families to work in the mills, and usually had a single owner, or a small group of owners, as opposed to the corporate ownership and mill girl boarding house style of the Waltham System.
- The Blackstone River Valley has served as an incubator for technological innovation from the time Samuel Slater arrived in Rhode Island with ideas for a textile factory through today. Inventions designed and created within the Blackstone River Valley include the screw-cutting lathes of the Wilkinson machine shops in Pawtucket, the cotton-processing equipment developed by the Whitin Machine Works, and the Draper looms made in Hopedale used in textile mills across the nation. These and many other innovations from workshops across the Blackstone River Valley helped drive the industrialization of America.
- The Blackstone River and its tributaries powered mills and factories launching the industrialization of the nation. The Blackstone River Valley, with waterpower systems including dams, reservoirs, and power canals, became a “managed river network.” These engineered resources that powered the mills continue to be one of the most visible elements of the Blackstone River Valley’s industrial landscape, and now are part of the region’s recreational resources.

Park Description

Blackstone River Valley National Historical Park was established by Congress on December 19, 2014 (PL 113-291). The creation of the new national historical park followed the designation of the John H. Chafee Blackstone River Valley National Heritage Corridor in 1986 (referred to as the National Heritage Corridor). The park was created to help preserve, protect, and interpret nationally significant resources that exemplify the industrial heritage of the larger Blackstone River Valley. The National Heritage Corridor provides a broad context that is critical to understanding the region and its place in history. The new national historical park, with multiple partners, preserves resources and tells stories of the evolution of the Blackstone River Valley and its people.

Blackstone River Valley National Historical Park includes six geographically dispersed sites in Massachusetts and Rhode Island, collectively encompassing approximately 202 acres of

significant historic properties (figure 1). The park's current legal boundary, established by Secretary of the Interior Deb Haaland on July 27, 2021, includes the following:

- Old Slater Mill Complex, Pawtucket, Rhode Island

The National Park Service owns and manages 3.06 acres of the 4.23-acre Old Slater Mill National Historic Landmark District in Pawtucket, Rhode Island.

- Blackstone River State Park, Lincoln, Rhode Island

The National Park Service holds a conservation and preservation easement over 85 acres of the 150 total acres within the Blackstone River State Park in Lincoln, Rhode Island.

Per the park's authorizing legislation, section 3031(c)(2)(B), the park's boundary includes other sites and resources.

- Four local historic districts owned and managed by local governments that partner with the National Park Service through general agreements:

- Ashton Historic District in Cumberland, Rhode Island
- Little Red Shop Local Historic District in Hopedale, Massachusetts
- Slatersville Historic District in North Smithfield, Rhode Island
- Whitinsville-Downton Crossroads Historic District in Northbridge, Massachusetts

- The Blackstone River and its tributaries (limited NPS role and authorities)

The majority of the river and tributaries spanning more than 540 square miles in Massachusetts and Rhode Island are not owned or managed by the National Park Service. Numerous other federal, state, and local government agencies; Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations; and other stakeholders operate with the appropriate authority and jurisdiction to undertake a variety of broad and focused river management activities along the entire Blackstone River and its tributaries. National Park Service management along the Blackstone River is focused on land based historic cultural resources along two stretches of the river directly adjacent to the locations where the National Park Service holds a property interest. At these two sites, the National Park Service partners cooperatively within its authority and jurisdiction to support river management activities that are led, implemented, and funded by other government agencies and local stakeholders:

- Old Slater Mill Complex within the Old Slater Mill National Historic Landmark District in Pawtucket, Rhode Island, where the NPS boundary is adjacent to a stretch of the river approximately 0.15 miles in length

- Blackstone River State Park in Lincoln, Rhode Island, where the National Park Service's 85-acre easement area is adjacent to a stretch of the river approximately 0.6 miles in length
- Blackstone Canal (1 mile of canal in Lincoln, Rhode Island)
 - Originally extending 45 miles from Worcester, Massachusetts, to Providence, Rhode Island, the majority of the remaining historic canal and canal walls is not owned or managed by the National Park Service. National Park Service management of the historic canal is focused on the approximately 0.6 total miles of canal within the National Park Service's 85-acre easement area at Blackstone River State Park in Lincoln, Rhode Island.

The National Park Service will work in partnership to support resource preservation and visitor enjoyment at partner-owned sites through formal agreements. The success of these partnerships is critical to the park's ability to meet its legislated purposes.

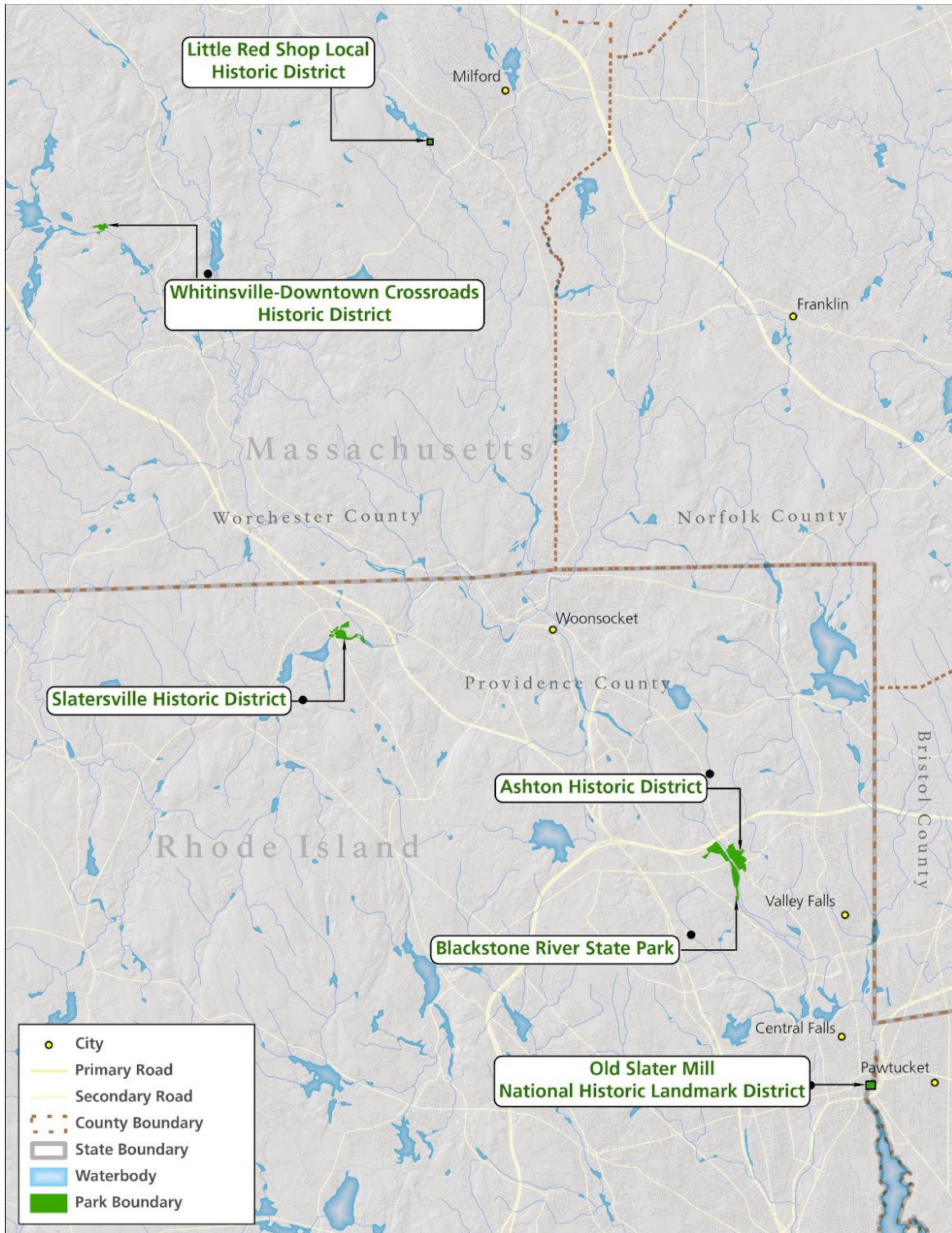


FIGURE 1. BLACKSTONE RIVER VALLEY NATIONAL HISTORICAL PARK AND THE SIX SITES WITHIN THE PARK BOUNDARY

Old Slater Mill National Historic Landmark District

This site encompasses the 4.23-acre Old Slater Mill National Historic Landmark District in Pawtucket, Rhode Island (figure 2). The core of the site preserves three historic buildings: Samuel Slater's 1793 mill, Oziel and David Wilkinson's 1810–1811 mill, and Sylvanus Brown's 1758 cottage (moved to the site in 1972). In Old Slater Mill and Wilkinson Mill, historic textile and precision manufacturing machinery invented or used on-site are on exhibit. The site also includes Hodgson-Rotary Park and a parking lot on the west side of the river and Slater Mill Park on the east side of the Blackstone River, as well as the Slater Mill Dam. The National Park Service currently owns and manages the 3.06 acres of land on the west side of the Blackstone River, hereafter referred to as "Old Slater Mill Historic Site." This site is the only one out of the six that has NPS fee simple ownership.



FIGURE 2. OLD SLATER MILL NATIONAL HISTORIC LANDMARK DISTRICT IN PAWTUCKET, RHODE ISLAND. THE NATIONAL PARK SERVICE CURRENTLY OWNS AND MANAGES THE 3.06 ACRES OF LAND ON THE WEST SIDE OF THE BLACKSTONE RIVER, LABELED AS "OLD SLATER MILL HISTORIC SITE."

Blackstone River State Park

This site includes 85 acres of Blackstone River State Park, in Lincoln, Rhode Island (figure 3). The state park is owned by the state of Rhode Island and managed by the Rhode Island Department of Environmental Management. The National Park Service has a conservation and preservation easement on these 85 acres. The purpose of the easement is to prevent any use or change of the property that would significantly impair or interfere with the property's conservation, recreation, and preservation values and to allow the National Park Service to manage the property for purposes consistent with the NPS Organic Act. The National Park Service works in partnership with the Rhode Island Department of Environmental Management to provide for visitor enjoyment at this site. The easement includes the Captain Wilbur Kelly House, a replica barn, a 1-mile section of the Blackstone Canal, and an approximately 2-mile segment of the Blackstone River State Bikeway. The easement also includes part of Old Ashton Historic District, which is listed in the National Register of Historic Places. The Old Ashton Historic District includes the Kelly House and the Blackstone Canal.



FIGURE 3. BLACKSTONE RIVER STATE PARK IN LINCOLN, RHODE ISLAND. THE NATIONAL PARK SERVICE HAS A PRESERVATION AND CONSERVATION EASEMENT ON 85 ACRES OF THE STATE PARK, LABELED WITH PURPLE HASH MARKS.

Ashton Historic District

This site encompasses Ashton Historic District, a 66-acre local historic district in Cumberland, Rhode Island (figure 4). The site includes a mixture of privately and publicly owned parcels, and it is managed as a local historic district under municipal law. The entire local historic district is also listed in the National Register of Historic Places. The local historic district is divided between the “lower village” and the “upper village.” The lower village occupies land on the east bank of the Blackstone River and includes the mill complex, brick workers’ housing, a dam, and a rail line. The focal point of the village is the Ashton Mill, a large brick building constructed in 1867. Ancillary mill structures include a 1-1/2-story brick building with a mansard roof (originally the mill office) and a powerhouse that sits on the riverbank. The upper village is organized along a roughly half-mile segment of Mendon Road (Route 122) and a portion of Scott Road and is situated at a dramatically higher elevation, overlooking the river. Henceforth, all references to “Ashton Historic District” refer to the local historic district. The National Park Service has a general agreement with the Town of Cumberland, Rhode Island, that formalizes how both entities will work in partnership to fulfill the park’s purpose. The National Park Service does not have the authority or jurisdiction to modify local land use regulations or affect land ownership.



FIGURE 4. ASHTON HISTORIC DISTRICT, A 66-ACRE LOCAL HISTORIC DISTRICT IN CUMBERLAND, RHODE ISLAND. THE LOCAL HISTORIC DISTRICT (OUTLINED IN PURPLE) IS COLOCATED WITH ASHTON HISTORIC DISTRICT (OUTLINED IN ORANGE), LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES. THERE IS NO NPS FEE SIMPLE OWNERSHIP WITHIN THE LOCAL HISTORIC DISTRICT.

Little Red Shop Local Historic District

This site encompasses Little Red Shop Local Historic District, a 0.3-acre local historic district in Hopedale, Massachusetts (figure 5). The site is owned by the Town of Hopedale and managed as a local historic district under municipal law. It is part of the larger Hopedale Village Historic District listed in the National Register of Historic Places, which encompasses about 800 acres and almost 800 resources. Hopedale Village is the civic, residential, and industrial center of the town of Hopedale, which was established as a utopian community in the 1840s but soon transformed into a model company town under the management of the Draper family. The site contains the Little Red Shop, the Drapers' 1843 factory building. The National Park Service has a general agreement with the Town of Hopedale, Massachusetts, that formalizes how both entities will work in partnership to fulfill the park's purpose. The National Park Service does not have the authority or jurisdiction to modify local land use regulations or affect land ownership.



FIGURE 5. LITTLE RED SHOP LOCAL HISTORIC DISTRICT, A 0.3-ACRE LOCAL HISTORIC DISTRICT IN HOPEDALE, MASSACHUSETTS. THE LOCAL HISTORIC DISTRICT (OUTLINED IN GREEN) IS PART OF THE LARGER HOPEDALE VILLAGE HISTORIC DISTRICT (OUTLINED IN ORANGE) LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES. THERE IS NO NPS FEE SIMPLE OWNERSHIP WITHIN THE LOCAL HISTORIC DISTRICT.

Slatersville Historic District

This site encompasses Slatersville Historic District, a 31.6-acre local historic district in North Smithfield, Rhode Island (figure 6). The site includes a mixture of privately and publicly owned parcels, and it is managed as a local historic district under municipal law. Parts of the local historic district are within the larger Slatersville Historic District listed in the National Register of Historic Places, which encompasses an approximately 130-acre area that radiates from the intersection of Main Street, North Main Street, Green Street, and Church Street. A variety of building types are at the center or hub of the national historic district, including the mill complex; a reservoir; religious, commercial, and civic buildings; and a limited number of residences (“Slatersville Historic District” refers to the local historic district from this point forward). The National Park Service has a general agreement with the Town of North Smithfield, Rhode Island, that formalizes how both entities will work in partnership to fulfill the park’s purpose. The National Park Service does not have the authority or jurisdiction to modify local land use regulations or affect land ownership.

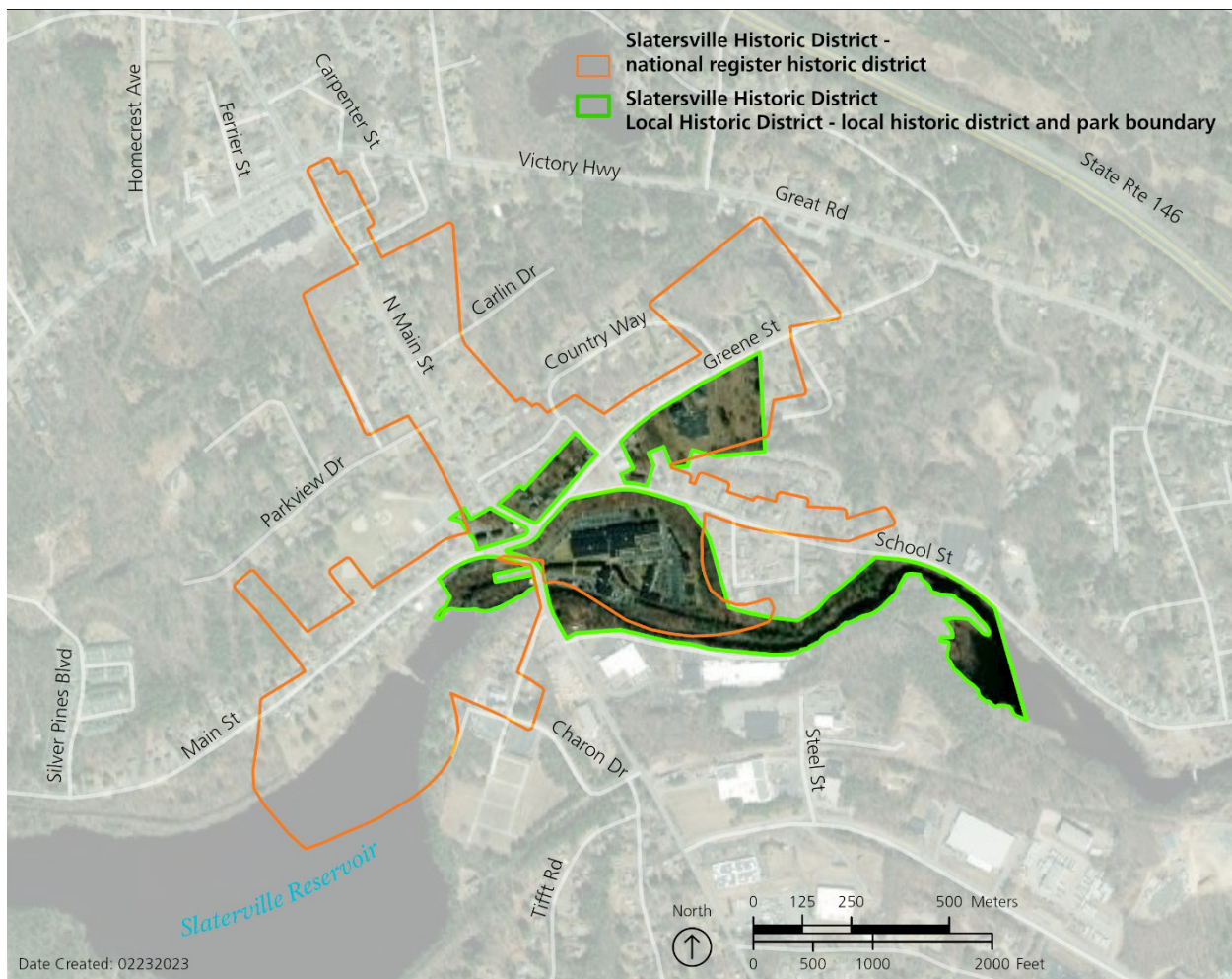


FIGURE 6. SLATERSVILLE HISTORIC DISTRICT, A 31.6-ACRE LOCAL HISTORIC DISTRICT IN NORTH SMITHFIELD, RHODE ISLAND. PARTS OF THE LOCAL HISTORIC DISTRICT (OUTLINED IN GREEN) ARE WITHIN THE LARGER SLATERSVILLE HISTORIC DISTRICT (OUTLINED IN ORANGE) LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES. THERE IS NO NPS FEE SIMPLE OWNERSHIP WITHIN THE LOCAL HISTORIC DISTRICT.

Whitinsville-Downtown Crossroads Historic District

This site encompasses Whitinsville-Downtown Crossroads Historic District, a 15.3-acre local historic district in Northbridge, Massachusetts (figure 7). The site contains a mixture of privately and publicly owned parcels, and it is managed as a local historic district under municipal law. The site is part of the larger Whitinsville Historic District in the National Register of Historic Places, which encompasses about 250 acres and approximately 350 structures built over the course of a century. In addition to the mills, the national register historic district contains hundreds of dwellings, built for mill owners as well as mill workers, and a distinctive assemblage of company-sponsored civic facilities. The National Park Service has a general agreement with the Town of Northbridge, Massachusetts, that formalizes how both entities will work in partnership to fulfill the park's purpose. The National Park Service does not have the authority or jurisdiction to modify local land use regulations or affect land ownership.

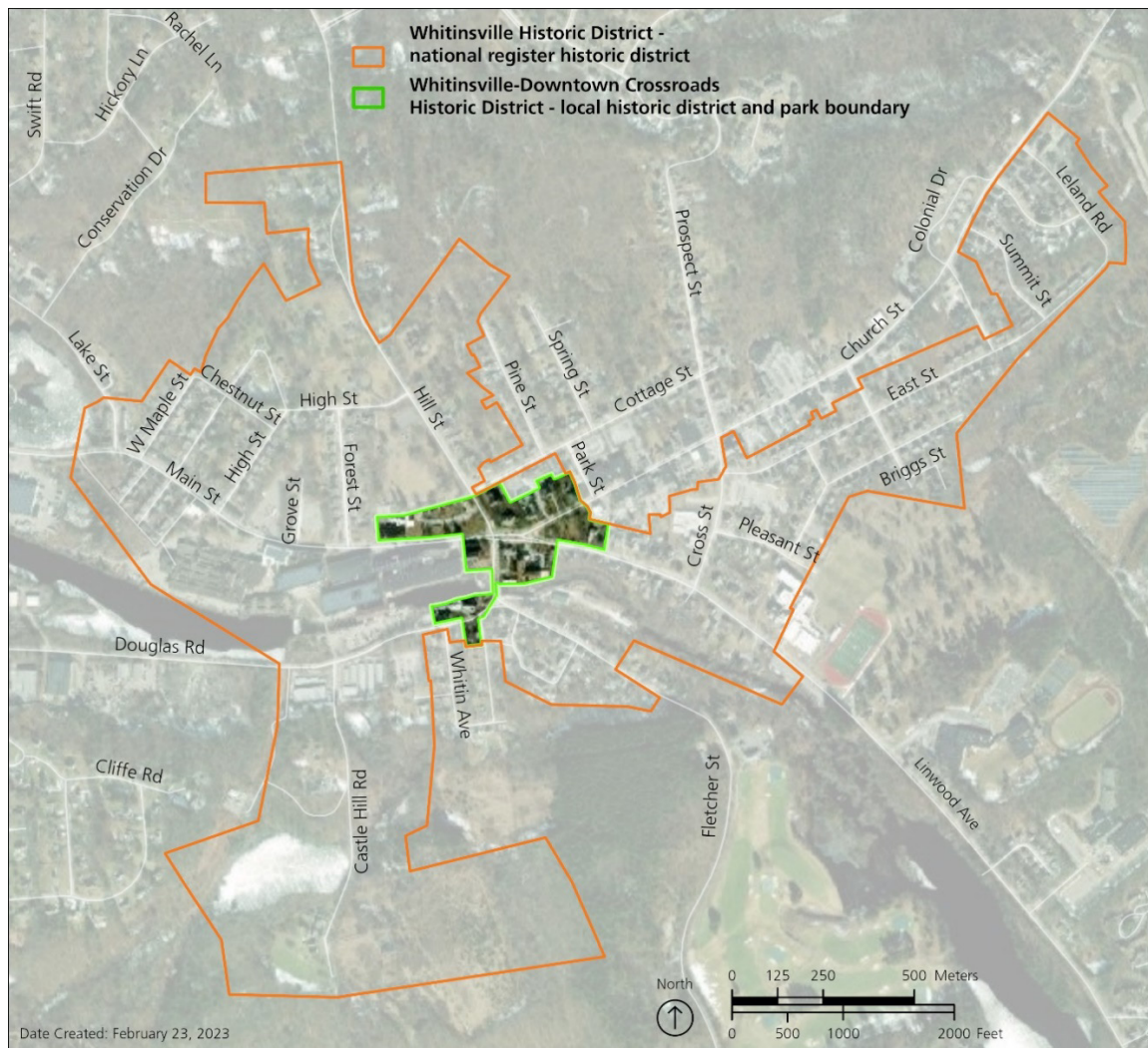


FIGURE 7. WHITINSVILLE-DOWNTOWN CROSSROADS HISTORIC DISTRICT, A 15.3-ACRE LOCAL HISTORIC DISTRICT IN NORTHBRIDGE, MASSACHUSETTS. THE LOCAL HISTORIC DISTRICT (OUTLINED IN GREEN) IS PART OF THE LARGER WHITINSVILLE HISTORIC DISTRICT (OUTLINED IN ORANGE) LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES. THERE IS NO NPS FEE SIMPLE OWNERSHIP WITHIN THE LOCAL HISTORIC DISTRICT.

Foundation Elements

The *Blackstone River Valley National Historical Park Foundation Document* (NPS 2020) provides the underlying basis for the general management plan and includes core components that typically do not change over time. These components are the legislated purpose of the park unit, the significance the unit holds, the focus of the unit's interpretation (interpretive themes) and education program, and the unit's fundamental resources and values. In addition, the foundation document contains dynamic components (e.g., special mandates and administrative commitments, key issues and associated planning and data needs) that can be updated. The special mandates and administrative commitments identify the legal requirements that must be followed in the management of the park unit. A foundation document can be used in all aspects of park management to ensure that the most important objectives are accomplished before turning to items that are also important but not directly critical to achieving the park purpose and maintaining its significance.

Access the full foundation document at <https://www.nps.gov/blrv/learn/management/foundation-document.htm>. Appendix A provides the following sections of the foundation document, as they contain information pertinent to the general management plan:

- park purpose and significance statements
- fundamental resources and values
- special mandates and administrative commitments

PURPOSE AND NEED FOR THE GENERAL MANAGEMENT PLAN

The National Park Service has prepared this general management plan to meet the requirements of Public Law 113-91, which enabled the establishment of Blackstone River Valley National Historical Park, the National Parks and Recreation Act of 1978, and NPS *Management Policies 2006*. The general management plan builds on the park legislation, established resolutions, laws, and policies, and on the park's foundation document to develop a management vision for the national historical park.

Through sustained civic engagement with the public, the general management plan provides a management vision based on a shared understanding of the conditions and level of development that will best achieve the park's purpose and conserve its fundamental resources and values. A general management plan is comprehensive and parkwide and looks holistically at critical issues, such as connected conservation outside of park boundaries, climate change adaptation and sustainability, and the socioeconomic environment, and addresses how the park will provide inclusive and equitable access and opportunities.

The purposes of this general management plan for Blackstone River Valley National Historical Park are as follows:

- Clarify the purpose, significance, and special mandates of Blackstone River Valley National Historical Park.

- Articulate the management vision for the park.
- Define resource conditions and visitor uses and experiences to be achieved in the national historical park, taking into considerations realistic funding, staffing, and environmental trends.
- Examine current and potential visitor and resource management opportunities and develop long-term strategies for providing access, connecting visitors to key experiences, managing use, and improving park sustainability.
- 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, and how to manage visitor use.
- Define programmatic direction for future facility investment at the park, setting realistic sideboards to guide the park on a financially sustainable path.

SCOPE

This general management plan articulates the overarching management vision for the national historical park and addresses the statutory requirements at a programmatic level; the plan does not describe how particular programs or projects should be implemented. Specifics about the scope of the plan are articulated in the following sections.

PLANNING ISSUES AND OPPORTUNITIES

The public; NPS staff; Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations; county, state, and city agencies; and various organizations helped to identify issues, opportunities, and concerns during internal scoping and civic engagement. The National Park Service solicited comments at public meetings, through planning newsletters, and at meetings with agencies and other partners. An issue is defined as a conflict or problem regarding the use or management of public lands. The general management plan provides high-level strategies for addressing these issues and opportunities within the context of the park's purpose, significance, and special mandates.

Preserving Cultural and Natural Resources

The park's fundamental resources include, but are not limited to, the Old Slater Mill Complex, the mill villages, and the waterpower system of the Blackstone River Valley. The general management plan will provide high-level guidance for managing the park's cultural and natural resources and explore the role of partnerships in achieving the desired conditions for natural and cultural resources. Previous plans, including the cultural landscape report for the Slater Mill Complex and the historic structure report for Old Slater Mill, include specific measures for the preservation of the park's resources. Documentation and guidance completed after this general management plan, such as several anticipated historic structure reports, will include their own measures.

The Slater Mill Dam is part of the Old Slater Mill National Historic Landmark District. Although not under NPS ownership at the time of publication, efforts were underway for the National Park Service to accept the donation of the dam.

In addition, state and other federal agencies have proposed installing a fish passage on or near the eastern parcel of the Old Slater Mill National Historic Landmark District, including the US Army Corps of Engineers, the US Fish and Wildlife Service, and the Rhode Island Department of Environmental Management, as well as nongovernmental organizations. Currently, no schedule exists for design, regulatory compliance and permitting, and installation of fish passage measures. When project details are made available to the National Park Service, the agency will consider how the proposed project may impact the park's fundamental resources and values, interpretive themes, and operations and develop appropriate management direction through an amendment to the general management plan, as appropriate.

Consideration of Preexisting or Planned Facilities

The park's enabling legislation requires that a general management plan “. . . shall consider ways to use preexisting or planned visitor facilities and recreational opportunities developed in the National Heritage Corridor, including—

- (I) the Blackstone Valley Visitor Center, Pawtucket, Rhode Island;
- (II) the Captain Wilbur Kelly House, Blackstone River State Park, Lincoln, Rhode Island;
- (III) the Museum of Work and Culture, Woonsocket, Rhode Island;
- (IV) the River Bend Farm/Blackstone River and Canal Heritage State Park, Uxbridge, Massachusetts;
- (V) the Worcester Blackstone Visitor Center, located at the former Washburn & Moen wire mill, Worcester, Massachusetts;
- (VI) the Route 295 Visitor Center adjacent to Blackstone River State Park; and
- (VII) the Blackstone River Bikeway.”

Presently, all park employees have offices on-site, mostly in the Wilkinson Mill, with some in Slater Mill. In the future, some offices may be located in the Blackstone River State Park Visitor's Center in Lincoln, Rhode Island. The Wilkinson Mill and Sylvanus Brown House provide limited space for park maintenance in the buildings' basements.

The Blackstone Valley Tourism Council has operated a facility in Pawtucket, Rhode Island, which historically functioned as the park's visitor center. The facility is across the street from the Old Slater Mill National Historic Landmark District in the nearby Blackstone Valley Visitor Center building. However, future use of the building is uncertain. In previous years, the Old Slater Mill Association offered educational programs, hosted events, and ran a gift shop at Old Slater Mill. The general management plan will explore options for identifying appropriate spaces for orientation, education, and community gatherings.

The park maintains agreements, formal and informal partnerships, and relationships with collaborators throughout the Blackstone River Valley to provide visitor services, facilities, and resource protection for resources named in the foundation document and enabling legislation. Examples of these include the Museum of Work and Culture, River Bend Farm and Blackstone River and Canal Heritage State Park, and the Worcester Blackstone Visitor Center. In many cases, the park may provide occasional programming at these sites, training for volunteers and/or staff, and other support services, but the responsibility for primary operation of facilities and providing visitor services and information lies with the partner organization.

Experiencing the Park

Blackstone River Valley National Historical Park consists of six geographically separated areas that collectively tell the story of the Blackstone River and its tributaries, the first successful water-powered cotton spinning mill, and the industrial revolution in the United States.

Because the park's sites are not contiguous and are spread out across two states, accessing and moving between sites in a way that allows visitors to draw connections between the sites and the broader stories of the Blackstone River Valley in a coherent way is often challenging. Visitor access and connectivity between sites is provided through paved public highways and roads, and access between park sites is primarily through personal vehicles. To move between the Pawtucket and Lincoln sites, visitors can use a bus line that connects the Old Slater Mill National Historic Landmark District to the Ashton Historic District to the north from which visitors can reach the Kelly House via a 10-minute walk. However, few visitors arrive at the park sites by mass transit, and 2020 census data (US Census Bureau 2020) confirms low regional public transit use in general. Once completed, the Blackstone River Bikeway will provide connectivity between the Old Slater Mill National Historic Landmark District and Blackstone River State Park, although this bikeway will require bicyclists to be on paved roads shared with vehicles in some segments. The park will work with partners as appropriate on addressing needs for consistent NPS signage and wayfinding between sites within the park's authorized boundary. Similarly, the park will work with partners as appropriate on methods to orient visitors to the park's interpretive themes and narratives at all the park's dispersed sites in Massachusetts and Rhode Island.

Over time, management of the park for visitor enjoyment and resource protection will benefit from detailed analysis of visitation and visitor activities statistics, which are beyond the scope of this plan.

Responding to Climate Change

Over the last decade, the National Park Service has consulted with the scientific community, federal agencies, nonprofit 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 the

National Park Service manages natural and cultural resources and which activities, facilities, and infrastructure it can support.

Climate change adaptation will play an increasingly important role in park resource management. Both historical trends and future projections suggest future increases in temperature, precipitation levels, and intensity of severe weather events. These changes will compound many of the other issues described in this section and 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 time frame of this plan. Increased demand for temperature control systems to mitigate the impacts of temperatures on visitors and staff can add further stress to sensitive historic buildings and require significant alterations to the structures. Even with temperature control systems in place, increased temperatures and humidity may cause park staff to limit ranger-led interpretive tours in the uninsulated and un-air-conditioned parts of buildings on extremely hot days due to concerns about visitor and staff safety. Increased precipitation, particularly heavy rainfall events, has resulted and will likely continue to result in increased occurrences of flooding, which may damage building foundations. Heavy rainfall events have exceeded the capacity of combined stormwater and wastewater systems along the Blackstone River, resulting in more frequent combined sewer overflows affecting water quality, including water flowing through the raceway at Slater Mill. Further, more humid conditions caused by increased precipitation and warmer temperatures will likely accelerate deterioration to any wooden structures. Changes in temperature, precipitation, and humidity may also result in new invasive species being established.

The general management plan establishes desired future conditions for resource conditions, visitor experiences and opportunities, and facilities and services that are climate-informed and consider plausible climate futures. The National Park Service works in cooperation with other federal agencies, the states, counties, and communities to explore how best to model, mitigate, and adapt to the impacts of climate change on NPS managed areas. Management strategies will be based on the best science available, conform to the mission of the National Park Service, follow relevant policies, and be within the park's available financial resources.

Partnerships

Blackstone River Valley National Historical Park is built on partnerships. Many parties cooperate to preserve the park's resources and provide experiences for visitors and to accomplish the vision for the park. Partnerships can support the park in addressing current issues and can provide expertise, resources, and support, thus expanding the park's organizational capacity.

The National Park Service will continue to collaborate and strengthen relationships with current partners and to seek out potential new partners to collectively fulfill the park's legislated purpose. The National Park Service recently completed a partnership strategy with the National Heritage Corridor that identifies a joint vision statement, shared goals, and key actions that leverage the strength of both organizations (NPS 2021). The continued preservation of historic structures and cultural landscapes at the park's sites is imperative to protect the historic integrity and visitor experience at the park. The National Park Service

does not have fee-simple ownership or easements within the four mill village sites. The agency will continue to collaborate through general agreements to preserve the mill village local historic districts. This general management plan supports the National Park Service's valuable relationships with these legislated partners.

The National Park Service will continue to partner with the responsible federal, state, and local agencies with authority and jurisdiction to manage water quality, ecosystem health, and recreational uses of the Blackstone River and its tributaries. The park will be a consistently engaged partner with Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations, other federal agencies, the two states, municipalities, and nongovernmental organizations to encourage activities appropriately authorized and implemented by others that promote the Blackstone River's ecological function and public access for recreation. The National Park Service is committed to supporting partnerships and engaging in collective conversations about access, water quality, and other recreational issues.

HOW BLACKSTONE RIVER VALLEY NATIONAL HISTORICAL PARK IS ADDRESSING THE FOUR STATUTORY GMP REQUIREMENTS

This general management plan articulates the overarching management vision for the national historical park and addresses the statutory requirements at a programmatic level. Given the dynamic nature of park operations and issues, the descriptions for each requirement include reference to subsequent planning needs to better address meet the statutory requirements through the park's planning portfolio. The general management plan will be complemented by the collective of other existing and subsequent plans in the park's planning portfolio. These complementing plans can be programmatic, strategic, or direct/implementation plans. The general management plan also helps codify the park's foundation document, which identifies the park's purpose, significance, and fundamental resources and values that guide park management at a high level. Subsequent plans, which will be consistent with the approved general management plan and the *Blackstone River Valley National Historical Park Foundation Document* (NPS 2020), will require additional analysis and compliance when moving forward with them becomes feasible.

Resource Preservation

This general management plan delineates and designates management areas, outlines the management vision for and identifies desired conditions for natural and cultural resources within the park's management areas, and identifies high-level management strategies and actions for natural and cultural resources. The general management plan also helps codify the park's foundation document, which identifies the park's purpose, significance, and fundamental resources and values that guide park management at a high level. The park's cultural landscape report for the Slater Mill National Historic Landmark District and historic structure report for Old Slater Mill provide measures for the preservation of those resources. Subsequent plans, such as other historic structure reports and an archeological management plan, will include specific measures for the preservation of the park's resources.

Types and General Intensities of Development

This general management plan delineates and designates management areas, outlines the management vision for and indicates desired conditions for the types and general intensities of development associated with public enjoyment and use of the area, and provides high-level strategies and actions for facility management. The general management plan also helps codify the park's foundation document, which identifies the park's purpose, significance, and fundamental resources and values that guide park management at a high level. As needed, subsequent site-specific plans would be developed that include specific measures to address the proper management of sensitive cultural and natural resources, administrative, maintenance, and storage needs in appropriate relationship with resource protection measures.

Visitor Carrying Capacity

This general management plan delineates and designates management areas, outlines the management vision and identifies desired conditions for visitor use and experience within the park's management areas, and identifies high-level strategies and actions to achieve desired conditions. The plan also identifies indicators, thresholds, visitor capacity, and potential management strategies that would respond to changes in visitation (see appendix B). The general management plan also identifies general intensities of use and activities associated with public enjoyment and use of the park. As needed, subsequent plans (e.g., a long-range interpretive plan and site-specific planning) would be developed that include more extensive management strategies to address visitor use and experience and may refine visitor capacity as additional information becomes available. Further, other guidance in this plan, including desired conditions applied by zones and the indicators and thresholds, will continue to inform and guide the management of the types and levels of visitor use to sustain the quality of park resources and visitor experience consistent with the park's purpose.

External Boundary Modifications

National Park Service policies require park managers to evaluate the adequacy of boundaries for protecting resources and providing visitor opportunities in general management planning. The criteria state that potential boundary adjustments may be recommended for the following purposes:

- 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 (e.g., topographic or other natural features or roads).
- Otherwise protect park resources that are critical to fulfilling park purposes.

The park's current legal boundaries were established by Secretary of the Interior Deb Haaland on July 27, 2021, in accordance with the park's enabling legislation. As such, no specific boundary adjustments were identified in this general management plan. This plan does not preclude future consideration of boundary adjustments should needs or conditions change. As needed, potential boundary adjustments would be evaluated in a boundary study or similar planning document. The general management plan also helps codify the park's foundation document, which identifies the park's purpose, significance, and fundamental resources and values that would inform future boundary adjustments.

Chapter 2

General Management Direction



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CHAPTER 2: GENERAL MANAGEMENT DIRECTION

INTRODUCTION

General management planning typically happens in multiple steps. A foundation document is the first step of management planning for national park system units. Foundation documents provide only basic guidance for planning and management decisions and are primarily descriptive, including articulating the unit's purpose, significance, fundamental resources and values, other important resources and values, interpretive themes, special mandates and administrative commitments, and planning and data needs.

The second step of general management planning is creating a framework of parkwide management goals followed by aspirational desired conditions for each management zone within the park. This chapter outlines the parkwide general management planning framework for Blackstone River Valley National Historical Park followed by parkwide desired conditions and desired conditions for each management area.

MANAGEMENT VISION

The general management vision articulates high-level parkwide desired conditions and guides management decision making for the unit. This vision guides NPS management commitments for resource preservation, types and intensities of development associated with public enjoyment and use, visitor carrying capacities, and boundary modification assessments, as needed (note: not listed in priority order).

Resource Management

- The park engages with partners; various state, local and regional agencies; Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations; and the public in protecting and interpreting the nationally significant historical, cultural, and natural resources of the Blackstone River Valley that exemplify the nation's industrial heritage and tell stories of the evolution of the Blackstone River Valley and its people.
- Management decisions about natural and cultural resources are based on scholarly and scientific information; fundamental resources and values; federal laws and policies; consultation with appropriate agencies, Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations, and communities; and consideration of the broader context of the resources in the Blackstone River Valley, including the effects of climate change.

Visitor Experience

- Through outreach and education, the park and its partners foster public understanding and appreciation of the purpose and significance of the Blackstone River Valley National Historical Park and its natural and cultural resources as well as its partner-managed sites and programs.

- Visitors are aware of and understand the thematic links between the park/partner-managed sites in Rhode Island and Massachusetts.

Types and General Intensities of Development and Boundary Modifications

- Through partnerships and engagement consistent with the park's authority and jurisdiction, the National Park Service encourages locally managed land uses that protect views and encourage cultural and natural development compatible with the park's purpose to preserve, protect, and interpret the nationally significant historical and cultural resources of the Blackstone River Valley.

Organizational Effectiveness/Operations

- Partnership development is ongoing and builds constituencies that fulfill the park's purpose to support and enhance the network of partners in the protection, management, and operation of related resources and facilities throughout the National Heritage Corridor.
- Funding, staffing levels and capabilities, partnerships, volunteer programs, and technology are secure, cost-effective, and used efficiently to enhance overall operations.

DESIRED CONDITIONS

Desired conditions outline the vision for resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area. Desired conditions help park managers answer the question, "what are we trying to achieve?" Desired conditions focus on fundamental resources and values (see chapter 1); the visitor experience and opportunities associated with them; and the types and levels of management, development, and access that would be appropriate in a particular location. The desired conditions for different park management areas articulate what kinds of experiences and opportunities should be provided for those areas of the park; these are presented in the "Management Areas" section below.

The following desired conditions apply parkwide:

Visitor Use and Experience

- Visitors of all abilities have opportunities to enjoy the experience of the park and its fundamental resources and values equitably across all sites.
- Visitors have opportunities to explore and understand natural and cultural landscapes at dispersed NPS and partner sites in the Blackstone River Valley. These sites, though spread across the Blackstone River Valley, collectively convey the multilayered and connected themes associated with the nation's industrial heritage and the history of the Blackstone River Valley and its people.

- Visitors understand how to and are inspired to explore all sites within the park boundary and other sites within the broader National Heritage Corridor.
- Visitors have a continuous and coordinated experience that enables them to understand when they are visiting/experiencing a park site, no matter where they are within the boundary.
- Interpretation and learning opportunities convey diverse, complex stories across space and time, representing the many communities who resided within the region, including traditionally underrepresented communities and narratives. First-person accounts communicate stories as much as possible.
- Visitors have opportunities to understand the cultures, economies, technology, histories, and perspectives of Indigenous Peoples in the Blackstone River Valley and its Sovereign Tribal Nations and their use of and connections to park resources.
- All visitors feel welcome and have a sense of belonging and inclusion.
- Visitor experiences are informed by visitation trends and audience needs and are enhanced by building long-term relationships with communities and audiences.
- Visitors have opportunities to connect with the complex and interconnected stories of the industrial revolution, from advancement of industry and technology through the relentless harnessing of natural resources and exploitation of human labor that fueled the rise of the United States as a global power to the subsequent environmental movement and preservation of historic resources.
- Visitors have opportunities to experience and gain insight into the power and excitement of the early years of industrial innovation on the Blackstone River and its tributaries, including interactions with machines and buildings.
- Visitors have opportunities to experience history through interpretive media and interactions with the landscape.
- Visitors have access to a riparian corridor that emphasizes natural and culturally relevant sights and sounds.
- Recreational paddlers have access to a navigable channel in the Blackstone River and its tributaries, where possible and feasible, as well as in the extant and watered portions of the canal.
- Visitors have access to a range of recreation activities where possible and feasible, such as biking, walking, running, birding, fishing, and picnicking.
- Local, regional, and national visitors all find relevance and high-quality experiences in the park and feel a sense of connection to place, history, and use.

- Sights, sounds and views of the river, dams, the canal, and raceways are prominent, as are views of industrial complexes, mill villages, and the cities and towns that have grown up around waterpower and emerging and evolving industry.
- Educational programs meet the needs of local and regional schools and other education providers.
- Visitors and educational groups have access to comprehensive education materials and programs that focus on fundamental resources and values within historic structures, natural and cultural landscapes, and communities preserving and promoting their engineered, natural, recreational, artistic, and cultural resources.
- Access to visitor information is provided during all hours and days of the year through a mixture of personal and nonpersonal services, including park personnel, online resources, waysides, and information kiosks.

Natural and Cultural Resources

- Partnerships fuel the protection of significant cultural and natural resources throughout the valley, including the Blackstone River and its tributaries; native plants and natural areas; and historic buildings, artifacts, Traditional Cultural Properties/sacred spaces, and landscapes.
- The National Park Service works collaboratively with Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations to encourage the long-term protection of the park's fundamental resources and values. The connection of Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations to the park is fostered, supported, and maintained.
- The park works collaboratively with the National Heritage Corridor and state and regional entities to encourage the long-term protection of the park's fundamental resources and values.
- Local and regional communities have opportunities to engage in both natural and cultural resource preservation.
- Within the park's jurisdiction and authority, the park facilitates access to park lands for Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations.
- Within the park's jurisdiction and authority, the park works with partners to promote the ecological health of the Blackstone River and its tributaries.
- People interact with valley and river resources in a respectful, sustainable manner.
- Historic buildings and the surrounding landscape convey stories of innovation throughout the valley and the importance of water in fueling that innovation, as well as the significance of the entire valley to the industrial revolution in the United States.

- The park and its resources are integrated into the surrounding communities, and the National Park Service works through partnerships and collaborations to collectively address challenges and leverage opportunities.
- The park's management of sensitive cultural and natural resources are informed by current planning and research.

Facilities

- Park facilities are maintained to complement and enhance the surrounding landscapes and, for some, as integral parts of the park's stories and visitor experiences.
- Facilities are cost-effective and have adequate space to meet visitor and staff needs.
- The design and placement of facilities promotes long-term sustainability.
- Facility design and maintenance acknowledges increasing climate risks and minimizes impacts from flooding or other disturbances through climate-informed facility adaptations when feasible.
- Park facilities use new and emerging technologies where appropriate and feasible to enhance visitor use and experience and adapt to a changing climate while still maintaining their historic character.

Visitor Services

- The park continually evaluates opportunities to provide quality visitor services and experiences.
- The park encourages uses that support the purpose and significance of the park, enhance protection of park resources and values, and add to public understanding and stewardship of the park and its resources.

MANAGEMENT AREAS

The National Park Service uses management zoning to identify and describe the variety of resource conditions and visitor experiences to be achieved and maintained in different areas of a park unit. Section 2.3.1.2 of *NPS Management Policies 2006* notes that each park's approved general management plan will include a map that delineates management zones or districts that correspond to a description of the desired resource and visitor experience conditions for each area of the park (NPS 2006). Section 2.3.1.2 of *NPS Management Policies 2006* also notes that zoning will outline the criteria for (or describe the kind of) appropriate uses and facilities necessary to support these desired conditions. Some desired conditions may apply parkwide, but the delineation of management zones will illustrate where there are differences in intended resource conditions, visitor experiences, and management activities (section 13 2.3.1.2) (NPS 2006).

For the purposes of this guidance, zoning and desired conditions often fulfill the same major planning goals for a park unit or area. In most cases, zoning can be considered the spatial application of statements of desired condition—where they describe the conditions, outcomes, and opportunities for specific areas of a park. Therefore, appropriately detailed desired conditions statements can essentially serve as management zoning for a unit if they provide guidance across all park areas. In this plan, the zones are referred to as management areas.

All lands in the six sites within the park’s legislated boundary are assigned to a management area regardless of whether the lands are currently owned in fee-simple title by the National Park Service. In partnership parks—such as Blackstone River Valley National Historical Park—where the National Park Service and its partners are making management decisions, this shared understanding provides the basis for general coordination of plans and activities.

This general management plan relies on developing five management areas—Historic Resources, Scenic and Natural Resources, Park Support, Mill Village Partnership, and East Parcel—to define specific resource conditions and visitor experiences to achieve and maintain in each area of the park. Each management area applies to different geographic locations (see descriptions below and more specifically, figures 8, 9, and 10), and each management area is associated with a general level of management guidance or direction, including the types of activities and facilities that are appropriate in that management area (table GMP-1). The management areas are consistent with, and help achieve, the specific purpose, significance, and special mandates for the park.

Historic Resources Management Area

Management Area Summary

This management area preserves significant historic buildings and historic, archeological, architectural, and landscape features while being adaptively reused for contemporary park needs. Visitors have a wide range of educational, interpretive, and recreational opportunities to enjoy and appreciate the park’s resources. Outdoor special events, hosted by the National Park Service, partners, and others, offer visitors opportunities to experience the park during themed activities, community celebrations, and other gatherings.

Geographic Extent

At the Old Slater Mill National Historic Landmark District, this management area includes the entire parcel of land on the west side of the river except for the parking lot. The Slater Mill Dam will be included in this management area after the National Park Service has full fee-simple ownership of that parcel (in progress). At Blackstone River State Park, this management area includes the Kelly House and adjacent fields, the Blackstone Canal and associated towpath, and building foundations from Old Ashton village.

Scenic and Natural Resources Management Area

Management Area Summary

This management area preserves the undeveloped open space, woodlands, meadows, wetlands, and floodplains that contribute to the setting, context, and scenic views of the Blackstone River, Blackstone Canal, and Old Ashton Historic District on the west side of the Blackstone River. Visitors have opportunities for a less congested experience, discovery, relaxation, and exploration in a relatively natural environment with limited interpretation or signage.

Geographic Extent

This management area includes all areas of Blackstone River State Park that are not in the Historic Resources or Park Support Management Areas.

Park Support Management Area

Management Area Summary

This management area provides visitors with vehicle entry and overall orientation to the park and includes space for park administration, maintenance, and emergency services. This area could include higher concentrations of signage for orientation and information and to provide a sense of welcome to the site. Community events could be hosted here.

Geographic Extent

At the Old Slater Mill National Historic Landmark District, this management area includes the parking lot on the northeast side of Old Slater Mill and the section of the Blackstone River Bikeway that runs adjacent to the parking lot. At Blackstone River State Park, this management area includes the parking lot underneath Rhode Island Route 116 and the access drive.

Mill Villages Partnership Management Area

Management Area Summary

This management area encompasses four mill village local historic districts that are locally owned and managed: Ashton Historic District, Little Red Shop Local Historic District, Slatersville Historic District, and Whitinsville-Downtown Crossroads Historic District. The National Park Service works in partnership with the local historic district commissions and others to preserve and interpret cultural and natural resources within these districts.

Geographic Extent

This management area encompasses the four mill village local historic districts.

East Parcel Management Area

Management Area Summary

This management area preserves open space with historically important views of Old Slater Mill and the Slater Mill Dam. Visitors have opportunities for recreation and relaxation, with limited interpretation of the park's natural and cultural resources.

Geographic Extent

This management area includes the parcel in the Old Slater Mill National Historic Landmark District on the east side of the Blackstone River.



FIGURE 8. MANAGEMENT AREAS FOR OLD SLATER MILL NATIONAL HISTORIC LANDMARK DISTRICT

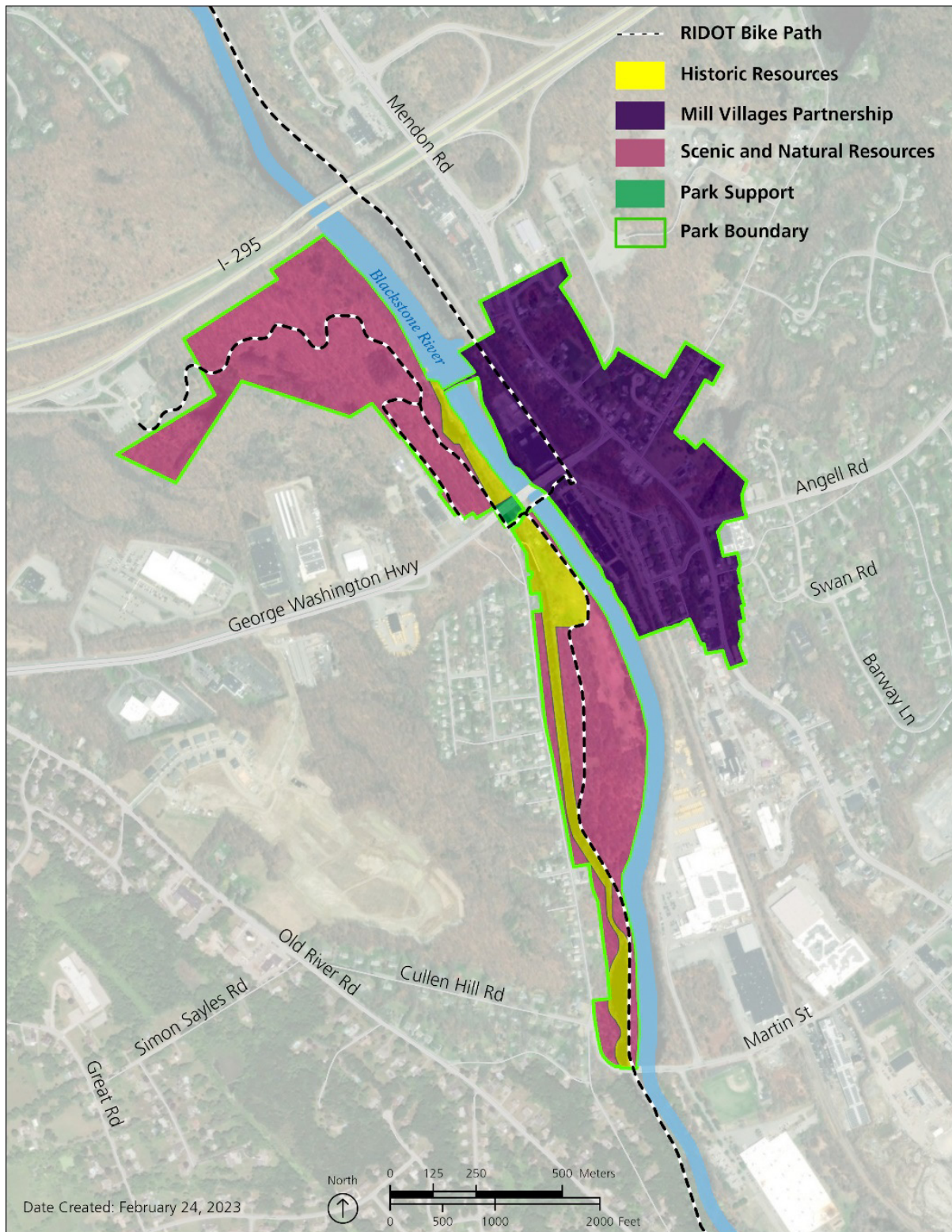


FIGURE 9. MANAGEMENT AREAS FOR BLACKSTONE RIVER STATE PARK AND ASHTON HISTORIC DISTRICT



FIGURE 10. MANAGEMENT AREAS FOR THE FOUR LOCAL HISTORIC DISTRICTS

Table GMP-1. Management Areas and Associated Desired Conditions

Category	Historic Resources	Scenic and Natural Resources	Park Support	Mill Villages Partnership	East Parcel (NPS Ownership or Easement)	East Parcel (Privately Owned)
Management Area Summary	This management area preserves significant historic buildings and historic, archeological, architectural, and landscape features while the buildings are adaptively reused for contemporary park needs. Visitors have a wide range of educational, interpretive, and recreational opportunities to enjoy and appreciate the park's resources. Outdoor special events, hosted by the National Park Service, partners, and others, offer visitors opportunities to experience the park during themed activities, community celebrations, and family events.	This management area preserves the undeveloped open space, woodlands, meadows, wetlands, and floodplains that contribute to the setting, context, and scenic views of the Blackstone River, Blackstone Canal, and Old Ashton Historic District. Visitors have opportunities for less congested or solitary discovery, relaxation, and exploration in a relatively natural environment with limited interpretation.	This management area provides visitors with vehicle entry and overall orientation to the park and includes space for park administration, maintenance, and emergency services. Community events could be hosted here.	This management area encompasses four mill village local historic districts that are locally owned and managed. The National Park Service works in partnership with the local historic district commissions and others to preserve and interpret cultural and natural resources within these districts.	This management area preserves open space with historically important views of Old Slater Mill and the Slater Mill Dam. Visitors have opportunities for recreation and relaxation, with limited interpretation of the park's natural and cultural resources.	<p>Natural resources are managed and maintained in accordance with city, county, and state law, regulations, and policies, including local land-use zoning. The National Park Service would provide technical assistance as feasible and appropriate.</p> <p>Through partnership with federal, state, and local government agencies and nongovernmental organizations, fish migration up the Blackstone River is supported through a fish passage that is visually compatible with the historic fabric and character of the Slater Mill Dam and the Old Slater Mill National Historic Landmark District.</p>
Cultural Resources	<p>The historic integrity of the Old Slater Mill Historic Site's buildings, both interiors and exteriors, are preserved and protected to the extent possible under future climate conditions. The raceway serving the historic buildings is maintained and kept operational and undamaged (free of excess silt and debris) with operational gates and sluices.</p> <p>Cultural landscapes at the Old Slater Mill Historic Site are rehabilitated for appropriate contemporary use of the landscape while preserving those features that convey historical, cultural, or architectural values. Historic industrial landscape features (raceways, foundation walls, river walls, the footbridge, dams) are preserved and protected. Views of Old Slater Mill, the Slater Mill Dam, and the Blackstone River are maintained.</p>	Cultural resources at Blackstone River State Park are managed according to the conservation and preservation easement adopted by the National Park Service and the Rhode Island Department of Environmental Management. Historic structures and historic industrial landscape features (foundations, walls, culverts, objects) are stabilized as needed and preserved and maintained to the extent possible under future climate conditions. Archeological resources would remain in situ and undisturbed, unless removal of artifacts or intervention into cultural material is justified by preservation treatment, protection, research, stabilization, data recovery, interpretation, or development requirements.	Archeological resources would remain in situ and undisturbed, unless removal of artifacts or intervention into cultural material is justified by preservation treatment, protection, research, stabilization, data recovery, interpretation, or development requirements.	Cultural resources are managed and maintained by local landowners in accordance with city, county, and state laws; regulations; and policies, including local land-use zoning. The National Park Service would provide technical assistance as feasible and appropriate.	<p>Historically important views and viewsheds of Old Slater Mill and Slater Mill Dam are preserved. Historic industrial landscape features (e.g., raceway remnants) are preserved and protected.</p> <p>Archeological resources would remain in situ and undisturbed, unless removal of artifacts or intervention into cultural material is justified by preservation treatment, protection, research, stabilization, data recovery, interpretation, or development requirements (e.g., fish passage construction).</p>	Cultural resources are managed and maintained in accordance with city, county, and state laws; regulations; and policies, including local land-use zoning.

Category	Historic Resources	Scenic and Natural Resources	Park Support	Mill Villages Partnership	East Parcel (NPS Ownership or Easement)	East Parcel (Privately Owned)
	<p>Archeological resources would remain in situ and undisturbed unless removal of artifacts or intervention into cultural material is justified by preservation treatment, protection, research, stabilization, data recovery, interpretation, or development requirements.</p> <p>Cultural resources at Blackstone River State Park are managed according to the conservation and preservation easement adopted by the National Park Service and the Rhode Island Department of Environmental Management. Through collaboration with state agencies, historic structures and historic industrial landscape features (e.g., foundations, walls, culverts, objects) at Blackstone River State Park are stabilized as needed and preserved and maintained.</p> <p>Cultural resources help visitors understand the story of the park and the valley's role in the industrial revolution in the United States. They are appropriately managed per NPS standards.</p>					
Natural Resources	<p>Natural resources are highly manipulated and modified to maintain the contemporary setting of historic buildings and structures and to accommodate special events.</p> <p>Native plants and pollinators are supported to the extent possible through informed landscape management.</p> <p>Natural sounds are generally audible, but the natural soundscape is often mixed with sounds from human activity, visitor use, and historically appropriate sounds. The roar of the water through the mills and over the dam is sufficiently audible for visitors to gain an understanding of the</p>	<p>Natural resources at Blackstone River State Park are managed according to the conservation and preservation easement adopted by the National Park Service and the Rhode Island Department of Environmental Management. Undeveloped open space, woodlands, meadows, wetlands, and floodplains continue to contribute to the setting, context, and scenic views of the Blackstone River, Blackstone Canal, and Old Ashton Historic District. Vegetation may be modified to enhance wildlife habitat, reduce the threat of fire, enhance views from trails,</p>	<p>Natural resources are highly manipulated and modified to accommodate park operations and visitor access.</p>	<p>Natural resources are managed and maintained by local landowners in accordance with city, county, and state laws; regulations; and policies, including local land-use zoning. The National Park Service would provide technical assistance as feasible and appropriate.</p>	<p>Natural resources are highly manipulated and modified to maintain historic views to the Old Slater Mill and associated buildings, Blackstone River, and Slater Mill Dam and to accommodate park operations and visitor access.</p> <p>Through partnership with federal, state, and local government agencies and nongovernmental organizations, fish migration up the Blackstone River is supported through a fish passage that is visually compatible with the historic fabric and character of the Slater Mill Dam and the Old</p>	<p>Natural resources are managed and maintained in accordance with city, county, and state law, regulations, and policies, including local land-use zoning. The National Park Service would provide technical assistance as feasible and appropriate.</p> <p>Through partnership with federal, state, and local government agencies and nongovernmental organizations, fish migration up the Blackstone River is supported through a fish passage that is visually compatible with the historic fabric and character of the Slater Mill Dam and the Old</p>

Category	Historic Resources	Scenic and Natural Resources	Park Support	Mill Villages Partnership	East Parcel (NPS Ownership or Easement)	East Parcel (Privately Owned)
	conditions at the mills when they were in operation.	<p>or control or prevent the spread of disease and invasive species. Specimen trees, shade trees, and boundary trees that do not materially obstruct the scenic views of the property may be planted and maintained. Existing open-field and lawn areas are maintained as lawn or meadow. Healthy native plant and animal communities and their habitats predominate within their potential ranges under changing climate conditions.</p> <p>Natural sounds generally dominate but sounds from visitor and park operations may be heard from within other areas of the park.</p>			Slater Mill National Historic Landmark District.	Slater Mill National Historic Landmark District.
Visitor Experience	<p>Visitors have opportunities to connect with the complex stories of the industrial revolution, from the relentless harnessing of natural resources and the exploitation of human labor that fueled the rise of the United States as a global power to the subsequent environmental movement and the preservation of historic resources. Visitors are provided with the preindustrial stories of the valley that provide key context to the industrial story and its wider impacts since 1793.</p> <p>Visitors have opportunities to experience history through interpretive media and interactions with the landscape.</p> <p>Visitors can immerse themselves in the sights, sounds, and experiences of the mills and surrounding facilities and resources, including the canal and canal features.</p> <p>Sights, sounds, and views of the river, dams, the canal, and raceways are prominent, as are views of industrial</p>	<p>Visitors have opportunities to experience the sights, sounds and smells of forested and agricultural landscapes and recreational features in parks and more rural areas.</p> <p>Visitors can access a riparian corridor that emphasizes natural and culturally relevant sights and sounds and is free of debris.</p> <p>Well-developed recreation trails, pathways, and associated amenities facilitate a range of experiences for people of all abilities.</p> <p>Scenic views of the Blackstone River, Blackstone River Canal and towpath, and Old Ashton Historic District are prominent.</p>	<p>Visitors are provided with a welcoming experience that includes accessible services, facilities, and amenities. Waysides and other information, orientation and wayfinding signage is prevalent, and visitors are provided with clear orientation to the immediate site as well as related nearby resources and experiences.</p> <p>Well-developed recreational pathways and associated amenities facilitate a range of experiences for people of all abilities.</p> <p>Clear delineations are provided between the visitor experience areas and park operations.</p> <p>Access to visitor information is provided during all hours and days of the year through a mixture of personal and nonpersonal services, including</p>	<p>Visitors have opportunities to gain new insights into industrial forces that shaped the cities, towns, and people in Massachusetts and Rhode Island as they are today.</p> <p>Visitors understand how to and are inspired to explore all sites within the park boundary and into the broader Heritage Corridor and can engage with and connect to the complete stories within the valley.</p> <p>Visitors have opportunities to form deep and personal connections with the interconnected stories and resources of the Blackstone River Valley from the family connections, transportation and river networks, and the advancement of industry and technology over decades.</p> <p>Visitors have opportunities for passive and active recreational</p>	<p>Visitors are provided with basic amenities on the east side of the river, such as picnic tables and open space for gathering. Visitors can view the historic Old Slater Mill and associated buildings, and viewsheds are maintained to facilitate those visual connections to the historic landscape and context.</p>	<p>Visitors can view the historic Slater Mill and associated buildings.</p>

Category	Historic Resources	Scenic and Natural Resources	Park Support	Mill Villages Partnership	East Parcel (NPS Ownership or Easement)	East Parcel (Privately Owned)
	<p>complexes, mill villages, and the cities and towns that have grown up around waterpower and emerging and evolving industry.</p> <p>Outdoor special events, hosted by the National Park Service, partners, and others, offer visitors opportunities to experience the park during themed activities, community celebrations, and family events.</p> <p>Well-developed recreation trails, pathways, and associated amenities facilitate a range of experiences for people of all abilities.</p> <p>Clear delineations are provided between the visitor experience areas and park operations.</p> <p>Access to visitor information is provided during all hours and days of the year through a mixture of personal and nonpersonal services, including waysides and information kiosks.</p>		waysides and information kiosks.	<p>opportunities on town-owned properties.</p> <p>Visitors have opportunities to immerse themselves in the sights, sounds, and experiences of a 19th-century mill town.</p> <p>Access to visitor information is provided during all hours and days of the year through a mixture of personal and nonpersonal services, including waysides and information kiosks.</p>		
Facilities	<p>Areas of high-density infrastructure occur in this management area. Facilities in this management area support concentrations of park visitors and their diverse needs and/or contribute to visitor understanding of the site. Facilities may include publicly accessible historic buildings, interpretive waysides, paved pathways, picnic areas, benches, gift shops, and bookstores. Some administrative and park operational facilities may exist in this management area, such as maintenance and curatorial storage. Adaptive reuse of historic buildings and structures could occur. Park landscapes are welcoming with well-manicured grounds, grass, shrubs, and flowers.</p> <p>Infrastructure is resilient and protected in ways that enable the historic structures and other facilities to</p>	<p>Facilities are managed according to the conservation and preservation easement adopted by the National Park Service and the Rhode Island Department of Environmental Management (RIDEM). RIDEM-owned and -managed facilities in this management area may include unpaved footpaths, recreational trails, bridges, and drainage ways.</p> <p>NPS facilities are limited and dispersed in this management area. NPS facilities support visitor experiences and may include signs, plaques, and kiosks.</p>	<p>Areas of high-density infrastructure occur in this management area. Facilities within the management area support visitor access and orientation, including parking lots, interpretive waysides and orientation and directional signage. Some park operational facilities may exist in this management area, such as maintenance and storage structures.</p> <p>Some recreational facilities exist in this management area, such as the Blackstone River Bikeway.</p>	NPS facilities within this management area are very minimal and include structures that support visitor experience, such as interpretive waysides and orientation and directional signage.	NPS facilities within this management area are very minimal and include structures that support visitor experience, such as interpretive waysides and orientation and directional signage.	Facilities within this management area are managed by local landowners according to city, county, and state law, regulation, and policies, including local land-use zoning. The National Park Service would provide technical assistance as feasible and appropriate.

Category	Historic Resources	Scenic and Natural Resources	Park Support	Mill Villages Partnership	East Parcel (NPS Ownership or Easement)	East Parcel (Privately Owned)
	<p>respond to a changing climate. Adaptation measures to protect structures, including the dam, from potential increasing flood risk are implemented.</p> <p>Accessibility of buildings and exhibits, including both physical barriers and language barriers, would be improved. Continued investments would be made in some of the facilities as museum exhibit locations to meet NPS museum standards.</p> <p>Facilities at Blackstone River State Park are managed according to the conservation and preservation easement adopted by the National Park Service and the Rhode Island Department of Environmental Management.</p>					
Visitor Services	Commercial uses and special park uses facilitate high-quality park experiences and support positive visitor experiences and resource protection.	Commercial uses and special park uses facilitate high-quality park experiences and support positive visitor experiences and resource protection.	Commercial uses and special park uses facilitate high-quality park experiences and support positive visitor experiences and resource protection.	Commercial services are managed by local landowners in accordance with city, county, and state laws; regulations; and policies, including local land-use zoning.	Commercial services are minimal.	Commercial services are managed by local landowners in accordance with city, county, and state laws; regulations; and policies, including local land-use zoning.

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Chapter 3

Management Strategies and Actions



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CHAPTER 3: MANAGEMENT STRATEGIES AND ACTIONS

INTRODUCTION

This chapter identifies management strategies and actions that will be used to achieve and maintain the desired conditions (see chapter 2) and resolve issues and leverage opportunities described in chapter 1. This chapter begins with strategies that are taken at a parkwide level, then lists strategies for specific sites. Management strategies associated with indicators, thresholds, and visitor capacities identified to help manage visitor use at sites under direct park control are detailed in appendix B. Actions directed by the general management plan or in specific implementation plans would be accomplished over the years following the plan and would be updated as needed. The park will continue to look for creative and diverse funding opportunities.

PARKWIDE AND GENERAL ACTIONS/COMMON TO ALL OR MULTIPLE SITES

Cultural Resources Management

- Develop research and planning documents focused on understanding and highlighting the ethnographic resources and history of the park.
- Complete the baseline documents needed to inform the management of sensitive cultural resources.
- Complete the baseline documents needed to inform archeological resources management (e.g., archeological management plan).
- Explore opportunities to implement agreements with Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations for co-stewardship of resources on park lands.
- Consult with Native Nations about repatriation of Native American cultural items or human remains in accordance with the Native American Graves Protection and Repatriation Act.
- Explore opportunities for programmatic agreements and/or special use permits to provide Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations access to park lands.

Natural Resources Management

- Promote research to increase the understanding of the park's natural resources and processes.
- Encourage partners to collect information on lands not owned or managed by the National Park Service to fill gaps in the knowledge and understanding of the park's natural resources, to assess status and trends, and to effectively protect and manage natural resources.

- Work Indigenous Peoples in the Blackstone River Valley and its Sovereign Tribal Nations without the first Sovereign Tribal Nations and partners to help establish opportunities for increased water quality monitoring on the Blackstone River and Blackstone River Canal at Blackstone River State Park using applicable partnership agreements and tools.
- Continue to partner with Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations; local, state, and national agencies; nonprofit organizations; and businesses to protect and enhance the water quality of the Blackstone River and its tributaries using applicable agreements (e.g., memorandums of understanding) and tools.
- Through partnerships, improve water quality through local and regional stormwater management to protect park resources and canal features.

Visitor Use and Experience – Interpretive and Educational Programs

- Develop and implement a long-range interpretive plan.
- Provide site-based educational programs and services at specific locations within the park that are of cultural, historical, and/or natural interest.
- Use interpretive materials developed or approved by Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations. When possible, offer interpretive programs given by Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations.
- Develop interpretive materials and programs that illustrate and educate the public on the use of the Blackstone River by Indigenous Peoples and its Sovereign Tribal Nations.
- Provide opportunities for recognition and support of Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations' ceremonies and programs.
- Create opportunities for NPS staff to be trained by Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations about Indigenous cultures, histories, perspectives, and relationships with park resources and how to incorporate those into new and existing interpretation.
- Develop a variety of self-guided multilingual interpretive products that enable visitors to explore the park. These products would provide orientation and link visitor experience opportunities across multiple park sites.
- Continue to coordinate and/or manage volunteer and youth programs.
- Upgrade and maintain digital assets, such as the park website and social media sites, to meet the needs of visitors, unify experiences across sites, and to leverage partner efforts.

- Host special events related to the park's themes, special summer or seasonal programs, or periodic commemorative events.
- Ensure that thematic connections between partnership sites (mill villages) are communicated across sites.
- Enhance partnerships related to visitor education, interpretation, wayfinding, and signs to improve connectivity between sites and visitor experiences.

Visitor Use and Experience – Recreation

- Enhance recreation-based partnerships to identify and develop new recreational opportunities in the Blackstone River watershed, with an emphasis on water-based and bike-based recreation.
- Support efforts by the National Heritage Corridor, local municipalities, and others to complete the Blackstone River Bikeway.
- Develop and implement protocols and procedures for collecting comprehensive visitor use data.

Visitor Use and Experience – Wayfinding, Circulation, and Visitor Information

- Develop a comprehensive sign plan and wayfinding plan to improve wayfinding, signage, maps, and markings throughout the park and the valley, inclusive of bike path markers, road-based signage and NPS identity across dispersed sites.
- Work with partners, including the Rhode Island Department of Transportation, Massachusetts Department of Transportation, and local jurisdictions, to evaluate and improve directional signage for visitors coming to park sites.
- Evaluate opportunities to partner with regional transit authorities to leverage services that connect existing routes and services to the park, particularly those that may serve underrepresented communities and visitors with disabilities.
- Develop strong partnerships with regional transit authorities, regional planning agencies, and others to provide sustainable transportation options to and from the park and between park sites.

Facilities

- Explore operationally and financially sustainable options, including National Park Service-owned and unowned properties, to meet the needs of the park facilities and maintenance program, including adequate workshop space and tool and equipment storage. Possible strategies include the following:
 - adaptively reusing existing structures at Old Slater Mill Historic Site for one or more of those purposes

- constructing a new facility at Old Slater Mill Historic Site that fits within the historic character of the site
- locating, through partnerships, agreements, leasing, or other tools, maintenance operations outside the park in the surrounding community

Visitor Services

- Evaluate opportunities to support and enhance visitor experiences and community building through commercial services, leasing, agreements, or other special park uses.

Partnerships

- Complete a partnership analysis that identifies potential partners and gaps in programming, services, or other partnership needs and forms the basis for a partnership strategy.
- Develop a partnership strategy that engages key partners throughout the Blackstone River Valley.
- Establish a friends group to provide support for all park sites.
- Consult with local police departments, fire departments, and other agencies as appropriate to establish and maintain agreements for law enforcement, fire, and emergency services.

MANAGEMENT ACTIONS FOR OLD SLATER MILL NATIONAL HISTORIC LANDMARK DISTRICT

Cultural Resources

- Implement treatment actions as appropriate from inventories and reports (e.g., cultural landscape report, historic structure report, archeological management plan) for cultural resources at the Old Slater Mill National Historic Landmark District.

Visitor Experience

- Provide and support experiences, special events, or gatherings on the grounds of the Old Slater Mill National Historic Landmark District that create a sense of community and engage residents as well as nonlocal visitors.
- Explore a variety of uses for the Slater Mill facility that serve the public and support the purposes for which the park was established. Uses could include historical demonstrations, classes, and/or specialized interpretive programs.
- Continue/expand special events that connect with the community.

Facilities

- Complete an evaluation of building utilization at Old Slater Mill that considers administrative, maintenance, and storage needs in appropriate relationship with resource protection measures and potential for leasing and other agreements.
- Complete exhibit plans for Old Slater Mill and Wilkinson Mill.
- Work with the National Park Service and other experts on climate change, facilities, and historic resources to explore climate change mitigation and facility adaption options.
- Explore options for modernizing infrastructure to meet the operational needs of NPS staff and visitors.
- Continue to coordinate with the City of Pawtucket regarding maintenance and use of the parking lot.
- Where appropriate, explore the possibility of time-limited parking options to promote turnover in the parking lots for park visitors.
- Continue to coordinate with the city of Pawtucket regarding city easements for construction and/or maintenance of the Blackstone River Bikeway, bus stop, lights, and Cogswell Temperance fountain.

MANAGEMENT ACTIONS FOR BLACKSTONE RIVER STATE PARK

Sitewide Actions

- Offer a staff and/or volunteer presence, as available, at Blackstone River State Park to provide interpretive and education programs and services.
- As budget and staffing allow, provide technical assistance to the Rhode Island Department of Environmental Management and other partners for design and implementation of interpretive media and programs that enhance public understanding of the cultural and natural resources of the state park.
- Work with the Rhode Island Department of Environmental Management to explore opportunities for addressing congestion at Blackstone River State Park parking caused by bike path users and special events and programs.
- Provide support to the Rhode Island Department of Environmental Management for enhanced recreational opportunities at the state park, including water-based recreation.
- As budget and staffing allow, provide technical assistance to the Rhode Island Department of Environmental Management and other partners to enhance natural and cultural resource conditions, interpretive programming, and public recreation opportunities.

Historic Resources Management Area

- Per the park's enabling legislation, in partnership with the Rhode Island Department of Environmental Management and other organizations, design, construct, and maintain a memorial at an appropriate location in the park that recognizes the role of John H. Chafee in preserving the resources of the Blackstone River Valley for the people of the United States.
- Prepare inventories and reports for cultural resources at the Blackstone River State Park site, such as cultural landscape reports and historic structure reports.
- Explore internal and external funding opportunities to support the stabilization of the Blackstone Canal's walls.
- Complete an exhibit plan for Kelly House.

Scenic and Natural Resources Management Area

- As budget and staffing allow, provide technical assistance to the Rhode Island Department of Environmental Management and other partners to enhance natural and cultural resource conditions, interpretive programming, and public recreation opportunities.

Park Support Management Area

- Where appropriate, explore the possibility of time-limited parking options to promote turnover in visitor parking lots.
- Explore opportunities to improve circulation within the state park between Blackstone River State Park Visitor's Center and the Kelly House, particularly for special events.

MANAGEMENT ACTIONS FOR MILL VILLAGES PARTNERSHIP MANAGEMENT AREA

General

- Maintain general agreements with local historic district commissions that clarify NPS and town responsibilities towards visitor services, law enforcement and emergency services, and land use and cultural resource protection within the local historic districts.

Cultural Resource Management

- Through general agreements with local historic district commissions, ensure that uses of non-NPS public and private lands within the local historic districts are consistent and compatible with the park's purpose.
- Provide technical assistance, as budget and staffing allow, in support of exterior restoration of municipally owned historic structures in the mill village sites.

- Prepare inventories and reports for cultural resources at mill village sites, such as cultural landscape reports and historic structure reports.
- Facilitate communications among partners to maintain a comprehensive and collaborative approach to management and to make partners aware of opportunities for state and federal funding.

Visitor Use and Experience

- Provide interpretive and educational programs and services at mill village sites as feasible.
- Offer a staff presence, as available, at town events to assist in providing information about the park and the mill villages' role within the history of the area.
- Provide visitor information related to the local historic districts and surrounding areas in NPS publications, both digital and hard copy.
- Provide technical assistance, as budget and staffing allow, with design and implementation of interpretive media and programs to enhance the public understanding of the cultural and natural resources of the local historic districts.
- Provide technical assistance in the development of identity and wayfinding signs where appropriate and feasible.

MANAGEMENT ACTIONS FOR EAST PARCEL MANAGEMENT AREA

At the time of publication, this parcel is privately owned. It is anticipated that regardless of future ownership, this parcel will be maintained as a flexible use open space for the public while preserving historically important views of Old Slater Mill and the Slater Mill Dam.

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PART II

Environmental Assessment



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CHAPTER 1: PURPOSE AND NEED

INTRODUCTION

The National Park Service (NPS) is preparing a draft general management plan (draft plan) for Blackstone River Valley National Historical Park (park) in Rhode Island and Massachusetts. The park was established by Congress on December 19, 2014, to help preserve, protect, and interpret nationally significant resources that exemplify the industrial heritage of the larger Blackstone River Valley. As a new unit of the national park system, the park requires a general management plan—a broad document, specific to the park, that identifies long-term goals for the park and guides management of the visitor experience, resource preservation, facilities, and operations. The ultimate outcome of general management planning for park units is an agreement among the National Park Service, its partners, and the public on why each area is managed as part of the national park system, what resource conditions and visitor experiences should exist, and how those conditions can best be achieved and maintained over time.

This environmental assessment evaluates the environmental impacts of the actions proposed in the draft plan.¹ Following the comment period, the National Park Service will revise the environmental assessment (through errata) and the draft plan, as appropriate, before issuing a decision document and final general management plan.

PURPOSE AND NEED FOR ACTION

The purpose of this planning effort is to

- clarify the purpose, significance, and special mandates of Blackstone River Valley National Historical Park;
- articulate the management vision for the park;
- define resource conditions and visitor uses and experiences to be achieved in the park, taking into consideration realistic funding, staffing, and environmental trends;
- examine current and potential visitor and resource management opportunities, and develop long-term strategies for providing access, connecting visitors to key experiences, managing use, and improving park sustainability;
- provide a framework for managers to use when making decisions about how to best protect the park's resources, provide quality visitor uses and experiences, and manage visitor use; and

1. While general management plans are actions that generally require an environmental impact statement, consistent with the NPS NEPA Handbook, 2015, section 1.5 E, an environmental assessment may be prepared if there is no potential for significant effects from implementing any of the proposed actions. The National Park Service has determined that there are minimal impacts associated with the proposed actions, and there is no potential for significant effects, and therefore has prepared an environmental assessment.

- define programmatic direction for future facility investment at the park, setting realistic sideboards to guide park managers on a financially sustainable path.

A general management plan is needed to fulfill a park planning priority for resource protection, access, use, and development and to address legal and policy requirements identified in

- Public Law 113-91, which established Blackstone River Valley National Historical Park; and
- 54 United States Code 100502 – General management plans.

The general management plan would provide needed guidance for addressing parkwide issues and opportunities, including cultural and natural resource preservation, facilities and infrastructure, climate change response, visitor use and experience, and partnerships, all within the context of the park’s purpose, significance, and special mandates.

PROJECT AREA

Blackstone River Valley National Historical Park includes six geographically dispersed sites in Massachusetts and Rhode Island, collectively encompassing approximately 202 acres of significant historic properties (figure 1). The park’s current legal boundary, established by Secretary of the Interior Deb Haaland on July 27, 2021, includes the following:

Old Slater Mill National Historic Landmark District: This site encompasses the 4.23-acre Old Slater Mill National Historic Landmark District in Pawtucket, Rhode Island. The core of the site preserves three historic buildings: Samuel Slater’s 1793 mill (“Old Slater Mill”), Oziel and David Wilkinson’s 1810–1811 mill (“Wilkinson Mill”), and Sylvanus Brown’s 1758 cottage (moved to the site in 1972) (“Brown House”). In Old Slater Mill and Wilkinson Mill, historic textile and precision manufacturing machinery invented or used on-site are on exhibit. The site also includes Hodgson-Rotary Park and a parking lot on the west side of the river and Slater Mill Park on the east side of the Blackstone River, as well as the Slater Mill Dam. The National Park Service currently owns and manages the 3.06 acres of land on the west side of the Blackstone River, hereafter referred to as “Old Slater Mill Historic Site.” This site is the only one out of the six that has NPS fee simple ownership.

Blackstone River State Park: This site includes 85 acres of Blackstone River State Park in Lincoln, Rhode Island. The state park is owned by the state of Rhode Island and managed by the Rhode Island Department of Environmental Management. The National Park Service has a conservation and preservation easement on these 85 acres. The easement includes the Captain Wilbur Kelly House, a replica barn, a 1-mile section of the Blackstone Canal, and an approximately 2-mile segment of the Blackstone River State Bikeway.

Ashton Historic District: This site encompasses Ashton Historic District, a 66-acre local historic district in Cumberland, Rhode Island. The site includes a mixture of privately and publicly owned parcels, and it is managed as a local historic district under municipal law. The National Park Service has a general agreement with the Town of Cumberland that formalizes how both entities will work in partnership to fulfill the park's purpose.

Little Red Shop Local Historic District: This site encompasses Little Red Shop Local Historic District, a 0.3-acre local historic district in Hopedale, Massachusetts. The site is owned by the Town of Hopedale and managed as a local historic district under municipal law. The National Park Service has a general agreement with the Town of Hopedale that formalizes how both entities will work in partnership to fulfill the park's purpose.

Slatersville Historic District: This site encompasses Slatersville Historic District, a 31.6-acre local historic district in North Smithfield, Rhode Island. The site includes a mixture of privately and publicly owned parcels, and it is managed as a local historic district under municipal law. The National Park Service has a general agreement with the Town of North Smithfield that formalizes how both entities will work in partnership to fulfill the park's purpose.

Whitinsville-Downtown Crossroads Historic District: This site encompasses Whitinsville-Downtown Crossroads Historic District, a 15.3-acre local historic district in Northbridge, Massachusetts. The site contains a mixture of privately and publicly owned parcels, and it is managed as a local historic district under municipal law. The National Park Service has a general agreement with the Town of Northbridge that formalizes how both entities will work in partnership to fulfill the park's purpose.

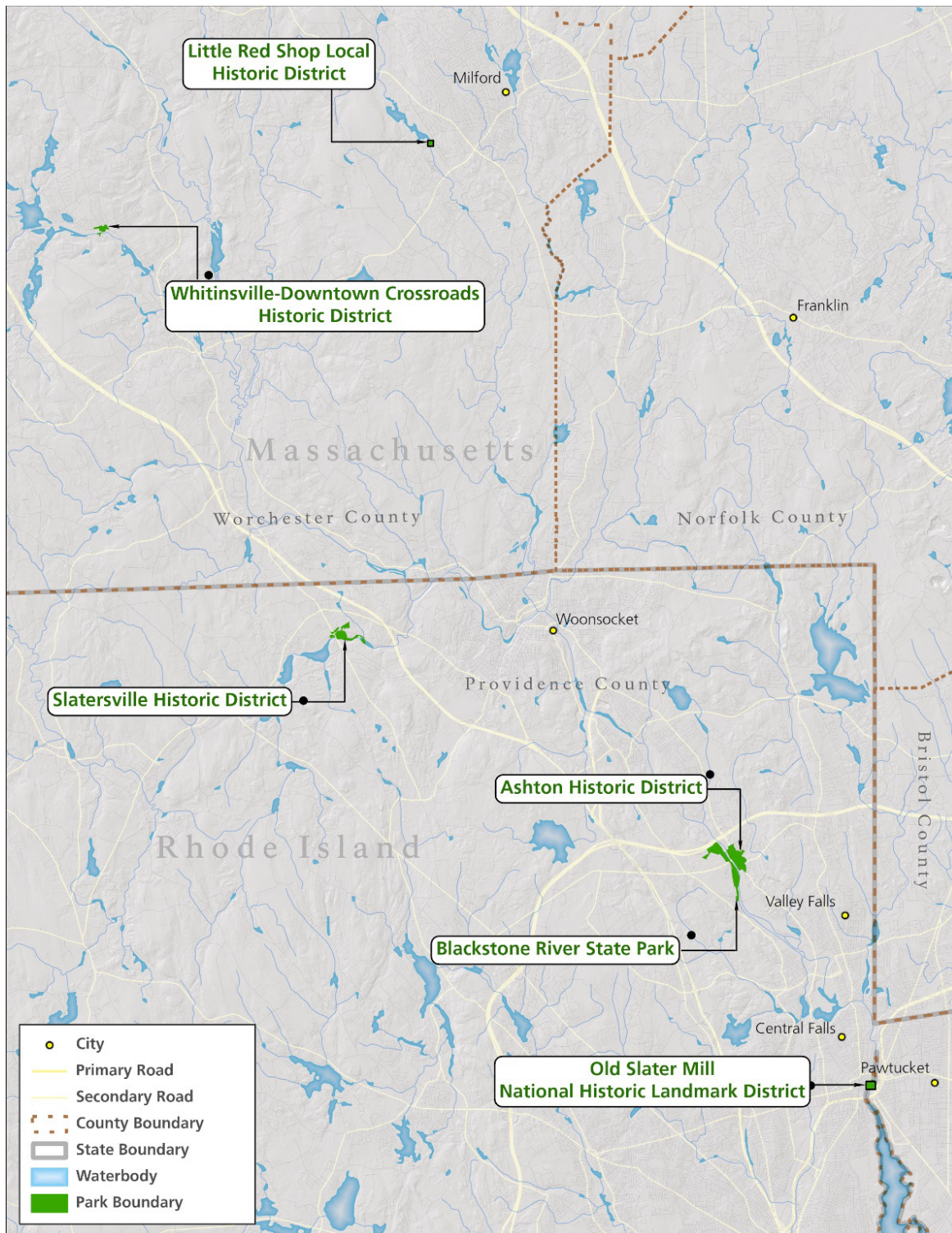


FIGURE 1. BLACKSTONE RIVER VALLEY NATIONAL HISTORICAL PARK AND THE SIX SITES WITHIN THE PARK BOUNDARY

CHAPTER 2: PROPOSED ACTION

The proposed action includes the designation of management areas and their desired conditions, and management actions and strategies to achieve and maintain those desired conditions. For visitor use and experience actions, the proposed action also identifies indicators, thresholds, and visitor capacities. A more thorough description is included in chapters 2 and 3 of the draft plan and in appendix B. The management strategies and actions described here are likely to be implemented in the foreseeable future and are sufficiently developed to allow a programmatic analysis under the National Environmental Policy Act. Management strategies and actions from the draft plan that are not included in the proposed action are listed at the end of this section; additional compliance would be completed for these strategies and actions when details and locations are known.

This document includes all required content for an environmental assessment according to 43 Code of Federal Regulations (CFR) 36.310(a) and 40 CFR 1501.5. Consistent with 43 CFR 46.310(b), the National Park Service has not included a no-action alternative because it would not be analytically useful here, and there are no unresolved conflicts about the proposed action with respect to alternative uses of available resources.

MANAGEMENT AREAS AND DESIRED CONDITIONS

The park's general management plan would identify management areas and define their desired conditions, which are the specific resource conditions and visitor experiences that the National Park Service strives to achieve and maintain. Each management area (1) applies to different geographic locations (see descriptions below and more specifically, figures 2, 3, and 4) and (2) is associated with a general level of management guidance or direction, including the types of activities and facilities that are appropriate in that management area. A detailed description of the desired conditions for each management area is included in chapter 2 of the draft plan, pages 28–41, and is incorporated by reference.

Historic Resources Management Area

At the Old Slater Mill National Historic Landmark District, this management area would include the entire parcel of land on the west side of the river except for the parking lot (figure 2). The Slater Mill Dam would be included in this management area after the National Park Service has full fee-simple ownership of that parcel (in progress). At Blackstone River State Park, this management area would include the Kelly House and adjacent fields, the Blackstone Canal and associated towpath, and building foundations from Old Ashton village (figure 3). The desired conditions for this management area would preserve significant historic buildings and historic, archaeological, architectural, and landscape features while the buildings are adaptively reused for contemporary park needs.

Scenic and Natural Resources Management Area

This management area would include all areas of Blackstone River State Park that are not in the Historic Resources or Park Support Management Areas (figure 3). The desired conditions for this management area would preserve historic structures and archeological resources, as

well as the undeveloped open space, woodlands, meadows, wetlands, and floodplains that contribute to the setting, context, and scenic views of the Blackstone River, Blackstone Canal, and Old Ashton Historic District.

Park Support Management Area

At the Old Slater Mill National Historic Landmark District, this management area would include the parking lot on the northeast side of Old Slater Mill and the section of the Blackstone River Bikeway that runs adjacent to the parking lot (figure 2). At Blackstone River State Park, this management area would include the parking lot underneath Rhode Island Route 116 and the access drive (figure 3). The desired conditions for this management area would provide visitors with vehicle entry and overall orientation to the park and includes space for park administration, maintenance, and emergency services.

Mill Villages Partnership Management Area

This management area would encompass four mill village local historic districts that are locally owned and managed: Ashton Historic District, Little Red Shop Local Historic District, Slatersville Historic District, and Whitinsville-Downtown Crossroads Historic District (figure 4). The National Park Service would work in partnership with the local historic district commissions and others to preserve and interpret cultural and natural resources within these areas. The desired conditions for this management area would support the preservation and interpretation of cultural and natural resources at the four locally owned and managed historic districts.

East Parcel Management Area

This management area would include the parcel at Old Slater Mill National Historic Landmark District on the east side of the Blackstone River (figure 2). The desired conditions for the portion of this management area with NPS ownership or easement would preserve open space with historically important views of Old Slater Mill and the Slater Mill Dam. The desired conditions for the portion of this management area that are privately owned would manage and maintain natural resources in accordance with applicable laws, regulations, and policies. For the privately owned portion of the parcel, the National Park Service would provide technical assistance as feasible and appropriate.

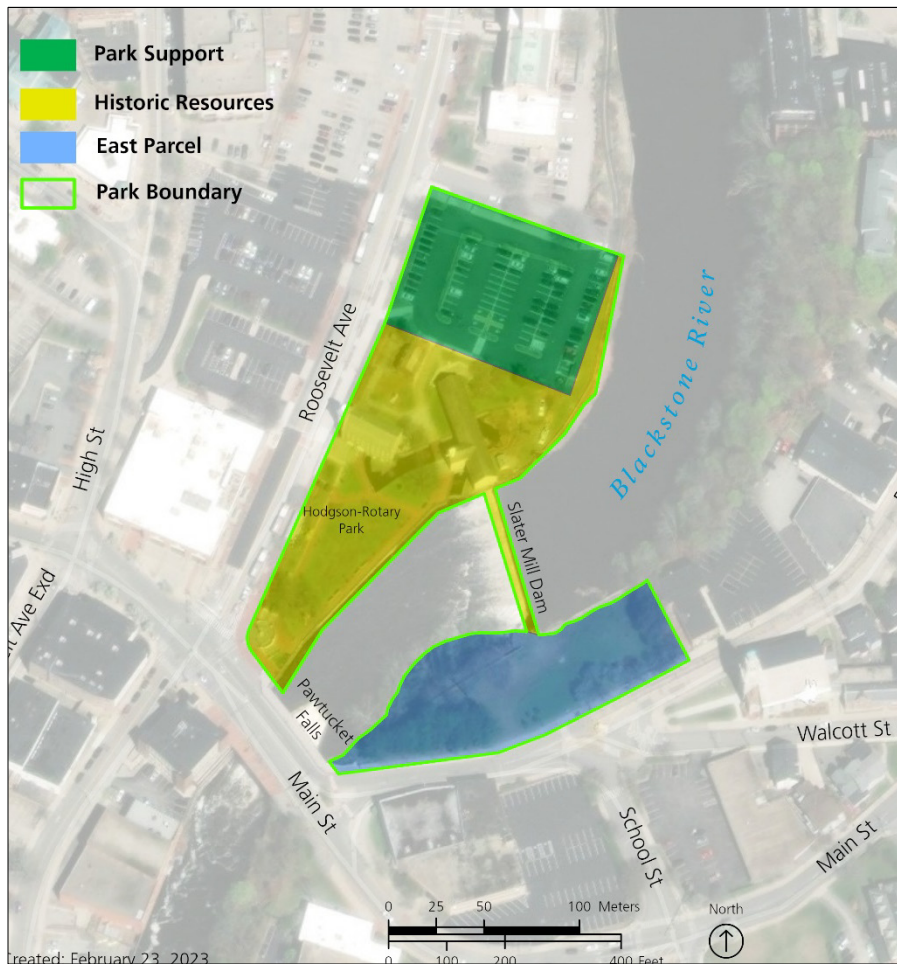


FIGURE 2. THE THREE MANAGEMENT AREAS FOR OLD SLATER MILL NATIONAL HISTORIC LANDMARK DISTRICT

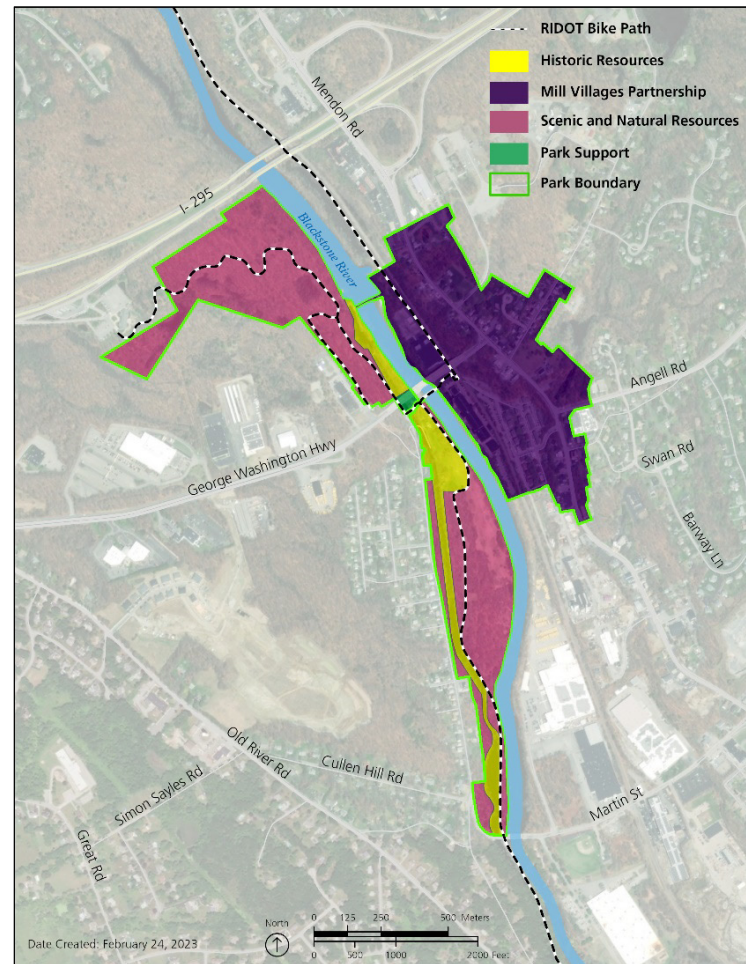


FIGURE 3. THE FOUR MANAGEMENT AREAS FOR BLACKSTONE RIVER STATE PARK AND ASHTON HISTORIC DISTRICT

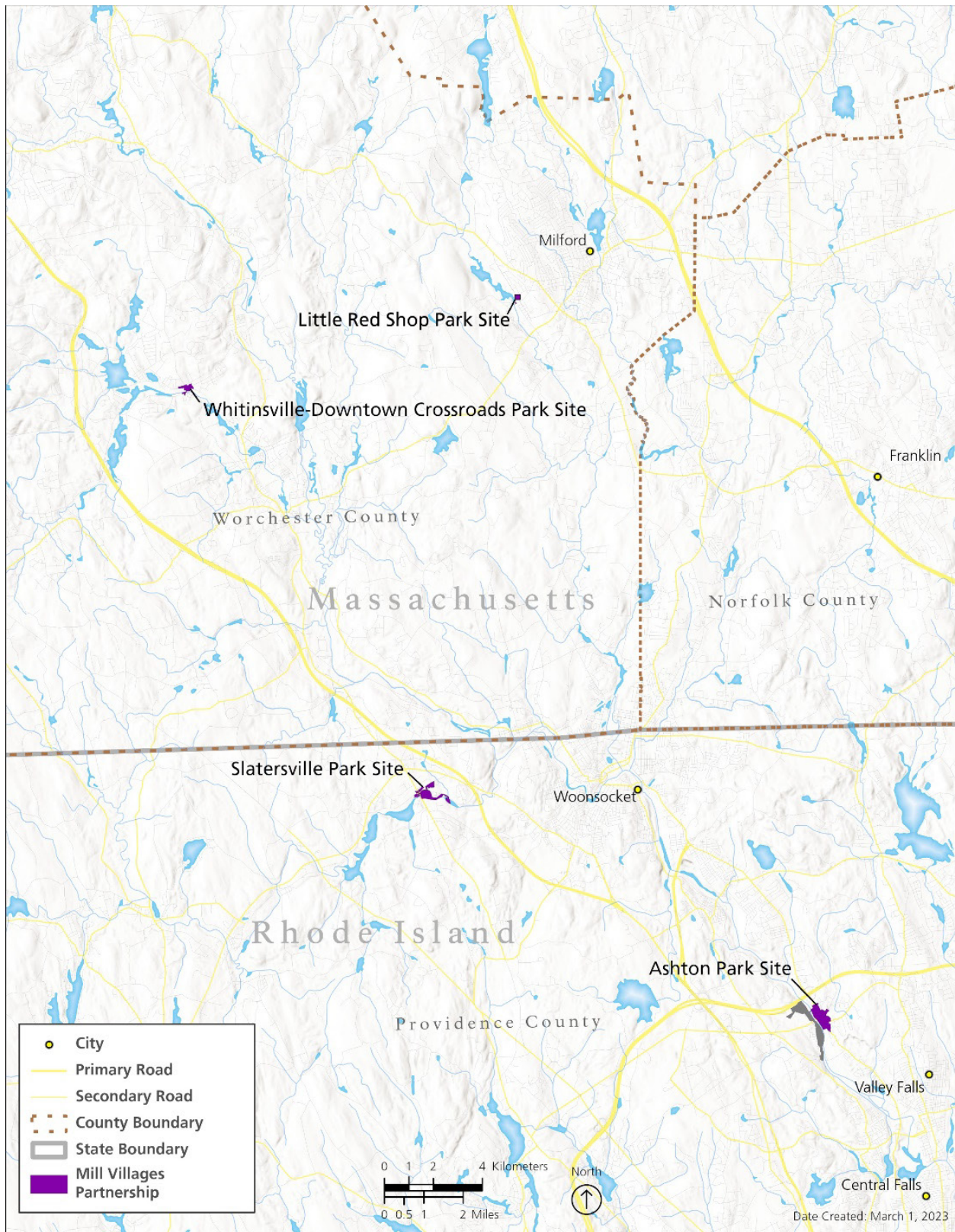


FIGURE 4. MANAGEMENT AREAS FOR THE FOUR LOCAL HISTORIC DISTRICTS

MANAGEMENT STRATEGIES AND ACTIONS TO ACHIEVE DESIRED CONDITIONS

A detailed description of management strategies and actions to achieve desired conditions is included in chapter 3 of the draft plan and appendix B and is incorporated by reference. The management strategies and actions focus on cultural resources management, natural resources management, visitor use and experience (including interpretive and educational programs, recreation, wayfinding, circulation, and visitor information), facilities, visitor services, and partnerships. As described in the draft plan, strategies and actions are first discussed as general actions common to all or multiple park sites. Then management actions and strategies are described specific to individual management areas.

The following summarizes the strategies and actions presented in the draft plan that are analyzed in this environmental assessment.

The National Park Service would do the following:

- Prepare research, planning, baseline, and inventory documents for cultural resource management, exhibits, and facilities management, including adaptation plans related to climate change mitigation.
- Execute partnerships and agreements for resource stewardship, improvements to park programs and visitor services, recreational opportunities, and access to the park for visitors and Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations . These actions include cooperating and consulting with Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations and establishing a friends group to support park sites.
- Promote research, monitoring, and data collection for natural and cultural resources and visitor use.
- Develop interpretation, education, and digital plans and programs for park sites that are informed by Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations.
- Host special events, including historical demonstrations, classes, and seasonal interpretation programs.
- Work with and support local municipalities to improve visitor use and experience through directional signage, new bikeways, and staff presence at town events.
- Develop a sign and wayfinding plan, and partner with others to connect existing routes and services to park sites, including providing sustainable transportation options.
- Evaluate opportunities to support and enhance visitor experiences and community building through commercial services, leasing, agreements, or other special park uses.
- Provide technical assistance and support to other partners, including state agencies.

- Explore funding opportunities with external partners to support the management of some park resources.

Indicators and Thresholds

Indicators measure conditions related to visitor use, and thresholds are minimally acceptable conditions associated with each indicator. Together, monitoring indicators and thresholds inform park managers and support the selection of appropriate management strategies to achieve and maintain desired conditions. The following two indicators and two thresholds would be used to monitor visitor experience and historic resource conditions:

Indicator 1: Number of complaints raised by visitors on guided interpretive tours at Old Slater Mill and Wilkinson Mill related to noise level and crowding

Threshold 1: The annual number of visitor complaints increases no more than 10 % compared to the 12-month baseline

Indicator 2: Number of incidents of human-caused damage to park historic resources under direct NPS management

Threshold 2: No more than 10% increase from baseline in documented incidents at any one site in a year

To keep thresholds from being exceeded, NPS staff would use one or more of the following management strategies:

- Continue to minimize noise generated by management activities by strictly regulating NPS administrative use of noise-producing machinery during tour times.
- Provide visitors with improved and more detailed information, particularly about tours and parking, to encourage the voluntary redistribution of visitor use to off-peak times and days when the park may be less crowded, including offering additional tours or shifting the tour schedule to spread visitors out.
- Use auditory enhancement technology, such as microphones for guides or listening devices for guests, to enhance and direct voice levels and provide tour participants with ear plugs and other ways to minimize loud noises where needed.
- Ensure noise levels do not exceed applicable OSHA standards.
- Provide visitors with improved and more detailed information regarding the sensitivity of the historic resources and the need to protect them. This strategy could be accomplished through a variety of communication approaches, including signs or messaging from guides at the beginning of tours.
- Conduct visitor surveys that seek to understand desired visitor opportunities pertaining to historic properties and current visitor knowledge of appropriate activities and actions near such properties. The information would be used to target additional management strategies that would provide access to properties and effectively communicate restrictions where necessary.

- Install additional removable physical barriers, such as posts and rope, to deter visitors from using or accessing particularly sensitive or fragile resources.
- Implement additional security measures, such as alarm systems and cameras, to deter intentional visitor damage.
- Increase the staff, volunteer, and law enforcement presence, and continue to enforce park regulations.
- Remove sensitive or fragile historic objects on display as a last-resort preservation/protection measure.

For a complete discussion of indicators and thresholds, including rationales, monitoring strategies, and associated management strategies, see appendix B.

Visitor Capacity

National Park Service staff would implement the visitor capacities described in table EA-1 for select areas of the park (figure 5). Management strategies to ensure that use levels stay within identified visitor capacities include continuing current management practices and implementing the management actions described above.

Table EA-1. Visitor Capacity Summary

Analysis Area	Visitor Capacity
Old Slater Mill Building	80 people at one time (PAOT) when open to the general public 120 PAOT when events, programs, and meetings occur during non-public hours
Wilkinson Mill	Two groups of 15 PAOT
Sylvanus Brown House	15 PAOT
Hodgson-Rotary Park	120 PAOT 1,250 PAOT for special events
Slater Mill Core Historic Area	65 PAOT 200 PAOT for special events
Slater Mill Parking Lot	240 PAOT 300 PAOT for special events

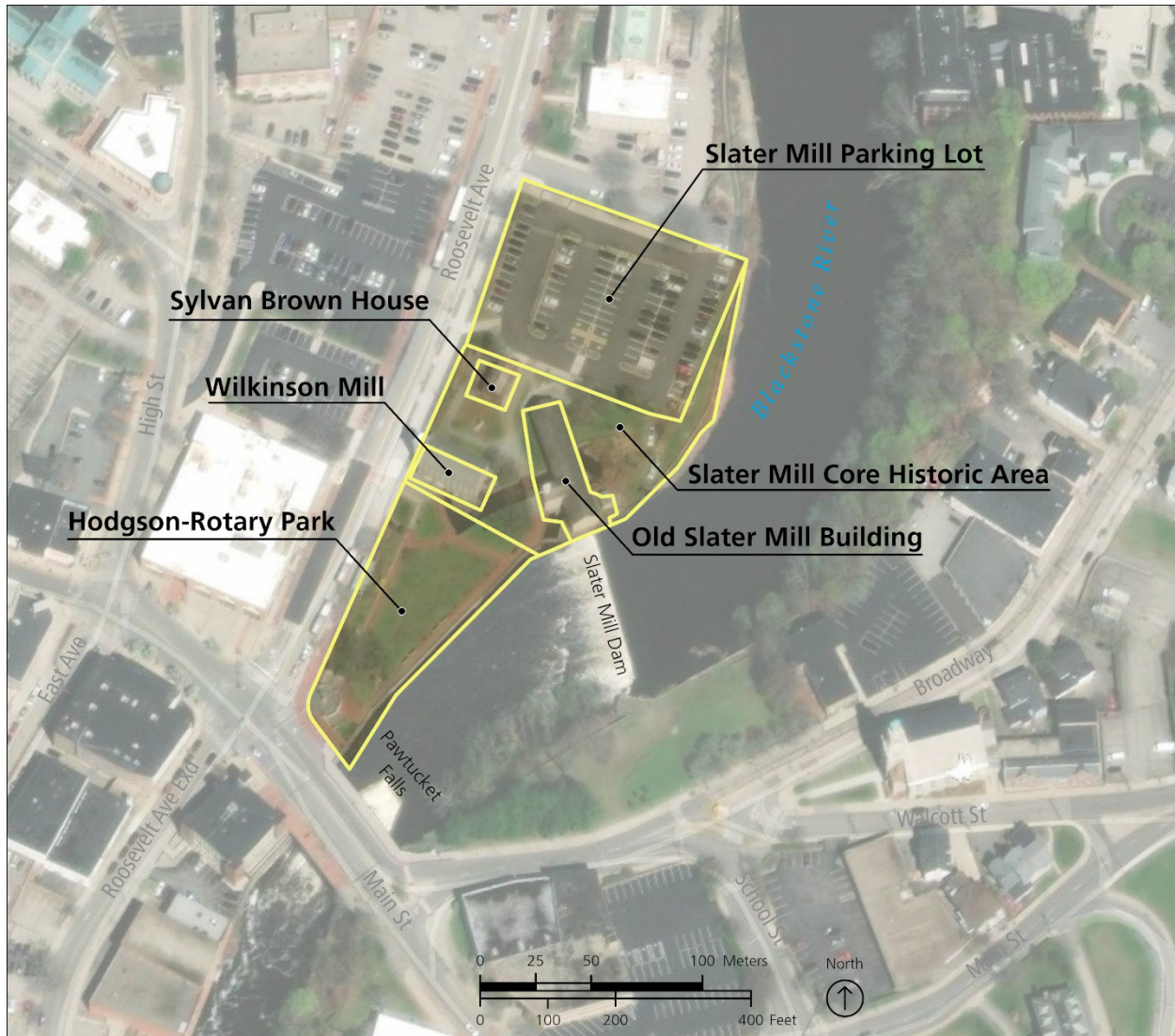


FIGURE 5. VISITOR CAPACITY ANALYSIS AREAS FOR BLACKSTONE RIVER VALLEY NATIONAL HISTORICAL PARK

See appendix B for a complete visitor capacity analysis, including a description of the analysis areas; a review of existing direction and knowledge; identification of limiting attributes; visitor capacity levels; and associated management strategies.

MANAGEMENT STRATEGIES AND ACTIONS FOR WHICH FUTURE COMPLIANCE IS REQUIRED

The following strategies and activities included in chapter 3 and appendix B of the draft plan are not included in the environmental assessment's proposed action because they are not sufficiently developed to analyze impacts. Additional appropriate compliance would be completed when details and locations are known.

Parkwide Management Strategies

- Explore operationally and financially sustainable options, including National Park Service-owned and unowned properties, to meet the needs of the park facilities and maintenance program, including adequate workshop space and tool and equipment storage. Possible strategies include the following:
 - adaptively reusing existing structures at Old Slater Mill Historic Site for one or more of those purposes
 - constructing a new facility at Old Slater Mill Historic Site that fits within the historic character of the site
 - locating, through partnerships, agreements, leasing, or other tools, maintenance operations outside the park in the surrounding community

Management Strategies for Old Slater Mill National Historic Landmark District

- Implement treatment actions as appropriate from inventories and reports (e.g., cultural landscape report, historic structure report, archeological management plan) for cultural resources at the Old Slater Mill National Historic Landmark District.
- Where appropriate, explore the possibility of time-limited parking options to promote turnover in the parking lots.
- Continue to coordinate with the City of Pawtucket regarding city easements for the construction and/or maintenance of the Blackstone River Bikeway, bus stop, lights, and the Cogswell Temperance Fountain.
- Explore options for modernizing infrastructure to meet the operational needs of NPS staff and visitors.

Management Strategies for Blackstone River State Park

- Work with the Rhode Island Department of Environmental Management to explore options for addressing parking congestion at Blackstone River State Park caused by bike path users and special events and programs. Where appropriate, explore the possibility of time-limited parking options to promote turnover in visitor parking lots.
- Per the park's enabling legislation, in partnership with the Rhode Island Department of Environmental Management and other organizations, design, construct, and

maintain a memorial at an appropriate location in the park that recognizes the role of John H. Chafee in preserving the resources of the Blackstone River Valley.

- Explore opportunities to improve circulation within the state park between Blackstone River State Park Visitor's Center and the Kelly House, particularly for special events.

Management Strategies for Indicators and Thresholds

The following management strategies would be considered if other strategies are not effective and there is evidence that conditions are trending away from desired conditions or are approaching thresholds.

- Consider installing exhibit design features that make exhibits more resilient to visitor impacts.
- Consider more closely managing the number of visitors at one time so that rangers, volunteers, and partner staff can better observe visitor activities and minimize the wear on historic resources that can occur during high-visitation levels.
- Explore removing or limiting self-guided tour options at historic sites so that rangers, volunteers, and partner staff can better observe visitor activities and deter improper behavior in real time.
- Consider timed entry reservations for guided or self-guided tours to manage the total number of visitors at one time.
- Consider changes to group sizes or the number and pacing of groups in a building at one time for Old Slater Mill, Wilkinson Mill, and Brown House.
- Explore incorporating design features that reduce undesirable noise, enhance the acoustics of cultural and interpretive resources, or provide nonauditory communication methods, such as closed captioning, to existing or future infrastructure, including interpretive exhibits.
- Explore prerecording information about sites that visitors can download and stream.

Management Strategies for Event Visitor Capacities

National Park Service staff could consider applying one or more of the following strategies to keep special event visitor capacities from being exceeded:

- Do not issue special use permits to nonpark-sponsored events larger than the capacities identified above.
- Ensure that events meet the latest outdoor event egress standards in case of an emergency.
- Ensure that events follow local permitting requirements, particularly guidance around sanitation and human safety.

- Require attendees to obtain a ticket or to RSVP to enter the event, and communicate this requirement in promotional materials to inform visitors not involved in the event of potential impacts on their visit from the event.
- Station volunteers and staff at sensitive resources, or place temporary barricades to protect them from the higher volume of visitors. Require the same for nonpark-sponsored event organizers.
- Survey event attendees to understand their perception of crowding and other influences on visitor experience.
- Strategically place attractants to congregate people in areas that are more tolerant of higher levels of use.
- Implement temporary closures or other strategies to manage access to sensitive areas and resources during special events if needed, except for the First Amendment area of Hodgson-Rotary Park.

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CHAPTER 3: IMPACTS ON PARK RESOURCES

INTRODUCTION

According to the Council on Environmental Quality regulations for implementing the National Environmental Policy Act, an environmental assessment should “briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact” (1501.5[c][1]). To support this analysis, the National Park Service reviewed resources that may be present in the project area and identified those resources that may be impacted by the proposed action. Impact topics that were considered but dismissed from further analysis in this environmental assessment are listed below, along with the reasons for dismissal. Following the dismissals section, this chapter assesses the effects to resources that are present and that could be impacted by the proposed action.

ISSUES CONSIDERED BUT DISMISSED (RESOURCES THAT ARE PRESENT IN THE PROJECT AREA BUT NOT EXPECTED TO BE IMPACTED)

Archeological Resources

The proposed action does not include any construction, ground-disturbing, or vegetation-clearing activities that could damage archeological resources. No changes would occur in the types or amounts of human activity in the project area as a result of the proposed action. Archeological resources would remain in situ, or undisturbed, unless the removal of artifacts or intervention into cultural material is justified by protection, research, stabilization, data recovery, interpretation, or development requirements. If artifacts are to be removed, the National Historic Preservation Act’s section 106 process would be initiated. For these reasons, there are no anticipated effects to archeological resources, and this impact topic was not carried forward for analysis.

Environmental Justice

Presidential Executive Order 12898, “General Actions to Address Environmental Justice in Minority Populations” requires all federal agencies to identify and address the disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. According to the US Environmental Protection Agency (USEPA), environmental justice is the

... fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies (USEPA 1998).

Many minority and low-income populations and communities surround Old Slater Mill National Historic Landmark District (USEPA 2023). The National Park Service determined that the proposed action would not result in any identified effects that would be specific to any minority or low-income community. Restrictions on travel or access to any area of the park that might result from the proposed action would be equally applied to all visitors, regardless of race or socioeconomic standing. The proposed action would not result in the destruction or disruption of community cohesion and economic vitality, the displacement of public and private facilities and services, increased traffic congestion, and/or the exclusion or separation of minority or low-income populations from the broader community. For these reasons, environmental justice was not carried forward for analysis.

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.

Via the Information for Planning and Consultation website for the US Fish and Wildlife Service, the National Park Service requested the most recent list of species and their designated critical habitat protected under the Endangered Species Act that may be impacted by projects in the park. The species list identified the northern long-eared bat (*Myotis septentrionalis*), an endangered species, and the monarch butterfly (*Danaus plexippus*), a candidate species for listing, as potentially being present in the project area.

The proposed action does not include any activities that would alter suitable roosting habitat, foraging habitat, or bat hibernacula or cause changes in noise levels or visual disturbance in an area. Furthermore, the proposed action does not include any activities that would alter suitable habitat for monarch butterflies, expose monarch butterflies to insecticides, or otherwise cause direct injury or mortality. Therefore, there would be no effect on federally listed threatened and endangered species from implementing management areas or management actions and strategies to achieve desired conditions and manage to indicators, thresholds, and visitor capacities. The National Park Service would consult with the US Fish and Wildlife Service on any proposed future actions within the park that may adversely affect the northern long-eared bat or monarch butterfly. For these reasons, federally listed threatened or endangered species were not carried forward for analysis.

Greenhouse Gas Emission

The proposed action would not increase the carbon footprint or increase greenhouse gas emissions associated with the site because the proposed action does not include any construction. Some administrative activities associated with the operation of the historic sites may emit a small amount of greenhouse gases; however, those are expected to be the same as current practices. Additionally, park visitors driving to the site may contribute greenhouse gas emissions. The National Park Service does not expect visitation numbers to change under the proposed action. Special events under the proposed action are expected to be about the

same size and frequency as the special events that have already been occurring. Therefore, for all these reasons, greenhouse gas emission was not carried forward for analysis.

Indian Trust Resources

Indian Trust Resources are legal obligations of the US government to protect Tribal lands, assets, resources, and/or treaty rights as granted under treaty or another legal instrument. The lands of the park are not held in trust by the secretary of the interior for the benefit of Indians due to their status as Indians. Because these resources are not at the park, Indian trust resources was not carried forward for analysis.

Night Sky

The proposed action does not contain any activities that include changes in lighting fixtures at the park, and therefore would have no impacts on night sky conditions. For this reason, night sky was not carried forward for analysis.

Socioeconomics

The proposed action would cause no measurable changes in parkwide annual visitation. The proposed action would have no anticipated effect on regional income, and jobs would not be lost or shifted. Similarly, the proposed action is not expected to result in growth-inducing impacts for the region or in nearby communities. Because the proposed action is unlikely to impact the socioeconomic environment, visitor populations, and the regional economy, socioeconomics was not carried forward for analysis.

Soils and Vegetation

The proposed action does not include any construction that would disturb soils or remove vegetation. In the Historic Resources Management Area, minimal landscaping and maintenance activities would continue as currently conducted. Much of the area is manicured lawn consistent with the cultural landscape. Therefore, limited disturbance to native vegetation from maintenance activities would occur. Additionally, new signs and waysides may be installed under the proposed action to enhance the visitor experience and to provide educational opportunities for the visitor. The installation of signs and waysides may require some vegetation removal and/or soil disturbance; however, site analysis and appropriate compliance would be completed at the time of implementation. Therefore, soils and vegetation were not carried forward for analysis.

Soundscapes

The proposed action does not include any construction activities that could cause noise disturbance. Park visitors and staff would continue to contribute some noise from vehicles used to access the park and from administrative activities such as landscaping and maintenance. However, because the proposal is not expected to result in an increase in parkwide annual visitation, noise from these activities is not expected to increase or decrease. No changes would occur in the types or amounts of human activity in the project area that could result in additional noise disturbances as a result of the proposed action. Special events

under the proposed action are expected to be about the same size and frequency as the special events that have already been occurring. The National Park Service would continue to minimize noise generated by management activities, such as landscaping and maintenance, by strictly regulating NPS administrative use of noise-producing machinery during tour times and ensuring that noise levels do not exceed applicable OSHA standards. Therefore, soundscapes were not carried forward for analysis.

Wildlife

The proposed action does not include any construction activities that could cause visual or noise disturbance to wildlife or degrade wildlife habitat. The installation of signs and waysides may require some vegetation removal and/or soil disturbance; however, site analysis and appropriate compliance would be completed at the time of implementation. Minimal ongoing landscaping and maintenance activities would continue in the Historic Resources Management Area, which could cause noise and/or visual disturbance wildlife in the area; the National Park Service would continue to minimize noise generated by those activities by ensuring that noise levels do not exceed applicable OSHA standards. Overall, no changes would occur in the types or amounts of human activity in the project area as a result of the proposed action. Therefore, wildlife was not carried forward for analysis.

Water Quality

The proposed action does not include any ground-disturbing activities that would result in bare soil susceptible to erosion and sediment transport to nearby waterbodies. No activities occur that involve vegetation clearing and which could reduce shading and therefore increase the water temperature. Furthermore, the proposed action does not include activities involving the use of herbicides, pesticides, or other contaminants that could be transported into nearby waterbodies. For these reasons, water quality was not carried forward for analysis.

POTENTIALLY IMPACTED RESOURCES

The following resources are present and could be impacted by the proposed action:

- Visitor use and experience
- Historic structures and cultural landscapes

The following section provides a brief description of the current condition of the resources and a discussion of how the actions proposed may change their condition.

Visitor Use and Experience

Affected Environment – The park is integrated in many ways with its surrounding communities. The park serves as a resource for its communities, particularly by providing open space in urban and suburban areas. The stories told in these spaces by Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations, community

members, partners, and park rangers are also deeply connected to the communities and their continual evolution.

The park is made up of six geographically separated areas that visitors primarily access in private vehicles. These areas include the following:

- *Old Slater Mill Historic Site*, where visitors engage in self-guided exploration of historic mill buildings and other historic structures, including the Old Slater Mill, the Wilkinson Mill, and the Sylvanus Brown House. The Old Slater Mill is open four days a week during the spring, summer, and fall and offers regular guided tours. The visitor contact station inside the mill is open to the public during these times as well. The outdoor space is used for special events, including festivals, musical performances, arts classes, and for leisure activities such as walking and picnicking.
- *Blackstone River State Park* is open to the public during daylight hours and, like all other park sites, does not charge an entrance fee. At the state park, the Captain Wilbur Kelly House is open to the public May through November, including for park-led interpretive tours. Visitors enjoy walking, jogging, biking, paddling, and picnicking.
- *The four mill villages* within the park are where NPS staff and volunteer-led programs occasionally take place. Visitors can also take advantage of self-guided walking tours of Hopedale, Whitinsville, and Slatersville provided through the park's website and the NPS app.

Because the sites are spread out over two states and contain inconsistent and unclear signage, it is challenging for visitors to move between sites in a way that allows them to draw connections between the sites and to orient to the entire story of the Blackstone River Valley.

Broad factors not specific to the park may increase or decrease future visitation, including population changes, economic trends, travel costs, leisure time availability, future disposable income, climate change impacts, and changes in recreation preferences.

Reasonably foreseeable future actions in the project area that may impact visitor use and experience include the construction of new housing and leisure attractions, the addition of recreation amenities, and the development of new or expanded park interpretive offerings. These actions would likely increase visitation and lead some visitors to spend longer periods of time at the park. There would be enhanced and expanded opportunities to recreate at the park and learn about and connect with park resources.

Impacts of Proposed Action – Establishing management areas, desired conditions, indicators and thresholds, and visitor capacities, along with management strategies and actions to achieve desired conditions, would improve the visitor experience at the park by increasing visitor understanding and appreciation of the park's resources, improving wayfinding, and enhancing learning and recreational opportunities. Over time, the park would use the desired conditions and management strategies outlined in the proposed action to strategically assess existing visitor opportunities and experiences and respond proactively to new opportunities and trends. This would, in turn, enhance visitors' connection with and understanding of the significance and fundamental resources and values of the park.

The park currently is not experiencing overcrowding, and most visitors appear to have successful visits. However, if desired conditions were not being achieved, additional management actions—such as improving education and interpretation, shifting tour schedules, and employing additional security measures to protect historic resources in some locations—could be implemented to ensure continued quality visitor experiences at the park while protecting park resources. Managing to the visitor capacities identified in the proposed action (which are at or above current use levels) could one day adversely impact some visitors who may not be able to visit on their desired day or may be temporarily displaced from the park to a different day; however, these measures would be implemented to improve the overall experience of visitors at the park. Overall, impacts on visitor use and experience from implementation of the proposed action would be small and largely beneficial.

The impacts of reasonably foreseeable future actions, which are included in the affected environment section, would likely increase visitation, and lead some visitors to spend longer periods of time at the park. Under the proposed action, there would be enhanced and expanded opportunities to recreate at the park and learn about and connect with park resources. The effects of the proposed action, when combined with the effects of past, present, and reasonably foreseeable future actions, would contribute beneficial impacts on the overall conditions in visitor use and experience.

Historic Structures and Cultural Landscapes

Affected Environment – The Old Slater Mill Historic Site includes three buildings on the west bank of the Blackstone River in downtown Pawtucket: Old Slater Mill (1793 et seq.), Wilkinson Mill (about 1810 et seq.), and the Sylvanus Brown House (about 1758; moved to the site in 1962). The “Old Slater Mill” site was designated a national historic landmark under Criterion 1, Theme XVII-b, Commerce and Industry, on November 13, 1966. The three buildings and other historic structures at the site continue to contribute to site’s historic significance. Key historic structures at Blackstone River State Park include the Captain Wilbur Kelly House (“Kelly House”), as well as a 1-mile section of the Blackstone Canal and adjacent towpath. Blackstone River State Park contains the best-preserved section of the Blackstone Canal, built in the 1820s to connect the port of Providence to the inland town of Worcester and listed in the National Register of Historic Places. The Kelly House has been defined as a contributing structure to the national register-listed Old Ashton Historic District.

Both historical trends and future projections suggest future increases in temperature, precipitation levels, and intensity of severe weather events. Increased demand for temperature control systems to mitigate the impacts of temperatures on visitors and staff can add further stress to sensitive historic buildings and require significant alterations to the structures. 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 deterioration to any wooden structures. Historic structures and cultural landscapes at Old Slater Mill Historic Site and Blackstone River State Park are part of national register-listed historic districts; as such, there has been a strong cultural resource preservation trend at both sites.

Reasonably foreseeable future actions that have the potential to impact historic structures and/or cultural landscapes include projects to repair exterior windows, doors, and trim on historic buildings at Old Slater Mill Historic Site and a project to repair failing historic masonry retaining walls around the Kelly House; these projects would have beneficial impacts on historic structures and cultural landscapes by improving the preservation of the historic features and interior finishes. Minimal landscaping and maintenance activities would continue as currently conducted in the Historic Resources Management Area for the purpose of maintaining cultural landscapes. The National Park Service also intends to improve Architectural Barriers Act Accessibility Standards (ABAAS)-compliant universal access at Old Slater Mill Historic Site, which may result in adding nonhistoric features/elements to historic structures or altering features/elements of historic structures. The National Park Service does not anticipate that improving ABAAS-compliant universal access is indicative of any evolving trend that would reverse the NPS preservation and adaptive reuse ethic.

Impacts of Proposed Action – Historic structures and cultural landscapes at Old Slater Mill Historic Site and Blackstone River State Park would be managed within the Historic Resources Management Area. This management area would provide direction for historic resource management with an emphasis on continued use and preservation of buildings and structures and the grounds immediately surrounding the historic structures. Under the proposed action, park managers would develop partnerships; seek out funding opportunities; improve education and interpretation; and improve research, monitoring and inventorying. These actions would improve the National Park Service’s ability to preserve historic structures and cultural landscapes in accordance with the *Secretary of Interior’s Standards and Guidelines for Historic Preservation* and Director’s Order 28: *Cultural Resource Management*.

Additionally, as described in chapter 2 of this environmental assessment, the National Park Service would manage to the established threshold for the number of incidents of human-caused damage to park historic resources under direct NPS management. Should that threshold be met, park managers may install removable physical barriers, add security measures, and increase the staff, volunteer, and law enforcement presence to better protect historic structures and resources from unintentional damage or vandalism. Therefore, implementation of the proposed action would improve the condition of historic structures and cultural landscapes through continued preservation and additional measures to ensure that the presence of visitors does not damage historic resources. When the impacts of the proposed action are combined with other past, present, and reasonably foreseeable future actions and trends, the overall cumulative impact on historic structures and cultural landscapes would be beneficial since the condition of these resources would improve.

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CHAPTER 4: CONSULTATION AND COORDINATION

The National Park Service consulted with Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations and federal and state agencies in preparing this document. The process of consultation and coordination is an important component of this plan. The National Park Service consulted with the following Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations:

- Hassanamisco Nipmuc Band
- Mashpee Wampanoag Tribe
- Narragansett Indian Tribe
- Wampanoag Tribe of Gay Head (Aquinnah)

The National Park Service consulted with the following state and federal agencies:

- State Historic Preservation Officer – Rhode Island
- State Historic Preservation Officer – Massachusetts
- US Fish and Wildlife Service

During the preparation of this general management plan, members of the planning team coordinated and/or consulted with various entities and persons.

INDIGENOUS PEOPLES OF THE BLACKSTONE RIVER VALLEY AND ITS SOVEREIGN TRIBAL NATIONS

Hassanamisco Nipmuc Band

Mashpee Wampanoag Tribe

Narragansett Indian Tribe

Wampanoag Tribe of Gay Head (Aquinnah)

AGENCIES

Massachusetts Historical Commission

Rhode Island Department of Environmental Management

Rhode Island Historical Preservation and Heritage Commission

Town of Cumberland, Rhode Island

Town of Hopedale, Massachusetts

Town of Lincoln, Rhode Island

Town of North Smithfield, Rhode Island

Town of Northbridge, Massachusetts

City of Pawtucket, Rhode Island

ORGANIZATIONS

Blackstone Heritage Corridor, Inc.

Blackstone River Watershed Council /Friends of the Blackstone

Clark University Blackstone Watershed Collaborative

ELECTED OFFICIALS

Jack Reed, US Senator – Rhode Island

Sheldon Whitehouse, US Senator – Rhode Island

David Cicilline, US Representative (former) – Rhode Island

Seth Magaziner, US Representative – Rhode Island

Edward Markey, US Senator – Massachusetts

Elizabeth Warren, US Senator – Massachusetts

James McGovern, US Representative – Massachusetts

Jake Auchincloss, US Representative – Massachusetts

The National Park Service will continue to consult and/or communicate with Indigenous Peoples of the Blackstone River Valley and its Sovereign Tribal Nations, agencies, partners, stakeholders, and the public as actions identified in the draft plan advance toward more detailed design development and implementation stages. Park managers will complete any additional compliance and permitting requirements, including compliance with section 106 of the National Historic Preservation Act, for project-specific undertakings.

Appendixes



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APPENDIX A: FOUNDATION ELEMENTS

The *Blackstone River Valley National Historical Park Foundation Document* (NPS 2020) provides the underlying basis for the general management plan and includes relatively stable components that will not change much over time. These components are the legislated purpose of the park unit, the significance the unit holds, the focus of the unit's interpretation (interpretive themes) and education program, and the unit's fundamental resources and values. In addition, the foundation document contains a special mandates and administrative commitments section, which includes the legal requirements that must be followed in the management of the park unit. A foundation document can be used in all aspects of park management to ensure that the most important objectives are accomplished before turning to items that are also important but not directly critical to achieving the park purpose and maintaining its significance.

The full foundation document can be accessed at <https://www.nps.gov/blrv/learn/management/foundation-document.htm>. The park purpose, significance, fundamental resources and values, other importance resources and values, and special mandates and administrative commitments are provided below, as they contain information pertinent to the Blackstone River Valley National Historical Park General Management Plan.

PARK PURPOSE

The purpose statement conveys the reasons that the area was set aside as a national park. Grounded in an analysis of park legislation and legislative history, purpose statements also provide primary criteria against which the appropriateness of plan recommendations, operational decisions, and actions are tested.

The purpose of Blackstone River Valley National Historical Park is as follows:

The purpose of Blackstone River Valley National Historical Park is to preserve, protect, and interpret the nationally significant historical and cultural resources of the Blackstone River Valley including lands, waterways, and structures that exemplify our nation's industrial heritage, and to support and enhance the network of partners in the protection, management, and operation of related resources and facilities throughout the John H. Chafee Blackstone River Valley National Heritage Corridor.

PARK SIGNIFICANCE

Significance statements capture the essence of the national park system unit's importance to the nation's natural and cultural heritage. They describe the unit's distinctiveness and describe why an area is important within regional, national, and global contexts. These statements help managers focus their efforts and limited funding on protection and enjoyment of attributes that are directly related to the purpose of the park unit.

The following significance statements have been identified for Blackstone River Valley National Historical Park.

- The historic structures and waterways woven throughout the urban and rural landscape of the Blackstone River Valley, particularly the survival of representative elements of entire 18th- and 19th-century production systems, are an outstanding example of an industrialized landscape developed over a period of 150 years. The national historical park is part of a larger cultural landscape that makes up Blackstone River Valley National Heritage Corridor. The corridor, approximately 600 square miles, provides the context in which the story of the American Industrial Revolution is told.
- Old Slater Mill, the first successful water-powered cotton-spinning mill in the United States, together with the hundreds of 19th-century factories and their associated mill villages located throughout the Blackstone River Valley, collectively illustrate the influence of Samuel Slater and the creation and evolution of the Rhode Island System of Manufacture, a dynamic force in American industrial history from 1790 to 1950. ·
- Slatersville was the first planned mill village in the United States and the first example of a Rhode Island System of Manufacture village. Its component parts and spatial organization, including housing, civic amenities, and commercial resources clustered around a factory and a power canal system, were duplicated throughout the Blackstone River Valley, and served as a model for industrial development across the nation. The Rhode Island System of Manufacture focused on hiring entire families to work in the mills, and usually had a single owner, or a small group of owners, as opposed to the corporate ownership and mill girl boarding house style of the Waltham System.
- The Blackstone River Valley has served as an incubator for technological innovation from the time Samuel Slater arrived in Rhode Island with ideas for a textile factory through today. Inventions designed and created within the Blackstone River Valley include the screw-cutting lathes of the Wilkinson machine shops in Pawtucket, the cotton-processing equipment developed by the Whitin Machine Works, and the Draper looms made in Hopedale used in textile mills across the nation. These and many other innovations from workshops across the Blackstone River Valley helped drive the industrialization of America.
- The Blackstone River and its tributaries powered mills and factories launching the industrialization of the nation. The Blackstone River Valley, with waterpower systems including dams, reservoirs, and power canals, became a “managed river network.” These engineered resources that powered the mills continue to be one of the most visible elements of the Blackstone River Valley’s industrial landscape, and now are part of the region’s recreational resources.

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.

The following fundamental resources and values have been identified for Blackstone River Valley National Historical Park:

- **Old Slater Mill Complex.** In 1790, Samuel Slater, recently arrived from England, worked with local machinists and investors to replicate the Arkwright System from England at a site along the Blackstone River in Pawtucket, Rhode Island, establishing America's first successful water-powered cotton-spinning mill. Slater began his operation in a former wool fulling mill, where it remained for three years. In 1793, he constructed a new mill specifically for spinning cotton thread that is today considered to be America's earliest factory. Defining features of the Old Slater Mill Complex include Slater Mill, Wilkinson Mill, Sylvanus Brown House, waterpower system, the smells and sounds of a working mill, machinery, and the collections. Slater Mill was designated a national historic landmark in 1966.
- **Mill Villages.** Mill villages in the Blackstone River Valley represent the characteristic physical expression of rural industrialization known as the Rhode Island System of Manufacture. Initially modeled on English precedents, the mill villages were centered on a mill and its infrastructure with family worker housing, commercial enterprises, and community amenities provided by the mill's owners. Defining features of the mill villages include: the factory complex, housing for workers and managers, civic structures such as churches, schools, recreation facilities for workers, and stores. They also included waterpower elements such as the mill pond, waterpower canals, and water flow control gates. The villages also often featured company farms and were integrated with local farming communities. The Rhode Island System hired entire families to work in the mills, and usually had a single owner, or a small group of owners, as opposed to the corporate ownership and mill girl boarding house style of the Waltham System. The following mill villages are included within the anticipated park boundary "because of their particularly high level of physical integrity and completeness and for the outstanding visitor experience potential that they offer in terms of opportunities for education, interpretation, and further study." Slatersville (North Smithfield, Rhode Island, 1807), Whitinsville (Northbridge, Massachusetts,

1809), Hopedale (Hopedale, Massachusetts, 1841), and Ashton (Cumberland, Rhode Island, 1867).

- **Waterpower System.** Stretching from Providence, Rhode Island, north to Worcester, Massachusetts, the 46-mile-long Blackstone River forms the Valley’s “spine.” The Blackstone River supported the majority of the region’s water-powered mills, while its many tributaries—including the Branch, Mumford, and Mill Rivers—enabled industrialization to spread throughout the watershed. Defining features of the waterpower system include the Blackstone River, its major tributaries, impoundments, and waterpower structures. •
- **Transportation Systems.** The young republic’s industrial development through the early Rhode Island System of Manufacture’s innovations would not have spread regionally or nationally without the interconnected transportation networks built along the Blackstone River including the road system, Blackstone Canal, railroad corridors, and related buildings and bridges. These transportation systems allowed for the expansion of industry across the region. This regionally scaled cultural landscape describes the evolution of the Blackstone River Valley’s development and nationally significant contributions to American industry and commerce.
- **Partnerships.** The National Park Service will not own and manage everything within the park boundary but will work in partnership to provide for the preservation of resources as well as visitor experience. Partners include the Blackstone River Valley National Heritage Corridor, Inc., Old Slater Mill Association, Rhode Island Department of Environmental Management, mill village host communities, and nonprofit organizations that own or manage thematically related historical, cultural, or natural resource sites.
- **Innovation and Enterprise.** Technological concepts brought from England to America by Samuel Slater initiated the American Industrial Revolution. Inventors such as David Wilkinson and John C. Whitin created new machinery throughout the Blackstone River Valley. Entrepreneurs such as Brown & Ives and Almy, Brown, & Slater, had the foresight to build a network of mills connected by a transportation system and created a demand for new machine-made textiles and products.

OTHER IMPORTANT RESOURCES AND VALUES

Blackstone River Valley National Historical Park contains other resources and values that are not fundamental to the purpose of the park and may be unrelated to its significance but are important to consider in planning processes. These are referred to as “other important resources and values.” These resources and values have been selected because they are important in the operation and management of the park and warrant special consideration in park planning.

The following other important resources and values have been identified for Blackstone River Valley National Historical Park:

- **Recreational Opportunities.** The Blackstone River Valley has long provided a multitude of recreational opportunities to residents and visitors. The scenic Blackstone River Bikeway travels for 17 miles along its namesake river and historic towpaths through Rhode Island and Massachusetts, with the ultimate goal of connecting Providence, Rhode Island, with Worcester, Massachusetts. The story of the Blackstone River, its tributaries, and canal can be told from many vantage points, but perhaps the best way to experience its history and beauty is on the waterways via canoe, kayak, or excursion boat. The river and canal segments form a comprehensive and sometimes seamless exploration of the valley and its industrial heritage where visitors can discover the dams, canal locks, bridges, and other structures that tell the story of “America’s Hardest Working River.”
- **John H. Chafee Blackstone River Valley National Heritage Corridor.** The resources of the National Heritage Corridor provide context for the Blackstone River Valley National Historical Park located within the larger landscape. The overall context defines the relationship of the river to the mills to the mill villages to the farms with the Blackstone River as the spine connecting them all.

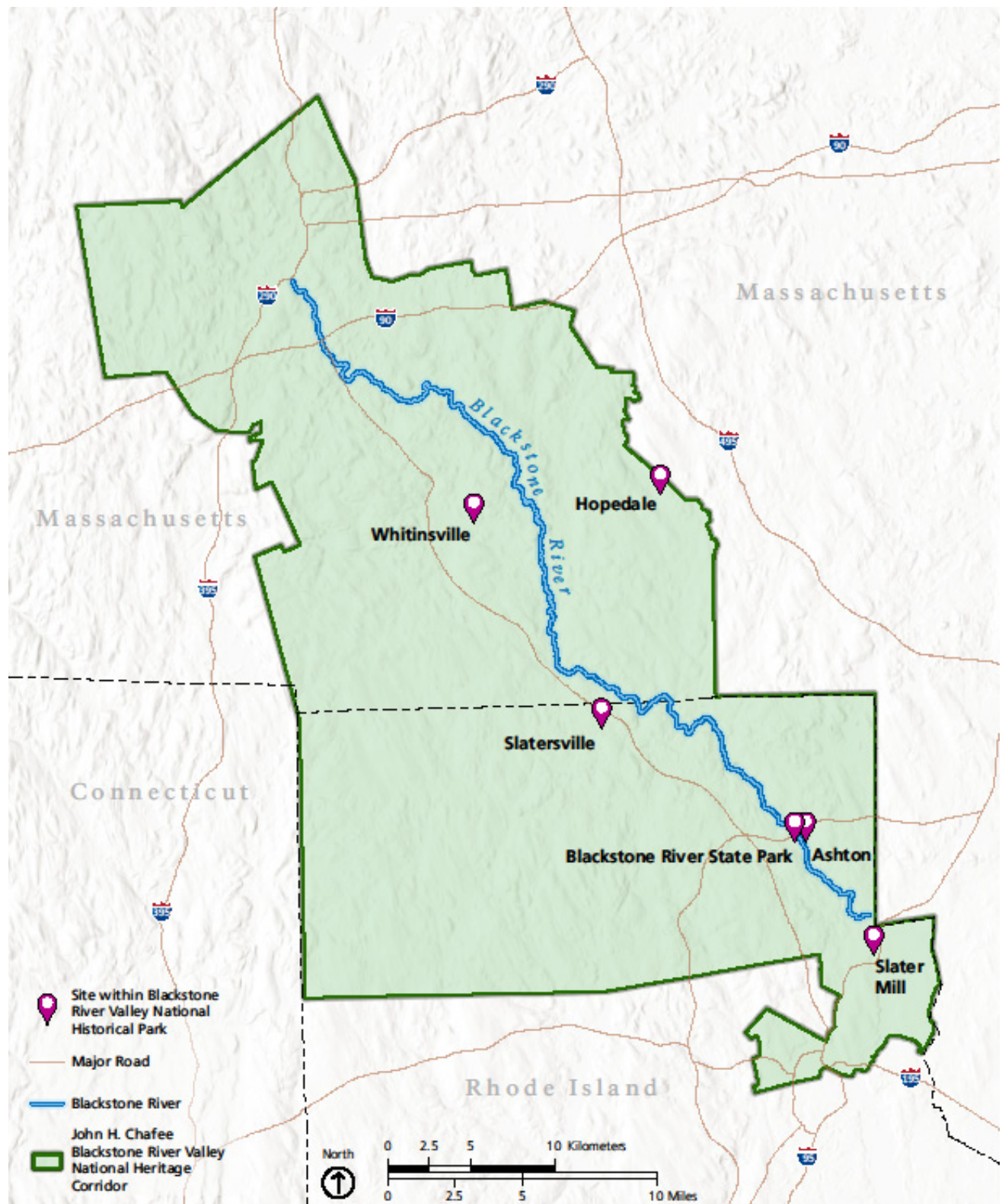


FIGURE A-1. MAP SHOWING THE AREA WITHIN THE JOHN H. CHAFEE BLACKSTONE RIVER VALLEY NATIONAL HERITAGE CORRIDOR AND THE SIX SITES WITHIN BLACKSTONE RIVER VALLEY NATIONAL HISTORICAL PARK

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, often through memorandums of agreement. 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 Blackstone River Valley National Historical Park.

Key provisions among the special mandates contained in the park's enabling legislation follow.

Visitor Facilities and Recreational Opportunities

Section (c)(4)(B) requires that the National Park Service “shall consider ways to use preexisting or planned visitor facilities and recreational opportunities developed in the National Heritage Corridor, including – (I) the Blackstone Valley Visitor Center, Pawtucket, Rhode Island; (II) the Captain Wilbur Kelly House, Blackstone River State Park, Lincoln, Rhode Island; (III) the Museum of Work and Culture, Woonsocket, Rhode Island; (IV) the River Bend Farm/Blackstone River and Canal Heritage State Park, Uxbridge, Massachusetts; (V) the Worcester Blackstone Visitor Center, located at the former Washburn & Moen wire mill, Worcester, Massachusetts; (VI) the Route 295 Visitor Center adjacent to Blackstone River State Park; and (VII) the Blackstone River Bikeway.”

Memorial

Section (5)(B) requires that the National Park Service “shall display a memorial at an appropriate location in the Park that recognizes the role of John H. Chafee in preserving the resources of the Blackstone River Valley for the people of the United States.”

Land Acquisition

Congress provided direction for federal acquisition of property within the boundary. Section (c)(3) states that at Blackstone River Valley National Historical Park, the National Park Service may acquire land or interests in land that are considered contributing historic resources in the historic sites and districts described in section (2)(B) for inclusion in the park boundary by donation, purchase from a willing seller with donated or appropriated funds, or exchange.

National Heritage Corridor

The authorizing legislation (Section 3031, [a] Purpose, [4]) states that the park's purpose includes: "to support and enhance the network of partners in the protection, improvement, management, and operation of related resources and facilities throughout the John H. Chafee Blackstone River Valley National Heritage Corridor." Established in 1986, the John H. Chafee Blackstone River Valley National Heritage Corridor is the second oldest national heritage area and a point of significant pride within the many Rhode Island and Massachusetts communities in the Blackstone River watershed. Both states have benefited from the corridor's leadership during its more than 30 years in environmental protections advocacy, recreational access planning, interpretive and visitor services programming, and community-building activities. The national heritage area's congressionally authorized commission expired in 2013. Its successor is Blackstone River Valley National Heritage Corridor, Inc., a nonprofit organization without a national heritage area commission. The national heritage area has no comanagement relationship to the Blackstone River Valley National Historical Park manageable unit, and the corridor's leadership and strategic planning efforts do not play guiding roles in the park unit's management. However, the park's authorizing legislation creates a unique perpetual relationship in which Blackstone River Valley National Heritage Corridor, Inc. applies for its annual national heritage area program funds through Blackstone River Valley National Historical Park.

APPENDIX B: INDICATORS, THRESHOLDS, AND VISITOR CAPACITY

INDICATORS AND THRESHOLDS

Overview

Monitoring to ensure desired conditions for resources and visitor experiences are tracked, achieved, and maintained over time is essential for the success of the Blackstone River Valley National Historical Park General Management Plan. The monitoring strategy for this plan was developed based on the principles described in the Interagency Visitor Use Management Council's (IVUMC) *Visitor Use Management Framework and Monitoring Guidebook*. These documents and associated background material are available on the IVUMC website at <http://visitorusemanagement.nps.gov/>.

Monitoring described in this plan is accomplished through the establishment of “indicators” and “thresholds.” Indicators are specific resource or experiential attributes that can be measured to track changes in conditions so that progress toward achieving and maintaining desired conditions can be assessed. Thresholds are the minimum acceptable conditions associated with each indicator. Together, indicators and thresholds provide park managers with monitoring protocols to ensure desired conditions for resources and visitor experiences are achieved and maintained over time.

The planning team considered many potential issues and related indicators that would identify impacts of concern, but the two described in this section were ultimately selected because of the importance and vulnerability of the resources and visitor experience. In identifying meaningful indicators, the planning team also reviewed the experiences of other park units with similar issues. Indicators are applied to the preferred alternative within the plan.

In addition to management strategies outlined in chapter 3, the planning team also identified management strategies associated with each indicator. Some of these strategies are currently in use and may be increased in response to changing conditions. Other strategies would be implemented if and when monitoring indicates that thresholds are being approached or exceeded. Future management strategies would be explored if the management strategies identified did not work. Details of future management strategies would be developed at the time they are needed to ensure that the most effective approach is implemented. The impacts of these future management strategies would be analyzed in future compliance as needed.

The iterative practice of monitoring, implementing management strategies, and then continuing to monitor the effectiveness of management strategies allows park managers to maximize benefits for visitors while achieving and maintaining desired conditions for resources and visitor experiences in a dynamic setting.

Indicators and Thresholds

Indicator

The number of complaints raised by visitors on guided interpretive tours at Old Slater Mill and Wilkinson Mill, related to noise level and crowding

Threshold

The annual number of visitor complaints increases no more than 10% compared to the 12-month baseline

Rationale

This indicator measures the number of visitor complaints related to noise level and crowding on interpretive tours at Old Slater Mill and Wilkinson Mill. Monitoring visitor complaints at these sites will help NPS staff better understand how overcrowding and loud noises or sustained noise levels negatively impact the visitor's ability to learn about the significance of the resources found within and the history related to the mill. Desired conditions related to visitor use and experience at the park focus on providing high-quality experiences that support the purpose and significance of the park and add to public understanding and stewardship of the park and its resources. This indicator will allow NPS staff to take appropriate management action to address impacts to a key park experience.

Because staff can monitor this indicator with relative ease using a simple protocol, park managers will have regular and consistent data to assess whether conditions are worsening and what type of management action is appropriate.

Monitoring Protocol

Staff would initially document visitor complaints for 12 months to establish a baseline. Because perceptions of crowding, the ability to hear, and the degree to which this negatively impacts a visitor's experience can vary from person to person, reviewing complaints over the course of a year will ensure an acceptable sample size.

Visitors could provide written feedback through e-mails, mail, or on-site comment forms or verbally. Only feedback from people who were on a guided tour that is directly provided by park personnel would be considered for the purposes of monitoring this indicator (social media comments, online reviews, and similar avenues would not be considered). National Park Service staff may train volunteers, interns, and seasonal employees on the proper way to document these complaints within a centralized database. Tours through the park's education program would not be part of this indicator.

These numbers would be considered in the context of visitation fluctuations and other outside factors that may impact the number of overall visitors and, therefore, the number of complaints.

After this initial data gathering period, staff would compare new visitor complaints each year relative to the baseline.

Management Strategies

To keep thresholds from being exceeded, the park may use one or more of the following management strategies:

- Continue to minimize NPS administrative use of noise-producing machinery during tour times (e.g., leaf-blowers, riding lawnmowers).
- Provide visitors improved and more detailed information, particularly about tours and parking, to encourage voluntary redistribution of visitor use to off-peak times and days when the park may be less crowded.
- Offer additional tours or shift the tour schedule to spread visitors out.
- Use auditory enhancement technology, such as microphones for guides or listening devices for guests, to enhance and direct voice levels.
- Provide tour participants with ear plugs and other ways to minimize loud noises where needed.
- Ensure that noise levels do not exceed applicable Occupational Safety and Health Administration (OSHA) standards.

Future Management Strategies

Future management strategies would be considered if the above management strategies are not effective and there is evidence that conditions are trending away from desired conditions or are approaching thresholds.

- Consider timed-entry reservations for guided or self-guided tours to manage the total number of visitors at one time.
- Consider changes to group sizes or the number and pacing of groups in a building at one time for Slater Mill, Wilkinson Mill, and Brown House.
- Explore incorporating design features that reduce undesirable noise, enhance the acoustics of cultural and interpretive resources, or provide nonauditory communication methods, such as closed captioning, to existing or future infrastructure, including interpretive exhibits.
- Explore prerecording information about sites that visitors can download and stream.

Indicator:

Number of incidents of human-caused damage to park historic resources under direct NPS management

- Human-caused damage is defined as graffiti, vandalism, theft, damage to items on display or exhibits, or other damage.

Threshold

No more than 10% increase from baseline in documented incidents at any one site in a year

Rationale

This indicator helps NPS staff address issues of damage to cultural resources, particularly historic structures and objects, from both intentional and unintentional human actions. Historic resources are nonrenewable, and restoration, replacement, or repairs are not always possible or appropriate. Consistent monitoring of human-related disturbance or destruction to historic resources allows managers to assess whether conditions are worsening and when to implement management strategies to help protect the park's fundamental resources and achieve its desired conditions (e.g., "The historic integrity of the Slater Mill Historic Site's buildings, both interiors and exteriors, are preserved and protected under future climate conditions."). Visitor use will always cause some impact, but the intent of this indicator is to ensure careful and frequent monitoring to minimize the level of impact to the fullest extent possible. For this reason, the threshold for impact has been established as a 10% increase from baseline in documented incidents at any one site in a year.

Monitoring Protocol

Staff would initially document visitor-caused damage to historic resources under direct NPS management for 12 months to establish a baseline. Damage would be identified by park visitors, staff, volunteers, and local law enforcement. Given that the park is frequently monitored through normal staff duties, such as conducting tours, changes to the resource would be easy to detect.

Damage would be reported to park facilities staff, who would document the issue and resolution in their maintenance record log, the Facility Management Software System (FMSS), and/or Cultural Resource Inventory System (CRIS) by recording details about the incident in the work order. National Park Service staff would annually review the data and compare it to the established baseline.

Management Strategies

To keep thresholds from being exceeded, the park may use one or more of the following management strategies:

- Provide visitors with improved and more detailed information regarding the sensitivity of the historic resources and the need to protect them. Staff could accomplish this through a variety of communication approaches, including signs or messaging from guides at the beginning of tours.
- Conduct visitor surveys that seek to understand desired visitor opportunities pertaining to historic properties and current visitor knowledge of appropriate activities and actions near such properties. Information would be used to target additional management strategies that would provide access to properties and effectively communicate restrictions where necessary.

- Install additional removable physical barriers, such as posts and rope, to deter visitor use of or access to particularly sensitive or fragile resources.
- Implement additional security measures, such as alarm systems and cameras, to deter intentional visitor damage.
- Increase staff, volunteer, and law enforcement presence and continue enforcement of park regulations.
- Remove sensitive or fragile historic objects on display as a last-resort preservation/protection measure.

Future Management Strategies

Future management strategies would be considered if the above management strategies are not effective and there is evidence that conditions are trending away from desired conditions or are approaching thresholds.

- Consider installing exhibit design features that make exhibits more resilient to visitor impact.
- Consider more closely managing the number of visitors at one time so that rangers, volunteers, and partner staff can better observe visitor activities and minimize the wear on historic resources that can occur during high-visitation levels.
- Explore removing or limiting self-guided tour options at historic sites so that rangers, volunteers, and partner staff can better observe visitor activities and deter improper behavior in real time.

OTHER RELATED MONITORING

Wayfinding Effectiveness

A key issue identified through this planning process was the lack of consistent signage and wayfinding between the six distinct sites that make up the park. The sites can be difficult to locate, and it can be challenging for visitors to understand them in the greater parkwide context. The park should track improvements in this element of the visitor experience. Tracking could include noting complaints, positive feedback, or questions provided directly to rangers, volunteers, or partner staff or through online comments and reviews. Tracking the number of new signs needed to further direct visitors could be another way to assess wayfinding effectiveness. Overall, the park would not rely on defined thresholds or a monitoring protocol but the professional judgement and knowledge of NPS staff to recognize trends and issues. If problems continue with wayfinding, the park could consider additional management strategies such as further investment in sign planning and design expertise.

Invasive Species

Park managers are working to eradicate or suppress known and emerging terrestrial invasive species that stand to impact native vegetation and planned landscaping. Staff will continue to

informally monitor these populations and learn to identify new problem species. If invasive species threaten historic structures or cultural landscapes and/or negatively impact the visitor experience, the park could develop more formal strategies and partnerships to aid in addressing this issue.

VISITOR CAPACITY

Overview

This section includes the visitor capacity identification for the Blackstone River Valley National Historical Park General Management Plan, prepared in accordance with the Interagency Visitor Use Management Council's Visitor Use Management Framework. More information about the framework can be found at <http://visitorusemanagement.nps.gov/>.

Visitor capacity is defined as “the maximum amounts and types of visitor use that an area can accommodate while achieving and maintaining the desired resource conditions and visitor experiences that are consistent with the purposes for which the area was established.” By establishing visitor capacities for areas of a park unit and implementing them with appropriate management strategies, the National Park Service can help ensure that resources are protected and that visitors have the opportunity for a range of high-quality experiences. The planning team followed the framework's process for identifying visitor capacity, including the following guidelines: (1) determine the analysis area, (2) review existing direction and knowledge, (3) identify the limiting attribute, and (4) identify visitor capacity.

The concept of the sliding scale of analysis is also a key part of the framework and guides the investment of time and resources related to identifying visitor capacity. The analysis includes four primary components: Issue Uncertainty, Impact Risk, Stakeholder Involvement, and Level of Controversy. Blackstone River Valley National Historical Park has a low degree of issue uncertainty; little impact risk due to the minor changes proposed under the management strategies; medium stakeholder involvement given the complex array of partnerships; and a low level of controversy. Therefore, the level of analysis is commensurate with the lower end of the sliding scale.

In addition to being an effective management tool, identifying visitor capacities is also directed by legal mandate. These capacities were established in accordance with Director's Order 2: *Park Planning*, Section 3.2.1 General Management Plan Requirements, which states that general management plans will include the identification of and implementation commitments for visitor carrying capacities for all areas of the park. The National Parks and Recreation Act of 1978 also requires the National Park Service to identify and implement commitments for visitor capacities for all areas of a park unit. This appendix includes visitor capacities for land under the direct management control of the park where sufficient information is known to inform a meaningful analysis and where the park has direct management authority to plan and implement management strategies to achieve desired conditions and manage use levels to capacity. Visitor capacities for other areas not included in this analysis could be identified in future planning, as appropriate. The protection of park resources will be addressed through existing agreements and the easement for the state park. Further, other guidance in this plan, including desired conditions applied by zones and the

indicators and thresholds, will continue to inform and guide management of the types and levels of visitor use to sustain the quality of park resources and visitor experience consistent with the park's purpose.

Visitor capacities are management decisions based on the best available data and other factors, including professional judgment, staff experience and expertise, lessons learned, and public input. Visitor capacity identifications, like other management decisions, provide direction. Visitor capacities can be adjusted with appropriate environmental compliance as new information becomes available through further study, analysis, and monitoring.

Future monitoring of use levels and indicators would inform the National Park Service if visitation were at or near established capacities. Implementation of the visitor capacities identified would include continuation of current management and implementation of management strategies described in chapter 3 of the general management plan and this appendix. Event-specific management strategies are detailed in that analysis area write-up.

Determine the Analysis Areas

Visitor capacity is identified for seven analysis areas that can be meaningfully evaluated given sufficient information and are directly managed by the National Park Service:

- Hodgson-Rotary Park
- Slater Mill Core Historic Area
- Old Slater Mill Building
- Wilkinson Mill
- Sylvanus Brown House
- Slater Mill Parking Lot
- Special Events

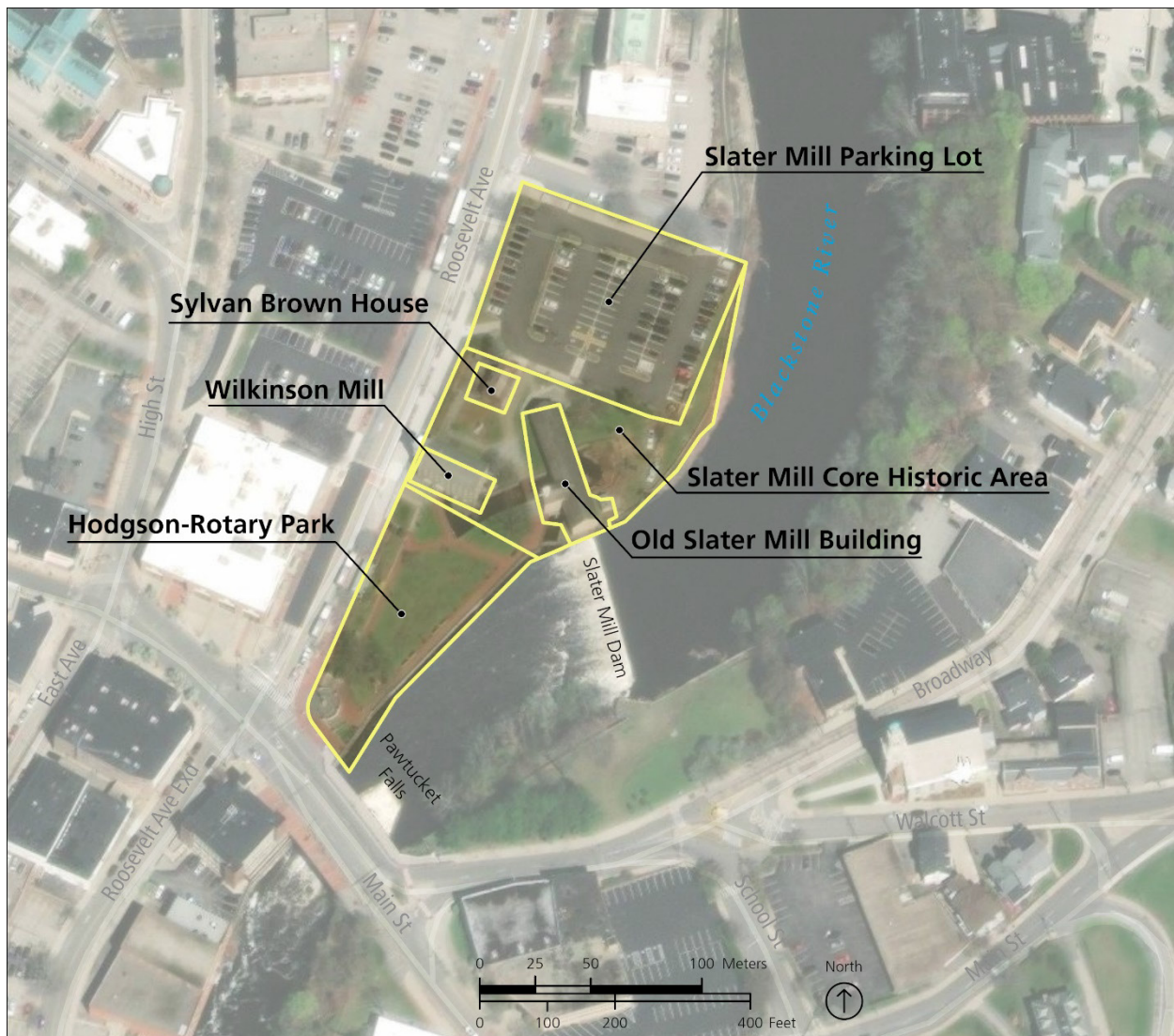


FIGURE B-1. VISITOR CAPACITY ANALYSIS AREAS FOR BLACKSTONE RIVER VALLEY NATIONAL HISTORICAL PARK

Review of Existing Direction and Knowledge

During this step, the planning team reviewed desired conditions, indicators and thresholds, key management issues affecting achievement of desired conditions, and information about current visitor use levels. Desired conditions for the management zones are in the “Management Zones and Desired Conditions” section, and the applicable zoning is in table GMP-1 (chapter 2). Indicators and thresholds are in sections before this appendix.

To identify visitor capacity, there is a need to determine how many visitors are coming to the park, where they are going, and what types of recreation are occurring. The team used available visitation data and professional knowledge about the resources to inform this step. Given limited data for prior years and/or the influence of the COVID-19 pandemic on visitation, fiscal year 2022 is the best available visitation data for the Slater Mill Historic Site. In fiscal year 2022 (October 2021 to September 2022), 5,129 people came to the Old Slater Mill visitor contact station, and 2,890 people attended formal interpretive or educational

programs. The largest interpretive tour had 55 people, and the smallest had 1. The number of daily visitors can vary substantially, from 3 to 177. The Old Slater Mill is open May through the beginning of December, 10:00 a.m. to 4:00 p.m., Thursdays through Sundays, with three ranger-led tours offered each day. Tours of the Brown House and Wilkinson Mill occur on a limited basis, and no self-guided opportunities are available currently. The park also hosts or permits several special events each year, which includes a May Day commemorative event and in 2022, included a “Blessing of the Fish Passage” gathering with local Tribes and river advocates. In fiscal year 2022, the events that took place primarily on the grounds around Slater Mill and the Hodgson-Rotary Park Area attracted 1,352 total visitors.

The park is working with partners to raise awareness of the unit and what it has to offer and is anticipating more visitation in most areas.

Identify the Limiting Attribute

This step requires identifying the limiting attributes that most constrain the analysis area’s ability to accommodate visitor use. The limiting or constraining attributes may vary across the analysis areas and are described below. This step is important to better understand the unique dynamics of visitor use in relation to desired conditions in each analysis area that directly inform the visitor capacity identification.

Identify Visitor Capacity

Visitor capacity contains two parts. First is the identification of the visitor capacity (maximum amounts and types of use), and second is the identification of management strategies that could be taken to implement visitor capacity to ensure the amount of visitor use is managed to achieve and maintain desired conditions.

To identify the appropriate amounts and types of use for each of the analysis areas, the previous steps were reviewed to understand current conditions and how they compare to desired conditions for the area. Based on this understanding, the planning team determined whether visitation levels could increase, be maintained at the current level, or decrease to achieve desired conditions. If current conditions are in keeping with desired conditions, the visitor capacity may be at or above current levels. However, if current conditions are not consistent with desired conditions due to issues with the levels of use, the visitor capacity may be below the current use level.

To ensure use levels stay within identified visitor capacities, the park would continue current management and implement management strategies described in chapter 3 of the general management plan and those detailed in this appendix. Event-specific visitor capacity management strategies are detailed below.

Analysis Areas

As figure B-1 highlights, the following analysis areas are all part of the Old Slater Mill Historic Site. Visitors may circulate through some or all these areas throughout their visit to experience different aspects of the site.

Old Slater Mill Building

This analysis area includes the interior spaces of the Old Slater Mill building. On the first floor, there is a visitor contact area where people view small exhibits, arrange tour times, and access the restrooms. This space feels crowded with more than 25 people in it. The visitor contact area leads into the main area of the mill, where guided tours are given. These tours happen for 30–40 minutes at one time, three times a day, from Thursday through Sunday. The building is currently closed to visitors December through April. Park managers try to manage tours to about 30 people to provide a high-quality visitor experience, but the space can accommodate up to 50 people without feeling overly crowded. The park will open the mill to self-guided tours when rangers are available and nearby. There are plans for future changes to this space such as additional and new exhibits. The park also plans to allow self-guided tours in this space one day.

A set of stairs off the visitor contact area leads to the building's second floor, where there are two main rooms, a kitchen, and more bathrooms. Currently, this area is used for school groups, park meetings with external stakeholders, and special events. Heating, ventilation, and air conditioning challenges make the space very warm in the summer and cold in the winter. This area can accommodate larger groups with 120 people between the two main rooms.

The building's first and second floors have differing limiting attributes. The desired conditions for visitor experience as outlined in the proposed Historic Resource Management Area are the limiting attribute on the first floor. If the building is too crowded, the ability for visitors to connect with the stories, objects, sounds, and other historic features of the mill will be diminished. The indicator "number of complaints raised by visitors on guided interpretive tours related to noise level and crowding" is particularly relevant for this analysis area. Monitoring this indicator and its associated threshold will help park managers understand when action should be taken to address visitor use levels.

The primary limiting attribute on the second floor is the ability to provide engaging visitor experiences and interpretive messaging, which is made more complex due to support pillars that block sightlines. These features cannot change given the historic nature of the building.

When the building is open to the public, its capacity is 80 people at one time. This would allow up to 5 people at one time on the second floor, 25 people at one time in the visitor contact area, and 50 people at one time in the exhibit space. Current levels of use on the first floor are consistent with desired conditions and that additional visitation would diminish the visitor experience, resulting in increased auditory conflicts and a diminished ability to interact with and connect with exhibits and historic objects. Minimal use on the second floor, such as small meetings while visitors use the first floor, would not disrupt their experiences.

When the building is not open to the public, its capacity for park-sponsored uses, such as meetings or school groups, is 120 people at one time. Given the limiting attribute, the upstairs rooms can accommodate more use than current use levels. Depending on the group and their reason for using the building, it could be appropriate for people to have access to the first

floor. If that were the case, the room capacities for the first floor would remain the same as if open to the public.

Wilkinson Mill

This analysis area includes the interior spaces of the Wilkinson Mill building. The Wilkinson Mill is a large, 3-1/2-story, rubblestone building located immediately to the southwest of Old Slater Mill. Today, a reproduction waterwheel in the basement of the building is intended to provide power to the extensive machinery collection housed on the building's first floor. The National Park Service uses the second and third floors for administrative purposes.

Currently, the Wilkinson Mill is not open to the public, but the park intends to provide tour-only access in the future with hands-on exhibits, machinery demonstrations, and waterwheel viewing and interpretation.

The limiting attribute at Wilkinson Mill is visitor safety. The park personnel-to-visitor ratio must ensure a safe experience given the proximity of visitors to working mill equipment. To ensure the safety of visitors and staff, as well as the protection of historic mill equipment, guided experiences of small groups is necessary to achieve desired conditions. Therefore, the visitor capacity for the main floor and the wheelhouse of Wilkinson Mill is identified as two groups of 15 people at one time, with no more than one group at one time on a single floor.

Sylvanus Brown House

This analysis area includes the interior of the Sylvanus Brown House, which was moved to Old Slater Mill Historic Site in 1962 to save it from demolition. The building has been restored and typifies a house of the Colonial era.

In the past, the public has been allowed in the Brown House only during special guided tours such as for school groups. Future use of the building is currently undetermined.

The limiting attribute at the Brown House is the ability to preserve historic resources and provide visitor safety. The Brown House is a small, mid-1750s home with small rooms, narrow doorways, low ceilings, a narrow historic staircase, and tight hallways. Safety considerations with the stairwell mean the visitor circulation around the space must be closely managed and monitored. Too many visitors at one time could also cause damage to the historic structure. The "visitor-caused damage to historic resources" indicator is particularly relevant to the Brown House, as it identifies a threshold for the number of incidents of damage related to visitor use and outlines potential management strategies.

The visitor capacity of the Brown House is identified at 15 people at one time, with no more than 8 people at one time in a room. Based on the experiences of rangers leading these tours, this is the maximum number of people who can be in the space at one time without affecting the integrity of the historic structure or posing safety issues with crowding on the stairway or in tight hallways and doorways.

Hodgson-Rotary Park

The Hodgson-Rotary Park analysis area includes the southern end of the Old Slater Mill Historic Site. On a day-to-day level, most people are walking or biking through or picnicking,

with rarely more than 50 people present at one time between a guided tour group and others using the open space (25 people at one time is the norm). This area is also used for large event gatherings and First Amendment activities; see below for an analysis of visitor capacity during special events. The City of Pawtucket is planning to build a bike path near the site, which may attract additional visitors. There are no bathrooms in the analysis area; visitors must enter a nearby building to use facilities. The Hodgson-Rotary Park is part of the proposed Historic Resources Management Area.

The limiting attribute is the desired condition for visitors to be able to immerse themselves in the sights, sounds, and experiences of the river, dam, mills, and surrounding resources. With too many people, these key features would become less prominent, and the visitor experience would be diminished.

Current use levels at Hodgson-Rotary Park—up to 50 people at one time on a busy weekend day—are achieving and maintaining desired conditions for the Historic Resources Management Area. Based on staff experience, 50 people at one time appears to be below what the area can accommodate while ensuring that quality visitor experiences are protected. In the assessment of current visitor use levels in relation to desired conditions for Hodgson-Rotary Park, NPS staff identified the opportunity to increase use levels. Given the limiting attribute, Hodgson-Rotary Park can accommodate a maximum of 120 people at one time while achieving and maintaining desired conditions.

Slater Mill Core Historic Area

This analysis area is also part of the Old Slater Mill Historic Site and the proposed Historic Resources Management Area. The area includes the sidewalks, raceway, and green space areas outside of Old Slater Mill, Wilkinson Mill, and Brown House, not including Hodgson-Rotary Park. Most visitors are walking through, picnicking, reading waysides, or visiting the historic site. Visitors may be on their own or part of a park tour. Guided tours of Old Slater Mill begin in this analysis area before going into the mill. On a day-to-day level, there are generally no more than 20 people present at one time except when a tour is being conducted, and that number could temporarily go up to about 50. This area has also been used for small events such as speeches, ceremonies, outdoor films, and musical performances; see below for an analysis of visitor capacity during special events.

A primary limiting attribute is the raceway and other sensitive historic features that could be impacted by too many visitors. Ensuring that visitors do not damage the historic resources is key to achieving park desired conditions and upholding its fundamental resources and values. The “visitor-caused damage to historic resources” indicator is particularly relevant in this analysis area, as it identifies a threshold for the number of incidents of damage related to visitor use.

Another important limiting attribute is the quality of visitor experiences. If too many people are present in the analysis area, the additional noise would reduce the ability of a visitor—particularly someone on a tour—to hear the cultural soundscape and connect with the park’s interpretive themes and stories.

Based on staff experience, the current visitation level (including visitors participating in a guided tour) of 50 people at one time appears to be lower than what the site can accommodate while preserving visitor experiences and protecting historic resources. In the assessment of current visitor use levels in relation to desired conditions for Slater Mill Core Historic Area, NPS staff identified the opportunity to slightly increase use levels. Given the limiting attribute, the Slater Mill Core Historic Area can accommodate a maximum of 65 people at one time while achieving and maintaining desired conditions.

Slater Mill Parking Lot

This analysis area includes the parking lot and a welcome area for visitors to the Old Slater Mill Historic Site. The Slater Mill parking lot is proposed to be zoned as Park Support Management Area. Areas in the Park Support Management Area are focused on providing visitors with vehicle entry and overall orientation to the park and include space for park administration, maintenance, and emergency services. The parking lot is currently shared with the City of Pawtucket and Pawtucket Police Department. If those entities moved out of their buildings, this would free up additional spaces for use by park visitors and for park administrative needs (i.e., staff parking, maintenance equipment storage). Currently, visitors have ample opportunity to park in this lot. Most visitors stay for a couple hours to half a day, so there is regular turnover of spots. The National Park Service may choose in the future to convert some of the parking spaces to storage. This area has also been used for community events such as the Labor Day festival; see below for an analysis of visitor capacity during special events.

The most limiting attribute for this analysis area is physical constraints of the space. The parking lot cannot expand given its location, and the one-way ingress and egress means the configuration of spaces cannot change greatly given circulation and safety considerations. Parking availability is an important consideration for park managers because if visitors are unable to easily park to access the site, they may be deterred from visiting the park altogether. Currently, adequate parking is available in the analysis area; moreover, there are other public parking areas nearby, a bus station a block away, and a paved path visitors could use to walk or bike to the Old Slater Mill Historic Site. The analysis area's visitor capacity is 240 people at one time (96 parking spaces multiplied by a person-per-vehicle factor of 2.5). Table B-1 provides a summary of visitor capacity for all analysis areas outside of special events.

Table B-1. Visitor Capacity

Analysis Area	Visitor Capacity
Old Slater Mill Building	80 people at one time (PAOT) when open to the general public 120 PAOT when events, programs, and meetings occur during non-public hours
Wilkinson Mill	Two groups of 15 people at one time
Sylvanus Brown House	15 PAOT
Hodgson-Rotary Park	120 PAOT 1,250 PAOT for special events

Analysis Area	Visitor Capacity
Slater Mill Core Historic Area	65 PAOT 200 PAOT for special events
Slater Mill Parking Lot	240 PAOT 300 PAOT for Special Events

Special Events – Hodgson-Rotary Park, Slater Mill Core Historic Area, and Slater Mill Parking Lot

The analysis area for special events comprises the Hodgson-Rotary Park, Slater Mill Core Historic Area, and Slater Mill Parking lot analysis areas. During special events, these three areas could all be used by event organizers and attendees, so a discussion of visitor capacity that recognizes their interconnectedness is warranted. In the past, nonpark-sponsored events have attracted 1,000–2,000 people. The largest event that the National Park Service has ever sponsored was about 300 people, which took place primarily in the Hodgson-Rotary Park.

The primary limiting attribute during special events is the feeling of being crowded when a large group gathers in the area. While the proposed Park Support Management Area and Historic Resources Management Area allow for special events and recognize their role in meeting elements of the desired conditions (i.e., “Outdoor special events, hosted by the National Park Service, partners, and others, offer visitors opportunities to experience the park during themed activities, community celebrations, and family events”), the level of use for events would not be consistent with other desired conditions on a regular basis.

Another limiting attribute is ensuring that cultural and historic resources are not damaged, particularly in the Slater Mill Core Historic Site, where the raceway and other sensitive historic resources are more accessible to the public.

The approximate useable space for each analysis area during special events is as follows:

- Hodgson-Rotary Park: 17,500 square feet
- Slater Mill Core Historic Site: 18,000 square feet
- Parking Lot: 18,000 square feet

Useable space refers to the parts of the analysis area where visitors could stand, walk, or sit. Sensitive areas that should be cordoned off during events, parts of the site where topography would make the space difficult to use for an event, and areas that would be needed to reasonably accommodate event facilities were removed from the overall square footage for each analysis area to arrive at the useable space square footage.

The Highway Capacity Manual serves as a resource for the analysis of capacity and level of service of pedestrian facilities such as queueing areas, sidewalks, and walkways. Given its application in high-density settings that closely mirror the experiences and conditions at an

outdoor special event, the planning team used its guidance to help determine capacity in the following areas.

Hodgson-Rotary Park

During special events when people are mostly standing or sitting (for example, at a music concert), a higher visitor density is appropriate. Per the Highway Capacity Manual, when 13 square feet per person is provided in areas where people are stationary, they are still able to comfortably stand and freely circulate through the area without disturbing others (NRC 2000). This density would be appropriate to use in Hodgson-Rotary Park, where concerts and other stationary events would be held. Therefore, Hodgson-Rotary Park could accommodate approximately 1,350 people at one time while still achieving desired conditions during special events.

Slater Mill Core Historic Area

During special events where sensitive resources are in the area, a lower density of people is appropriate. When visitors each have 90 square feet on walkways, there is sufficient space for groups to select their preferred walking speed to bypass other pedestrians (NRC 2000). This density creates the occasional need to adjust paths to avoid conflicts, which is an acceptable impact on the visitor experience during a special event while still being a low enough density to prevent unintentional damage to historic resources like the bridge in the Slater Mill Core Historic Area. Give this consideration, at this density, the Slater Mill Core Historic Area could accommodate 200 people at one time.

Slater Mill Parking Lot

For the Slater Mill Parking Lot, where there are few sensitive resources, the park was comfortable with a higher density of people but not to the level of Hodgson-Rotary Park given the desire to accommodate events, such as farmers market, where people would need to be able to walk more freely. Sixty square feet per person would create conditions where visitors have to more frequently adjust their paths to avoid conflicts but still have an acceptable event experience (NRC 2000). At this density, special events in the Slater Mill Parking Lot could accommodate 300 people at one time within the useable area while still achieving desired conditions during special events.

Table B-2 summarizes visitor capacity during special events for all applicable analysis areas.

Table B-2. Visitor Capacity for Special Events

Analysis Area	Visitor Capacity
Special events	Hodgson-Rotary Park: 1,250 PAOT Slater Mill Core Historic Area: 200 PAOT Slater Mill Parking Lot: 300 PAOT

Management Strategies

In addition to current management practices, management strategies outlined in chapter 3, and those identified to manage to established thresholds, the park could consider applying one or more of the following strategies to keep special event visitor capacities from being exceeded:

- Do not issue special use permits to nonpark-sponsored events larger than the capacities identified above.
- Ensure events meet the latest outdoor event egress standards in case of an emergency.
- Ensure events follow local permitting requirements, particularly guidance around sanitation and human safety.
- Require attendees to obtain a ticket or to RSVP to enter the event, and communicate this requirement in promotional materials to inform visitors not involved in the event of potential impacts on their visit from the event.
- Station volunteers and staff at sensitive resources or place temporary barricades to protect them from the higher volume of visitors. Require the same for nonpark-sponsored event organizers.
- Survey event attendees to understand their perception of crowding and other influences on visitor experience.
- Strategically place attractants to congregate people in areas that are more tolerant of higher levels of use.
- Implement temporary closures or other strategies to manage access to sensitive areas and resources during special events if needed, except for the First Amendment area of Hodgson-Rotary Park.

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APPENDIX C: REFERENCES

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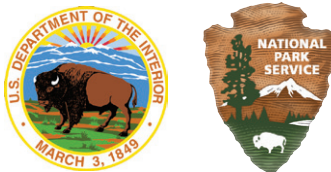
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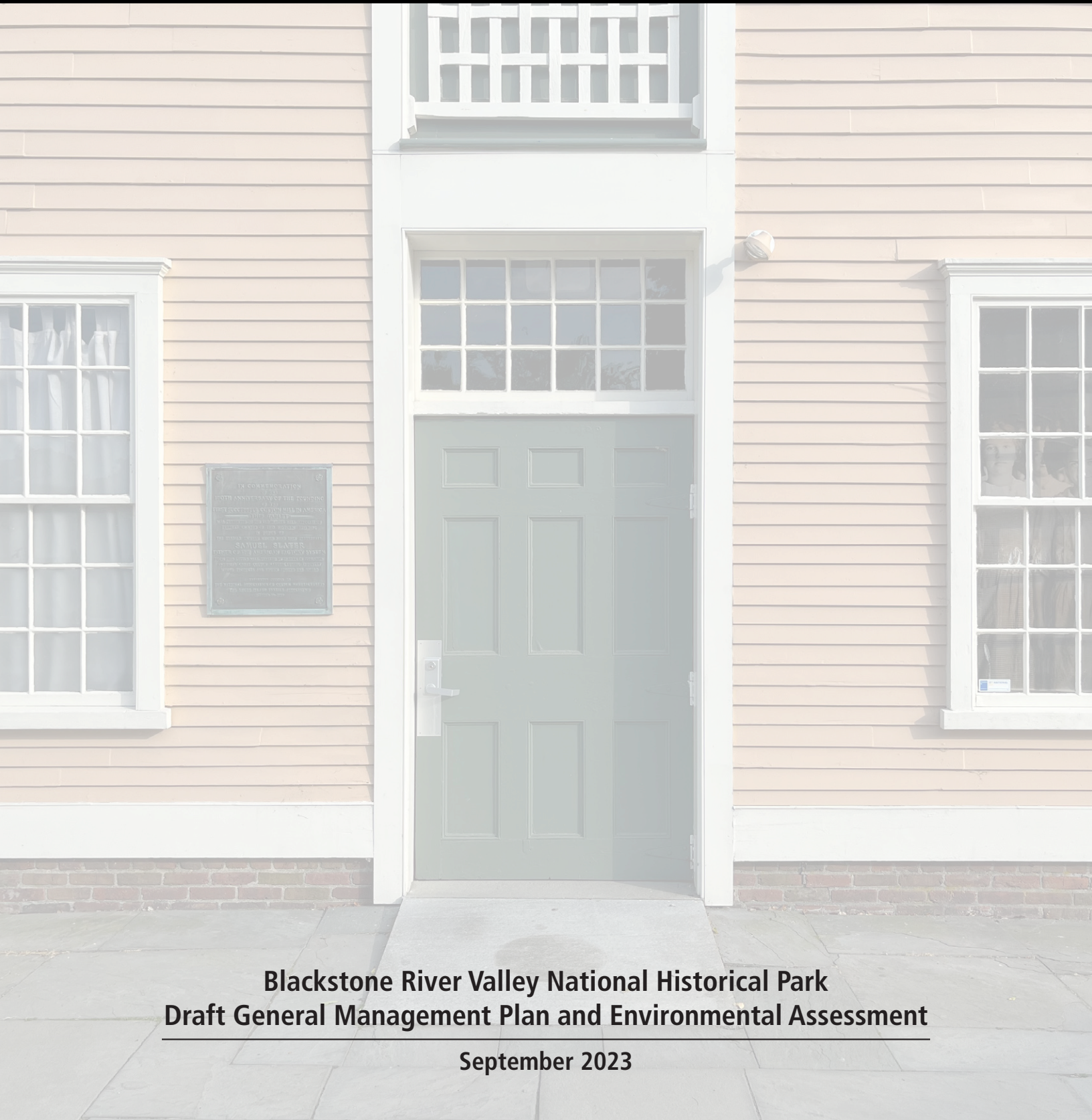
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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our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



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September 2023