NATIONAL PARK SERVICE • U.S. DEPARTMENT OF THE INTERIOR

RESOURCE STEWARDSHIP STRATEGY SUMMARY

ROCK CREEK PARK DISTRICT OF COLUMBIA

SEPTEMBER 2018

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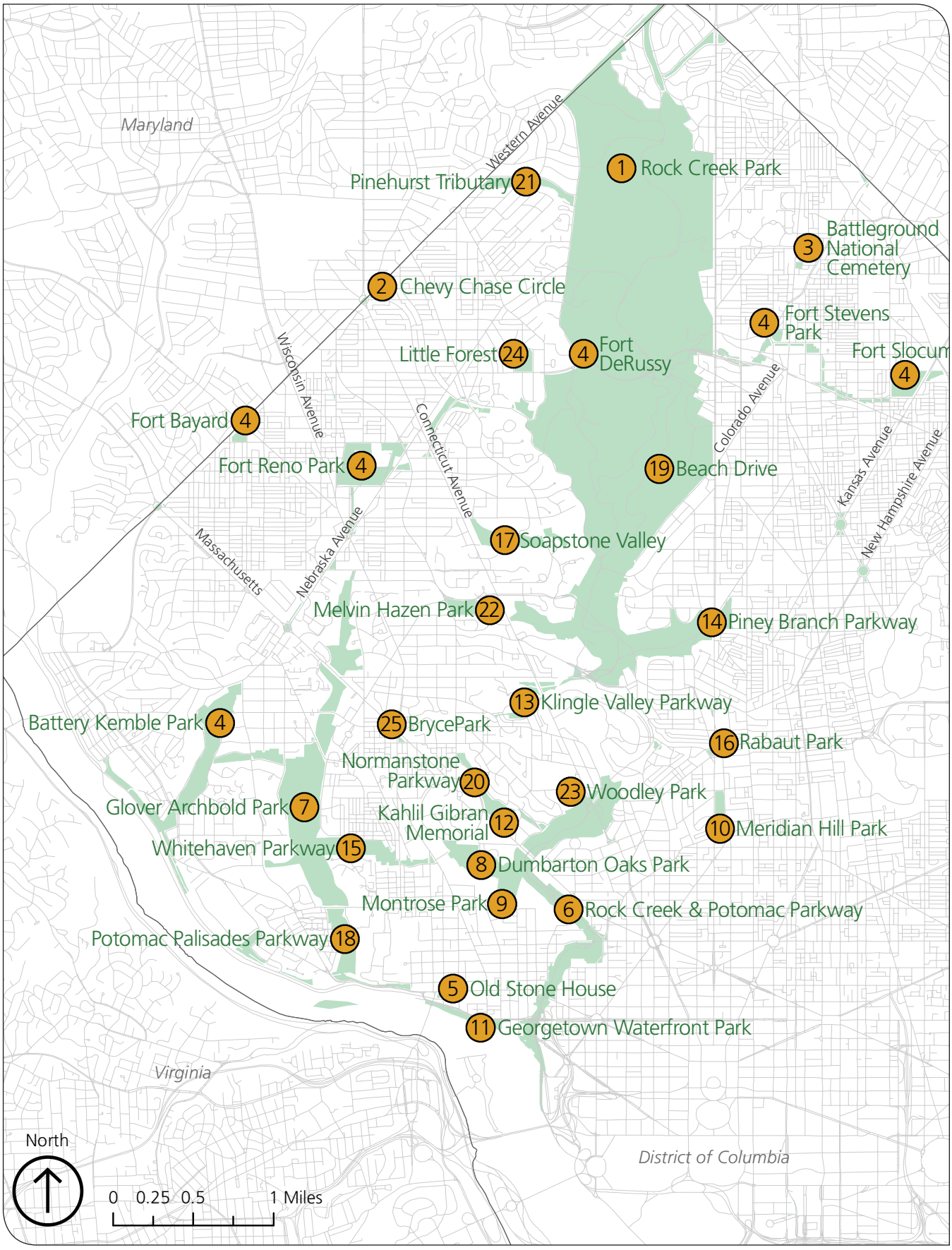
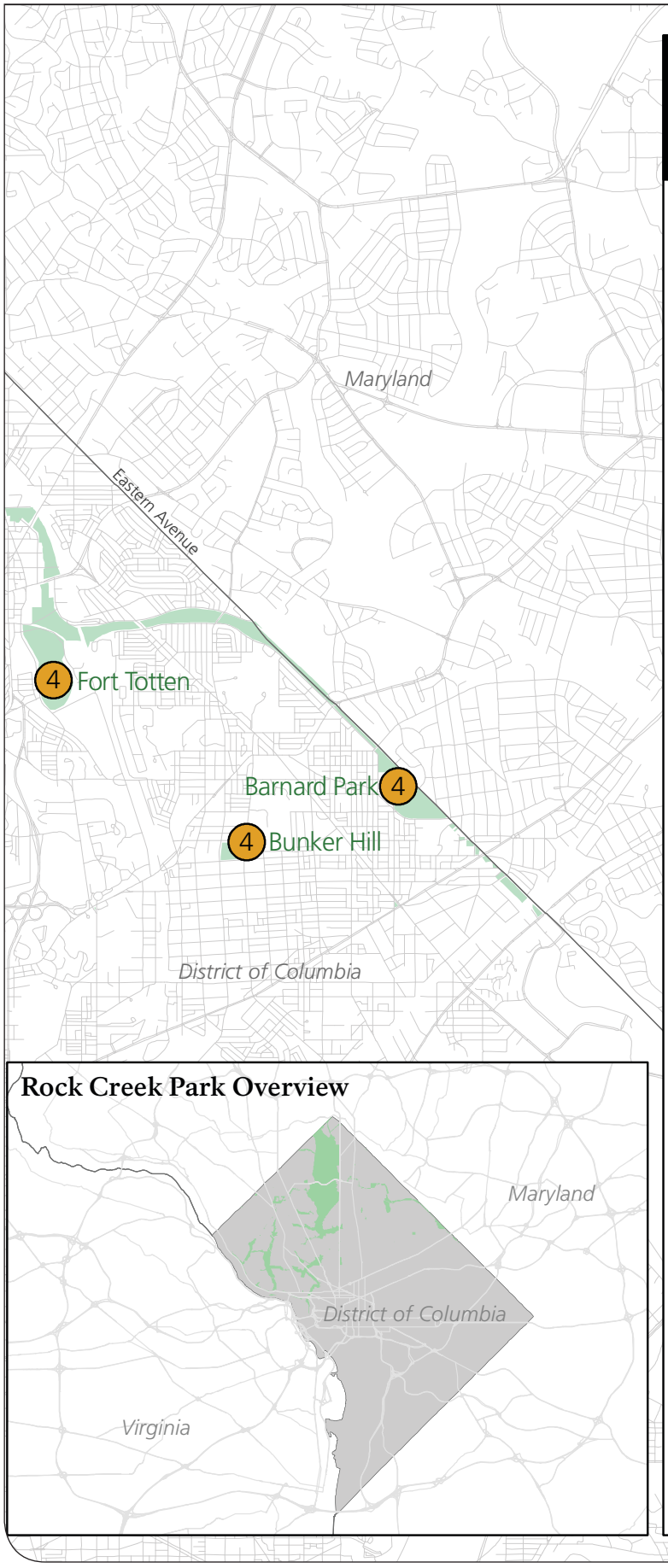


Rock Creek Park
District of Columbia



1. Rock Creek Park
2. Chevy Chase Circle
3. Battleground National Cemetery
4. Civil War Defenses of Washington
5. Old Stone House
6. Rock Creek & Potomac Parkway
7. Glover Archbold Park
8. Dumbarton Oaks Park
9. Montrose Park
10. Meridian Hill Park
11. Georgetown Waterfront Park
12. Kahlil Gibran Memorial
13. Klingle Valley Parkway
14. Piney Branch Parkway
15. Whitehaven Parkway
16. Rabaut Park
17. Soapstone Valley
18. Potomac Palisades Parkway
19. Beach Drive
20. Normanstone Parkway
21. Pinehurst Tributary
22. Melvin Hazen Park
23. Woodley Park
24. Little Forest
25. Bryce Park

CHAPTER 1: INTRODUCTION AND OVERVIEW

ROCK CREEK PARK

Rock Creek Park administers nearly 3,000 acres within the District of Columbia and is both an individual unit of the national park system as well as an administrative unit that oversees numerous park sites and resources beyond the original core of Rock Creek Park (US Reservation 339) addressed in the enabling legislation. The park administers a total of 99 areas, which include the Rock Creek and Potomac Parkway, the Old Stone House, part of the Civil War Defenses of Washington (CWDW), Dumbarton Oaks Park, Meridian Hill Park, and Glover Archbold Park. These sites were not included in the original enabling legislation of the park but were authorized for their own unique qualities. This document contains analysis with specific guidance for planning and management of Rock Creek Park and its administrative park sites. The primary legislated and nonlegislated park sites are listed below. The remainder of managed sites are park triangles, traffic circles, and small square parks spread throughout Washington, DC.

LEGISLATED PARK UNIT MANAGED BY ROCK CREEK PARK

- Rock Creek Park

ASSOCIATED PARK SITES MANAGED BY ROCK CREEK PARK

- Battleground National Cemetery
- Civil War Defenses of Washington
- Old Stone House
- Rock Creek and Potomac Parkway
- Glover Archbold Park
- Dumbarton Oaks Park
- Montrose Park
- Meridian Hill Park
- Georgetown Waterfront Park
- Klingle Valley Parkway
- Piney Branch Parkway
- Whitehaven Parkway
- Rabaut Park
- Soapstone Valley
- Potomac Palisades Parkway
- Beach Drive
- Normanstone Parkway
- Pinehurst Tributary
- Melvin Hazen Park
- Woodley Park
- Little Forest
- Bryce Park
- More than 40 circles, squares, and triangles around the city

BRIEF DESCRIPTION OF ROCK CREEK PARK AND ASSOCIATED SITES

ROCK CREEK PARK—Rock Creek Park itself was established in 1890 to protect the natural and historical landscape of the Rock Creek Valley in Washington, DC. Stretching from the Maryland state line to the National Zoo, Rock Creek Park exists as a green oasis amidst the dense urban development of the Washington, DC, metropolitan area. The park was one of the first designated federal park units, and among these early parks was unique because of its proximity to an urban center. Its location makes it highly accessible for city residents and visitors alike to experience a tranquil natural setting for its own sake or in pursuit of any number of recreational activities. As stated in the enabling legislation, Rock Creek Park is "perpetually dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people of the United States," which included the construction of driving roads and trails for horses and pedestrians, while preserving the park's "timber, animals, and curiosities . . . in their natural condition, as nearly as possible."

The main natural feature of Rock Creek Park is a 9.6-mile segment of Rock Creek. In the years after the initial park area was designated, several tributary land parcels were incrementally added to the park, which combine to protect more than 2,000 acres of the Rock Creek watershed. This area protects a natural landscape consisting of deciduous forests and meadows, which provide habitat for many plant and animal species, including fish, amphibians, mammals, and 180 species of birds. Wetlands and floodplains along Rock Creek and its tributaries are home to a large number of plant and animal species and represent an important component of the biodiversity in the park.

Human presence in what is now Rock Creek Park spans thousands of years. The park includes a number of significant archeological sites, such as the Piney Branch Quarry Site, which provided important evidence in the debate over the history of human presence in the Americas, and others that continue to be discovered and studied. Sites connected to more recent human presence in the Rock Creek valley include Peirce Mill, representative of the active milling industry in the valley in the mid-19th century, and a number of sites related to the defense of Washington, DC, during the Civil War.

In addition to protecting important natural and cultural resources, Rock Creek Park offers an impressively wide range of opportunities for active recreation, education, and quiet refuge from the surrounding urban environment. Park visitors can walk, run, bicycle, horseback riding, drive, or simply relax and enjoy a quiet natural atmosphere. Concessioners provide lessons and rentals for popular activities such as kayaking, canoeing, rowing, paddleboarding, and bicycling. The park also features facilities for more organized activities, including ball fields, a golf course, and developed play areas. The park nature center hosts scheduled interpretive programs, including astronomical programs in the planetarium. Park staff also guide interpretive walks and talks throughout the park. The Carter Barron Amphitheatre provides a range of music and theater performances, offering an exceptional opportunity for cultural enrichment. All of these opportunities facilitate an exceptionally close connection between the park and surrounding community.

CIVIL WAR DEFENSES OF WASHINGTON—Of the 19 surviving features of the system of defenses termed the Civil War Defenses of Washington, Rock Creek Park administers eight: Forts Bunker Hill, Totten, Slocum, Stevens, DeRussy, Reno, Bayard, and Battery Kemble. In addition, Battleground National Cemetery is also administered by the park. The other ten defense sites administered by the National Park Service (NPS) are part of the George Washington Memorial Parkway and National Capital Parks East. These sites came under the jurisdiction of the National Park Service under the authority of Public Law 71-284, the Capper-Cramton Act. Most of the forts had previously been under federal ownership, and during the first half of the 20th century, jurisdiction passed through several governing bodies within the federal government until they came to the National Park Service.

The Civil War Defenses of Washington were constructed as a circle of fortifications on the high ground surrounding Washington, DC, to protect the city during the Civil War. The city had not been threatened militarily since the War of 1812 and was initially undefended against Confederate incursion as the Civil War began in 1861. This network of fortifications made Washington, DC, one of the most heavily fortified cities in the world and played an important role in deterring any Confederate plans to attack the nation's capital.

Beginning as early as 1872, several plans called for creating a continuous thread of public parks surrounding the city where the defenses had once kept watch. The 1902 Report of the Senate Park Commission "The Improvement of the Park System of the District of Columbia," known as the McMillan Plan, was a comprehensive planning document that called for the improvement of District of Columbia parks, including linking the city's Civil War fort parks via a grand drive. Government acquisition of the Civil War defenses began between the establishment of Fort Dupont in 1916 and the work relief programs of the Civilian Conservation Corps in the 1930s, providing an impetus for park design and reconstruction efforts at sites such as Fort Stevens, Fort Stanton, Bunker Hill, and others. Today, each of the historic fort sites plays an important role in its local community, both as an area for recreation and as a place to learn about the history of the Civil War in Washington, DC.

THE OLD STONE HOUSE—The Old Stone House is the oldest structure on its original foundation in Washington, DC, and one of the last surviving examples of 18th-century architecture in the city. The house is listed in the National Register of Historic Places and is also a contributing resource to the Georgetown Historic District.

ROCK CREEK AND POTOMAC PARKWAY—The Rock Creek and Potomac Parkway occupies the gorge and rim of the lower Rock Creek Valley and a stretch of land along the Potomac riverfront. The parkway was built between 1923 and 1936, with some of the labor supplied by the Works Progress Administration during the later stages of construction, and was intended to replace a polluted river stream valley with a picturesque drive and bridle path linking Rock Creek Park to the National Mall area. The parkway is one of the best-preserved examples of the earliest design of motor parkway development.

DUMBARTON OAKS PARK—Dumbarton Oaks Park, part of the estate of Mildred and Robert Bliss, was donated to the National Park Service in 1940. The naturalistic garden on the grounds was designed to create the illusion of country life within the city, and it is considered one of the most important works by notable landscape architect Beatrix Farrand.

MONTROSE PARK—Montrose Park occupies land that belonged to rope-making magnate Robert Parrott during the early 19th century. Parrott generously allowed Georgetown residents to use his tract of land for picnics and meetings. The area became known as Parrott's Woods and by the early 20th century had fallen into disrepair. Sarah Louisa Rittenhouse spearheaded a group of women who petitioned Congress to buy the acreage and establish Montrose Park "for the recreation and pleasure of the people."

MERIDIAN HILL PARK—Meridian Hill Park is a national historic landmark and is considered one of the finest examples of Neoclassicist American park design in the United States, inspired by 16th- and 17th-century Italian villas. A notable feature is the cascading water fountain, which is one of the longest in North America, and John J. Earley's innovative use of exposed aggregated concrete in its construction.

GLOVER ARCHBOLD PARK—Glover Archbold Park preserves the natural and cultural resources of the Foundry Branch Valley, which flows from upper Northwest Washington, DC, to the Potomac River. These 222 acres were acquired between 1924 and 1943 by the National Capital Park Commission through donation or purchase of parcels originally owned by Charles Carroll Glover and Anne Archbold. Glover played a key role in the creation of Rock Creek Park and other parks in the nation's capital.

GEORGETOWN WATERFRONT PARK—Georgetown Waterfront Park provides a green space for visitor recreation and contemplation. Cyclists, skaters, and pedestrians have their own car-free pathways with views of individual boaters, kayakers, and competitive crews as well as of Roosevelt Island and the magnificent Key Bridge. The park curves along 10 acres of the Potomac extending from the Washington Harbour complex to Key Bridge, creating the vital last link in 225 miles of parkland from Mt. Vernon, Virginia, to Cumberland, Maryland.

PARK PURPOSE

Purpose statements identify the specific reason for the establishment of a particular park. Purpose statements are crafted through a careful analysis of the enabling legislation and legislative history that influenced the development of Rock Creek Park and the park units it administers. The 2015 Foundation Document states the park purpose as:

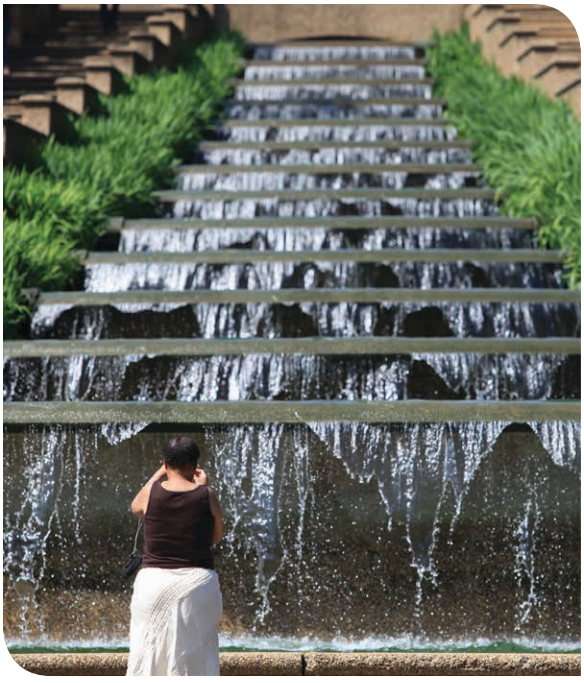
One of the first federal parks, established in 1890 for the benefit of the people of the United States, Rock Creek Park preserves the natural, archeological, and historic resources of the Rock Creek Valley and areas of northern Washington, DC, while providing visitors with compatible recreational opportunities and a respite within the nation's capital.

PARK SIGNIFICANCE

Significance statements express why Rock Creek Park resources and values are important enough to merit national park unit designation. These statements are linked to the purpose of the park unit and are supported by data, research, and consensus. They describe the distinctive nature of the park and inform management decisions, focusing efforts on preserving and protecting the most important resources and values of the park unit.

The following significance statements are included in the park's 2015 Foundation Document (please note that the sequence of the statements does not reflect the level of significance):

1. The core of Rock Creek Park, known as US Reservation 339, is one of the oldest and largest natural urban parks in the United States and was established in 1890 as a result of the 19th century conservation movement to preserve natural scenic areas in the United States.
2. Rock Creek, its tributaries, and its springs sustain a variety of fish and aquatic species, including the endangered Hay's Spring amphipod, found nowhere else in the world.
3. Rock Creek Park preserves archeological resources that document 5,000 years of human knowledge and understanding of prehistoric human activities in the Washington, DC, area.
4. Rock Creek Park preserves nearly 3,000 acres of federal land within a highly urbanized area, including thousands of acres of forested habitat that provide protection and management for a diversity of plant and animal species.
5. Meridian Hill Park is a national historic landmark and is a nationally significant example of Neoclassicist American park design in the United States.
6. The Old Stone House, circa 1765, is one of the oldest structures in Washington, DC, preserving an example of mid-18th century residential and commercial architecture in Georgetown.
7. Rock Creek Park manages 9 of the 19 NPS-managed sites of the Civil War Defenses of Washington. These defenses protect and interpret the remnants of historic Civil War forts while preserving a corridor of forest and natural scenery as part of a comprehensive system of parks for recreation, preservation of substantial tracts of forests, and protection of source water in and around the nation's capital.



Additional significance topics have been identified for the Civil War Defenses of Washington managed by Rock Creek Park:

- The scale, inventive design, and speed of construction of the Civil War Defenses of Washington resulted in a system of forts, batteries, and rifle trenches that effectively deterred the invasion of the nation's capital by the Confederate Army during the Civil War, and are a tangible reminder of the capital city's rich Civil War history.
- The defensive position of the forts on hills surrounding the city provides an outstanding opportunity to explore and understand the strategic interaction between the environment and cultural history.
- The significant natural features and processes preserved by the Civil War Defenses of Washington provide viable corridors for both plant and wildlife diversity and exceptional recreational opportunities, which help create a healthier natural and human environment in the nation's capital.
- The Civil War Defenses of Washington were havens of safety for the many contrabands and formerly enslaved Africans who fled to Washington during the Civil War and influenced African American settlement patterns in the nation's capital. ("Contraband" is a historical term that refers to individuals who escaped slavery and sought refuge behind Union lines).
- The McMillan Commission's 1902 plan, as realized when the acquisition of fort sites began in the 1920s, represented visionary urban planning efforts for public recreation and preserved a scenic backdrop for the nation's capital.
- The green space and extensive trail network protected by the Civil War Defenses of Washington help to shape, strengthen, and provide identity for communities in the city through recreation, cultural events, and neighborhood activities.

8. Battleground National Cemetery, established in 1864 following the Battle of Fort Stevens, is the final resting place of 41 Union soldiers who fought in the battle and serves as a memorial to honor their sacrifice.

9. Once part of the larger Dumbarton Oaks estate, the 27-acre Dumbarton Oaks Park is an outstanding example of the work of pioneering landscape architect Beatrix Farrand, who designed the naturalistic garden.

10. Montrose Park, the first public park in Georgetown, was designed by notable Washington, DC, architect Horace Peaslee and landscape architect George Burnap.

11. The Rock Creek and Potomac Parkway, authorized in 1913, was the first parkway in a metropolitan region and is an excellent example of early parkway design.

12. Georgetown Waterfront Park is an excellent example of a successful public-private partnership, working for nearly 20 years to reclaim a former industrial area and complete the greenway of open space stretching along the Potomac River from Cumberland, Maryland, to Mount Vernon, Virginia.

13. Glover Archbold Park, a forested urban area that became parkland through donations in 1924 and expanded with additional purchases through 1943, is an important component of the park system that creates a critical recreational greenway from upper Northwest Washington, DC, to the Potomac River and commemorates the role of Charles Carroll Glover in the establishment of Rock Creek Park.

RESOURCE STEWARDSHIP STRATEGY OVERVIEW

As steward of Rock Creek Park's natural and cultural resources, park management recognizes the importance of developing a strategic approach to resource management. Such an approach must be information-based and may inform stakeholders about park issues through science and scholarship. Director's Order 2-1, Resource Stewardship Planning (which recommends the preparation of a resource stewardship strategy [RSS] to replace the resource management plan at parks nationwide); the 2004 NPS Program Standards: Park Planning; and NPS *Management Policies 2006* provide a useful framework for developing the resource strategies needed at the park.

A resource stewardship strategy is a long-range dynamic planning tool for a national park unit to set specific goals and track progress in achieving its desired natural and cultural resource conditions. As part of a park's planning portfolio, the resource stewardship strategy serves as a bridge between the park's foundation document, other plans, and everyday management of its natural and cultural resources.

A resource stewardship strategy establishes a framework and a coordinated process for:

1. evaluating and summarizing existing information about park resources (including key issues, stressors, and threats),
2. using science and scholarship to establish stewardship goals for resources,
3. integrating natural and cultural resource management, and
4. determining the stewardship activities needed to achieve stewardship goals.

This information provides a basis for making informed resource management decisions for specific project proposals and for developing and revising annual work plans over time.

A resource stewardship strategy is not a static document or a one-time effort. Rather, it is a dynamic framework that should be routinely updated as conditions change; new issues, stressors, or threats are identified; and activities are accomplished. A resource stewardship strategy is review by NPS subject-matter experts and decision markers; however, it is not a publicly reviewed decision document.

The resource stewardship strategy process also provides an opportunity for a park to take an integrated approach to resource management by capitalizing on overlapping opportunities among and within disciplines or addressing larger parkwide issues. Taking an integrated approach can result in more effective stewardship for resources through the use of science, scholarship, research, policy, interpretation, and direct management.

RELATIONSHIP WITH OTHER PARK PLANS

In the National Park Service planning hierarchy, the general management plan (GMP) typically serves as the overarching document that sets the long-term, qualitative goals (stated as desired conditions) for a national park unit. Rock Creek Park developed a general management plan in 2005. Select plans, studies, and references to assist resource management needs and inform the development of the resource stewardship strategy are identified in table 1 (note the list of plans in table 1 does not represent an exhaustive list of park management plans).

The resource stewardship strategy provides a bridge between the broad direction provided in the foundation document and the more comprehensive activities that need to be implemented to achieve or maintain desired resource conditions. The resource stewardship strategy provides a logical rationale for prioritizing activities regarding the allocation of financial and human resources for resource management.

Table 1. Select Resource Planning Efforts Used in Developing the Resource Stewardship Strategy

CURRENT PLANS	STATUS
Development Concept Plan for Nature Center and Maintenance Yard	In progress (as of March 2018)
Integrated Pest Management Plan	In progress (as of March 2018)
Resource stewardship strategy	2017
National Capital Region Invasive Plant Management Plan	2016
District of Columbia Wildlife Action Plan	2015
White-Tailed Deer Management Plan	2012
Reconstruction and Rehabilitation of Rock Creek & Potomac Parkway EA	2012
Preserve Historic Peirce Mill	2012
Rock Creek Park and the Rock Creek and Potomac Parkway General Management Plan	2007
Civil War Defenses of Washington Long-Range Interpretive Plan	2012
Rock Creek Park Long-Range Interpretive Plan	2010
Civil War Defenses of Washington Management Plan	2004

Table 2. Future Plans Identified in the 2017 Resource Stewardship Strategy

PLANNING ACTIVITY	IDENTIFIED AS A PLANNING NEED IN THE NCR PLANNING PORTFOLIO?
Meridian Hill turf management plan	Identified as park priority
Cyclic maintenance plan for historic structures	No
Sewer infrastructure EA for tributary parks	Yes
Old Stone House housekeeping plan	Identified as Museum Resource Center need
Old Stone House interpretive treatment plan	Identified as park priority
Old Stone House invasive pest management plan	Identified as Museum Resource Center need
Carter Barron Amphitheater business plan	Yes

CHAPTER 2: RESOURCE STEWARDSHIP STRATEGY PROCESS

PURPOSE AND INTENT OF THE SUMMARY

This summary document is intended to give readers an overview of the resource stewardship strategy for Rock Creek Park. The document serves as a communication tool that compliments the dynamic and evolving RSS desktop application actively used for resource management. This summary is not intended to describe all the elements in the resource stewardship strategy, but instead focuses on the components of the resource stewardship strategy that are essential for communicating the highest priority natural and cultural resource needs and management issues.

This summary document includes brief descriptions of the park's priority resources and their components, some of the high-priority stewardship strategies for these resources (which include stewardship goals and specific activities to fulfill the goals), and a list of key issues, stressors, and threats affecting park resources. The summary concludes by looking at ongoing implementation of the resource stewardship strategy.

It is important to remember that implementation of the resource stewardship strategy is an ongoing process, with updates and revisions occurring as resource and management conditions change and strategies are executed.

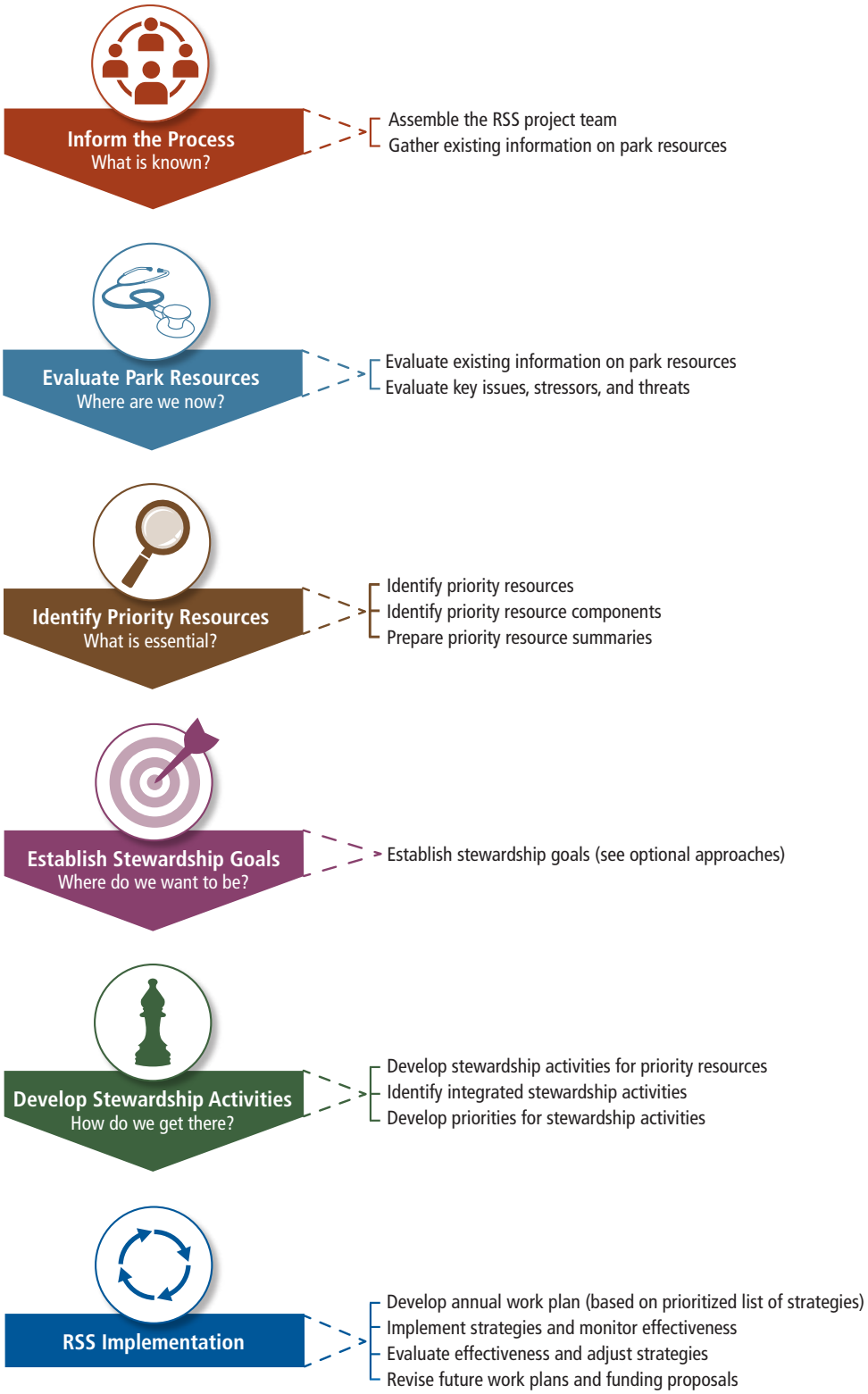
RESOURCE STEWARDSHIP STRATEGY PROCESS

The resource stewardship strategy provides strategic guidance for resource management at Rock Creek Park. It represents the collaborative effort and knowledge of park staff, the National Capital Region (NCR), Natural Resource Stewardship and Science (NRSS) and Cultural Resources, Partnerships and Science (CRPS) programs, the Denver Service Center (DSC), and subject matter experts including state agency partners and scholars. As one of the first parks to implement the new resource stewardship strategy framework developed by the national working group, the Rock Creek Park Resource Stewardship Strategy participants addressed steps outlined in the resource stewardship strategy development guide to craft these strategies

As illustrated in figure 2, the resource stewardship strategy development process follows six main steps: (1) Inform the process; (2) Evaluate park resources; (3) Identify priority resources; (4) Establish stewardship goals; (5) Develop stewardship activities; and (6) Implement resource stewardship strategies.

The ROCR RSS process addressed each of these steps in an iterative fashion throughout a three-day workshop. The team particularly focused on the outcomes of the key issues, stressors, and threats analysis, combined with consideration of staffing and funding availability to consciously prioritize their resources, goals and activities.

Figure 2: Resource Stewardship Strategy Process



DEVELOPMENT OF THIS RESOURCE STEWARDSHIP STRATEGY

ASSEMBLING THE RSS TEAM AND GATHERING INFORMATION

Initiating the resource stewardship strategy planning process for Rock Creek Park began with assembling the resource stewardship strategy project team. The team then gathered documentation on park resources, including the natural resource condition assessment (NRCA), draft cultural resource stewardship assessment (CRSA), the District of Columbia Wildlife Action Plan, inventory and monitoring reports, NRSS resource summaries, climate change resource management implications, GIS data, and other relevant information.

Prior to an in-person workshop, the team began discussions and analysis of this body of resource information and knowledge during conference calls. Specific calls were held to discuss which planning documents and information were relevant to the RSS effort and key issues and threats.

CONDUCTING THE WORKSHOP

One workshop was held at Rock Creek Park on August 30-September 1, 2017. Staff and NPS personnel from the park, National Capital Region, and Natural Resource Stewardship and Science participated in the workshop while Denver Service Center Planning Division staff served as facilitators.

During the workshop, the ROCR RSS team confirmed the body of documentation identified above, emphasizing information gaps and key management issues. NRSS information, focusing mainly on climate change adaptation and air quality, was also addressed. Patrick Gonzalez, principal climate change scientist with the NRSS Climate Change Response Program, presented on climate change and its potential implications for park resources. The presentation covered temperature and precipitation trends as well as overarching climate change considerations for park managers to consider in the RSS and future planning efforts. Dr. Gonzalez provided resource management considerations and methods for incorporating climate change in park planning and specific risks for managing the park's cultural and natural resources. Building on the evaluation of park resources, the team identified and analyzed the key issues, stressors, and threats facing park resources at Rock Creek Park.

Based on the RSS Team's evaluation and analysis of park resources, references and previous documentation, and a discussion of key issues, stressors, and threats, the team selected the RSS priority resources and components to include in the ROCR RSS. Next, the team developed long-term and short-term stewardship goals for the priority resources, drawing from the information, evaluations, and analyses resulting from the previous steps in the process.

The final step of the workshop involved developing the stewardship activities to achieve the short-term goals for each priority resource and component based on best practices. Throughout the workshop, the park's foundation document, *Revitalizing Rock Creek*, and draft cultural resource stewardship assessment were referenced for potential activities, cultural and natural resource information gaps, and management treatments. The park staff prioritized the activities and identified the relevant activity details after the workshop.

Following the workshop, the team continued to engage in a collaborative process involving resource specialists and subject matter experts from both the park and regional office who provided guidance and recommendations on the development of resource stewardship strategies for Rock Creek Park. Their outcomes were essential steps in moving the resource stewardship strategy process forward.

The outcomes of the on-site workshop and the continued refinement of the resource stewardship strategy summary tables by the Rock Creek Park resource management team and regional subject matter experts formed the basis for the stewardship goals and activities identified in this resource stewardship strategy.

SCHOLARLY AND TECHNICAL INFORMATION USED TO INFORM THE RSS PROCESS

A list of documents used to inform the RSS process includes the following:

- Draft ROCR Cultural Resource Stewardship Assessment (August 2017)
- Natural Resources Stewardship and Science (NRSS) RSS Resource Information Sheets: ROCR (2017)
- IPaC Resource List (USFWS) (2017)
- ROCR Foundation Document (2015)
- NPS Urban Agenda (2015)
- Revitalizing Rock Creek (2015)
- District of Columbia Wildlife Action Plan (2015)
- ROCR Natural Resource Condition Assessment (2009)
- ROCR General Management Plan (2005)
- Fort Circle Parks Management Plan (2004)
- ROCR General Management Implementation Plans (various)

An important part of the resource stewardship strategy development process involves reviewing and assessing scholarly and technical information to evaluate the status of information and condition of the park's natural and cultural resources. The following sources of information represent the primary resource documentation and databases used to determine the information and condition status of each priority resource analyzed in the development of the Rock Creek Park's Resource Stewardship Strategy.

GENERAL MANAGEMENT PLAN—Signed in 2005, the Rock Creek Park General Management Plan is the first comprehensive plan prepared for Rock Creek Park and the Rock Creek and Potomac Parkway and provides the basic foundation for decision-making regarding the management of the park and the parkway. The general management plan does not propose specific actions or how particular programs or projects should be ranked or implemented. Those decisions are addressed through more detailed planning efforts, such as strategic plans and implementation plans. All the goals, future conditions, and appropriate types of activities included in specific planning efforts and this resource stewardship strategy were established in the general management plan.

FOUNDATION DOCUMENT—Rock Creek Park's foundation document, completed in 2015, describes the park's purpose, significance, fundamental resources and values, and interpretive themes and provides basic guidance for planning and management decisions. Combined with the natural resource condition assessment and draft cultural resource stewardship assessment, the foundation document is one of the main "starting point" documents used to identify and evaluate priority natural and cultural resources for the resource stewardship strategy.

INVENTORY AND MONITORING PROGRAM—To improve park management through greater reliance on access to scientific information, the NPS Inventory and Monitoring Program (I&M) and the National Capital Region's Division of Natural Resources and Science provided guidance, funding, and technical assistance to complete a host of natural resource inventories for parks. The inventories are a baseline for long-term ecological monitoring by the National Capital Region Network (NCRN) I&M of numerous natural resources at Rock Creek Park (https://www.nps.gov/im/ncrn/index.htm).

WILDLIFE ACTION PLAN—State wildlife action plans are plans developed by a state for conserving wildlife and habitat before they become too rare or costly to restore. Each plan includes the identification of Species of Greatest Conservation Need for that state. The District of Columbia Wildlife Action Plan, last updated in 2015, is a comprehensive, citywide plan and framework for managing and conserving the District's diverse animal wildlife and their habitats. It outlines the next 10 years of conserving, sustaining, and protecting the District's wildlife and habitats for the benefit and enjoyment of residents and visitors.

NATURAL RESOURCE CONDITION ASSESSMENT—Completed in 2009, Rock Creek Park's natural resource condition assessment combines existing scholarly and scientific data with expert interpretations as the primary basis for developing information and condition findings for natural resources in the resource stewardship strategy. The natural resource condition assessment also highlights emerging or crosscutting issues that require the greatest management attention and helps inform the development of stewardship strategies.

CULTURAL RESOURCE STEWARDSHIP ASSESSMENT—Similar to the natural resource condition assessment, Rock Creek Park's cultural resource stewardship assessment provides a comprehensive evaluation of the physical condition of cultural resources and current condition of the park's cultural resources program. The cultural resource stewardship assessment assesses six cultural resource categories, including archeological resources, cultural anthropology, cultural landscapes, historic structures, history, and museum collections. A draft Rock Creek Park CRSA was available during the September 2017 RSS workshop.

LIST OF CLASSIFIED STRUCTURES—The List of Classified Structures (LCS) is an inventory of all known historic and prehistoric structures that have historical, architectural, or engineering significance within the national park system. The list is evaluated by the National Register of Historic Places criteria.

ARCHEOLOGICAL SITES MANAGEMENT INFORMATION SYSTEM—The resource stewardship strategy includes knowledge, inventory, and archeological condition information obtained from the Archeological Sites Management Information System (ASMIS), which is the NPS database for the registration and management of park prehistoric and historic archeological resources. ASMIS records contain data on site location, description, significance, condition, threats, and management requirements for known park archeological sites.

FACILITY MANAGEMENT SOFTWARE SYSTEM—This application assists facility managers in managing inventory assets, determining the condition of the asset, planning work to bring the asset into a better operating condition, or identifying obsolete assets in the inventory. The Facility Management Software System provides a work management process for scheduling work, performing preventive maintenance, and tracking the work performed on the asset. It also provides the means to generate maintenance backlog by asset. The system may be most helpful to park managers because it contains asset numbers and property location data.

CULTURAL LANDSCAPE DOCUMENTATION—A cultural landscape inventory provides baseline documentation for cultural landscapes. It evaluates the physical development, historic significances (including eligibility for listing on the National Register of Historic Places), and assesses the integrity and condition of these landscapes. At Rock Creek Park, cultural landscape inventories have been completed for Ashbury Memorial (2007), Battleground National Cemetery (2011), Chevy Chase Circle (2011), Civil War Defenses of Washington (1996), Fort Stevens (2010), Gibbons Memorial (2007), Linnaean Hill (2009), Marconi Memorial (2007), Montrose Park (2008), Peirce Mill Complex (2009), and Sherman Circle (2011). Cultural landscape reports, detailed studies of the historic context and features related to identified cultural landscapes that include treatment recommendations, have been completed for Dumbarton Oaks Park (2000), Meridian Hill Park (2001), and Peirce-Klingle Mansion (1993). These documents were referenced during the resource stewardship strategy development process.

NATIONAL REGISTER OF HISTORIC PLACES NOMINATION FORMS—Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places serves as the official list of the nation's historic places worthy of preservation. Historic properties and archeological sites are identified, researched, evaluated for potential eligibility, and documented for listing on National Register of Historic Places. Numerous cultural resources at Rock Creek Park have been listed or are eligible for listing on the National Register of Historic Places, and these nomination forms are a valuable source of data for resource managers and decision makers. National Register documentation has been completed for numerous historic buildings, structures, and landscapes within the park.

PREPARING ANNUAL WORK PLANS

The resource stewardship strategy is a strategic planning tool that can inform the development of annual resource management work plans. Park resource managers can use the information contained in the RSS application to inform the allocation of budgets and personnel time. There are varying approaches to developing annual work plans. Generally, they all include details as to what, where, how, and when resource stewardship activities occur when considering the park's overall budget and staffing levels.

The information developed in the resource stewardship strategy process and stored in the RSS application include key elements that should be considered when developing annual work plans. The RSS application has several categories or fields associated with each activity that park staff may find useful in their work planning. Useful fields should be filled in as appropriate. These fields include, but are not limited to:

- activity target (e.g., timeframe, completeness, quality level)
- duration of activity
- compliance status
- general cost estimate
- project management information system (PMIS) reference
- potential fund source
- target fiscal year start
- sequencing approach
- key regional/field contacts
- interdisciplinary coordination and expertise needed
- notes

BEST PRACTICES TO PREPARE ANNUAL WORK PLANS

- Work planning can be accomplished in a number of ways, using various methods and tools. The RSS Access desktop application is one tool that parks can use.
- Once complete and fully populated, the RSS Access desktop application will provide a listing of those short-term resource stewardship goals and/or activities that are considered high, medium, or low priority to complete. This output can inform which activities are the most important to include in an annual work plan given budget, staffing, and other constraints.
- The work plan should focus on priority resources.
- The park staff should select and fill in the categories listed above they feel are useful for annual work planning.
- Work plans are expected to change and are intended to be updated. The resource stewardship strategy database should similarly be updated to reflect realities of resource management from year to year as work planning dynamics evolve.
- The RSS is a strategic planning tool that does not trigger NEPA compliance. The "compliance status" category in the RSS application is used to document whether an activity needs compliance prior to implementation or if an activity already has compliance covered through a previous planning effort. This will allow the park staff to track compliance needs for each strategy described in a RSS.

CHAPTER 3: KEY PARK STRESSORS AND ISSUES

The evaluation of key resource management stressors and key issues is an important step in the resource stewardship strategy development process to inform the development of stewardship goals and activities during steps 4 and 5. Stressors are factors that may exacerbate change in resource conditions, such as climate change, population growth, invasive species, and visitor use. Key issues are management concerns that directly relate to park resources and their conditions. Related to stressors and key issues, stewardship threats are immediate or potential factors that may negatively impact park resources, such as expanding development outside park boundaries. Understanding the current state of resources as well as stressors that multiply the effects of current issues, and threats that may become key management issues, helps the park better understand resource conditions and future trends.

STRESSORS

Rock Creek Park faces a variety of resource stressors and resource management issues that are currently impacting or pose future threats to the park's priority resources and components. Stressors such as population growth, invasive species, climate change including increased precipitation and flooding events, and visitor use may exacerbate change in resource conditions. They represent immediate or potential management challenges that may negatively impact park resources. Stressors were considered in the development of resource stewardship strategies, especially in the priorities assigned to stewardship activities. Impacts of key stressors on the park's priority resources and components are discussed in the following section.

IMPACTS OF KEY STRESSORS

INCREASING VISITATION AND RECREATION DEMANDS—Visitation to Rock Creek Park has been steadily increasing as the population in Washington, DC, rapidly increases around it. Recreational demand and use of facilities has evolved. Greater intensity of use has caused major effects on Rock Creek and tributaries, trails, and historic structures the park manages. For example, at least 22 miles of social trails have been created throughout the park. Grassy areas have been trampled, often exposing soil. Off-leash dogs stress wildlife, aggravate other park visitors, and contribute to erosion by jumping into streams and running along streambanks. Surveying of social trails needs to continue to obtain information about the areas most used by visitors. Historic structures have been vandalized with graffiti and litter is an extensive problem in the park. A stronger law enforcement presence is needed in areas of the park where vandalism is occurring most frequently. The park currently lacks sufficient capacity to manage engagement efforts with neighbors, friends groups, and other visitors among the park's diverse and complex stakeholders.

URBAN ENCROACHMENT—Rock Creek Park administers nearly 3,000 acres over 99 areas, which includes the original core of Rock Creek Park (US Reservation 339), as well as the Rock Creek and Potomac Parkway, the Old Stone House, part of the Civil War Defenses of Washington, Dumbarton Oaks Park, Meridian Hill Park, Glover Archbold Park, and numerous small parks, triangles, and traffic circles. With all of the park's land located within Washington, DC, and with 82.5 miles of boundary, park staff faces many issues related to regional growth. DC infrastructure and utilities are found throughout the units managed by Rock Creek Park. Rock Creek Parkway, Beach Drive, and Potomac Parkway, which are used extensively by commuters, create the backbone of the park but also contribute to issues related to visitor safety, noise, air quality, and habitat fragmentation. Residential and commercial development continue to threaten park lands and surrounding viewsheds. Stormwater runoff and potential impacts to water quality are related impacts that continue to be heavily influenced by regional development. The park is vulnerable to combined sewer overflows from local wastewater management systems. Excessive stormwater runoff from impervious surfaces and inadequate existing stormwater infrastructure contribute to pollution impacts in the park's streams and wetlands. Polluted runoff, sewage, and illegal and accidental chemical releases contaminate the park's streams and pose threats to fish and wildlife. Heavy downpours lead to flooding and streambank erosion that cause extensive and expensive damage to roads, bridges, sewer infrastructure, and park resources. Dumping of landscaping waste introduces nonnative invasive plant species into the park.

The park's disjointed nature and complex boundary present numerous management challenges. Accurate and comprehensive boundary surveys are needed to inform complex resource management issues in relation to encroachment. Surveying the park boundary, collecting boundary data, and clearly marking the park boundary are all ongoing management activities at the park.

CLIMATE CHANGE—Based on current climate science, temperatures have already increased, while projected climate changes by mid-century in the mid-Atlantic region include notable increases in temperature, relatively small increases in precipitation, more heavy rainfall events, increasing sea level in tidal areas, and stronger storm surges. Projected changes include three times as many days above 90°F (32°C) and about half as many days below freezing. These physical manifestations of climate change may directly influence park resources and visitor activities through changes in runoff and erosion and the timing of visitation, but many effects will be indirect such as increased damage to historical structures resulting from greater survival of wood-boring insects because of warmer winters.

Climate change will act as a threat multiplier to other identified stressors and management issues. Anticipated climate changes should be considered when developing resource stewardship strategies for Rock Creek Park. Projected climate changes will affect native and nonnative invasive vegetation, diseases, the longevity and preservation of historic structures, design of drainages, likelihood of sediment loading, flooding and potential runoff in Rock Creek and its tributaries, hydroperiod of ephemeral wetlands, and many other aspects of cultural and natural resources. It will also affect park operations. Proper funding, as well as partnerships with Montgomery County, must be secured to complete vulnerability assessments of cultural and natural resources and prepare for the potential effects of climate change.

FLOODING AND STORMWATER MANAGEMENT—Flood events continue to challenge park management. Because most of Rock Creek Park lies within the natural drainage area of the city of Washington, DC, stormwater runoff and flooding threaten some cultural resources, including archeological sites, cultural landscapes, and historic structures. Aging infrastructure and deferred maintenance coupled with flood events have caused damage to historic structures along the creek and present numerous dangers to other park resources, infrastructure, operations, and safety. The park's streams and wetlands suffer from pollution and excessive runoff from upstream areas in the District and Montgomery County. Rock Creek Park will need to continue improving coordination among key agencies, water authorities, and other stakeholders to increase advocacy for clean water and healthy streams. For example, DC Water also has aging infrastructure, which threatens park resources in the event of failure of these facilities. Continuing to work with District of Columbia Water and Sewer Authority is critical for protecting resources in Glover Archbold Park, Pinehurst Valley, Soapstone Valley Park, Rock Creek Park, and in the Civil War Defenses of Washington, among other areas. Developing a relationship with Montgomery County, whose upstream water feeds into Rock Creek, will also need to be established to determine future potential rehabilitation projects. Currently, the park is working with the Department of Energy & Environment on a stormwater management project in the parking lots and vicinity of the Carter Barron Amphitheater and the tennis stadium. The park is also installing low impact development facilities adjacent to Beach Drive.

NATIVE VEGETATION MANAGEMENT—There are significant threats to native trees and other vegetation because of nonnative invasive species, high deer population, and overuse of areas by visitors. Nonnative invasive plants are displacing trees, shrubs, wildflowers, and tree seedlings, which destroys habitats and limits forest regeneration. With high deer population comes over-browsing of vegetation, which prevents tree seedlings and saplings from growing into a mature canopy. The park also grapples with how it manages natural resources while meeting the needs of mixed-use recreating. Off-leash dogs and the creation of social trails has contributed to vegetation loss, erosion, wildlife disturbances, and introduction of nonnative invasive species. Overuse of forested areas and artificial terrestrial habitat areas by visitors allows for erosion and habitat fragmentation.

NONNATIVE INVASIVE SPECIES—Nonnative invasive species present management challenges to preserving the park's natural and cultural resources. Nonnative invasive plant species have overgrown several areas in the park, threatening native plant species and biodiversity, and complicating the maintenance of historic structures in the park. Other threats facing the park often help in the spread of nonnative invasive plant species, such as off-leash dogs, social trails, and high deer populations that overgraze native vegetation. Illegal dumping of yard waste in the park and the surrounding area of the Rock Creek Park has allowed for the spread of nonnative invasive plant species. Proper education is needed to inform the public and neighbors on the problem that illegal dumping can pose to the spread of nonnative invasive plant species. Surveys are needed to evaluate the impact of nonnative invasive pests such as Hemlock Wooly Adelgid and possible fungal disease such as white-nose syndrome in bats. Park management continues to emphasize early detection rapid response protocols, as well as prioritizing high biodiversity areas in treatment plans.

CULTURAL LANDSCAPES MANAGEMENT—Rock Creek Park's location makes it highly accessible for city residents and visitors alike to experience tranquil natural settings alongside historically significant buildings representing three centuries of development in Washington, DC. Its proximity to such a highly populated, urban area presents numerous challenges including vandalism, inappropriate use, and recreational overuse. Aging historic infrastructure, including fountains, bridges, and culverts, contributes to many of the park's reoccurring maintenance issues. Many of the park's historic sites attract significant local interest and community use, and the park must balance local engagement with the prioritization of its limited resources (personnel, budget, and physical fabric).

Revitalization of existing buildings and designed landscapes could greatly enhance use and enjoyment of Rock Creek Park. The park aims to develop a cyclic maintenance plan for historic structures to create preventative and regular maintenance through additional training for staff on historic preservation.

CHAPTER 4: PRIORITY RESOURCES AND IDENTIFIED COMPONENTS

PARK PRIORITY RESOURCES

Rock Creek Park's priority resources drive the resource stewardship strategy process. A priority resource is a cultural or natural resource that the National Park Service manages or monitors to maintain a park unit's purpose and significance, to address policy/law mandates, or to address scholarly and scientific research needs or findings. A priority resource component is an aspect or attributing resource that is integral to the functionality, importance, or condition of a priority resource and can be managed, monitored, or studied practically over both the short and long term. Priority resource components are included, or nested, under the associated priority resources.

The following priority resources and components were identified for Rock Creek Park.

CULTURAL RESOURCES

As stated in the NPS *Management Policies 2006*, the National Park Service is the steward of many of America's most important cultural resources. These resources are categorized as archeological resources, cultural landscapes, ethnographic resources, historic and prehistoric structures, and museum collections. The National Park Service's cultural resource management program involves:

- researching to identify, evaluate, document, register, and establish basic information about cultural resources and traditionally associated peoples;
- planning to ensure that management processes for making decisions and setting priorities integrate information about cultural resources and provide for consultation and collaboration with outside entities; and
- stewardship to ensure that cultural resources are preserved and protected, receive appropriate treatments (including maintenance) to achieve desired conditions, and are made available for public understanding and enjoyment.

Based on an analysis of the park's foundation document, cultural resource stewardship assessment, and consensus among NPS staff and regional subject matter experts, the following cultural resources were identified as priority resources at Rock Creek Park.

CULTURAL LANDSCAPES

Rock Creek Park preserves over 40 historically significant cultural landscapes that span the18th, 19th, and 20th centuries. These landscapes represent over three hundred years of land use and social movements in the region and reflect the changing ideals of parks as natural and cultural resources. Additional documentation of character-defining landscape features and their historic contexts, as well as thoughtful planning and landscape management documents and restoration efforts, will guide park maintenance activities and ensure the park's resources are preserved.

Several of the park areas within Rock Creek Park have preservation groups specifically dedicated to their stewardships. Rock Creek Park resources staff work in collaboration with NPS National Capital Region programs, other National Capital parks, numerous nonprofit partners, and volunteer groups to protect the natural and cultural resources that comprise its locally, regionally, and nationally significant historic landscapes.

COMPONENT RESOURCES—Overall cultural landscape; Meridian Hill Park; Dumbarton Oaks; Montrose Park; Walter Pierce Park; Linnaean Hill; small park reservations; Civil War Defenses of Washington; golf course; tributary parks; Lock 0.

HISTORIC STRUCTURES

There are more than 265 historic features on Rock Creek Park's List of Classified Structures. These include historic buildings currently used as visitor facilities, such as the pre-Revolutionary War-era Old Stone House, the 19th-century Peirce Mill Complex, and Carter Barron Amphitheater, as well as other historic buildings not regularly open to the public, and elements of the park's infrastructure and roadway networks. Many historic structures, including the Meridian Hill Park terrace and fountain, Klingle Mansion (Linnaean Hill), Peirce Mill, and the Civil War Defenses of Washington areas managed by Rock Creek Park, are integral features in the park's identified cultural landscapes. The park is active in the historic preservation of its buildings, having recently undertaken the restoration of Peirce Mill and the Old Stone House.

While many of the notable historic buildings managed by Rock Creek Park are open to the public, some-including the Chesapeake House, Conduit Road Schoolhouse, and Divine Science Church-are currently not being used by the park or outside groups. Carter Barron Amphitheater, opened in 1950 as a community performance venue, was closed for the 2017 season because of structural deficiencies and safety concerns. Aligning the future rehabilitation and use of these historic buildings with the needs of the park and local organizations or neighborhoods will help ensure they are maintained and continue to support the park's purpose.

COMPONENT RESOURCES—Old Stone House; Peirce Mill; Carter Barron Amphitheater; Chesapeake House; Conduit Road Schoolhouse; Divine Science Church.

ARCHEOLOGICAL RESOURCES

Rock Creek Park preserves archeological resources that document 5,000 years of human history, including the presence of Native Americans, colonial settlers, trading and plantation economy, enslaved persons, free black society, Civil War engagements fought in Washington, DC, and the nationally notable Piney Branch Quarry Site. Investigation of the Piney Branch Quarry Site by William Henry Holmes of the Smithsonian Institution clarified the timeline of human presence in the Americas during the early development of archeology as a discipline itself at the turn of the 20th century.

As of 2017, approximately 34% of the park land area had been surveyed for archaeological sites. Of the 82 identified archaeological sites in the park, 77 are in good condition according to the Archeological Sites Management Information System, but many of the park's archeological sites lack sufficient data for evaluation for listing in the National Register of Historic Places. Considerable potential exists for additional research to further explore the identified archeological contexts—both prehistoric and historic—as well as additional opportunities to connect park visitors to Rock Creek Park's rich archeological resources and history.

MUSEUM COLLECTIONS

The Rock Creek Park collection totals approximately 97,000 items including historical furnishings and objects from Pierce Mill; zoological, geological, entomological and herbarium specimens; and archeological objects from within the park and their associated field records. Approximately 96% of the museum collections have been categorized, although only a few of the park's archeology and natural history collections have been thoroughly catalogued. Most of the park collections are housed at the Museum Resource Center (MRCE), a central housing location in Maryland for parks within the National Capital Region. At the park, a limited number of artifacts are on exhibit at the Old Stone House, Peirce Mill, and the Nature Center.

ETHNOGRAPHIC RESOURCES

Because of its location within the District of Columbia, Rock Creek Park and the areas it administers are an integral part of the community. Its many reservations provide green space within a crowded urban landscape and have served as places for gathering, special events, and organized activities for decades. Meridian Hill Park's First Amendment Rights Area is a historic location for demonstrations and has been the starting point for numerous marches and rallies. The proximity, personal connections, recreational opportunities, and natural landscape combine to provide residents with a unique sense of place when they visit the park. Community groups, friends groups, and volunteer outreach efforts actively work to foster stewardship among the park's diverse neighbors and visitors. Rock Creek Park as a whole showcases the rich cultural diversity of the nation's capital through the ways different communities use and view the park's resources and public spaces.

Although there are contemporary links to cultural communities and enduring connections to traditional user groups, an ethnographic overview and assessment has not been completed for many parks and public spaces managed by Rock Creek Park. Ethnographic overviews have been completed for the Civil War Defenses of Washington (1997) and the Colored Union Benevolent Cemetery (2016), and a rapid ethnographic overview of Meridian Hill Park is being produced in collaboration with Howard University (2018). Additional information about traditional user groups associated with other park-managed resources and current cultural connections to Rock Creek Park's units will help ensure that associated groups have the opportunity to use the park's green space and be actively involved in park stewardship.

NATURAL RESOURCES

As stated in the NPS *Management Policies 2006*, the National Park Service will strive to understand, maintain, restore, and protect the inherent integrity of the natural resources, processes, systems, and values of the parks while providing meaningful and appropriate opportunities to enjoy them. The National Park Service recognizes that natural processes and species are evolving, and the bureau will allow this evolution to continue—minimally influenced by human actions. The natural resources, processes, systems, and values that the Service preserves are described generally in the 1916 NPS Organic Act and in the enabling legislation or presidential proclamation establishing each park. They are described in greater detail in management plans specific to each park. Natural resources, processes, systems, and values found in parks include:

- physical resources such as water, air, soils, topographic features, geologic features, paleontological resources, and natural soundscapes and clear skies, both during the day and at night,
- physical processes such as weather, erosion, cave formation, and wildland fire,
- biological resources such as native plants, animals, and communities,
- biological processes such as photosynthesis, succession, and evolution
- ecosystems, and
- highly valued associated characteristics such as scenic views.

Based on an analysis of the park's foundation document, natural resource condition assessment, and consensus among NPS staff, the following natural resources were identified as priority resources for the Rock Creek Park resource stewardship strategy.

AQUATIC SYSTEM

The main natural feature of Rock Creek Park is a 9.6 mile segment of Rock Creek that bisects the length of the park before joining the Potomac River south of the park. Since the park was established, several tributaries and their surrounding land parcels were added to protect more than 2,000 acres of the Rock Creek watershed. Wetlands, ephemeral ponds, and floodplains along Rock Creek and its tributaries are an important component of the plant and animal biodiversity found in the park. Rock Creek and its tributaries have been designated as Special Waters of the District of Columbia. Adding to the diverse ecological dynamics, floodplains along Rock Creek and its major tributaries support native riparian vegetation critical to stabilizing erosion. The creek and its tributaries support at least 39 species of fish. The park also contains approximately 40 seeps and springs, which provide subterranean habitat to rare, threatened, and endangered species.

According to the 2009 Rock Creek Park Natural Resource Condition Assessment, water quality for Rock Creek and its tributaries was very variable between the metrics that were analyzed. Dissolved oxygen, pH, water temperature, acid neutralizing capacity and the physical habitat index were in very good condition. Aqeuous nitrate was in fair condition, salinity was in degraded condition, and two metrics—total phosphorus and invertebrates indices of biological integrity—were very degraded. Water quality sampling is conducted by the National Park Service as well as by the District of Columbia Department of Energy and Environment, which also conducts regular surveys of fish populations in Rock Creek.

The park's aquatic resources are affected by upstream activities. Watershed-wide urbanization and development result in challenges to water quality and quantity. From the mouth of Piney Branch Creek south to the Potomac River, Rock Creek is vulnerable to sewer overflows and increasing and damaging stormwater flows. Increased nutrients, pollutants, and flashiness of river flow can result in impacts to wetland flora and fauna as well as streambank erosion. Wetland (Inland) Habitat within Rock Creek Park was assessed to be in fair condition (NRCA 2009). Wetland Habitats (2%) within Rock Creek Park are challenged by elevated nutrient concentrations and salinity, resulting in negative impacts on stream flora and fauna and potential reduction of visitor experience.

The 2009 NRCA recommended that road salting should be managed to further reduce impacts to streams and nutrient reduction strategies should be implemented. The park must manage intensively in the northern floodplain area for nonnative, invasive species that compete with native spring ephemerals. Fencing of vernal pools is necessary to allow amphibians and other species to breed without the threat of disturbance from pets and humans. Strengthening of local and regional partnerships is essential if Rock Creek Park is to be maintained as an ecological oasis in an urban landscape.

COMPONENT RESOURCES—Rock Creek and tributaries; other tributaries (Potomac and Anacostia); ephemeral wetlands and vernal pools.

TERRESTRIAL COMMUNITIES

Terrestrial habitats constitute a majority of Rock Creek, covering approximately 81% of the park. Rock Creek Park has over 700 species of flowering plants and 9 species of coniferous trees. The terrestrial communities hold important habitat for native animals including deer, six species of bats, over 180 species of birds, 14 species of reptiles, among many others.

Rock Creek Park preserves dynamic plant communities, including eastern deciduous forests, meadows, and wetlands that sustain a diversity of native animals including insects, migratory birds, fish, and other aquatic species. Adding to the diverse ecological dynamics, floodplains along Rock Creek and its major tributaries support native vegetation critical to stabilizing erosion and providing habitat for other plants and animals. For example, the park provides habitat for the federally endangered Hay's Spring Amphipod, a colorless, shrimplike crustacean approximately the size of a grain of rice that is known to exist only within freshwater springs in the park.

The forest at Rock Creek Park is comprised entirely of secondary growth, the majority of which is more than 100 years old. Activities prior to the park's establishment in 1890, such as timber cutting, farming, and Civil War clearing, removed much of the original forest. A few large oaks still living in the park have been estimated to be more than 280 years old and may be remnants of virgin growth. Today's forests are primarily a mixture of deciduous species typical of the eastern deciduous forest in the later stages of succession. There are five different forest associations within the park. They include beech-white oak/mayapple forest, the tulip poplar, chestnut oak-black oak/huckleberry, sycamore-green ash, and the Virginia pine-oak. The most common forest type within the park is the beech-white oak/mayapple, which occurs on moist to somewhat drier slopes. The other forest associations are either uncommon or rare.

Studies have been carried out to assess the habitat value of the forest within Rock Creek Park, as well as the surrounding area. While there is high connectivity and low impervious surface within the park boundary, making this a valuable habitat for flora and fauna, these features are more challenged when the park is placed in the context of the surrounding urban landscape (NCRA 2009, Townsend et al. 2006). Invasive invertebrates such as the hemlock wooly aldelgid and the emerald ash borer pose a threat to the canopy of these forests. The understory is impacted by invasive plant species, an overpopulation of deer, social trails, and lawn waste dumping from commercial landscaping companies and the public.

In addition to naturally forested areas, there are also artificial terrestrial areas where visitors are able to partake in outdoor activities such as running, hiking, picnicking, and biking. They include community gardens, managed meadows, and lawns. These areas account for 17% of the park. One of the largest artificial terrestrial areas is the golf course located in the central-eastern part of the park (Angold et al. 2006, Snep et al. 2006).

COMPONENT RESOURCES—Eastern deciduous forest communities; artificial terrestrial habitats.

NIGHT SKIES AND NATURAL SOUNDS

The *phonetic environment* represents the totality of the patterns of light at night, while *lightscapes* include the human perception of the nighttime scene including the night sky and faintly illuminated terrain. The condition of the phonetic environment can affect wildlife interactions and other vital ecological processes including predator/prey relationships, reproduction, navigation, and migration. Even when night skies may not be valued for their human aesthetic appeal, natural darkness may still be essential for wildlife. While the night sky quality is degraded because of its location within urban Washington, DC, the park has less light pollution impacts than the surrounding areas and provides the best opportunity for millions of people to enjoy night sky views through its active planetarium and night sky programming. The park also provides important open space and habitat for nocturnal wildlife.

The *acoustic environment* is a combination of all acoustic resources within a given area—natural sounds as well as human-caused sounds. Soundscape is the component of the acoustical environment that can be perceived and comprehended by humans. The acoustic environment is integral to wildlife communication, behavior, and many other ecological processes. Rock Creek Park's mean existing sound level is predicted to be about 11.1 decibels above the natural ambient sounds level, which would reduce listening area for wildlife and visitors by 92% (NSNSD 2014). While this is a significant loss of listening area, it does not reflect that some areas of the park likely have less impact than others and that much of Rock Creek Park is predicted to be better than the surrounding areas. Although the acoustic environment is drastically affected by the park's urban location, it can serve as a relative refuge for wildlife and visitors from the busier—and noisier—part of greater Washington, DC.

Additional data is needed to help the park better understand the current condition of its acoustic and phonetic environment and improve conditions for wildlife and visitor enjoyment. Because many of Rock Creek Park's memorials and park units include nighttime lighting, careful consideration should be given to how such lighting affects resources and whether the timing, amount, and direction of the lighting are appropriate, both to protect the surrounding natural environment and to retain a suitable lightscape for cultural landscapes and safety.

COMPONENT RESOURCES—night skies and natural sounds.

CHAPTER 5: STEWARDSHIP GOALS AND HIGH-PRIORITY ACTIVITIES

Stewardship activities represent the primary outcome of the resource stewardship strategy development process, providing the park with a roadmap for investing both human and financial resources in the management of natural and cultural resources. Each resource stewardship strategy consists of identified stewardship goals and a comprehensive set of activities to help managers achieve those goals.

A stewardship activity is defined as one or more initiatives that strive to achieve a short-term stewardship goal. On its own, an activity produces a specific deliverable or outcome. Such activities may include assessments, documentation, identification, maintenance, operations, resource protection, thematic studies, catalogue, evaluation, interpretation, planning, training, data recovery, education, inventory, monitoring, research, survey, treatment, restoration, or other types of management.

The following stewardship strategies tables (tables 3a-3i) are organized by priority resource components and include stewardship goals and associated high-priority activities.

Table 3a. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Park Resources (Overall)

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Resources are managed to maintain ecological integrity and cultural and historical authenticity under climate change; park greenhouse gas emissions are mitigated.	Natural and cultural resources that are vulnerable to climate change are identified.	- *No high-priority activities identified.* (See table 4a.)
OVERALL	Resources are managed to maintain ecological integrity and cultural and historical authenticity under climate change; park greenhouse gas emissions are mitigated.	Climate change science is integrated into resource management.	- In the renovation of Dumbarton Oaks Park, use projections of runoff under climate change in design requirements. - Prioritize and target removal of invasive species that are more invasive under climate change.
OVERALL	Resources are managed to maintain ecological integrity and cultural and historical authenticity under climate change; park greenhouse gas emissions are mitigated.	Park greenhouse gas emissions that cause climate change are reduced.	- *No high-priority activities identified.* (See table 4a.)

Table 3b. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Cultural Landscapes

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Baseline documentation for identified park landscapes is completed.	- Work with NCRO to continue documenting landscapes and updating existing plans.
MERIDIAN HILL PARK	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	The CLI condition of Meridian Hill Park is improved.	- Complete project phasing for comprehensive restoration of Meridian Hill Park and begin project scoping/planning for future restoration activities. - Develop standard operating procedure (SOP) for scheduling and completing cyclic maintenance (pressure washing, graffiti removal, treatment of fountains, use of grass panels). - Develop a turf plan for Meridian Hill Park. - Improve security measures at site through coordination with park law enforcement officers.
DUMBARTON OAKS PARK	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Character-defining features of Dumbarton Oaks are rehabilitated after tributary stormwater mitigation project is properly managed and completed.	- Continue restoration of Dumbarton Oaks Park landscape through implementation of existing work plan. - Follow up with Dumbarton Oaks Park Conservancy to create collaborative master work plan and scheduling that aligns with CLR treatment recommendations, which includes scenery and view sheds and takes into consideration climate change impacts. - Complete stormwater mitigation project at Dumbarton Oaks Park and work to reduce offsite source inputs.
WALTER PIERCE PARK	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	The Walter Pierce Cemetery management plan and NRHP documentation information informs park management and preservation.	- Complete Walter Pierce Park management plan and begin to implement recommendations. - Collect ethnographic information related to the Walter Pierce Park cemetery.

Table 3b. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Cultural Landscapes (continued)

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
MONTROSE PARK	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Character-defining historic features of Montrose park are rehabilitated and storm water passing into Dumbarton Oaks Park is properly managed.	- Rehabilitate trail towards Lover's Lane to address erosion and safety concerns in Montrose Park. - Rehabilitate tennis court and associated storm-water runoff in Montrose Park.
LINNAEAN HILL	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Linnaean Hill's character-defining features are restored and landscape management considered climate change implications.	- Complete Linnaean Hill HALS documentation.
SMALL PARK RESERVATIONS	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Character-defining features of the small park reservations managed by Rock Creek Park are identified to inform future preservation and management.	- Complete CLI for NCR small park reservations.
CIVIL WAR DEFENSES OF WASHINGTON	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Earthworks are stabilized and managed to minimize future degradation.	- Complete necessary CLI/CLR for Civil War Defenses of Washington. - Complete earthworks management strategy for Civil War Defenses of Washington.
GOLF COURSE	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	The selected golf course management entity is actively maintaining the natural resource and cultural landscape according to completed CLR recommendations.	- Manage golf course through CLR with particular attention to natural resources and associated scenery. - Collaborate with NCR cultural resource program for the completion of a combined NCR golf course CLR.
TRIBUTARY PARKS	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Tributary parks' cultural landscapes are rehabilitated after successful completion of sewer projects.	- Complete sewer infrastructure EA for Soapstone Park. - Complete sewer infrastructure EA for Glover Archbold Park. - Implement tributary parks sewer infrastructure MOA to mitigate for project's adverse effects to Soapstone Park's cultural resources.

Table 3b. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Cultural Landscapes (continued)

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
LOCK 0	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	A master plan vision/EA for the first mile of the C&O Canal is completed through collaboration with Georgetown Heritage and C&O Canal National Historic Park. Rock Creek Park has begun preservation, rehabilitation, and management activities as outlined in the completed master plan/EA.	- Coordinate with partners to identify needs for the Lock 0 area and obtain goals for planning efforts and area resources.

Table 3c. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Historic Structures

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Historic structures are maintained in good condition according to List of Classified Structures (LCS) and per DO-28 policies.	At least 75% of park historic structures are in good condition according to List of Classified Structures (LCS).	- Phases V and VI of the Meridian Hill rehabilitation are complete.
OLD STONE HOUSE	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Rehabilitation of Old Stone House is complete and furnishing/interior exhibits are selected according to historic study recommendations.	- Implement Harpers Ferry Center interpretation recommendations for Old Stone House. - Formalize housekeeping plan and implement invasive pest management plan in Old Stone House.
PEIRCE MILL	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Pierce Mill is maintained in good condition through implementation of a cyclical maintenance plan.	- Complete Peirce Mill Historic Furnishings Report and implement recommendations. - Develop and implement cyclical maintenance and pest management plan for Peirce Mill (including flooding mitigation). - Document in PMIS and put forward for funding rehabilitation of Peirce Barn and Mill.

Table 3c. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Historic Structures (continued)

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
CARTER BARRON AMPHITHEATER	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Character-defining features of the amphitheater are restored and the amphitheater is reopened for public use.	- Complete Carter Barron Amphitheater historic structure report. - Complete A&E design process for amphitheater improvements. - Begin construction/rehabilitation project to address amphitheater visitor safety issues. - Complete and implement business plan to inform appropriate and active use of the amphitheater. - Continue nonnative invasive removal, in coordination with partners, to maintain natural landscape inside amphitheater fence.
CHESAPEAKE HOUSE	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Condition of Chesapeake House is improved and the building is actively used.	- Complete Chesapeake House historic structure report. - Rehabilitate Chesapeake House. - Explore the possibility of using the Chesapeake House as a visitor center and interpretive contact point for Fort Circle Parks.
CONDUIT ROAD SCHOOLHOUSE	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Condition of Conduit Road Schoolhouse is improved and the building is actively used.	- *No high-priority activities identified.* (See table 4b.)
DIVINE SCIENCE CHURCH	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	The Divine Science Church is actively used under a negotiated historic lease.	- *No high-priority activities identified.* (See table 4b.)

Table 3d. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Archeological Resources

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Archeological resources within the park are identified and protected.	Known archeological sites are evaluated for NRHP.	- Identify sites from the park archeological overview and assessment and ASMIS database that require evaluation; prioritize identified sites and develop strategies for addressing these needs.
OVERALL	Archeological resources within the park are identified and protected.	Knowledge of archeological sites is improved through identification and evaluation of sites.	- *No high-priority activities identified.* (See table 4d.)

Table 3e. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Museum Collections

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	All museum objects are accounted for and preserved in the best possible conditions. Access to the museum collections for research, education, and interpretive opportunities within the park and with friends and partners is increased.	The park has all necessary information to maintain the museum collection in best condition and in adherence with NPS museum program standards.	- Complete museum baseline documentation.
OVERALL	All museum objects are accounted for and preserved in the best possible conditions. Access to the museum collections for research, education, and interpretive opportunities within the park and with friends and partners is increased.	The park can account for all museum objects.	- Complete 100% inventory in conjunction with MRCE staff. - Develop a park museum collections advisory committee. - Begin deaccessioning items that no longer align with the park's Scope of Collections Statement.
OVERALL	All museum objects are accounted for and preserved in the best possible conditions. Access to the museum collections for research, education, and interpretive opportunities within the park and with friends and partners is increased.	Museum collection is accessible to the public and staff for research and educational programming.	- *No high-priority activities identified*. (See table 4e.)
OVERALL	All museum objects are accounted for and preserved in the best possible conditions. Access to the museum collections for research, education, and interpretive opportunities within the park and with friends and partners is increased.	Park museum storage facility meets NPS "museum checklist" standards.	- Continue to address deficiencies identified in ACP. - Continue to address cultural resource artifact storage at park through deaccessioning, relocation, and finding additional storage space. - Write necessary PMIS statement to continue addressing additional deficiencies to museum storage and exhibit space.

Table 3f. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Ethnographic Resources

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Community and visitor information related to park cultural resources is actively considered to inform management decisions.	Ethnographic overview and assessment and visitor use studies are completed and used to identify traditional park users and associated community groups.	- Finish parkwide ethnographic overview and assessment.

Table 3g. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Aquatic System

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Natural stream processes (physical and biologic) and floodplain function are improved.	Habitats of species of special concern (herring, northern red salamander, spotted salamander) are protected.	- Recharge groundwater watershed to prevent degradation of springs.
ROCK CREEK AND TRIBUTARIES	Natural stream processes (physical and biologic) and floodplain function are improved.	Water quality is maintained or improved and sediment loading of Rock Creek and its tributaries is reduced.	- Continue stormwater management through maintenance of park structures. - Improve Carter-Barron parking lot and storm-water management project. - Construct and maintain Beach Drive water structures. - Restore Pinehurst Branch stream. - Implement Dumbarton Oaks Park stormwater management mitigation project. - Stabilize stream associated with DC Water's Soapstone Valley Park facility/ sewer rehabilitation project. - Restore Rock Creek streambank and vegetation at Grove 2 North parking lot.
OTHER TRIBUTARIES (POTOMAC AND ANACOSTIA)	Natural stream processes (physical and biologic) and floodplain function are improved.	Maintain or improve Water quality conditions of other park tributaries is maintained or improved to support healthy aquatic ecosystems and beneficial uses for people.	- Begin planning for future DC Water rehabilitation projects. - Stabilize stream and install trash trap interceptor at Gallatin as part of Civil War Defenses of Washington project.
ROCK CREEK AND TRIBUTARIES	Natural stream processes (physical and biologic) and floodplain function are improved.	The park has investigated expanding buffer opportunities for streams.	- Restore Rock Creek mitigation site at opposite mouth of Pinehurst Branch. - Rehabilitate Soapstone sewer.
OTHER TRIBUTARIES (POTOMAC AND ANACOSTIA)	Natural stream processes (physical and biologic) and floodplain function are improved.	The park has investigated expanding buffer opportunities for streams.	- Facilitate expansion of existing buffer areas (i.e., Picnic Grove 7).

Table 3g. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Aquatic System (continued)

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
EPHEMERAL WETLANDS, VERNAL POOLS	Natural stream processes (physical and biologic) and floodplain function are improved.	Hydrological function in the park is improved; habitat of park ephemeral wetlands is sustained.	- *No high-priority activities identified.* (See table 4g.)
EPHEMERAL WETLANDS, VERNAL POOLS	Natural stream processes (physical and biologic) and floodplain function are improved.	The park has undertaken biota monitoring to improve knowledge of park species populations.	- *No high-priority activities identified.* (See table 4g.)

Table 3h. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Terrestrial Communities

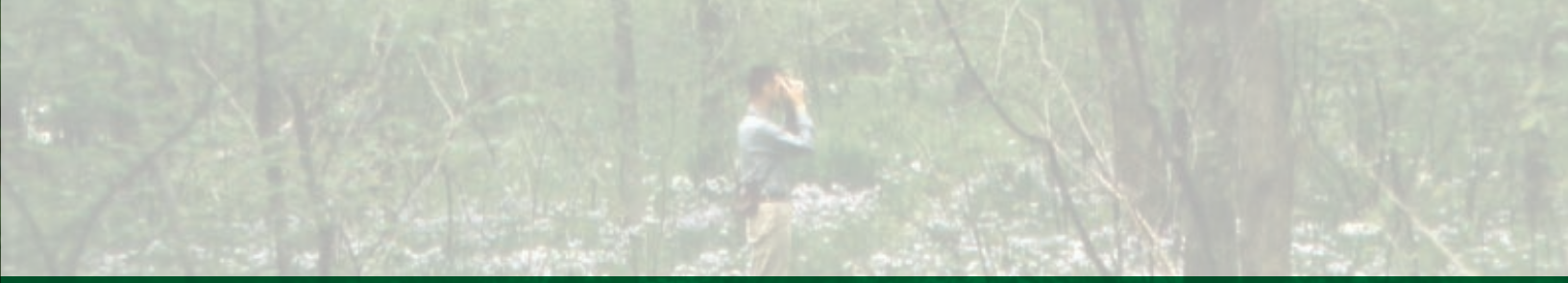
COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	The upper canopy ecological community is protected.	- Treat hemlock for hemlock wooly adelgid. - Control and remove nonnative invasive plants according to regional Invasive Plant Management Plan. - Work together with park maintenance division for snag management. - Address ash tree removal and tree replacement. - Continue working with partners (such as Casey Trees) for forest restoration efforts.
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Ecological understory and herbaceous layer are protected and restored.	- Control and remove nonnative invasive plants according to regional Invasive Plant Management Plan for understory purposes. - Find potential partnerships to continue restoration efforts and support park-sponsored efforts. - Maintain vegetation restoration efforts through work with partners, contractors, and NPS staff. - Maintain data from native landscape and restoration activities. - Continue deer culling and monitoring in vegetation plots and overall deer management to help improve understory health.
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Habitats of species of special concern are protected.	- Identify trees that bats are using for roosting purposes and determine how to protect these trees. - Identify and coordinate with partners to support improvement of habitat for neo-tropical migrating birds.

Table 3h. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Terrestrial Communities (continued)

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	The spread of nonnative invasive plants and terrestrial species is controlled.	- Continue to emphasize Early Detection Rapid Response (EDRR) protocol. - Develop restoration targets to guide nonnative invasive plant management at ROCR.
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Habitat fragmentation and visitor use impacts are reduced.	- Close select social trails to help improve understory health. - Continue surveying social trails to update GIS layer and close data gaps on visitor usage. - Ensure all official park trails are blazed to lessen visitor confusion between trails open to public use and social trails/restricted trails. - Communicate to public the impacts of social trails, off-leash dogs, and dumping. - Communicate with park law enforcement officers concerning off-leash dog policy. - Conduct visitor use surveys on social trails to inform management decisions about formalizing or closing social trails.
ARTIFICIAL TERRESTRIAL HABITATS	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Existing formal meadows (excluding lawns) are protected and maintained.	- Coordinate with maintenance division on meadow mowing. - Address nonnative invasive species according to region and park IPM plans.
ARTIFICIAL TERRESTRIAL HABITATS	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Native plant biodiversity of meadows are enhanced to improve pollination habitat.	- Increase native plantings in meadow areas through park efforts and in collaboration with partner such as the Rock Creek Conservancy. - Coordinate native flower planting addition to meadows at Dumbarton Oaks Park with Dumbarton Oaks Conservancy. - Work with Friends of Georgetown Waterfront Park to complete third native pollinator garden.

Table 3i. Long-Term Goals, Short-Term Goals, and High-Priority Stewardship Activities for Priority Resource—Night Skies and Natural Sounds

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
NIGHT SKIES	Non-natural light within the park is minimized.	Current condition of night skies in the park are understood.	- Look for opportunities to limit park light usage potentially through motion detectors or reducing/ removing lights.
NATURAL SOUNDS	Further degradation of natural sounds within U.S. Reservation 339 (Rock Creek Park) is prevented.	Current conditions of natural sounds are understood and used to make future management decisions.	- *No high-priority activities identified.* (See table 4h)



CHAPTER 6: OTHER IDENTIFIED STEWARDSHIP ACTIVITIES

The following stewardship strategies tables (tables 4a-4i) are organized by priority resource components and short-term stewardship goals and associated medium- and low-priority activities.

Table 4a. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Park Resources (Overall)

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Resources are managed to maintain ecological integrity and cultural and historical authenticity under climate change; park greenhouse gas emissions are mitigated.	Natural and cultural resources that are vulnerable to climate change are identified.	- Submit PMIS statement for non-facilities climate change vulnerability assessment for FY19 NPS Servicewide Combined Funding Call. - Complete vulnerability assessment of park resources to increased flooding under climate change.
OVERALL	Resources are managed to maintain ecological integrity and cultural and historical authenticity under climate change; park greenhouse gas emissions are mitigated.	Climate change science is integrated into resource management.	- In the renovation of canal mile zero area, include sea level rise and storm surge data to design requirements.
OVERALL	Resources are managed to maintain ecological integrity and cultural and historical authenticity under climate change; park greenhouse gas emissions are mitigated.	Park greenhouse gas emissions that cause climate change are reduced.	- Reinventory park emissions with NPS Climate Friendly Parks Program to quantify progress since the original greenhouse gas inventory. - Identify successful energy efficiency and other actions in the original park Climate Action Plan to identify and continue successful best management practices.

Table 4b. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Cultural Landscapes

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
MERIDIAN HILL PARK	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	The condition of Meridian Hill Park, according to the CLI, is improved.	- Update design of lodge house for Park Police use.
DUMBARTON OAKS PARK	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Character-defining features of Dumbarton Oaks are rehabilitated after tributary stormwater mitigation project is properly managed and completed.	- Develop cyclic maintenance plan including dredging activities to rehabilitate Dumbarton Oaks Park water features. - Incorporate climate change models into restoration plan implementation and future Dumbarton Oaks Park planning/restoration efforts.
WALTER PIERCE PARK	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	The Walter Pierce Cemetery management plan and NRHP documentation information inform park management and preservation.	- *No other activities identified.*
MONTROSE PARK	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Character-defining historic features of Montrose park are rehabilitated and stormwater passing into Dumbarton Oaks Park is properly managed.	- Complete treatment recommendations for witness tree protection from Montrose Park CLR/ vegetation management strategy from landscape preservation maintenance plan to ensure proper maintenance direction.
LINNAEAN HILL	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Linnaean Hill's character-defining features are restored and landscape management considered climate change implications.	- Update Linnaean Hill CLR. - Begin Linnaean Hill tree line/boundary restoration (tree replacement) according to CLR.
SMALL PARK RESERVATIONS	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Character-defining features of the small park reservations managed by Rock Creek Park are identified to inform future preservation and management.	- *No other activities identified.*

Table 4b. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Cultural Landscapes (continued)

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
CIVIL WAR DEFENSES OF WASHINGTON	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Earthworks are stabilized and managed to minimize future degradation.	- *No other activities identified.*
GOLF COURSE	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	The selected golf course management entity is actively maintaining the natural resource and cultural landscape according to completed CLR recommendations.	- *No other activities identified.*
TRIBUTARY PARKS	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	Tributary parks' cultural landscapes are rehabilitated after successful completion of sewer projects.	- Implement tributary parks' sewer infrastructure MOA to mitigate for project's adverse effects to Glover Archbold Park's cultural resources.
LOCK 0	All park cultural landscapes are identified and documented; at least half of the cultural landscapes are maintained in good condition according to the Cultural Landscapes Inventory (CLI) (including character-defining features).	A master plan vision/EA for the first mile of the C&O Canal is completed through collaboration with Georgetown Heritage and C&O Canal National Historic Park; Rock Creek Park has begun preservation, rehabilitation, and management activities as outlined in the completed master plan/EA.	- *No other activities identified.*

Table 4c. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Historic Structures

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Historic structures are maintained in good condition according to List of Classified Structures (LCS) and per DO-28 policies.	At least 75% of park historic structures are in good condition according to List of Classified Structures (LCS).	- Restoration of the park's historic fireplaces and grills is underway. - Restoration of the park's historic stonework is underway.
OLD STONE HOUSE	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Rehabilitation of Old Stone House is complete and furnishing/interior exhibits are selected according to updated historic study recommendations.	- Update NRHP for Old Stone House.
PEIRCE MILL	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Peirce Mill is maintained in good condition through implementation of a cyclical maintenance plan.	- Develop and implement an integrated pest management plan for Peirce Mill.
CARTER BARRON AMPHITHEATER	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Character-defining features of the amphitheater are restored and the amphitheater is reopened for public use.	- *No other activities identified*.
CHESAPEAKE HOUSE	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Condition of Chesapeake House is improved and the building is actively used.	- *No other activities identified*.

Table 4c. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Historic Structures (continued)

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
CONDUIT ROAD SCHOOLHOUSE	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	Condition of Conduit Road Schoolhouse is improved and the building is actively used.	- Update Conduit Road Schoolhouse historic structure report. - Update Conduit Road Schoolhouse NRHP. - Conduct Conduit Road Schoolhouse condition assessment to prepare for historic lease agreement. - Prepare use and occupancy agreement for Conduit Road Schoolhouse.
DIVINE SCIENCE CHURCH	Historic buildings are in good condition, are in active and appropriate use, and have appropriate documentation to provide maintenance guidance (National Register of Historic Places nomination, Determination of NRHP Eligibility, or historic structure report).	The Divine Science Church is actively used under a negotiated historic lease.	- Resolve current Divine Science Church occupancy status and pursue possibility of historic lease.

Table 4d. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Archeological Resources

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Archeological resources within the park are identified and protected.	Known archeological sites are evaluated for NRHP.	- Complete an archeological overview and assessment for the Old Stone House.
OVERALL	Archeological resources within the park are identified and protected.	Knowledge of archeological sites is improved through identification and evaluation of sites.	- Identify areas that need additional survey work and conduct small field projects using volunteer/student intern assistance (e.g. Little Forest).

Table 4e. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Museum Collections

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	All museum objects are accounted for and preserved in the best possible conditions. Access to the museum collections for research, education, and interpretive opportunities within the park and with friends and partners is increased.	The park has all necessary information to maintain the museum collection in best condition and in adherence with NPS museum program standards.	- Implement museum baseline documentation recommendations.
OVERALL	All museum objects are accounted for and preserved in the best possible conditions. Access to the museum collections for research, education, and interpretive opportunities within the park and with friends and partners is increased.	The park can account for all museum objects.	- Use collections advisory committee to identify where missing collection items are being stored. - Resolve loan agreements related to park natural and cultural collections. - Open conversation whether to loan natural collections to Smithsonian or other off-site repository.
OVERALL	All museum objects are accounted for and preserved in the best possible conditions. Access to the museum collections for research, education, and interpretive opportunities within the park and with friends and partners is increased.	The museum collection is accessible to the public and staff for research and educational programming.	- Develop PMIS statement for digitization of certain pieces for online access. - Work with interpretation and education divisions to develop/update exhibit plans for select park locations (Nature center, Old Stone House, Peirce Mill and Park, Chesapeake House, Reno City). - Implement recommendations from recent NCR CR/Interp assessment document and Museum Baseline and LRIP. - Work with NCRO to develop relationship with specific professors from local universities for collaboration purposes.
OVERALL	All museum objects are accounted for and preserved in the best possible conditions. Access to the museum collections for research, education, and interpretive opportunities within the park and with friends and partners is increased.	The park museum storage facility meets NPS "museum checklist" standards.	- *No other activities identified.*

Table 4f. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Ethnographic Resources

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Community and visitor information related to park cultural resources is actively considered to inform management decisions.	Ethnographic overview and assessment and visitor use studies are completed and used to identify traditional park users and associated community groups.	- *No other activities identified.*

Table 4g. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Aquatic System

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
OVERALL	Natural stream processes (physical and biologic) and floodplain function are improved.	Habitats of species of special concern (herring, northern red salamander, spotted salamander) are protected.	- Identify/restore cooler water refugia. - Plant trees at selected erosion locations to help uniformly cool stream waters.
ROCK CREEK AND TRIBUTARIES	Natural stream processes (physical and biologic) and floodplain function are improved.	Water quality is maintained or improved and sediment loading of Rock Creek and its tributaries is reduced.	- Develop relationship with Montgomery County (source of upstream water) for coordination on stream and floodwater issues. - Restore stream areas damaged by stormwater flows, such as Fenwick and Portal Branches. - Remove Secret Service Underground Storage Tanks. - Improve road salt management/use protocols to lower salinity/chloride concentrations. - Monitor and maintain Klingle Branch.
OTHER TRIBUTARIES (POTOMAC AND ANACOSTIA)	Natural stream processes (physical and biologic) and floodplain function are improved.	Water quality conditions of other park tributaries is maintained or improved to support healthy aquatic ecosystems and beneficial uses for people.	- *No other activities identified*.
ROCK CREEK AND TRIBUTARIES	Natural stream processes (physical and biologic) and floodplain function are improved.	The park has investigated expanding buffer opportunities for streams.	- Plant trees at selected picnic sites that are no longer mowed. - Consider transitioning some currently mowed sites to restoration plantings to expand stream buffer.
OTHER TRIBUTARIES (POTOMAC AND ANACOSTIA)	Natural stream processes (physical and biologic) and floodplain function are improved.	The park has investigated expanding buffer opportunities for streams.	- *No other activities identified*.
EPHEMERAL WETLANDS, VERNAL POOLS	Natural stream processes (physical and biologic) and floodplain function are improved.	Hydrological function in the park is improved; habitat of park ephemeral wetlands is sustained.	- Communicate with outside partners to redirect stream along Maryland/DC line to follow historic flow into northern part of park. - Develop partnership with USFS to do condition assessment on ephemeral ponds for suggestions on restoration/creation of ponds.
EPHEMERAL WETLANDS, VERNAL POOLS	Natural stream processes (physical and biologic) and floodplain function are improved.	The park has undertaken biota monitoring to improve knowledge of park species populations.	- Continue to coordinate park participation in the national dragonfly mercury project coordinated by ARD.

Table 4h. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Terrestrial Communities

COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Upper canopy ecological community is protected.	- *No other activities identified.*
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Understory and herbaceous layer protected and restored.	- *No other activities identified.*
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Habitats of species of special concern are protected.	- *No other activities identified.*
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	The spread of nonnative invasive plants and terrestrial species is controlled.	- Update and finalize current draft park nonnative invasive plant management plan to align with approved regional invasive management plan. - Actively seek funding for nonnative invasive management efforts through partnerships and/or by responding to funding calls.
EASTERN DECIDUOUS FOREST COMMUNITIES	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Habitat fragmentation and visitor use impacts is reduced.	- Place temporary signs on social trails to educate users of impacts. - Support a Bark Ranger program to address dog behavior in the park.
ARTIFICIAL TERRESTRIAL HABITATS	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Existing formal meadows (excluding lawns) are protected and maintained.	- *No other activities identified.*
ARTIFICIAL TERRESTRIAL HABITATS	The biodiversity and composition of native terrestrial communities within their potential ranges is conserved and improved.	Native plant biodiversity of meadows are enhanced to improve pollination habitat.	- *No other activities identified.*

Table 4i. Long-Term Goals, Short-Term Goals, and Other Identified Stewardship Activities for Priority Resource—Night Skies and Natural Sounds

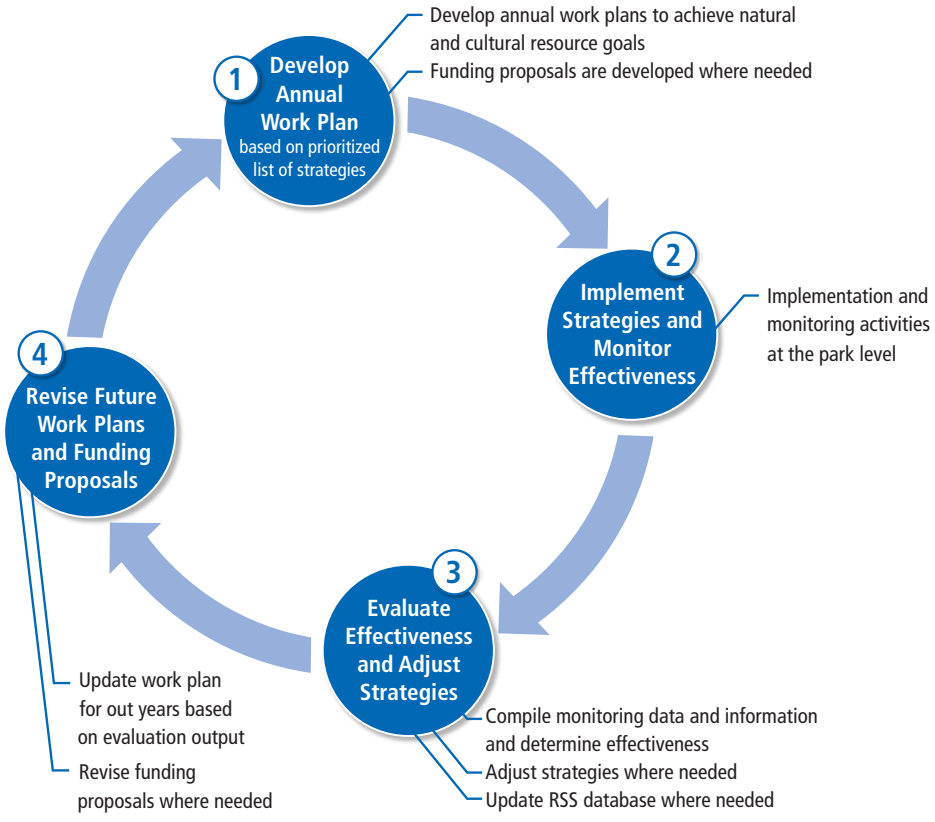
COMPONENT	LONG-TERM GOALS	SHORT-TERM GOALS	ACTIVITIES
NIGHT SKIES	Non-natural light within the park is minimized.	Current condition of night skies in the park are understood	- Complete night sky assessment and recommendations, including park light usage, with assistance from NPS Night Skies and Natural Sounds program. - Obtain best management practices related to park light use from NPS NSNS Division. - Coordinate with park maintenance division to install/use LED lighting and retrofit existing park structures when possible; improve usage of proper lighting with partners and contractors.
NATURAL SOUNDS	Further degradation of natural sounds within U.S. Reservation 339 (Rock Creek Park) is prevented.	Current conditions of natural sounds are understood and used to make future management decisions.	- Partner with NPS Night Skies and Natural Sounds to conduct baseline natural sounds assessment to close data gaps and influence future management.

CHAPTER 7: ONGOING IMPLEMENTATION OF THE RESOURCE STEWARDSHIP STRATEGY

The stewardship goals, activities, and other pertinent information of the resource stewardship strategy is managed and updated regularly using the RSS desktop application. This information will assist resource managers in determining what, how, when, and where resource management occurs in the parks and will assist the park's resource management staff in developing annual work plans. These work plans will be an important planning tool for park staff to determine what they will be able to realistically tackle over the coming years.

Long-term implementation of the resource stewardship strategy includes park managers monitoring resource information and conditions and evaluating the effectiveness of resource stewardship strategies over time. Regular monitoring of RSS progress will provide park managers an opportunity to evaluate whether the stewardship strategies are making progress and consider whether adjustments are needed. See figure 3 for more information on the cyclical nature of this process. In addition, routine communication with the public is another important aspect of the implementation process. These outreach efforts are intended to improve public awareness about the science and strategies used to protect the park's diverse resources and values over time.

Figure 3: Resource Stewardship Strategy Implementation Process



APPENDIXES

APPENDIX A: RESOURCE STEWARDSHIP STRATEGY GLOSSARY

Activity: One or more initiatives that strive to achieve a short-term stewardship goal. On its own, an activity produces a specific deliverable or outcome. Such activities may include assessments, documentation, identification, maintenance, operations, resource protection, thematic studies, cataloguing, evaluation, interpretation, planning, training, data recovery, education, inventory, monitoring, research, survey, treatment, restoration, or other types of management.

Activity Priority: High, medium, low priority of activity.

Activity Status: This status would track whether the activity has been initiated, not initiated, ongoing, or completed.

Activity Target: The specific target for completing the activity (e.g., time frame, completeness, quality level). The target should be flexible because time frames might need to be readjusted once all of the activities are compiled.

Activity Type: The type of activity described could include resource education, research, inventory, direct management, collaboration, etc.

Desired Conditions: A park's natural and cultural resource conditions that the National Park Service aspires to achieve and maintain over time and the conditions necessary for visitors to understand, enjoy, and appreciate those resources.

Key Issue: A park management concern directly related to park resources and their condition.

Priority Resource: A cultural or natural resource that the National Park Service manages or monitors to maintain a park unit's purpose and significance, to address policy/law mandates, or to address scholarly and scientific research needs or findings.

Priority Resource Component: An aspect or attributing resource that is integral to the functionality, importance, or condition of a priority resource and can be managed or monitored practically over the next three to five year horizon. Priority resource components are included, or nested, under the associated priority resources.

Resource Condition Assessments: Developed separately, the Natural Resource Condition Assessment and Cultural Resource Condition Assessment combine existing scholarly or scientific data with expert interpretations as the primary basis for developing information and condition findings in the Resource Stewardship Strategy. Condition assessments highlight emerging or crosscutting issues that require the greatest management attention and help inform the development of stewardship strategies.

State of the Park Report: Summarizes the current condition of cultural and natural park resources, visitor experience, and park infrastructure as assessed by a combination of available factual information and the expert opinion and professional judgment of park staff and subject matter experts. The report also highlights park stewardship activities and accomplishments to maintain or improve current conditions and identifies key issues and challenges to help inform park planning.

Strategy: A tactical path forward defined through achievable actions that maintain or improve aspects of a priority resource / component. Strategies typically begin with a short-term stewardship goal and include a comprehensive set of activities to meet that goal. Strategies are logically organized, science/scholarship-based, well documented, and reviewed by subject-matter experts. Strategies may strive toward long-range information or stewardship goals. In cases where no stewardship goal has been identified, strategies may strive to reduce stressors on priority resources / components. The typical timeframe for a executing a strategy is three to five years, depending on a park's needs.

Stewardship goals: Description of what resource or information conditions managers are working to achieve for a park's natural and cultural resources. More specifically, stewardship goals strive to enhance information; improve or maintain resource condition; address stressors and threats; or achieve other park stewardship needs, such as increasing collaboration with partners or expanding education and interpretation, related to the priority resources. Long-term stewardship goals are used to establish long-range desired conditions and typically have a 10- to 20-year time frame. Short-term goals are used to inform the development of stewardship activities and typically have a 3- to 5-year time frame. Both long-term and short-term stewardship goals are based on science, law, NPS management policies, and the long-term public interest.

Stressors: Factors that may exacerbate change in resource conditions, such as climate change, population growth, invasive species, and visitor use.

Threats: Immediate or potential factors that may negatively impact park resources in the future, such as expanding development outside the boundary of the park.

APPENDIX B: BIBLIOGRAPHY

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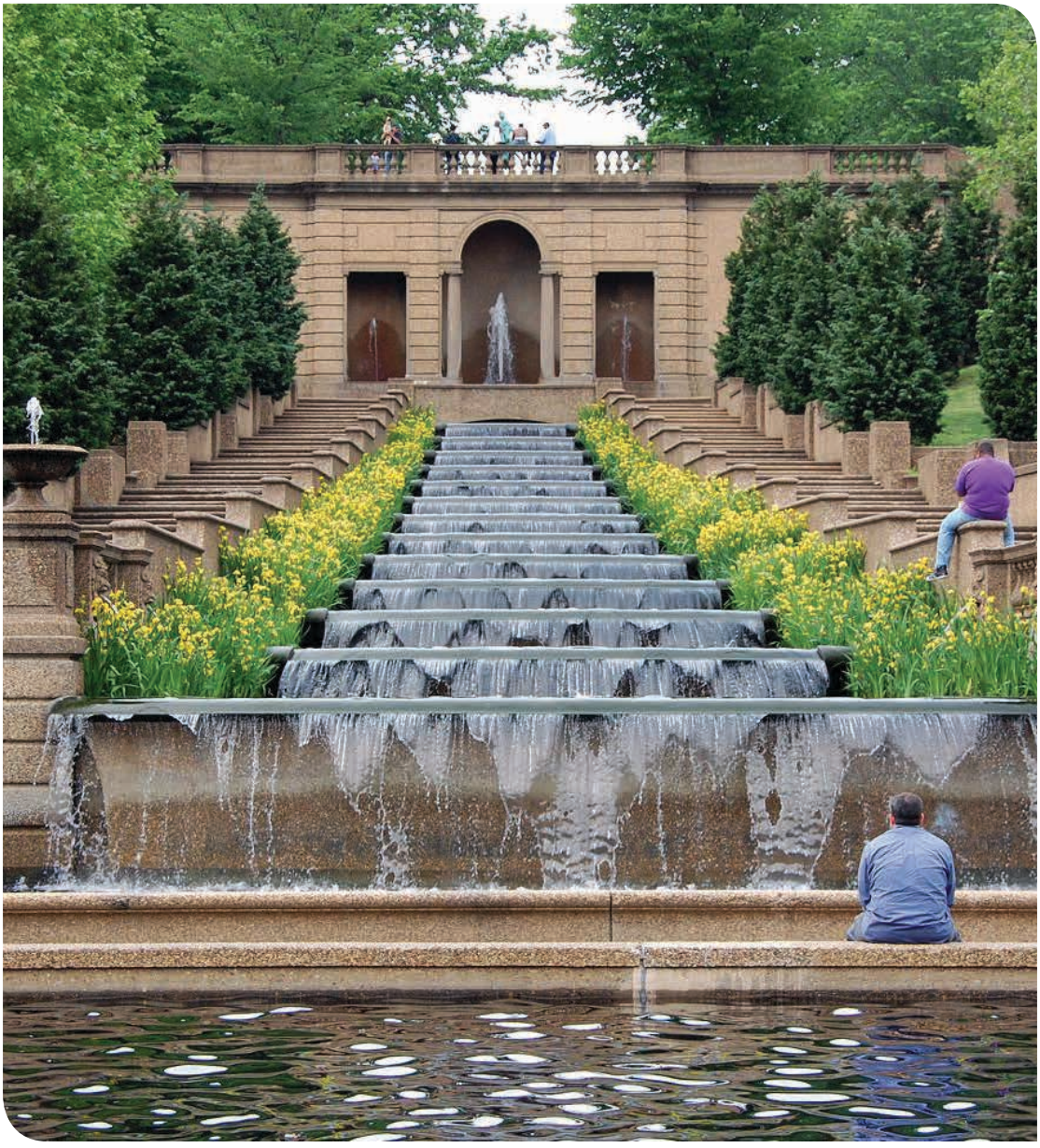

APPENDIX C: REFERENCE DOCUMENTS ORGANIZED BY PRIORITY RESOURCES

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  - » Battleground Cemetery (2014)
  - » Dumbarton Oaks Park (2000
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  - » Peirce Mill Complex (2009)
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  - » Civil War Defenses of Washington (1996
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  - » *Rock Creek Golf Course (In progress)*
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  - » Meridian Hill Park (1987)
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  - » Rock Creek Park Road System (1996)
  - » Old Harvard Bridge (1992)
  - » Shoreham Hill Bridge (1988)
  - » New Harvard Street Bridge (1995)
  - » M Street Bridge (1993)
  - » Pennsylvania Ave Bridge (1993)
  - » K Street Bridge (1993)
  - » P Street Bridge (1993)
  - » Connecticut Ave Bridge (1987)
  - » Boulder Bridge (1988)
  - » Rapids Footbridge (1988)
  - » Old Military Road Bridge (1988)

- Ross Drive Bridge (1988)
- Woodley Lane Bridge Abutment (1992)
- Rock Creek and Potomac Parkway Bridge near P Street (1989)
- Grant Road Bridge (1988)
- Pinehurst Bridge (1988)
- Rolling Meadow Footbridge (1992)
- Riley Springs Footbridge (1992)
- Bluffs Footbridge (1992)
- Boundary Footbridge (1992)
- Lyons Mill Footbridge (1992)
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APPENDIX D: ADDITIONAL STEWARDSHIP ACTIVITIES

The following tables identify resource-management activities that were recommended by NPS and non-NPS subject-matter experts for consideration during the RSS process. For various reasons described in the RSS summary, these activities were ultimately not included as RSS stewardship activities to accomplish within the next five years. However, park staff may decide to pursue any of these activities as future opportunities arise, and thus they are noted here for future reference.

Table D1. Natural Resources

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
CLIMATE CHANGE	Move infrastructure from flood zones.	NPS Climate Change Response Program presentation (Sept. 2017 RSS Workshop)
CLIMATE CHANGE	Need to understand range of possible impacts of climate change on Rock Creek watershed, ecosystems, and cultural landscapes, and develop appropriate management strategies. Climate change scenario planning enables managers to explore critical uncertainties in climate, ecology, and sociopolitical factors and a broad range of plausible future conditions.	Foundation (2015)
CLIMATE CHANGE	Initiate coordination with partners or obtain funding for climate change vulnerability assessments of key resources.	NPS Climate Change Response Program presentation (Sept. 2017 RSS Workshop)
CLIMATE CHANGE	Complete vulnerability assessment of park ecosystems to invasive alien plant species under climate change.	NPS Climate Change Response Program presentation (Sept. 2017 RSS Workshop)
SCENERY	"Natural scenery and historic views" was suggested as a potential priority resource suggested by ARD because of the development threat to and relevance of "natural scenery" and viewshed in the ROCR foundation. ARD has suggested goals and activities for consideration if adopted, helping to manage scenery as a resource. **ARD NOTE**—air quality/pollution as a resource and stressor may not qualify as a priority resource for ROCR. Consider whether to include as a component of the suggested "Scenery" priority resource.	Proposed ROCR Priority Resources Team Call (August 2017)
SCENERY	Park is to manage the natural scenery in and around Washington DC per NPS fundamental criteria.	Natural Resource Condition Assessment (2009)
SCENERY	A park viewshed management plan would help protect park views from vantages within identified cultural landscapes.	Foundation (2015)

Table D1. Natural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
SCENERY	**LONG-TERM GOA**—Protect, improve, and monitor views important for natural scenery and cultural landscapes both within the park and across park boundaries to evoke historic conditions and maintain or improve visual character. - **SHORT-TERM GOAL 2**—Protect and Improve. To the extent possible, minimize changes, visual contrast, and intrusions to views. - **SHORT-TERM GOAL 2 ACTIVITY 1**—Include visual impact consideration within park operations project proposal/clearance process. - **SHORT-TERM GOAL 2 ACTIVITY 2**—Adopt ARD recommended or develop specific in-park best practices for visual resources. - **SHORT-TERM GOAL 2 ACTIVITY 3**—Following the visual resource inventory, develop view or landscape specific short-term conservation goals, prioritizing inventoried areas of high scenic quality and importance and visibility from multiple locations. - **SHORT-TERM GOAL 2 ACTIVITY 4**—Update the park's greenhouse gas inventory to assess progress (2009-2016), and set new goals for the park's Climate Friendly Parks Action Plan starting with 2017. (Demonstrating the park's leadership and commitment to do its part, which can broaden the opportunities for dialogue, outreach, and further empower the park partnership plan in minimizing stakeholder impacts to the park.) **SHORT-TERM GOAL 3**—Collaboration. Adjacent landowners, planners, developers, and other stakeholders are engaged in cooperative conservation of important views across park boundaries. - **SHORT-TERM GOAL 3 ACTIVITY 1**—Build/maintain partnerships with park neighbors, developers, and other stakeholders, understanding shared visual values, increasing awareness and coordination for action for the protection and improvement of views. - **SHORT-TERM GOAL 3 ACTIVITY 2**—(Where feasible) Establish recommended design guidelines for adjacent landowners, zoning, or pursue land acquisition or additional easement strategies to protect views. - **SHORT-TERM GOAL 3 ACTIVITY 3**—Develop a park partner action strategy, including the protection of natural scenery/historic views, night sky, and natural sounds as cross boundary issues for collaboration.	NRSS-Air Resource Division RSS Resource Info Sheet (2017)
SCENERY	**SHORT-TERM GOAL**—Understand. Inventory and assess park views, repeating as warranted to monitor changes in condition. (Background: Inventory including associated values to inform visual resource goals and protection strategies. The inventory will provide a baseline from which to monitor changes in condition from encroachment and development and help to inform visual resource collaboration with park partners.) Supporting activities - Identify views related to the park purpose and visitor values, including views important to natural scenery and cultural landscapes and those that may cross park boundaries. - Conduct a visual resource inventory using the NPS ARD protocol to identify scenic quality and importance of views and establish baseline condition. - Assess vulnerability of park views using NPS ARD guidance to understand protections and threats, including 29 existing scenic easements. - Repeat visual resource inventory every 5-10 years or as landscape changes are observed to monitor changes in views condition.	NRSS-Air Resource Division RSS Resource Info Sheet (2017)

Table D1. Natural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
SCENERY	**SHORT-TERM GOAL—**Protect and Improve. To the extent possible, minimize changes, visual contrast, and intrusions to views. Supporting activities - Include visual impact consideration within park operations project proposal/clearance process. - Adopt ARD recommended or develop specific in-park best practices for visual resources. - Following the visual resource inventory, develop view or landscape specific short-term conservation goals, prioritizing inventoried areas of high scenic quality and importance and visibility from multiple locations. - Update the park's greenhouse gas inventory to assess progress (2009-2016), and set new goals for the park's Climate Friendly Parks Action Plan starting with 2017. (Demonstrating the park's leadership and commitment to do its part, which can broaden the opportunities for dialogue, outreach, and further empower the park partnership plan in minimizing stakeholder impacts to the park.)	NRSS-Air Resource Division RSS Resource Info Sheet (2017)
SCENERY	**SHORT-TERM GOAL—**Collaboration. Adjacent landowners, planners, developers, and other stakeholders are engaged in cooperative conservation of important views across park boundaries. Supporting activities - Build/maintain partnerships with park neighbors, developers, and other stakeholders, understanding shared visual values, increasing awareness and coordination for action for the protection and improvement of views. - Establish recommended design guidelines for adjacent landowners, zoning, or pursue land acquisition or additional easement strategies to protect views (where feasible). - Develop a park partner action strategy, including the protection of natural scenery/historic views, night sky, and natural sounds as cross boundary issues for collaboration.	NRSS-Air Resource Division RSS Resource Info Sheet (2017)
SCENERY	**SHORT-TERM GOAL**—Provide opportunities for visitor access and understanding of park views. Supporting activities - Complete photo gallery on the park's website with the important views chosen for the visual resource inventory. - Establish park webcam(s) to provide a virtual experience of the park's natural scenery and historic views.	NRSS-Air Resource Division RSS Resource Info Sheet (2017)
AIR QUALITY	Close data gaps of local air quality to downscale regional data; park data could be used to calibrate air quality transport and depositional models.	Natural Resource Condition Assessment (2009)
AIR QUALITY	Traffic volume in park – - GMP strategies included park police radar and speed bumps, but not implemented - Roadkill, recreational user safety, air quality	ROCR RSS Team Call Summary Notes (July 2017)
AIR QUALITY	Data gap on traffic's effects on park resources (vegetation, masonry structures, statuary)	Sept. 2017 RSS Workshop

Table D1. Natural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
AIR QUALITY	Survey ozone-sensitive bioindicator plant species for foliar injury. Rationale: There are at least 46 ozone-sensitive plants in the park including tulip poplar, American sycamore, red maple, black cherry, blackberry, and coneflower.	NRSS-Air Resource Division RSS Suggested Activity
AIR QUALITY	Interpret air quality issues in tangible ways including use of an ozone garden containing park ozone-sensitive bioindicator species.	NRSS-Air Resource Division RSS Suggested Activity
AIR QUALITY	**LONG-TERM GOA—**Seek to understand park air quality and perpetuate the best possible condition for the protection of park air quality related values (AQRVs) including scenic views/visibility, night skies, vegetation, and wildlife. Visibility is in good condition by the year 2064, where the average visibility is < 2 deciviews above natural conditions.	NRSS-Air Resource Division RSS Resource Info Sheet
AIR QUALITY	**SHORT-TERM GOAL—**Understand Improve understanding of air quality through developing the air quality summary, identifying and monitoring sensitive resources, assessing future research needs, and educating park staff and public about impacts to park resources. Supporting activities - Develop a park air quality summary. (in cooperation with ARD) - Provide air quality forecasts to staff and visitors in cooperation with Metropolitan Washington Council of Governments. https://www.mwcog.org/environment/planning-areas/air-quality/air-quality-forecast/ - Establish connection with nearby CAA Class I SHEN air quality specialist towards understanding park/regional quality. - Include air quality summary information into staff training/handbook. - Encourage/allow park staff to increase air quality literacy by taking the "Air Resources in National Parks" free DOI Learn 2 hour training course. - Survey ozone-sensitive bioindicator plant species for foliar injury. Rationale: There are at least 46 ozone-sensitive plants in the park including tulip poplar, American sycamore, red maple, black cherry, blackberry, and coneflower. - Interpret air quality issues in tangible ways including use of an ozone garden containing park ozone-sensitive bioindicator species. - Continue participation in the national dragonfly mercury project coordinated by ARD. - Monitor for airborne toxic contaminants opportunistically in park biota including insect, bird, bat, and fish species.	NRSS-Air Resource Division RSS Resource Info Sheet

Table D1. Natural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
AIR QUALITY	**SHORT-TERM GOAL**—Improve/Environmental Leadership Improving park sustainability and environmental leadership through the park Climate Friendly Parks Action Plan, demonstrating the park's commitment to do its part for sustainability, air/water quality, and climate change. (Can broaden the opportunities for dialogue, outreach, and further empower LIRI to work with partners in minimizing their impacts to the park.) Supporting activities - Develop park Energy, Waste, & Lighting Guidelines for park staff and volunteers. - Update the park's greenhouse gas inventory to assess progress (2009-2016) and set new goals for the park's Climate Friendly Parks Action Plan starting with 2017. (Demonstrating the park's leadership and commitment to do its part, which can broaden the opportunities for dialogue, outreach, and further empower the park partnership plan in minimizing stakeholder impacts to the park.)	NRSS-Air Resource Division RSS Resource Info Sheet
EASTERN DECIDUOUS FOREST	Initiate conversation with USFWS about the park's potential need for a forest management plan	Sept. 2017 RSS Workshop
EASTERN DECIDUOUS FOREST	Partner with I&M to inform program on native plantings	Sept. 2017 RSS Workshop
EASTERN DECIDUOUS FOREST	Continue/initiate conversations with neighbors on lawn waste dumping and potential invasive plan species introduction	Sept. 2017 RSS Workshop
ARTIFICIAL TERRESTRIAL COMMUNITIES	It is recommended to maintain forest connectivity and reduce forest fragmentation by minimizing stressors such as dumping, roads, structures, trails and fires.	Natural Resource Condition Assessment (2009)
ARTIFICIAL TERRESTRIAL COMMUNITIES	Air quality is severely compromised- least buffered in this habitat. Regional partnerships and education to improve air quality.	Natural Resource Condition Assessment (2009)
ARTIFICIAL TERRESTRIAL COMMUNITIES	Garden Management Plan - Plan would assist management of community gardens.	Foundation (2015)
SOILS	**Note:** Annual tennis tournament – pressure on park to increase parking on turf fields near meadows, but park has regulatory control	ROCR RSS Team Call Summary Notes (July 2017)
WETLANDS	Sediment loss in streams/tributaries, impacts water quality, smothering habitats	ROCR RSS Workshop Notes
WETLANDS	Road salting should be managed to further reduce impacts to streams and that nutrient reduction strategies should be implemented.	Natural Resource Condition Assessment (2009)
ROCK CREEK AND TRIBUTARIES	Detailed water quality study to provide detailed water quality data related to pollutants in Rock Creek (herbicides and pesticides) and updated trend data (i.e., water quantity, flows, various water quality measures).	Foundation (2015)
ROCK CREEK AND TRIBUTARIES	Long-term monitoring for water quality and quantity, including climate change effects and changes in spring discharge rates. Climate change vulnerability assessment.	Foundation (2015)
ROCK CREEK AND TRIBUTARIES	Reconstruct and maintain Beach Drive water quality structures	Sept. 2017 RSS Workshop

Table D1. Natural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
ROCK CREEK AND TRIBUTARIES	**GOAL**—Better understand potential for within-park nutrient processing by characterizing streamside vegetation Activity - Assess efficacy of various buffer species	Natural Resource Condition Assessment (2009)
NIGHT SKIES AND NATURAL SOUNDS	Identify and implement projects that could reduce noise and artificial light in the park (e.g., infrastructure, purchasing, contracting).	Foundation (2015)
NIGHT SKIES AND NATURAL SOUNDS	Acoustic Resources Management Plan - The plan would include natural and cultural sounds description, assessment of current conditions, management objectives, thresholds and standards for management, and opportunities to improve conditions.	Foundation (2015)
VEGETATION	Develop comprehensive tree stewardship and invasive plant management programs to promote a mature tree canopy and promote an understory that maximizes appropriate biodiversity	Revitalizing Rock Creek (2015)
VEGETATION	Assess the condition of trees in all park areas	Revitalizing Rock Creek (2015)
VEGETATION	Survey opportunities to re-plant or plant new trees	Revitalizing Rock Creek (2015)
VEGETATION	Implement a monitoring and annual reporting plan to protect existing trees and plant new trees in collaboration with federal and local agencies and organizations	Revitalizing Rock Creek (2015)
VEGETATION	Build a tree care program that both creates green jobs and uses volunteers	Revitalizing Rock Creek (2015)
VEGETATION – Invasive species	Make the park a model urban park with best practices to manage invasive species	Revitalizing Rock Creek (2015)
VEGETATION – Invasive species	Expand the current volunteer program and create green jobs to manage invasives	Revitalizing Rock Creek (2015)
VEGETATION – Invasive species	Engage park neighbors in helping stem the spread of invasives from nearby properties	Revitalizing Rock Creek (2015)
VEGETATION	Restore priority areas, including important bird and wildlife habitat	Revitalizing Rock Creek (2015)
AQUATIC SYSTEM	Improve coordination among key agencies, water authorities, and other stakeholders; create a convening organization like a Federal City commission	Revitalizing Rock Creek (2015)
AQUATIC SYSTEM	Increase advocacy for clean water and healthy streams	Revitalizing Rock Creek (2015)
AQUATIC SYSTEM – Rock Creek and tributaries	Conduct studies to identify sources of pollution in Rock Creek tributaries and take steps to control them	Revitalizing Rock Creek (2015)
AQUATIC SYSTEM	Prevent water pollution from sources within the park	Revitalizing Rock Creek (2015)
AQUATIC SYSTEM	Control sewer leak, combined sewer overflows, and illegal discharge	Revitalizing Rock Creek (2015)
AQUATIC SYSTEM	Use best practices in the park to reduce runoff from impervious surfaces	Revitalizing Rock Creek (2015)
AQUATIC SYSTEM	Install projects to capture and manage stormwater in the park and in upstream areas outside the park perhaps in collaboration with DC Water	Revitalizing Rock Creek (2015)
AQUATIC SYSTEM	Expand and scope programs to engage private and institutional park neighbors in backyard habitat, downspout disconnect, and rain garden programs to reduce runoff from their properties	Revitalizing Rock Creek (2015)

Table D1. Natural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
AQUATIC SYSTEM	Evaluate the current and future potential of the Park to supply ecosystem services like stormwater management that can generate Stormwater Retention Credits (SRCs) and income to the park through voluntary green infrastructure projects.	Revitalizing Rock Creek (2015)
AQUATIC SYSTEM	Fisheries Management Plan - The plan would address the long-term viability of the park's fisheries. It would include management goals and objectives, status of the relevant fish stocks, stock assessments for fish species, and fishery habitat and water quality considerations (management of dam and fish ladder).	Foundation (2015)
AQUATIC SYSTEM	Lead conversations about resource landscape-scale management with NCR programs and other DC area parks	Sept. 2017 RSS Workshop
AQUATIC SYSTEM – Ephemeral Wetlands, Vernal Pools	Conduct vulnerability analysis on ephemeral ponds in response to climate change	NPS Climate Change Response Program presentation (Sept. 2017 RSS Workshop)
AQUATIC SYSTEM – Ephemeral Wetlands, Vernal Pools	Lead conversation about resources to manage species and region-wide management approach	Sept. 2017 RSS Workshop
WILDLIFE	Conduct studies as needed to inform park management decisions	Revitalizing Rock Creek (2015)
WILDLIFE	Empower park users to help protect wildlife by keeping dogs on leashes	Revitalizing Rock Creek (2015)
WILDLIFE	Create a park neighbors program that engages surrounding communities in creating backyard habitats, tree planting, and other eco-friendly practices	Revitalizing Rock Creek (2015)
WILDLIFE	Initiate conversation with USFWS about the park's potential need for a bat recovery plan	Sept. 2017 RSS Workshop
PARK BOUNDARIES	Continue to monitor park boundaries and take action to prevent reverse border encroachment	Revitalizing Rock Creek (2015)

Table D2. Cultural Resources

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
CULTURAL ANTHROPOLOGY/ ETHNOGRAPHY	Conduct an Ethnographic Overview & Assessment (E.O.A.) of Rock Creek Park. The need for an EOA has been identified as the top Cultural Resource Stewardship priority for the park. Analyze the archeological assemblages for articles or exhibits (this is less than 10% complete)/education and interpretation use.	Draft CRSA (September 2017)
ARCHEOLOGY	Develop objectives for treating archeological sites, features, and objects as described in an Archeological Management Plan. Evaluate sites and develop/submit National Register Nominations.	Draft CRSA (September 2017)
ARCHEOLOGY	Enter appropriate maintenance data and Facility Condition Index (FCI) ratings for archeological sites in the Facility Management Software System (FMSS).	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	Cultural landscapes need to be more adequately addressed in the Facility Management Software System. At this time, 0% have been adequately addressed. Park staff should be inputting points, getting WASO verification, and inputting cross walks into data into FMSS. Cultural Landscape features should be entered into FMSS with multiple points, and CLI records should be entered into FMSS by park Resource Management personnel. 0% of Cultural Landscape features are currently in FMSS with a FCI in good condition.	Draft CRSA (September 2017)
BASELINE DOCUMENTATION	All current Cultural Resource Baseline Documents for the park should be readily available to park staff (digitally or hard copy) and the public (the park website could include links to the documents as a preferred method of sharing non-sensitive documents with the public).	Draft CRSA (September 2017)
MUSEUM COLLECTION	Issues identified in the Museum Property Inventory should be resolved and a deaccessions committee should be assembled to resolve missing items and necessary objects to be deaccessioned	Draft CRSA (September 2017)
COMPLIANCE	Park Section 106 Coordinator and appropriate Cultural Resource Management (CRM) Advisor Team should be involved in early project planning and scoping when the broadest feasible range of alternatives is available for consideration.	Draft CRSA (September 2017)
ARCHEOLOGY	Analyze the archeological assemblages for articles or exhibits (this is less than 10% complete).	Draft CRSA (September 2017)
ARCHEOLOGY	Develop an archeological site treatment plan with an emphasis on necessary national register eligible sites that require additional management/protection.	Draft CRSA (September 2017)
ARCHEOLOGY	Enter appropriate maintenance data and Facility Condition Index (FCI) ratings for Managed Archeological Sites (MAS) in FMSS.	Draft CRSA (September 2017)
ARCHEOLOGY	Consider an addendum to the park Archeological Overview and Assessment to chronicle Section 106 actions since its publication in 2008.	Draft CRSA (September 2017)
ARCHEOLOGY	Conduct any necessary archeological research. Evaluate sites for the national register and contribute to historical contexts for education and interpretation of the park and its resources.	Draft CRSA (September 2017)
ARCHEOLOGY	Continue intensive archeological surveys of the remaining 66% percent of the park to identify and document archeological resources per requirements under Section 110.	Draft CRSA (September 2017)
ARCHEOLOGY	Thirty-eight sites in ASMIS lack NRHP eligibility information. Conduct Phase II archeological site investigations to evaluate national register eligibility determinations as needed. Evaluate and enter eligibility information in ASMIS.	Draft CRSA (September 2017)

Table D2. Cultural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
ARCHEOLOGY	Resource Management staff should address the backlog of archeological report citations that have not yet been uploaded into the appropriate digital repository (IRMA, ETIC, TDAR, etc.). Archeological reports are not to be uploaded for public access. Conduct training to increase the proficiency of park staff regarding laws and policies concerning archeology resources.	Draft CRSA (September 2017)
ARCHEOLOGY	Ensure that sufficient funding for Section 106 compliance activities is included in project planning by including Resource Management personnel early in the process.	Draft CRSA (September 2017)
ARCHEOLOGY	Develop park strategy for protecting archeological sites and features from the impacts of climate change.	Draft CRSA (September 2017)
CULTURAL ANTHROPOLOGY	Conduct an ethnographic overview and assessment (EOA) of Rock Creek Park. The need for an EOA has been identified as the top cultural resource stewardship priority for the park.	Draft CRSA (September 2017)
CULTURAL ANTHROPOLOGY	Complete a Contemporary Use Study to identify associated groups using Meridian Hill Park in coordination with RTCA.	Draft CRSA (September 2017)
CULTURAL ANTHROPOLOGY	Develop adaptation strategy to protect and preserve resources from climate change impacts.	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	Develop and implement visitor use study to determine effects on natural and cultural resources and determine appropriate capacity to maximize visitor experience.	Sept. 2017 RSS Workshop
CULTURAL LANDSCAPES	Cultural landscapes need to be adequately addressed in the Facility Management Software System. At this time, 0% of cultural landscapes have been adequately addressed in FMSS. Park staff should be inputting points, getting WASO verification, and inputting cross walks into FMSS. Supporting activities - ROCR needs to complete FMSS asset and locational data for nationally significant landscapes. - ROCR needs to complete FMSS asset and locational data for state and locally (District of Columbia) significant landmarks.	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	Cultural landscape features should be entered into FMSS with multiple points, and CLI records should be entered into FMSS by park Resource Management personnel. 0% of cultural landscape features are currently in FMSS with an FCI in good condition. ROCR staff should reference the spreadsheet created to identify FMSS data needs in the park's cultural landscapes	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	The park should continue to add to its store of knowledge by addressing the seven Cultural Landscape Report (CLR) planning needs identified in the foundation document: - Rock Creek and Potomac Parkway Part 2, - Old Stone House, - Klingle Mansion and Linnean Hill, - Glover Archbold Park, - miscellaneous reservations, - individual CWDW sites, - traffic circles and triangles under park management.	Draft CRSA (September 2017)

Table D2. Cultural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
CULTURAL LANDSCAPES	Park and regional staff should continue to address the ten Cultural Landscape Inventory (CLI) planning needs that were identified in the foundation document: Rock Creek and Potomac Parkway, Old Stone House, Glover Archbold Park, Westmoreland Circle and Kalorama Circle, Ward Circle, Francis Scott Key Park, CWDW sites, miscellaneous reservations, Palisades, and community gardens	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	Complete Historic American Landscape Survey (HALS) documentation as needed for cultural landscapes.	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	Park and regional staff will continue to enter current baseline cultural landscape documentation (CLI & CLR) into IRMA for ROCR.	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	Review cultural landscape planning needs and update foundation document and Baseline Documentation Matrix to reflect identified needs. Develop PMIS statements for needed documents.	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	Undertake parkwide study to create an adaptation strategy in consideration of climate change impacts to cultural landscapes.	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	Reassess the condition of ROCR cultural landscapes and develop work orders for landscape stabilization efforts as noted in CLIs.	Draft CRSA (September 2017)
CULTURAL LANDSCAPES	Secure funding to pay for ongoing landscape maintenance needs.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Develop a parkwide stewardship program in which individuals, nonprofits, businesses, and neighboring institutions adopt specific park areas and features.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Ensure that the National Park Service has sufficient staffing to leverage partnership and stewardship opportunities.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Use a combination of rapid response, enforcement, volunteer support, and education to address nuisances.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Track and respond as needed to proposed development and redevelopment projects near the park.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Take advantage of opportunities presented by the Civil War forts, traffic circles, and small parks to preserve as precious green space and community assets in neighborhoods across the District.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Improve landscaping of Chevy Chase Circle and Westmoreland Circle as entrances to the nation's capital.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Continue efforts to restore Dumbarton Oaks Park.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Complete remaining work on the multi-phase Meridian Hill (Malcolm X) Park restoration	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Control invasive vines overtaking trees, and develop and implement a landscaping plan to restore beauty to Rock Creek and Potomac Parkway, by far the most heavily visited park area.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Conduct a cultural landscape report for the entire park.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Secure sufficient resources to understand, document, and as appropriate, preserve and restore the park's cultural resources.	Revitalizing Rock Creek (2015)
CULTURAL LANDSCAPES	Reach out to neighbors to create support for a turf "rest period" in park experiencing overuse.	ROCR RSS Workshop- Day 1
CULTURAL LANDSCAPES	Repair historic grills and fireplaces in Reservation 339.	ROCR RSS Workshop- Day 1
CULTURAL LANDSCAPES	Masonry restoration work at Reservation 339.	ROCR RSS Workshop- Day 1

Table D2. Cultural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
HISTORIC STRUCTURES	Enter Historic Structures Baseline Documents for ROCR into IRMA (0% have been entered). Three of nine relevant documents (33.3 %) have been uploaded to ETIC.	Draft CRSA (September 2017)
HISTORIC STRUCTURES	Assess and document potential impacts of climate change on historic structures.	Draft CRSA (September 2017)
HISTORIC STRUCTURES	Develop more detailed information about historic structure needs for future park planning efforts through the RSS process (the general management plan and foundation document are not sufficiently specific).	Draft CRSA (September 2017)
HISTORIC STRUCTURES	Develop and implement a protocol to document a record of treatment for historic structures (present information is fragmented between PEPC and FMSS).	Draft CRSA (September 2017)
HISTORIC STRUCTURES	Plan and conduct additional historic conservation training for park field personnel to hone their skills and abilities to perform preservation maintenance work.	Draft CRSA (September 2017)
HISTORIC STRUCTURES	Appropriate asset and locational data needs be entered into FMSS by park personnel to facilitate necessary maintenance on historic structures.	Draft CRSA (September 2017)
HISTORIC STRUCTURES	Create adaptation strategy that considers potential impacts of climate change on historic structures.	Draft CRSA (September 2017)
HISTORIC STRUCTURES	Develop a cyclic maintenance plan for historic structures to create preventative and regular maintenance work orders for staff or contract employees.	Draft CRSA (September 2017)
HISTORIC STRUCTURES	Develop treatment plans for historic structures documented in FMSS with fair and poor condition to improve their condition.	Draft CRSA (September 2017)
HISTORIC STRUCTURES – Glover Archbold Trestle	Continue conversation with Metro and the District Department of Transportation about treatment of Glover Archbold trolley trestle.	ROCR RSS Workshop- Day 1
HISTORIC STRUCTURES – Carter Barron Amphitheater	Conduct a study to reimagine and evaluate possible partnerships and uses of amphitheater complex.	Revitalizing Rock Creek (2015)
HISTORIC STRUCTURES – Lodge Building (Park Police Station)	Find an alternative location for the US Park Police; rehabilitate the building for use as a visitor center.	Revitalizing Rock Creek (2015)
HISTORIC STRUCTURES – Chesapeake House	Renovate Chesapeake House for partner space or an alternative use.	Revitalizing Rock Creek (2015)
HISTORIC STRUCTURES – Conduit Road Schoolhouse	Renovate Conduit Road Schoolhouse for children's nature programming or an alternative use.	Revitalizing Rock Creek (2015)
HISTORIC STRUCTURES – Miller Cabin	Restore Miller Cabin for use as a cultural facility.	Revitalizing Rock Creek (2015)
HISTORIC STRUCTURES – Linnaean Hill Complex and golf course	Evaluate alternatives in connection with the reimagination of possibilities for the nature center and the park as a whole.	Revitalizing Rock Creek (2015)

Table D2. Cultural Resources (continued)

RESOURCE	RECOMMENDED ACTIVITY	SOURCE
HISTORY	An update to the park-wide Historic Resource Study (Bushong 1990) is recommended.	Draft CRSA (September 2017)
HISTORY	Continue work to list properties such as the Piney Branch Quarry and the Conduit Road Schoolhouse on the National Register of Historic Places (NRHP). An additional 28 historic properties may also warrant documentation on the national register.	Draft CRSA (September 2017)
HISTORY	Park and regional personnel should upload history baseline documents for ROCR into IRMA.	Draft CRSA (September 2017)
HISTORY	Park and regional personnel should plan projects that will address the medium priority historical research needs identified in the foundation document (Three Historic Resource Studies and two new NR nominations).	Draft CRSA (September 2017)
HISTORY	Prepare project proposal for an update to the parkwide Historic Resource Study and an annotated bibliography of recent scholarly (contextual) research.	Draft CRSA (September 2017)
HISTORY	Revision of existing historical publications should occur on a cyclical basis alongside existing studies (e.g., CLIs) and as informed by ongoing research.	Draft CRSA (September 2017)
MUSEUM COLLECTIONS	Issues identified in the Museum Property Inventory should be resolved, and a deaccessioning committee should be completed for any missing items or objects to be deaccessioned.	Draft CRSA (September 2017)
MUSEUM COLLECTIONS	Park and MRCE personnel should collaborate to establish and implement a relevant preventative conservation program for protecting and maintaining collections and archives.	Draft CRSA (September 2017)
MUSEUM COLLECTIONS	Park and MRCE personnel should ensure that facilities that store or exhibit museum objects and archives are considered good based on the facilities checklist.	Draft CRSA (September 2017)
MUSEUM COLLECTIONS	Catalog documentation for the park's Archeology and Natural History museum collections.	Draft CRSA (September 2017)
MUSEUM COLLECTIONS	Create a comprehensive collections assessment and inventory of the CWDW collection to identify the items in the collection, their condition, and their location. This is identified as a medium priority in the foundation document.	Draft CRSA (September 2017)
MUSEUM COLLECTIONS	Identify furnishings in the Old Stone House on an updated Historic Furnishings Report (originally published in 1959 and last updated in 1986).	Draft CRSA (September 2017)
MUSEUM COLLECTIONS	Create project to conduct a collection condition survey.	Draft CRSA (September 2017)
COMPLIANCE	Park Section 106 Coordinator, appropriate cultural resource management (CRM) team members, and regional cultural resource advisory team should be involved in early project planning and scoping when the broadest feasible range of alternatives is available for consideration.	Draft CRSA (September 2017)
GIS	ROCR and NCRO need to establish a protocol to ensure that GIS data is being updated and maintained to CR-GIS geospatial program standards.	Draft CRSA (September 2017)
GIS	Legacy archeological data should be uploaded to the park GIS and shared with region.	Draft CRSA (September 2017)
GIS	The park atlas should be brought up-to-date.	Draft CRSA (September 2017)
CLIMATE STRESSORS	Data relevant to the potential effects of climate change on cultural resources should be integrated and distributed to the appropriate park and regional personnel.	Draft CRSA (September 2017)
CLIMATE STRESSORS	A climate change scenario plan is needed, as stated in the foundation document.	Draft CRSA (September 2017)
CLIMATE STRESSORS	ROCR should increase collaboration with partners to share, learn from, and adopt approaches to managing cultural resources in relation to climate change.	Draft CRSA (September 2017)

APPENDIX E: PARTICIPANTS AND CONTRIBUTORS

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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 2018

RSS

RESOURCE STEWARDSHIP STRATEGIES

NATIONAL PARK SERVICE

BRIDGING SCIENCE AND MANAGEMENT FOR TODAY AND TOMORROW