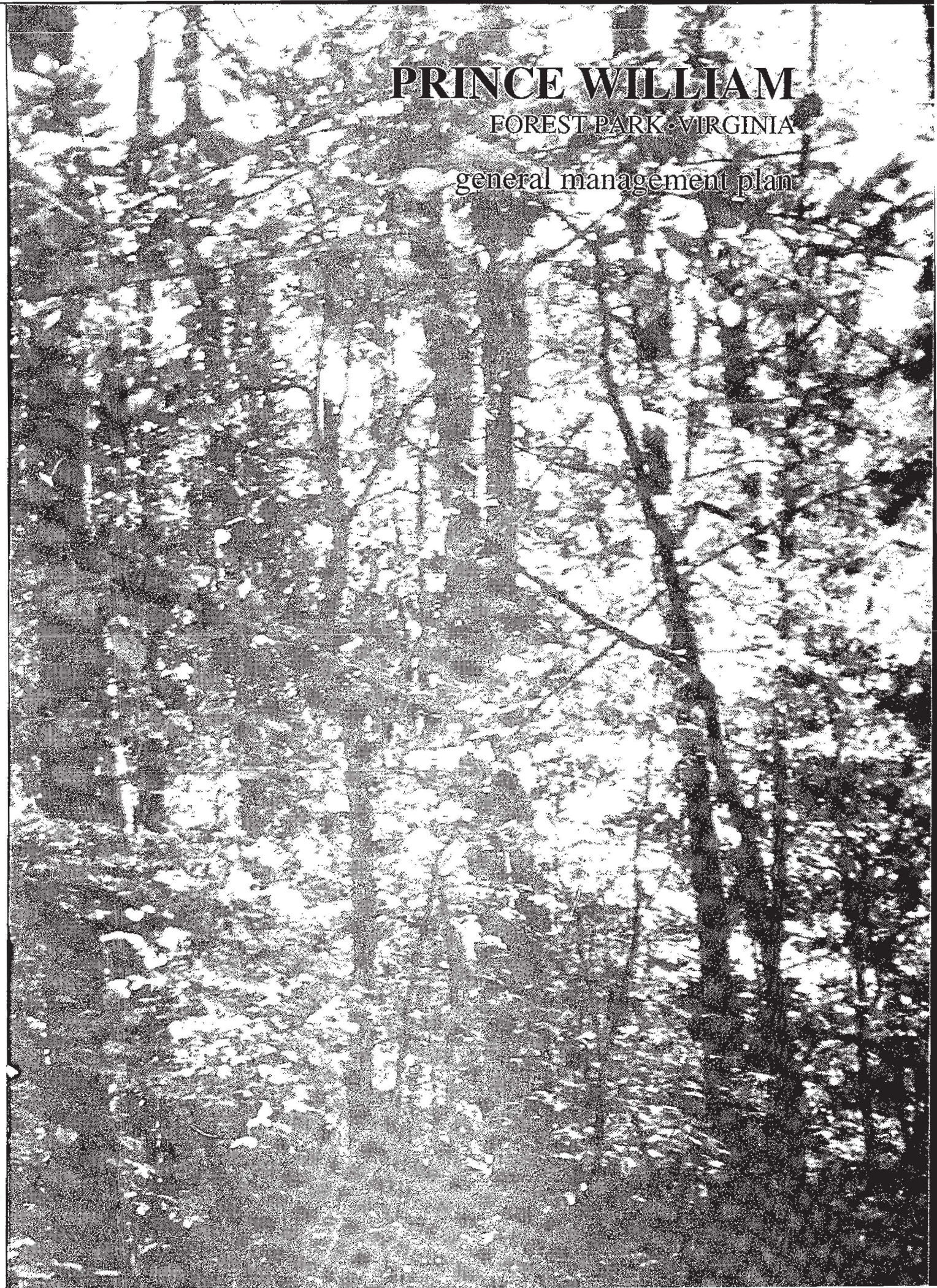


PRINCE WILLIAM

FOREST PARK · VIRGINIA

general management plan

Recommended:

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Prince William Forest Park

January 28, 1999

Approved:

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National Capital Region

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General Management Plan

February 1999

PRINCE WILLIAM FOREST PARK

Virginia

United States Department of the Interior • National Park Service

SUMMARY

Watershed

A primary management objective of Prince William Forest Park is the protection of the Quantico Creek watershed through a combination of land acquisition, exchanges and transfers, internal land use practices, and active cooperation with owners of property adjacent to the park boundary. A "Watershed Management Plan" for the portion of the watershed outside the park boundary was developed and approved by the National Park Service (NPS) and the Navy Department in 1984. This *General Management Plan* recommends additional actions that should be taken to maintain water quality in Quantico Creek and its tributaries and to preserve significant watershed forest values. The planning process has resulted in proposed actions that will result in the partial retention of NPS lands in the Chopawamsic Creek watershed, and a watershed protection plan is envisioned for that watershed as well.

Natural Resources

Prince William Forest Park preserves approximately 17,000 acres of mixed hardwood forest covering a major portion of the Quantico Creek watershed. The park represents one of the largest parcels of undeveloped land in the area and is the third largest unit of the national park system in Virginia. That, combined with the fact that it is the largest example of a piedmont forest ecosystem in the national park system, makes it a significant natural resource. The park also contains two physiographic provinces, the Piedmont and the Coastal Plain, and it straddles the southern and northern climates — a transition zone that supports many species to the outer limits of their ranges. This creates a wide diversity of habitat, vegetative communities, and species composition not generally found in any single forest type.

Cultural Resources

Four Civilian Conservation Corps (CCC) cabin camps (camps 1, 2, 3, and 4) and their landscapes are listed on the National Register of Historic Places as historic districts. The camps require substantive rehabilitation, which will be in keeping with *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.* Cabin camp 5 was considered ineligible for the national register because of the loss of historic integrity. Methods are being explored for preserving and interpreting features from this historical era while reducing the operating and maintenance costs associated with the camps. The recreational function of the cabin camps continues to be evaluated in light of changing visitor needs and current management practices. The Cabin Branch Pyrite Mine site will be nominated to the National Register of Historic Places, as suggested by the Virginia State Historic Preservation Office.

Land Protection

As park resources have become more significant over time, critical protection needs have become more urgent. Previously undeveloped forested land adjacent to the park is rapidly being changed to residential subdivisions and other uses. A land protection plan will be prepared to promote a comprehensive management approach for preserving resource values. Protection methods will be examined for these lands and recommendations made to minimize any imminent or long-term threats.

Visitor Services

Interpretive services will continue to play an important role in the visitor experience because of the park's rich natural and cultural history. This plan identifies the most effective means of interpretation — personal contacts, programs, exhibits, films, and other media — to reach the largest number of visitors. The plan also outlines the need for an adequate visitor center and related facilities. At present, educational partnerships are only minimally supported because the current facility is unable to accommodate large school groups.

Recreation

The planning team has evaluated the appropriateness, adequacy, and accessibility of recreational facilities and activities beyond current levels to ensure that they are compatible with the park environment and best serve visitor needs. Camping facilities range from backcountry and tent camps to recreational vehicles and cabin camps. Additional group areas for tent campers are recommended to better accommodate increasing demand.

Visitor Use

Day use, particularly hiking, biking, backpacking, picnicking, and orienteering, have become increasingly popular in the park. The park's extensive trail system will be appropriately maintained and periodically reviewed to determine appropriate use and impacts on park resources, particularly the highly erodible soils. Design and planning will address separating types of use to avoid conflicts and to provide fulfilling camping and trail recreation experiences.

The name of the park suggests a local park affiliation or a national forest designation. A legislative name change is recommended to identify Prince William Forest Park as a unit of the national park system rather than as a county or a U.S. Forest Service area. The NPS identity will clarify the scope of resource-based visitor services and better attract the park's share of out-of-state and international visitors, greatly enhancing its economic benefit to the region.

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PURPOSE OF AND NEED FOR THE PLAN

Introduction

Prince William Forest Park was established as a unit of the national park system in 1936. Continuing population growth and land development in northern Virginia have made the park an increasingly rare landscape along the east coast — a wooded oasis for human renewal within an hour's drive of the homes of more than 3 million people (see Location map).

The park's value transcends its recreational and inspirational benefits. It is the only component of the national park system dedicated to preserving a representative example of the Piedmont and Upland Coastal Plain physiographic provinces and the rare deciduous forest type that they support. It protects a major portion of the Quantico Creek and Chopawamsic Creek watersheds and a piedmont / coastal plain ecosystem that appears much as it did in pre-colonial times. The park preserves and administers five actively used CCC-era cabin camps, four of which are listed on the National Register of Historic Places as historic districts. The camps have seen significant use over the years, including housing and training for World War II recruits for the Office of Strategic Services, the forerunner of the Central Intelligence Agency. These areas continue to be used for group camping activities and outdoor experiences.

The National Park Service has prepared this *General Management Plan* for Prince William Forest Park to determine the best management strategy that will ensure long-term preservation of its significant resources and provide for public use and enjoyment of its many features. This plan will guide management of the park for the next 10 to 15 years.

Issues

This plan is needed to address issues related to resource protection, visitor use and education, park operations, and public awareness of the park's identity as part of the national park system. Several issues have driven the planning process for the park, as follows:

- ***Watershed:*** The watersheds of Quantico Creek and Chopawamsic Creek (which ultimately drain into Chesapeake Bay) are prime resources requiring long-term protection and preservation. The native plant and animal communities characteristic of the piedmont / coastal plain forest also need to be protected. Developments on private lands in the Independent Hill area, which also is within the Quantico Creek watershed, could threaten these resources. Compatible land use practices should be encouraged relative to the Potomac River and the Chesapeake Bay ecosystem.
- ***Natural Resources:*** Prince William Forest Park contains about 17,000 acres of mixed hardwood forest covering a major part of the Quantico Creek watershed. The park is one of the largest parcels of undeveloped land in the area and contains a wide diversity of habitat. However, in developed areas of the park the native vegetation has been disturbed

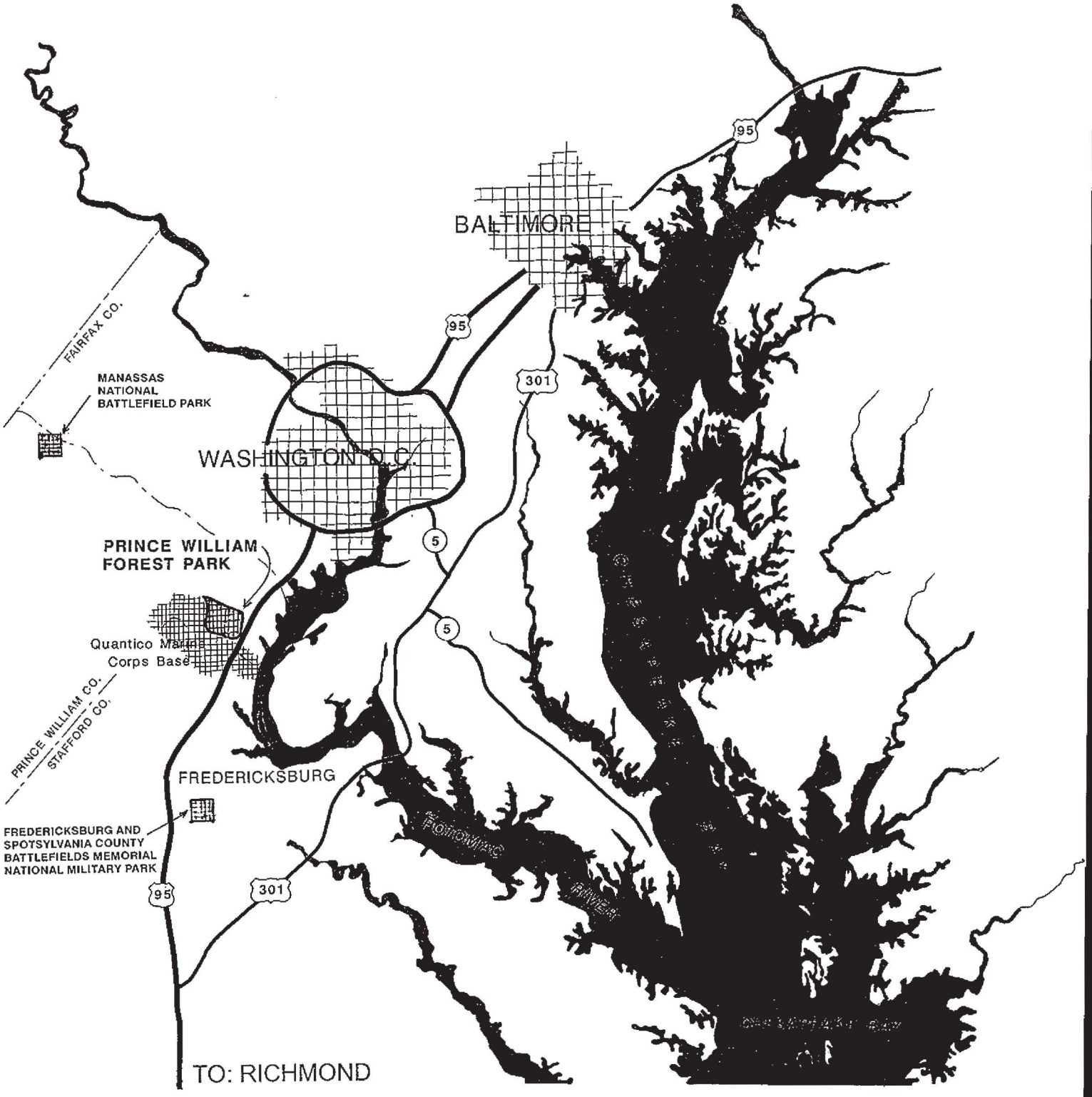
and exotic species have invaded, creating resource management problems. Many of the park's wildlife species are relatively sensitive to human disturbance; therefore, their numbers are decreasing in other areas of the piedmont, and their continued survival in the park is increasingly critical. Sustainable practices in park operations and facility design are necessary to ensure the adequate preservation of natural resources.

- ***Cultural Resources:*** Substantive rehabilitation is needed for four CCC cabin camps in the park. Complete restoration of the Cabin Branch Pyrite Mine site is needed, which probably will take many years. Sustainable practices would ensure adequate preservation of these cultural resources.
- ***Visitor Services:*** The present park visitor center is inadequate to meet the needs of visitors, particularly groups. An expanded visitor facility is needed to meet the current and projected public demand for educational opportunities in the park.
- ***Recreation:*** The highly populated, largely urban area surrounding Prince William Forest Park generates a great demand for recreational facilities. Opportunities for public recreation are needed at levels and in locations that will ensure the long-term preservation and protection of park resources, without competing with more active recreational opportunities available locally and regionally.

Public Review of the *Draft General Management Plan / Environmental Assessment*

The *Draft General Management Plan / Environmental Assessment* described three alternatives for the management and use of Prince William Forest Park. The preferred alternative or proposed action (alternative A) provided for improved facilities and the expansion of selected areas. The other alternatives included continuing existing management and operations (alternative B) and consolidating development with natural restoration of the core park area (alternative C). Since the release of the draft plan in 1993, the park superintendent and the commanding general of the Quantico Marine Corps Base have entered into a formal agreement to resolve land issues related to park lands that are used by the U.S. Marine Corps under a special use permit. This agreement works toward a settlement of the land issues that will both fulfill the terms of 1948 legislation related to the park and address concerns about boundary and jurisdictional issues.

The *Draft General Management Plan / Environmental Assessment* was on formal public review during the month of February 1993. A total of 67 written comments were received, 42 of which addressed the special use permit lands that are currently used by the Marine Corps. The range of comments is more fully discussed in the "Consultation and Coordination" section (p. 31). The comments did not substantially modify any of the alternatives, or supplement, improve, or modify the environmental analysis. The selection of the proposed action as the approved plan for Prince William Forest Park is documented in a "Finding of No Significant Impact," which is included in the appendix of this *General Management Plan.*



LOCATION

PRINCE WILLIAM FOREST PARK / VIRGINIA
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
860 • 40010 D • DSC • AUGUST 1996

Background

Prince William Forest Park preserves an example of the type of forest that once blanketed the entire Piedmont and Coastal Plain physiographic provinces. While the area was highly disturbed, today it has been substantially restored through natural succession. When first seen by early European settlers in the 1600s, this expanse of woodlands was virtually untouched by human activity. However, as European populations expanded into America and settlers moved westward, the forests were gradually cleared, settlements were established, and crops were planted.

Because it was close to the Potomac River, a major travel corridor, the area encompassing Prince William Forest Park was one of the first cleared, settled, and planted with corn, cotton, and tobacco. From about 1680 until the early 20th century, these lands were farmed intensively, depleted of nutrients, allowed to erode, and then abandoned. In the early 1930s the Roosevelt administration, recognizing the need for land and water conservation and outdoor education experiences, set them aside as part of a Depression-era program directed at public relief employment and land reclamation. The plan was to establish the areas as examples of proper stewardship and to encourage their return to natural conditions by preventing soil erosion and stream pollution and facilitating reforestation.

A major example of returning parkland and waters to optimal natural conditions is the Cabin Branch Pyrite Mine. The mine began operation in 1889 and was active until 1920, when it was abandoned as a result of a labor dispute. The site consists of approximately 20 acres of historic foundations and features and underground workings. The Civilian Conservation Corps dismantled the remaining structures during the 1930s, using some of the materials to construct the cabin camps. Much of the area surrounding the remaining cultural features has grown into a mixed hardwood forest. Approximately 7 acres of ground, including acidic pyrite tailings, were reclaimed in 1995 to mitigate water quality impacts associated with surface runoff. The primary environmental concerns were the high acidity and high sediment loading in Quantico Creek. The complete restoration of the site, including reforestation and recovery of the stream ecosystem in the mine area, is expected to take many years.

The lands of the park, which comprise most of the Quantico Creek and Chopawamsic Creek watersheds, were originally designated as the Chopawamsic Recreation Demonstration Area in 1933. Returning the area to natural conditions began the following year with the acquisition of lands and the initiation of strict conservation practices. CCC workers were assigned to the area to develop facilities that would permit recreational use, particularly organized group camping. By the time the recreation demonstration area was transferred to the Department of the Interior in 1936, most recreational developments were in place and the lands were beginning to show signs of restoration through natural succession.

In November 1936 Congress established the Chopawamsic area as part of the national park system and designated the National Park Service to administer the area (Executive Order 7496).

In June 1948 Public Law (PL) 736 focused attention on the protection of the Quantico Creek watershed. The law transferred control of approximately 5,000 acres to the secretary of the navy for inclusion in the adjacent Quantico Marine Corps Base, upon assurance that the secretary would guarantee "the potability and the undamaged source of water of the South Branch of Quantico Creek to the lands lying east of VA 619." The law also authorized $10,000 for the acquisition of up to 1,500 acres of private lands "for the proper rounding out of the [park] boundaries" and stated that only after these acquisitions were complete was the Park Service to transfer the 4,862 acres in the Chopawamsic Creek watershed to the Navy (see appendix A).

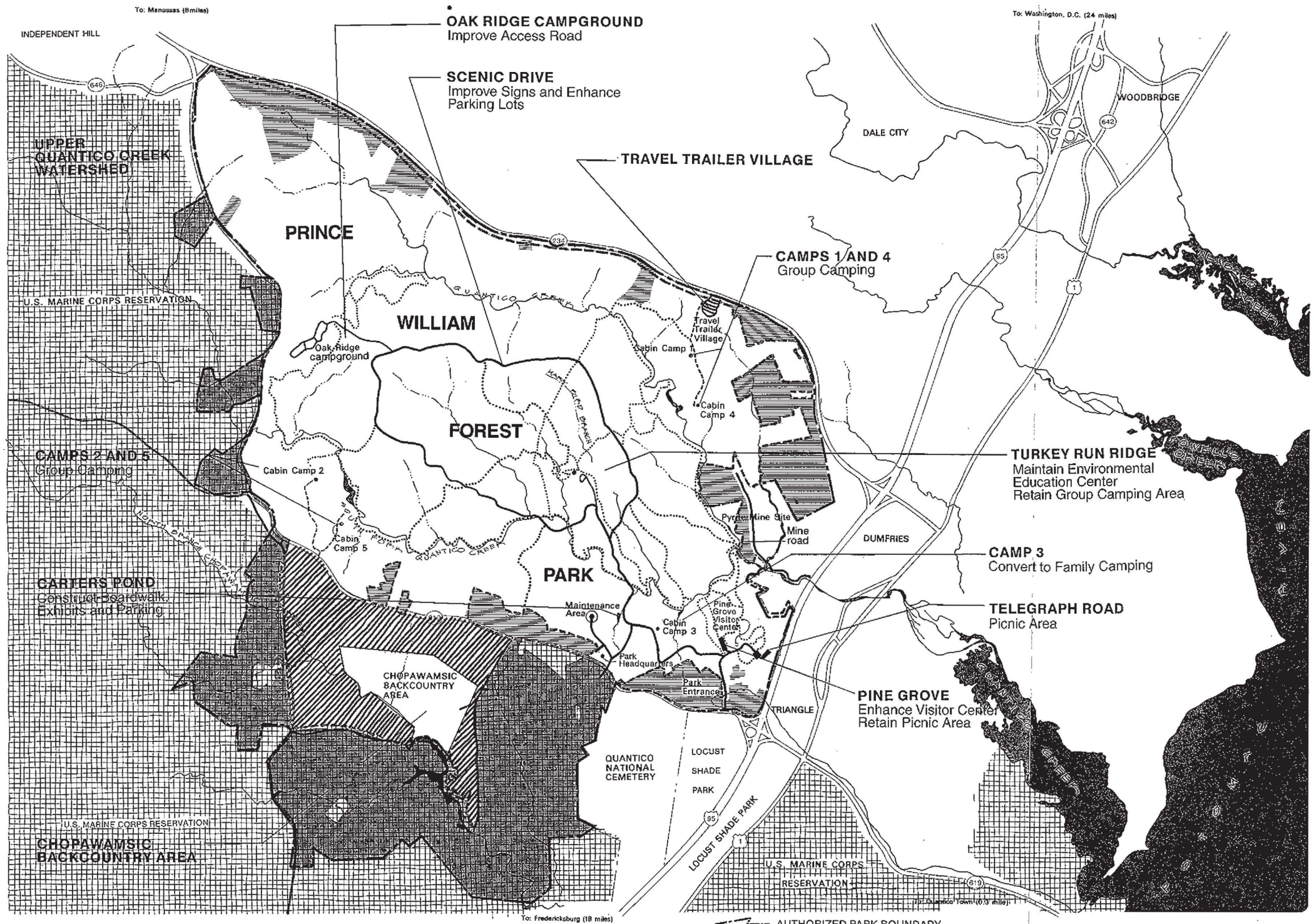
That legislation also changed the park name from the Chopawamsic Recreation Demonstration Area to Prince William Forest Park (also see appendix B, "Administrative History"). Funds were never allocated to complete park acquisitions, and the Chopawamsic area remains part of Prince William Forest Park. The Navy currently uses most of the Chopawamsic area lands under a special use permit from the National Park Service.

The park superintendent and the commanding general at Quantico signed a memorandum of understanding in March 1998 (see appendix C). This document works toward a settlement of this land issue that will both fulfill the 1948 legislation at no cost to the government and solve long-standing boundary and jurisdictional confusion. The memorandum states that the park staff and the Quantico staff will work together for legislation to divide the special use permit lands that were to go to Quantico in their entirety. The acreage that the park was to receive before transferring the lands would be carved out of the Chopawamsic lands themselves from the land now under the special use permit. The remaining acreage would be transferred to military jurisdiction, both requirements fulfilling the 1948 legislation (see Map of the Plan).

Today Prince William Forest Park continues to be administered to preserve and interpret its significant natural and historic resources (also see park mission statement, appendix D). The park, consisting of more than 17,000 acres, contains one of the largest examples of a piedmont forest in the East and is a sanctuary for native plants and animals in the midst of a rapidly developing region. Several species have reached their natural distribution limits in the park, indicating that it is in a transition zone between northern and southern climates and between eastern and western physiographic regions. The park is also home to numerous uncommon, rare, and endangered species. Among them are the small-whorled pogonia (one of the rarest plants in the United States), the false mermaid-weed, the eastern hemlock, the red-shouldered hawk, the star-nosed mole, Lemmer's lithophane moth, a tiger beetle, the pygmy shrew, and the Diana butterfly. As these species disappear on a local and global scale, their survival at Prince William Forest Park is increasingly critical.

Prince William Forest Park, with its variety of natural resources and recreational opportunities, is an important recreation resource to the people of the Washington, D.C., metropolitan area. The park receives between 250,000 and 300,000 visitors each year. Many facilities in the park date from the era of the Civilian Conservation Corps. Examples of CCC work include five cabin camps, several ponds and lakes, and three wooden bridges. There also are two tent campgrounds, a concessioner-operated campground with trailer and recreational vehicle (RV)

hookups, a primitive campsite in the Chopawamsic backcountry area, two picnic areas, and 37 miles of hiking trails. Visitor opportunities inherent in the natural environment include exploring more than 25 miles of creeks and streams, observing the many varieties of wildlife, and seeing a wide diversity of plants. The park offers the adventures of a "beginner wilderness" experience while providing an understanding of the complex land use changes that have affected the Chesapeake Bay ecosystem and its tributaries over time.



THE PLAN
VISITOR USE AND GENERAL DEVELOPMENT

PRINCE WILLIAM FOREST PARK / VIRGINIA
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
660 • 20002 D • DSC • AUGUST 1996

THE PLAN

Prince William Forest Park will undertake actions to improve visitor experiences and enhance general public use of park facilities. The "Resource Management Plan" will be updated annually to ensure the long-term protection of significant resources, and land protection planning will be initiated to further protect the Quantico Creek watershed. Some key preservation concepts were received from the public regarding long-range core forest value protection because forested areas under private ownership are being developed, and wildlife populations are being "squeezed." It is anticipated that a growing population will value the "eastern wilderness" experiences at Prince William Forest Park.

Resource Overview

Prince William Forest Park's most important values are its double function as a "cradle" for Virginia's indigenous native species and as a natural human retreat from a burgeoning urban area. The National Capital Planning Commission in the "Parks, Open Space, and Natural Features" element of its 1983 *Comprehensive Plan for the National Capital* states that "Prince William Forest Park, a large natural forest area which comprises a large portion of an entire watershed, is unique to the National Capital. This setting offers camping, hiking, nature study, and other forms of recreation attainable only in large natural areas. The near-wilderness qualities of this park are significant and should be carefully protected."

On the basis of the primary values and purpose of the park, in-depth evaluation, and discussions with governmental officials at all levels, the private sector, and the public, park managers have concluded that a wide variety of recreational activities are appropriate and should be enhanced. However, a number of primarily active pursuits and facilities are considered inappropriate and likely to produce negative impacts on the park's natural and cultural resources.

Given the guidance of the comprehensive plan and the natural and cultural resources of the park, the following activities and facilities are deemed unsuitable for Prince William Forest Park. This is not a comprehensive listing, but it reflects the types of activities and facilities that are not appropriate.

- ***Large-Scale Recreational Development:*** Facilities such as public swimming pools, water parks (water slides, wave pools, etc.), skateboard parks, golf courses, tennis courts, ballfields, basketball courts, and indoor facilities (gymnasiums, skating rinks) are appropriately provided at state, regional, and local levels in less environmentally sensitive areas or areas with different management objectives.
- ***Off-Road Activities:*** Because the soils throughout the park are highly erodible, four-wheel-drive vehicles, off-road vehicles, motorcycles, and horses are prohibited (see appendix E). Bicycles are allowed on the park's paved roads and on the fire roads, but not

on hiking trails or off road. These activities also would conflict with other visitor uses that are encouraged, such as hiking and wildlife observation.

Development and Visitor Use

This plan will enhance the use of the park by providing additional information and visitor services. The present visitor center is widely recognized as inadequate to meet visitor needs, particularly those of groups. It is critical that the park obtain funding for a visitor center that will allow sufficient exhibit space to showcase the park's resources and story. Alternative sites outside the Quantico Creek watershed will be considered for new park development. Where needed, existing structures will be modified to incorporate universal designs and accommodate physically challenged visitors. New structures and facilities will be developed in accordance with federally accepted accessibility standards.

An expanded visitor center will support the current and projected public demand and serve as a focal point for educational partnerships and visits. It will house the cooperating association bookstore, interpretive displays on natural and cultural history, a 100-seat auditorium with a slide or video orientation program, a curatorial center, workspace for developing programs and exhibits, and staff to provide information, orientation, and interpretation.

The center will serve as a point of origin for some visitors and as a destination for others. People who do not want to see the park interior may picnic in the landscaped areas, tour the nearby barrier-free Pine Grove trail, or hike to the South Fork of Quantico Creek. Other day use facilities will also be improved. Carters Pond will be retained for wildlife observation and outdoor environmental education. An interpretive wayside and a small parking area will be constructed near the boardwalk. To meet visitor demand and manage visitor use patterns, additional picnic pavilions may be built in the Telegraph Road area and near cabin camps 1 and 4. A geology trail will be developed with trail guides and wayside exhibits at the Cabin Branch Pyrite Mine sites and the geologic formations.

The Turkey Run Ridge Education Center will continue to serve as a base for park-related resource studies and conferences and for research by schools, outside organizations, and individuals.

Camping facilities will continue to be improved. Many camping experiences will continue to be available in the park, including expanded group tent camping and primitive camping opportunities. When the land and jurisdictional exchanges are completed with the U.S. Navy, there will be more opportunities for backcountry and group camping.

Cabin camp 3, a prime example of CCC work, has been adapted to offer the cabins for individual rentals. Options will be explored for arranging a concession contract or a historic leasing program under which these facilities and others could be rehabilitated and cost-effectively operated. The remaining cabin camps will be retained as group facilities. Camps 1, 2, 3, and 4 will be rehabilitated according to *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.* All overnight facilities in

cabin camp 1 have already been improved. Since cabin camp 5 is not listed on the national register due to loss of integrity, it is not subject to the *Secretary's Standards.*

The need for public access along VA 234 is recognized, and a development concept plan will address design for appropriate access to the park from that corridor. The major source of visitors along VA 234 will continue to be Travel Trailer Village and numerous housing developments near the park. Prince William County plans to develop a major bicycle/pedestrian trail along that corridor as part of the road widening project, as approved in the *Prince William County Trails and Greenways Plan.* A feasibility study of the concession-operated Travel Trailer Village will be conducted to determine its optimal future.

No major additions to the existing road system are planned. Roadbeds and drainage will receive a higher level of maintenance. Some improvements are planned for the trailheads and signs along the loop road, such as interpretive wayside exhibits. Long-term consideration will be given to closing some of the scenic loop road to vehicles or converting it to trail. This might be done if interior facilities were relocated to the park's periphery so as to restore the forest canopy and value as undisturbed wildlife habitat. Until a determination is made, the loop road will be maintained.

Only cabin camps 1 and 4 and Travel Trailer Village are connected to public water and sewage systems. All other park facilities rely on wells and springs for drinking water and septic fields for sewage disposal. The need to connect to public water and sewer lines as soon as possible has been identified. This would include upgrading aging waterlines, preventing potential public health problems, avoiding water supply interruptions, and meeting increasingly stringent regulations for public water supplies.

Interpretation

The interpretive program will be expanded to emphasize the park's major themes, its natural environment (including the Quantico Creek watershed and the Chesapeake Bay ecosystem), and human interaction with the landscape. The interpretive program will be enhanced by an improved visitor center. New exhibits will be developed and added for permanent exhibits. The visitor center will be enlarged to accommodate the permanent interpretive staff, an adequate auditorium, and exhibit space. The additions will be designed to complement the present structure. In addition to conducting structured interpretive programs, the park staff will provide a full range of information services. Access to specific interpretive features such as the South Branch of Quantico Creek, the Cabin Branch Pyrite Mine, and cabin camp 3 will be facilitated by improved trail connections from the visitor center. Additional wheelchair/stroller-accessible trails will be constructed at Oak Ridge and near Pine Grove.

In addition to adding structured interpretive programs at the visitor center, the park's environmental education program will be expanded. The program will be coordinated with regional schools to complement curriculum requirements. Programs and both personal and nonpersonal services will be available to secondary, post-secondary, and nontraditional and

nonstudent populations. Educational activities and the resource management program will supplement each other's efforts such as field studies and inventorying and monitoring park resources.

Interpretive waysides will be added to major trailheads and all appropriate parking areas along the scenic drive, and interpretive displays will be added to the historic cabin camps. Day use facilities will be improved; Carters Pond will be set aside for wildlife viewing; and an interpretive display and a small parking area will be constructed near the boardwalk. A geological trail will be developed at the pyrite mine sites and geologic formations, with trail guides and wayside exhibits.

Resource Management

The resource management program will work toward the implementation of all specific actions recommended in the park's "Resources Management Plan." Natural resource management will involve mapping geological resources, research on the types and distribution of vegetation communities and wildlife habitat, periodic inventorying of flora and fauna, and monitoring to ensure that park resources do not deteriorate significantly. A number of actions will be undertaken to enhance the park's natural values, to reduce pollution of park waters, to promote the health and growth of indigenous vegetation and wildlife populations, and to reduce or eliminate exotic species. It is important that park managers understand the park's resource values relative to the decreasing availability of unfragmented forest in the Washington metropolitan region.

The natural streamflow of Quantico Creek has been partially altered by dams constructed to create recreational lakes for cabin campers. The dams act as sediment traps for stormwater runoff, and the lakes must be periodically dredged. However, the lakes also represent the primary wetland resource for the park and continue to provide a historic scene tied to the cabin camps. They serve as the principal habitat for waterfowl, aquatic populations, and related wildlife. Although they are artificial, the dams should be rehabilitated and maintained to preserve the significant wetland habitat and associated wildlife that they support.

Other natural resource management actions will include implementing protection strategies for rare and endangered species and completing flora and fauna inventories. Where appropriate, meadows will be established in old field locations. Certain utility corridors will be removed to allow natural restoration and reduce visual intrusions. Old dump sites within the boundary will be removed. Certain trails may be relocated to reduce pollution and other impacts on park waters.

The abandoned Cabin Branch Pyrite Mine site on the southeastern edge of the park, which was reclaimed in 1995, will remain as an interpretive feature illustrating local industrial history. An existing or rerouted trail across this site will be enhanced by installing wayside exhibits to further tell the story of the site's cultural heritage and to educate the public about

mineral extraction and the need for reclamation and restoration to promote good land stewardship.

Cultural resource management actions in the park will include inventorying archeological resources, rehabilitating and maintaining CCC-era facilities that are listed on the National Register of Historic Places, preserving and protecting park artifacts, and collecting oral histories wherever possible. Cabin camps 1, 2, 3, and 4 will be rehabilitated to ensure the long-term preservation of these historic resources (cabin camp 1 has been partially rehabilitated). All work will be completed in compliance with law, policy, and *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings;* no alterations will be permitted that could substantially modify the historic fabric or require the removal of significant architectural features. Other cultural features, such as homesites and remnants of earlier communities, will also be evaluated for historical significance.

A historic structures report and a historic structure preservation guide will be prepared for the continuing rehabilitation and maintenance of CCC-era facilities listed on the National Register of Historic Places. Cabin camps 1, 2, 3, 4 and the vintage structures at cabin camp 5 will be rehabilitated to ensure the long-term preservation of these historic resources. The cabin camps will be evaluated for future documentation by the Historic American Buildings Survey.

The museum collection will continue to be maintained and preserved, and it will be divided into separate natural history and cultural history collections. The natural history collection will serve as a representative sample of the natural resources in the park for exhibit and study. It will be an archival repository for contractor and cooperator studies. The active collection and solicitation of donated artifacts related to the park's history will be continued. The cultural history collection will contain artifacts relative to the historic themes of the park such as the Civilian Conservation Corps, World War II, the Cabin Branch Mine, and early residents of the area. The collection will be available for study and will provide exhibits for the visitor center.

Historic resource studies (including oral histories) will be conducted on the following subjects:

- CCC activities in the park and lifetime impacts on enrollees
- the Cabin Branch Pyrite Mine
- the use of the park by the U.S. Army Office of Strategic Services, and what role, if any, their training here played in the allied victory in World War II and the early Cold War period
- the historic use of cabin camps (1937–42)
- the social history of pre-park communities
- the historic African-American experience in the park (1700–1942)

Priority will be placed on oral history studies because many living sources of information are advancing in age.

Other cultural features such as homesites and remnants of earlier communities will also be evaluated for their historical significance.

Land Protection: The Quantico Creek Watershed

The 38.3-square-mile Quantico Creek watershed, an important natural feature of the park, is protected by several federal laws (see appendix A). The headwaters drainage to this watershed includes land within the titled lands and boundary of both the national park and the U.S. Marine Corps base at Quantico, as well as private and public lands outside those boundaries.

Quantico Creek has been classified by several studies as one of the highest quality and most biologically diverse streams in the northern Virginia area. The stream's water quality is being used as a baseline for comparison with and study of other streams in the region under development pressure.

The Quantico Creek and Chopawamsic Creek watersheds, which ultimately drain into the Chesapeake Bay, are prime resources requiring long-term protection and preservation. Forests are important to water quality in the Chesapeake Bay because they help filter nutrients and sediment, stabilize soils, and moderate flooding. Congress recognized the need to protect the Quantico Creek watershed in 1948 when it required the secretary of the navy to guarantee "the undamaged source" of Quantico Creek waters flowing from the Marine Corps base into the park. A watershed management plan to provide this protection was signed by the U.S. Marines Corps and the National Park Service in 1984. An additional agreement is envisioned for the Chopawamsic watershed, as mentioned in a memorandum of understanding signed in 1998.

The National Park Service is committed to protecting the Quantico Creek watershed by working with the Marine Corps, local governments, owners of adjacent property, and surrounding agencies and jurisdictions to ensure that there will be no or minimal adverse impacts on water quality and natural resources from development within the watershed. Efforts will include opposition to any rezoning, special use, or exception that would result in density levels or adverse effects beyond what is allowed by existing zoning and the Prince William County comprehensive plan. The National Park Service will oppose any net increase in stormwater runoff entering the federal lands of the Quantico Creek watershed or any change to the Prince William County or Stafford County comprehensive plans that would result in adverse effects on the watershed. The National Park Service will work to mitigate any adverse effects that may result from development as a matter of right under existing zoning by working with landowners, developers, and county staff during the subdivision process. Recent watershed initiatives, such as the Chesapeake Bay Preservation Act adopted by Prince William County, provide additional protection.

A park protection zone or a sector plan concept, which could be implemented by Prince William County through its comprehensive planning process, is recommended on peripheral lands to ensure the continued development of compatible low-density single-family

residences, as indicated in the comprehensive plan. This is especially important in the Independent Hill area, where private lands outside the boundary are within the Quantico Creek watershed. As a part of the upper watershed of the Quantico Creek, the Independent Hill area should receive a higher level of protection, whether through a county sector plan, agreements with property owners, inclusion within the park authorized boundary, or other appropriate means.

The management of the special use permit area will continue to be guided by the terms of the permit and NPS mandates until the exchange of jurisdiction, as proposed in this plan, has been completed. The exchange outlined in the 1998 memorandum of understanding (appendix C) provides for the National Park Service to retain approximately 1,700 acres of the special use permit lands in lieu of the purchase of additional acreage between VA 619 and VA 234 envisioned in the 1948 legislation. The U.S. Navy, as landholder for the Quantico Marine Corps Base, would receive all the rest of the permit lands except for the 1,700 acres. This would fulfill the 1948 legislation and provide an equitable, no-cost solution to jurisdictional problems between the Park Service and the Marine Corps in that area. Under this agreement, legislation would be sought to complete several property exchanges between the two agencies to clarify boundaries. The National Park Service would retain lands bounded by Breckenridge Reservoir, New Breckenridge Road, MCB 1 to Belfair Crossroads, Joplin Road, and Breckenridge Road. This configuration would allow each agency to have clearly identifiable boundaries bounded by existing roads or significant natural features.

A detailed land protection plan will be developed to cover the land within the authorized park boundary. Tracts of private land exist within the park boundary that have not been acquired because funds are lacking. The land protection plan will address the types of interest to acquire on each tract of private land within the boundary. It will be made available for public review.

Appropriations for land protection will be sought from the Land and Water Conservation Fund. The National Park Service is obligated to protect the lands within the Quantico Creek upper watershed and will seek to acquire fee title or scenic easements that will restrict development to appropriate levels. In determining the type of interest to be acquired, the following analysis of each tract will be undertaken:

1. Review existing zoning and planning documents to determine the anticipated allowable densities that can be achieved on the tract.
2. Consider wetlands, floodplains, endangered plants and animals, cemeteries, or other historic resources that would restrict development on the tract and/or might be best protected through fee acquisition.
3. Determine what level of residential development on the tract is appropriate to control stormwater runoff to predevelopment levels.
4. Analyze the need for park development and whether a visual or sound buffer is needed to minimize the effects of existing or future park development or circulation system.
5. Examine the existing uses and their compatibility with park objectives.

The National Park Service will not acquire private lands within the authorized boundary that are outside the watershed boundary, as shown on the Quantico Creek Watershed map (p. 23).

Park Operations

A full-time safety officer is recommended because park operations are increasingly complex and public health and safety regulations have become more stringent. Actions proposed in the "Visitor Use and Development" section address changes for operational efficiency for Prince William Forest Park. The maintenance complex will be upgraded to provide needed loading docks, additional covered storage, adequate utilities, and more office space. Additional staff will be needed to meet the interpretive and resource management, safety, and other operational program needs outlined in this plan. A concessions specialist will coordinate operations and administrative duties for the group and family cabin camp rentals, Travel Trailer Village, and any new concession operations. Adding this position will increase customer service and efficiency and enhance revenues through planning and marketing.

Three positions that are currently unfilled because of inadequate funding are critical to park resource management and the maintenance and operation of the cabin camps. Restoring the funding for these positions is a priority.

Costs

Implementing this plan may result in new construction costs and additional operational costs to better serve the public. In addition, major rehabilitation costs will be incurred, mainly to ensure the health and safety of the visiting public at the cabin camps. It should be noted that the estimated costs would cover a period of at least 10 years. As of 1998, park staff have identified the most urgent needs as connecting to the municipal water system, rehabilitating five campground restrooms, completing a group campground expansion study, and rehabilitating the visitor center (see table 1).

TABLE 1: PROJECT COSTS
(1998 COSTS)

Project	Gross Construction Costs	Advance and Project Planning Costs	Total Project Cost
Connect water and sewer to municipal system			
Phase I	2,000,000	431,250	2,431,250
Phase II	3,000,000	0	3,000,000
Repair and rehabilitate five restrooms in campgrounds	350,000	50,000	400,000
Group campground DCP and initial development	15,000	60,000	75,000
Rehabilitate Pine Grove visitor center and expand	2,000,000	300,000	2,300,000
Provide new exhibits	500,000	86,250	586,250
Carters Ponds			
Design and construct wayside exhibits and parking	60,000	10,350	70,350
Oak Ridge			
Improve access road	300,000	34,500	334,500
Cabin Camps[a]			
Rehabilitate camp 2	381,000	48,475	429,475
Rehabilitate camp 4	305,000	35,365	340,365
Rehabilitate camp 5	100,000	17,250	117,250
Travel Trailer Village development concept plan	0	175,000	175,000
Improve parking lots and signs	150,000	25,875	175,875
Construct restrooms (2) at two parking lots	250,000	43,125	293,125
Maintenance Area			
Provide covered storage/offices and loading doors	1,869,000	322,400	2,191,400
Rehabilitate dam (camps 2 and 5)	200,000	15,525	215,525
Rehabilitate dam (camps 1 and 4)	175,000	21,560	196,560
Total Implementation Costs	**11,655,000**	**1,676,925**	**13,156,925**

a. The cost of rehabilitating cabin camp 3 will be borne by the lessee if this option is selected.

In addition to development costs, the following staff will be added to meet the requirements of the plan:

Position	Full-Time Equivalent
Seasonal maintenance worker, WG-5	4.0
Permanent maintenance worker, WG-7	2.0
Safety officer, GS-11	1.0
Permanent park ranger (resource management), GS-9	1.0
Permanent park ranger (interpretation), GS-9	2.0
Permanent park ranger (visitor use assistant), GS-7	1.6
Seasonal park ranger (interpreter), GS-4	2.0
Seasonal park ranger (resource management), GS-5	2.0
Concession specialist, GS-11	1.0
Total	**16.6**

DESCRIPTION OF PARK RESOURCES

Regional Context

Prince William Forest Park is in the southeast corner of Prince William County, Virginia, 32 miles south of the nation's capital. Interstate 95, a major north-south travel route, provides easy and convenient access. The park complex is bordered by VA 234 on the north and VA 619 on the south and west. A detached portion, including the Chopawamsic backcountry area, is south of the main park, with access from VA 619.

In 1990, the last year of published census data, Prince William County had a population of over 219,000. The county has experienced one of the most rapid rates of population growth in the nation over the past quarter century, and this growth is continuing. The population is comparatively affluent and reflects the trends in the larger region, with the median age on the increase and household size becoming smaller.

Lands adjacent to the park boundary are equally divided between public and private ownership. Along the southern boundary is Quantico Marine Corps Base and Quantico National Cemetery, and there are small tracts of private property along VA 619. Along the northern boundary the lands are predominantly in private ownership; the private lands are currently zoned either residential or business.

Two local parks, Locust Shade and Helwig County Parks, are southwest and northwest of Prince William Forest Park, respectively. These parks are developed for active recreational pursuits, including tennis, volleyball, baseball, soccer, golf, picnicking, and large group activities. Locust Shade has an 18-hole golf course with buildout to 27 holes, a reservoir, and a marina developed for water-related recreation. There are also numerous neighborhood parks that provide various activities.

The Washington metropolitan area and nearby northern Virginia counties will experience continued rapid growth rates. It is projected that the regional population will surpass 4.5 million by 2000. The 1990 population figure was 3.9 million. Available public recreational lands have not kept pace with population growth. Natural areas, trails for recreation, and campgrounds are not expected to keep pace with demand because of land prices and development pressures.

The park will continue to experience increased changes and proposals for change on adjacent lands. High-density subdivisions have been built along the eastern and northern boundary (Brittany and Forest Park), and additional subdivisions or expansions are being built or planned for the north side of VA 234. New residential neighbors have concerns about deer or other wildlife from the park eating or damaging expensive landscaping plants and about hazard trees from the park falling on their property. Local residents seek access to recreate in the park. Encroachments from dumping lawn rubbish and unauthorized entry onto fee park lands are increasing. Adjacent timberlands are subject to logging, and best management practices are currently voluntary in Virginia.

Highway corridor and utility infrastructure construction projects bring more road noise and threats of air and water pollution. In addition to regular road runoff pollutants, hazardous truck spills have been relatively frequent in the region and are a concern for the park's watershed. VA 234 has been widened from two to six lanes between U.S. 1 and Interstate 66. The expanded road will require the construction of at least two stormwater management facilities on park property and others that will drain into park streams. The National Park Service supports the development of a class I bike trail in the VA 234 corridor, as documented in the county's 1993 *Trails and Greenways Master Plan*, which was developed by the Prince William County Park Authority.

The commuter lanes for I-95 have been extended to a terminus point between VA 234 and VA 619. A commuter rail train system has also been implemented along the eastern corridor, further fueling growth and development. Prince William County constructed a public golf course in 1996, which will draw more vehicles to the area. Planning efforts are underway to improve VA 619 from near the park entrance to the entrance of the Quantico National Cemetery.

Natural Resources

Prince William Forest Park preserves approximately 17,000 acres of mixed hardwood forest covering a major portion of the Quantico Creek watershed. The park represents one of the largest parcels of undeveloped land in the area and is the third largest unit of the national park system in Virginia. That, combined with the fact that it is the largest example of a piedmont forest ecosystem in the national park system, makes it a significant natural resource. In addition, the park contains two physiographic provinces, the Piedmont and Coastal Plain. It straddles the southern and northern climates; a transition zone that supports many species to the outer limits of their ranges. This creates a wide diversity of habitat, vegetative communities, and species composition not generally found in any single forest type.

Topography, Geology, and Soils

Approximately two-thirds of the park is in the Piedmont and one-third in the Coastal Plain. The topography is undulating, with narrow ridgetops and relatively steep-sided valleys. The park is underlain by late Precambrian to early Paleozoic rocks, which are overlain in the eastern part of the park by unconsolidated Cretaceous period deposits. The soils of the park are sandy, relatively infertile, and easily disturbed. The steep terrain and poor quality soils combine to create severe erosion problems.

Relief is moderately high, and the elevation ranges from about 10 feet to nearly 400 feet above sea level. Ridgetops are narrow to moderately wide and nearly level to gently sloping. Side slopes are moderately wide to narrow and sloping to very steep. In the piedmont, the geology consists largely of granite gneiss, hornblende gneiss, and mica schist rock types. The ridges of the piedmont are capped with thin mantels of coastal plain or other alluvial sediments in many

places. Fairly broad floodplains have developed along the larger streams. The coastal plain is underlain by stratified marine sediments of sand, silt, clay, and gravel. The lowland soils are strongly acidic and of low natural fertility. The soils have low permeability, making them subject to at least seasonal wetness. The slopes and gently sloping ridges are occupied by more porous soils that are more easily eroded. They also are strongly acidic and of low fertility.

Unconsolidated soil types are generally located in the coastal plain, coastal plain caps, floodplains, and floodplain and stream terraces. The erosion potential in these areas ranges from moderate to high.

Outcrops of folded and faulted rock are scattered throughout the park, and they dip nearly vertically in some areas, especially along streambeds. Many of the faulted rocks may represent the fall line, a unique geological feature where streams form falls or rapids as they leave the harder rocks of the piedmont and enter the softer rocks of the coastal plain. In many places the ridges of piedmont areas are capped with thin mantels of coastal plain or other alluvial sediments, and fairly broad floodplains have developed along larger streams.

In addition to its geological diversity and observable geological processes, the park has large mineral deposits, in particular pyrite and associated minerals. The largest concentration of pyrite is at the confluence of the main branches of Quantico Creek, and the water's interaction with exposed mineral formations has formed unusual compounds and crystalline formations.

Water Resources

An integral part of the Prince William ecosystem is the Quantico Creek watershed (see Quantico Creek Watershed map). The north branch of Quantico Creek and southern branch of Quantico Creek, which flow southeast and join near the eastern boundary, are the main streams in the park. These two streams receive more than 90% of the runoff waters; an intricate network of smaller streams drains the rest of the park. The north branch drainage basin is about 7 square miles; this heavily forested stream valley provides critical habitat for a number of native species. The South Fork drainage basin encompasses about 11 square miles of woodlands.

The water quality in the North Branch and the South Fork of Quantico Creek and in other small tributaries in the park is generally good and supports numerous fish species and benthic organisms. Additional surveys will be required to determine the exact species composition and distribution; however, it is likely that anadromous fish like herring and shad use the streams for breeding and that other rare or uncommon species inhabit the waters because of their relative isolation and lack of development. Additional research and monitoring are critical to ensure that freshwater biota in the park is preserved.

The natural streamflow of Quantico Creek has been partially altered by the construction of dams to create recreational lakes for cabin camp users. These dams act as sediment traps for

stormwater runoff and must be periodically dredged. These features provide habitat for numerous wetland species and serve as the primary breeding area in the park for aquatic organisms such as fish and amphibians. The removal or failure of dams would result in excessive sediment loading of the streams below them. In the short-term, there would be mortality of most aquatic organisms below the present dams. Without the catch basin system the dams currently provide, sediment loading would affect the entire stream reaches in the long term, reducing both the number and diversity of fish and other aquatic populations.

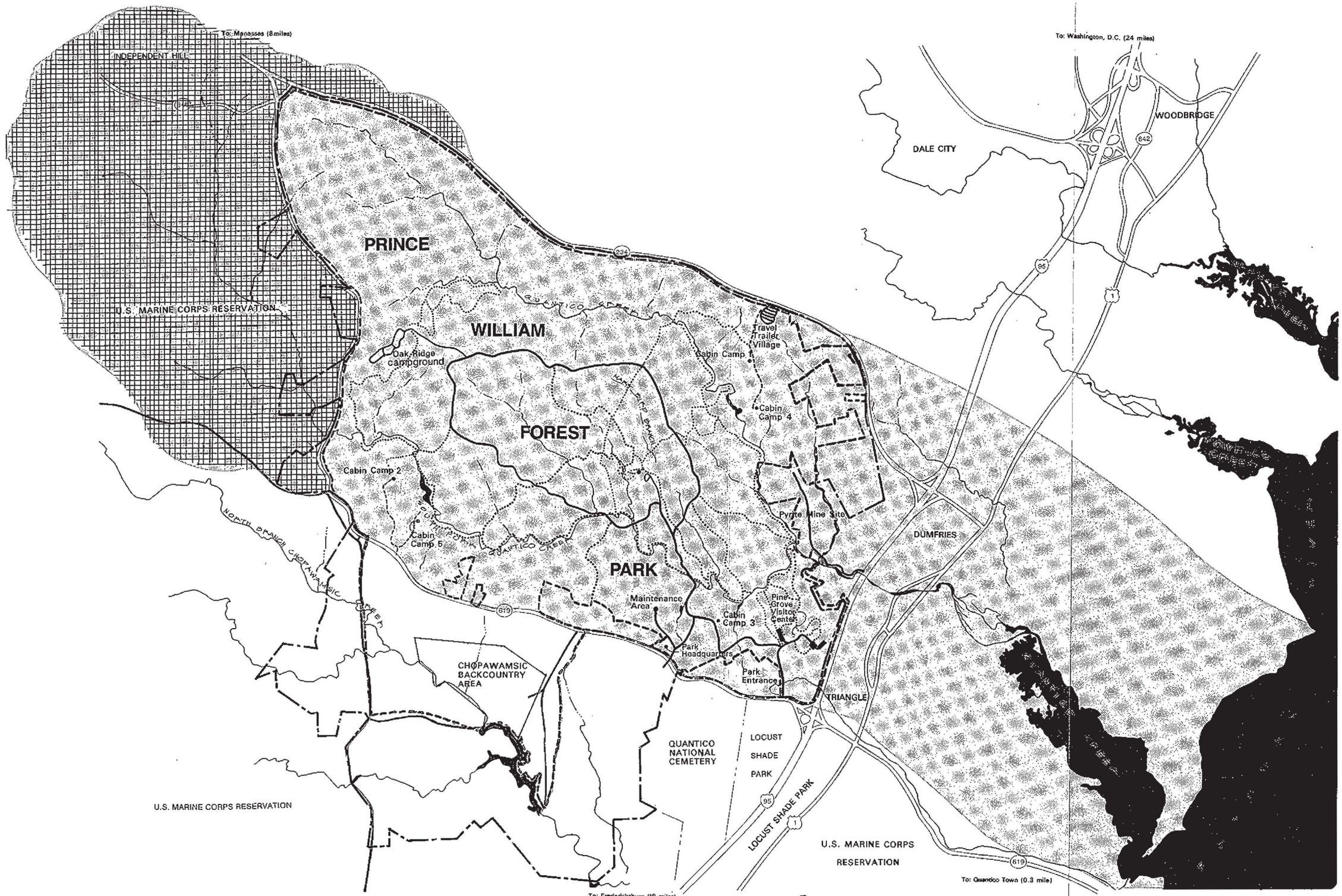
Vegetation

The stream valleys of the North Branch and the South Fork of Quantico Creek appear to have been the least farmed or first abandoned lands historically because the oldest mature forest species are generally found along these streams. In addition, the niches formed in the ecotone between aquatic and terrestrial communities are highly productive and provide diverse habitat. The expanding beaver populations and the reported sightings of river otter at Prince William Forest Park are evidence of the healthy relationship between forest and stream.

Terrestrial communities are equally diverse and healthy. There are at least two distinct types of forest ecosystems in the upland areas of the park. On the ridges and upper slopes is a mixed oak forest, and on the lower slopes, above the floodplain, is a mesic hardwood forest. Beeches, which are found in this area, require undisturbed interior environments for their best development into a forest. Some uncommon or rare tree species are interspersed, including butternut, bigtooth aspen, black walnut, swamp white oak, and cottonwood, as well as floodplain species like American beech, box elder, and sycamore. Several of these species are at their distributional limits in the park, attesting to the fact that the park is in a transition zone between northern and southern climates and between eastern and western physiographic provinces.

Prince William Forest Park is the only natural area in the national park system that contains a significant expanse of a piedmont forest ecosystem. The park contains several rare communities, including a seepage swamp, remote stands of eastern hemlock, and several populations of rare plants. As surveys are conducted, other rare communities may be located in the park.

Understory trees and vegetation, including dogwood, redbud, ironwood, mountain laurel, American holly, Solomon's seal, spotted wintergreen, and sassafras, are found throughout the forest. Ferns, mosses, vines, briers, and numerous wildflowers form the groundcover. Cardinal flower and Hercules club are common in the park, although uncommon and protected elsewhere. The small-whorled pogonia, a federally listed threatened species, has been identified in the park. Because of its rarity, specialized habitat criteria, and proximity to developed areas, the management of this species is critical to ensure its continued survival.



QUANTICO CREEK WATERSHED

PRINCE WILLIAM FOREST PARK / VIRGINIA
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
860 • 20014 E • DSC • AUGUST 1996

860/40014E published as
860/20014E

AUTHORIZED PARK BOUNDARY
PROPOSED PARK BOUNDARY
TRAILS
U.S. NAVY / NATIONAL PARK SERVICE WATERSHED AGREEMENT AREA
WATERSHED AREA

NORTH

0 0.5 1 KILOMETER
0 0.5 1 MILES

In the developed areas of the park, particularly the cabin camps, native vegetation has been disturbed by soil compaction and trampling, which have resulted in vegetation loss, increased erosion, and stream sedimentation. Few understory and groundcover species survive at these sites. Exotics like honeysuckle, wisteria, and yucca have invaded many of these disturbed areas, creating resource management problems.

Wildlife

The park's dense forests and varied topography provide diverse habitats for wildlife. Healthy breeding populations of white-tailed deer, wild turkey, ruffed grouse, gray fox, and beaver are supported. Small mammals like raccoons, gray squirrels, and opossums are abundant, as are various reptiles and amphibians. The park is also home to numerous bird species — great horned owls, woodcocks, pileated woodpeckers, numerous hawks, warblers, and songbirds. Bald eagles occasionally pass through the area, although they are not known to nest in the park.

Many of the park's wildlife species, especially the larger predators, are relatively sensitive to human disturbances. As a result, their numbers are decreasing in other areas of the piedmont, and their continued survival within the park is increasingly critical. As development continues in northern Virginia, Prince William Forest Park will become an extremely valuable sanctuary for these wildlife resources.

Cultural Resources

In accordance with section 110 of the National Historic Preservation Act of 1966, as amended, in 1986 the National Park Service prepared an archeological and historical overview and assessment of the park titled *The Hinterland: An Overview of the Prehistory and History of Prince William Forest Park, Virginia.* This study, written by Dr. Patricia Parker, provides the historic and prehistoric context for the park's cultural resources. After that report was completed, the park nominated four of its five CCC cabin camps to the National Register of Historic Places. In 1989 cabin camps 1, 2, 3, and 4 were approved and officially listed as part of the four historic districts. Cabin camp 5 has been significantly altered over time and lacks the necessary architectural integrity required for listing on the national register. The remains of buildings and the historic landscape associated with the (1899–1921) pyrite mine have been determined to be eligible for the national register as a result of archeological consultation with the Virginia state historic preservation officer. The park will continue to manage this site as a historical resource.

Prince William Forest Park also contains approximately two dozen additional structures that have not been identified and evaluated. A survey of the park's archeological resources will be completed as funds become available. The recently identified Chapman Plantation and Missouri Mills archeological sites will be further studied for inclusion on the National Register of Historic Places. Both sites are on lands currently under the special use permit to

Quantico Marine Corps Base. The park's 40 cemeteries have been mapped and recorded. Dams 2–4 are also listed on the national register as part of the CCC cabin camp nomination. Any proposed removal of historic dams or cabins would constitute an adverse effect on the historic districts and potential archeological resources and would require consultation with the state historic preservation office.

Prehistoric Period

Base camps of extended families of hunters and gatherers and a few activity sites are the prehistoric site types that are likely to exist in Prince William Forest Park. Research in adjacent areas has revealed evidence of occupation back to 4500 B.C. and possibly to 8800 B.C. By 1100 B.C. there was an increase in the population of the Potomac Valley, and it is probable that the park area was more heavily used. By A.D. 700–900 villages had begun to be established. The Potomac, or Tauxenent, American Indians reportedly had a village site along one or more of the inlets to the Potomac River, very possibly the creeks in the vicinity of the park.

It is probable that one or more of the groups that settled along the Potomac claimed the Quantico/Chopawamsic area as their land. By A.D. 1100, slash-and-burn agriculture, with a major reliance on corn, was prevalent in the region. It is doubtful that villages were sited within the park area because the soils were not well-suited for maize agriculture and the terrain discouraged major concentrated settlement. The more abundant site types are likely to have been hunting base camps along Quantico Creek.

English contact, disease, and group warfare gradually affected Native Americans' use and occupation of the area. By 1660 Native Americans were gone from the park area.

Historic Period

From about 1650 to 1680 most of the land in the park vicinity was patented and settled by the English, who established large tobacco plantations that flourished until the late 1700s. Prince William County (named after William, Duke of Cumberland, youngest son of George II) was formed in 1731, and the town of Dumfries gradually grew into a major colonial shipping and processing area for the tobacco growers. Because of its proximity to Dumfries, the park area became important tobacco-growing land. However, with a single exception, there is no evidence that the planter-elite actually settled in the park; rather, it was farmed by indentured servants, tenant farmers, and slaves directed by representatives of the large landowners.

Tobacco remained by far the most important product shipped out of Dumfries from the park area until 1800. However, monocropping took its toll on the lands, and tobacco yields declined steadily throughout the latter part of the 18th century. Erosion of the uplands, exacerbated by heavy rains and flooding, caused the mouth of Quantico Creek to fill in, and Dumfries was cut off from direct access to the Potomac. Despite efforts to build canals to the

river, by the 1790s Dumfries' role as a port town had ended, and the economic and social system based on plantation agriculture gradually ceased to exist.

During the early 1800s at least four small grist mills and sawmills operated in the area that is now park land, and people turned their excess corn and wheat into cash. A cotton factory operated in the area in the 1830s. Original plantations were gradually divided as land was passed on to succeeding generations. Small farms and woodlots became more common as each new landowner built structures on his property. A variety of structures, most now removed, existed in the area that is now the park. Besides farmhouses and related outbuildings, there were churches, stores, schools, a poor farm, and over 40 cemeteries. Paths, trails, rolling roads (tobacco roads, now VA 234 and VA 619), and farm roads crisscrossed the area.

During late 1861 and early 1862 approximately 6,700 Confederate troops camped next to Quantico Creek near Dumfries. Dumfries was a major supply center, and several actions were directed toward its protection before the spring of 1862 when its warehouses and the fortifications at the mouth of the creek and on Grayson's Hill (just outside the eastern park boundary) were abandoned. A Confederate raid on Union forces in Dumfries was mounted, at least in part, from the southeastern section of what is now the park. A map from the 1860s shows a "line of rifle pits" at the northeastern boundary behind Grayson's Hills, and both Confederate and Union soldiers are said to be buried in several cemeteries within the present park boundary.

The pyrite mine was established in 1899. At its production peak, it employed 250 workers, many of whom resided in the area that is now the park. When the mine finally closed in 1921, many of the employees found work at the newly established Quantico Marine Corps Base.

By the early 1930s the soils within the present park boundary were mostly exhausted, and the forests had been harvested. The families that occupied the land found it difficult to sustain a living by farming or to obtain work elsewhere. In 1933, under the authority of the National Industrial Recovery Act, the park area was chosen as one of 25 recreation demonstration projects to be developed jointly by the Department of the Interior, the National Park Service, the Resettlement Administration, and the Civilian Conservation Corps. The purposes of the recreation demonstration projects were (a) to reclaim the land near urban centers classified by the government as submarginal for farming, (b) to establish recreational facilities intended to serve the poor and underprivileged of the nearby urban centers, and (c) to facilitate the resettlement of rural populations from submarginal areas to fertile farmland. An additional purpose was to provide useful work for unemployed men.

The Chopawamsic Recreation Demonstration Area project, in the area now comprising Prince William Forest Park, began with the purchase of land by the Resettlement Administration. Initially, large areas were purchased from wealthier owners who had accumulated land over the years as investment, as settlement for accumulated debts in country stores, or in exchange for allowing former owners to remain on land they could no longer afford. Eventually, however, small landowners were also bought out and relocated. In 1934 the Civilian Conservation Corps began to construct cabin camps, roads, lakes, trails, and utility systems. The first cabin camp was completed and in operation in 1935, and by 1936, when the area was

officially transferred to the national park system, all five camps had been completed. Some local labor was used to build the camps, but most of the work was done by men from Pennsylvania, West Virginia, Tennessee, and other parts of Virginia who had joined the Civilian Conservation Corps. The cabin camps and supporting facilities were built primarily of local materials. Dump material from the pyrite mine was used for roadbeds, and rock features from farms were incorporated into retaining walls, firepits, and so forth.

In 1942 the park was taken over as a training site by the U.S. Army Office of Strategic Services. Cabin camps 1, 2, 4, and 5 were used for top secret training and housing of recruits intended to perform covert military operations and transmission interception and decoding. The military used the area until the latter part of 1945. In 1948 the park was returned to the Department of the Interior and renamed Prince William Forest Park.

Because the dominant economic activity in the area during its 300-year history was small-scale farming, supplemented by other income-producing activities, a wide range of properties probably existed. However, only structural ruins and site features remain from earlier periods; no standing structures, other than those associated with the CCC camps, remain in the park. Readily apparent remains of other past occupations are limited, the most visible being the family cemeteries and various kinds of stonework associated with farming and mill operations. Although most structural remains are gone, there is little doubt that archeological manifestations of the social and economic activities associated with the park's history still exist. The 1986 comprehensive overview prepared by the National Park Service identifies specific areas where studies should be directed.

Recreation Resources

The Region

According to the 1996 *Virginia Outdoors Plan,* Prince William Forest Park is located in the state's eastern urban corridor, which experienced approximately 90% of Virginia's growth during the 1980s. Because it is largely urban, the area generates greater levels of demand for recreation services than any other region in the state. The 1992 "Virginians Outdoors" survey reported that a majority of those surveyed desired more parklands. There has always been an unusually high degree of commitment on the part of local government to meet those demands. The region continues to experience exceptional population growth, with the greatest growth currently south of Washington, D.C.

The extent of recreational opportunities in northern Virginia is reflected in the wide variety of areas available for public use, including park and recreation areas, forests, wildlife management areas, natural areas, public fishing lakes, public boat landings, historic areas, scenic highways, byways and parkways, scenic rivers, trails, hostels, and beaches. Recreational activities offered at these areas are equally diverse — they include camping, fishing, boating, swimming, hiking, jogging, bicycling, horseback riding, off-road vehicle use, hunting, picnicking, golf, tennis, team sports, ice skating, and skiing.

Some of the most pressing needs in the region include the need for more facilities for jogging, hiking, and biking trails; beaches and outdoor swimming facilities; and picnicking and camping facilities. A demand exists for an interconnected recreational trail network throughout the region, and public interest in high-quality trails and camping opportunities in Prince William Forest Park will continue.

The Park

The park was originally established as the Chopawamsic Recreation Demonstration Development Area in 1934. Studies of national recreation needs at that time revealed an urgent need for natural areas close to population centers with group campsites, hiking trails, and swimming and picnic facilities. Today, with over 17,000 acres, Prince William Forest Park, the largest natural or conservation park in the Washington metropolitan area, still offers the recreational opportunities originally identified for the park. This large natural preserve is particularly significant when viewed from a national perspective. More than 80% of the United States' population lives in the East, which contains only 12% of the wilderness in the lower 48 states.

The varied recreational activities offered at Prince William Forest Park are consistent with resource protection and appropriate for a unit of the national park system. Park visitors can enjoy hiking, fishing, camping, picnicking, bicycling, and nature study supported by 37 miles of trails, 25 miles of streams, five ponds and lakes, one 79-site family campground, one 170-person group campground, one 79-site RV campground (concessioner operated), a designated backcountry camping area, three picnic areas, and five cabin camps (capacity 890 persons). The group campground, the family campground, one picnic area, a portion of cabin camp 5, and a portion of the concession-operated RV campground are operated during the winter.

During the past five years the park's annual visitation has remained relatively stable at around 250,000 visitors per year. Monthly visitation patterns indicate that visitation is seasonal; more than 75% of the visits occur from April through October. The largest monthly total typically occurs in May; July records the heaviest use of campsites and cabin camps. Most of the cabin camps are closed during the winter, affecting the visitation statistics for that season.

The use of campgrounds and cabin camps parallels the overall use of the park. Recent trends indicate a relatively stable demand for both cabin camps and campgrounds. Overnight use has remained fairly constant on certain days, particularly on weekends, when the demand for available campsites and cabin camps has sometimes exceeded the supply. The monthly patterns of use at the campgrounds and cabin camps also reflect overall visitation patterns at the park. Overnight use accelerates about April and continues until the end of October. The demand for individual rental cabins has also been constant.

A survey taken during the fall of 1996 (appendix F) resulted in the following information:

- More than 72% of park visitors were residents of Virginia, Maryland, and the District of Columbia.
- The remaining visitors were travelers on I-95 and people visiting the nation's capital.
- The visitors who were not regional residents came from 29 other states.
- The park was the primary reason for 35% of the visitors coming to the area.
- Of the visitors surveyed, 46% were families, 42% were groups of two, and 35% were 36–55 years old.
- The most popular activities at the park are hiking (69%), driving the Scenic Drive (49%), and camping in developed campgrounds (32%).
- When asked about park features, visitors rated opportunities for recreation and solitude extremely important and very important.
- The most popular destinations in the park were the Farms-to-Forest Trail (46%), the visitor center (33%), the Travel Trailer Village (21%), and the Pine Grove Picnic Area (20%).
- The campgrounds and trails were rated as the highest quality facilities (95% and 88%, respectively).

Prince William Forest Park ties for third place with Great Falls Park for the diversity of recreational opportunities offered by 22 natural sites found in the National Capital Planning Commission region. Rock Creek Park and Anacostia rank first, and Greenbelt Park is second. The comprehensive plan for the National Capital Open Space and Natural Features element states that the National Capital Open Space system should maintain large natural scenic areas for camping, hiking, nature study, and other recreational activities that do not adversely impact their natural qualities.

CONSULTATION AND COORDINATION

Public Input Opportunities

Public meetings were held in 1985 and 1993 to identify and discuss the issues facing the park. Two public workshops were conducted in April 1985 to discuss the issues. A total of 28 people attended those workshops. In addition, 27 written comments were received. The general consensus in the written comments and comments received at the workshops was a concern that the park's natural values and landscape should be preserved and that the present types of recreational opportunities should continue to be accommodated, with relatively minor modifications. A total of 67 written comments were received after the publication of the *Draft General Management Plan* in 1993. Agencies and organizations that commented were as follows:

Quantico Marine Corps Base
Prince William County
Prince William County Park Authority
Stafford County
Fredericksburg Department of Tourism
Virginia Department of Tourism
Virginia State Forester
Virginia Department of Historic Resources
Virginia Department of Conservation and Recreation
Brittany Homeowners and Equity Resources
Sierra Club, Virginia Chapter
Sierra Club, Mount Vernon Group
National Parks and Conservation Association
Virginia Native Plant Society
Potowmack Chapter, Virginia Native Plant Society
Friends of Prince William Forest Park

Subjects of Public Comments

Land Exchanges to Protect Park Resources

Nineteen comments strongly supported an exchange of jurisdiction with the Marine Corps involving the Chopawamsic Creek lands and Upper Quantico Creek areas. There were 23 comments in general support of a land exchange, for a total of 42. Many commenters said the National Park Service should own and control both areas. The Marine Corps base strongly opposed the direct transfer of land between the park and the base, as proposed in the *Draft General Management Plan / Environmental Assessment.* Three comments were received that opposed a land exchange between the National Park Service and the military. Five comments opposing land exchanges with private landowners came from homeowners in the Brittany subdivision.

Expanding Visitor Center and Environmental Education

It was widely acknowledged that the present visitor center is inadequate to accommodate and serve the public. Six comments supported a new or expanded visitor center; 13 comments were in favor of expanded visitor activities; and 10 comments favored expanded environmental education opportunities.

Reducing Internal Facilities and Long-term Core Protection

Alternative C in the draft plan called for protecting the park's ecosystem, envisioning a time when woodlands could be obliterated by development. Six comments were received in favor of relocating park facilities to the periphery or putting new ones only in previously developed areas to protect core forest values. Four commenters opposed road closures or the removal of facilities, citing accessibility or trail maintenance problems. Four commenters were concerned about the potential reduction in the size of the cabin camps.

Other Comments

Seven comments supported upgrading trails and greenways and developing more linkages with other trails. Five comments expressed concern for the small whorled pogonia; 7 comments were received about the removal or relocation of the concession operation (retaining Travel Trailer Village was favored); and 6 comments called for more protection of cultural resources and the expansion of cultural history programs.

Coordination with Other Concerned Entities

Park representatives have met with representatives of Prince William County, the Quantico Marine Corps Base, and the Quantico National Cemetery to encourage their participation in the project, to understand their concerns, and to provide periodic status reports. The U.S. Fish and Wildlife Service had been contacted for information regarding endangered or threatened plant or animal species in Prince William Forest Park. NPS personnel from the park and the regional support office have met with personnel from the Virginia State Historic Preservation Office and the Advisory Council on Historic Preservation to discuss the condition and significance of existing park structures. The cabin camps and buildings and other features in the maintenance area have been examined.

Copies of this document will be sent to all federal, state, and local agencies concerned with Prince William Forest Park.

APPENDIX A: LEGISLATION

AN ACT

To authorize the transfer of certain Federal lands within the Chopawamsic Park to the Secretary of the Navy, the addition of lands surplus to the Department of the Army to this park, the acquisition of additional lands needed to round out the boundaries of this park, to change the name of said park to Prince William Forest Park, and for other purposes.

June 22, 1948
[H. R. 6246]
[Public Law 736]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior be, and he is hereby, authorized to transfer to the Secretary of the Navy control and jurisdiction over those parcels of land within the Chopawamsic Park, known hereafter as the Prince William Forest Park, a part of the park system of the National Capital and its environs by Act of Congress of August 13, 1940 (54 Stat. 785), comprising approximately five thousand acres, lying south of the Joplin Road and contiguous to the Marine Base at Quantico, Virginia, with the exception of approximately four acres at the intersection of roads 626 and 620, which land contains the fire tower, upon assurance that the Secretary of the Navy will guarantee the potability and the undamaged source of water of the South Branch of Quantico Creek to the lands lying east of route 619, now or hereafter acquired for the Chopawamsic Park: *Provided, however*, That the transfer of jurisdiction herein authorized shall not be effectuated until funds have been made available by the Congress for the acquisition of the lands referred to in section 3 of this Act.

Chopawamsic Park, Va.
Transfer of jurisdiction.

Condition of transfer.

SEC. 2. That all of the lands that were formerly acquired by the War Department and that are now surplus to the needs of the Department of the Army within and adjacent to the Chopawamsic Park, comprising approximately one thousand one hundred and thirty-eight and sixty-two one hundredths acres, are hereby added to and made a part of that park, and shall be subject to all the laws, rules, and regulations applicable thereto.

Surplus lands of Department of Army.

SEC. 3. That the Secretary of the Interior and the Secretary of the Navy be, and they are hereby, authorized to acquire on behalf of the United States, by donation or purchase, lands adjoining or contiguous to the Chopawamsic Park, in the State of Virginia, as may be necessary for the proper rounding out of the boundaries of that park, but not exceeding one thousand five hundred acres. The title to real property acquired pursuant to this Act shall be satisfactory to the Attorney General of the United States. All property acquired by the United States pursuant to this Act shall become a part of the Chopawamsic Park upon acceptance of title thereto, and shall be subject to all laws, rules, and regulations applicable thereto.

Acquisition of land.

SEC. 4. There is authorized to be appropriated not to exceed the sum of $10,000 to carry out the provisions of section 3 of this Act.

Appropriation authorized.

Approved June 22, 1948.

EXECUTIVE ORDER

[No. 7496—Nov. 14, 1936—1 F.R. 1946]

TRANSFER OF PROPERTY, FUNCTIONS, FUNDS, ETC., PERTAINING TO RECREATIONAL DEMONSTRATION PROJECTS FROM THE RESETTLEMENT ADMINISTRATION TO THE SECRETARY OF THE INTERIOR

By virtue of and pursuant to the authority vested in me by Title II of the National Industrial Recovery Act (48 Stat. 200), the Emergency Relief Appropriation Act of 1935 (49 Stat. 115), and the Emergency Relief Appropriation Act of 1936 (Public, No. 739, 74th Congress), I hereby order as follows:

1. There is transferred from the Resettlement Administration to the Secretary of the Interior (a) all the real and personal property or any interest therein, together with all contracts, options, rights and interests, books, papers, memoranda, records, etc., acquired by the Resettlement Administration in connection with the recreational demonstration projects set forth in the attached schedule with funds appropriated or made available to carry out the provisions of the National Industrial Recovery Act by the Fourth Deficiency Act, fiscal year 1933 (48 Stat. 274, 275), and by the Emergency Appropriation Act, fiscal year 1935 (48 Stat. 1055), and with funds appropriated by the Emergency Relief Appropriation Act of 1935 (49 Stat. 115), and by the Emergency Relief Appropriation Act of 1936 (Public, No. 739, 74th Congress), and (b) all personnel, whether in the District of Columbia or elsewhere, now employed in connection with the acquisition of land for those recreational demonstration projects, together with all administration personnel records pertaining to the employees transferred, and to those employees engaged in development activities as of July 31, 1936, who were released by the Resettlement Administration on that date to permit the Department of the Interior to enter them on its rolls as of August 1.

2. There is transferred and allocated to the Secretary of the Interior all balances of appropriations heretofore made available to or allotted for expenditure by the Resettlement Administration both for acquiring land for the recreational demonstration projects set forth in the attached schedule and for developing those projects, under the said National Industrial Recovery Act, Fourth Deficiency Act, fiscal year 1933, Emergency Appropriation Act, fiscal year 1935, Emergency Relief Appropriation Act of 1935, and Emergency Relief Appropriation Act of 1936, to be used for the purposes for which such funds were made available or allotted to the Resettlement Administration. The Secretary of the Interior shall assume all outstanding obligations, commitments, and encumbrances heretofore incurred by the Resettlement Administration in connection with the said projects.

3. The Secretary of the Interior is authorized, through the National Park Service, to complete and administer the projects transferred to him by this Executive Order and to exercise with respect to any real or personal property or any interest therein, contracts, options, rights and interests, books, papers, memoranda, and records acquired in connection with such projects, all the powers and functions given to the Resettlement Administration in connection therewith by Executive Orders Nos. 7027 and 7028 of April 30, 1935, and April 30, 1935, respectively.

4. The Secretary of the Interior is authorized to prescribe such rules and regulations as may be necessary to carry out the administrative functions transferred and delegated to him by this Executive Order.

FRANKLIN D. ROOSEVELT.

THE WHITE HOUSE,
November 14, 1936.

APPENDIX B: A BRIEF ADMINISTRATIVE HISTORY

- **1933:** Resettlement Administration (under authority of the National Industrial Recovery Act) acquired nearly 17,000 acres of land, which became the Chopawamsic Recreation Demonstration Area.
- **1933:** Civilian Conservation Corps (CCC) was given responsibility for constructing recreational facilities.
- **November 14 1936:** Executive Order 7496 turned the land over to the National Park Service.
- **August 12, 1938:** Department of the Interior issued a permit (upon request of the Department of the Navy) for the construction of a concrete dam on Chopawamsic Creek on NPS lands, to provide water source for the base (created Breckenridge Reservoir).
- **August 13, 1940:** Congressional Act 54 Stat. 785 provided that the area be administered as part of the National Capital Park system to provide recreational opportunities for visitors to the nation's capital.
- **June 12, 1943:** The secretary of the navy requested use of 4,862 acres for training purposes for the duration of "emergency" (WW II), and 6 months thereafter. The secretary of the interior responded that it would be agreeable if the Navy agreed to purchase lands north of VA 619 to round out the boundaries of the park.
- **June 22, 1948:** PL 736 authorized the transfer of approximately 4,862 acres of National Park Service land to the Department of the Navy with the following stipulations:
    a. the secretary of the navy would guarantee the potability and undamaged source of water of the Quantico Creek east of VA 619
    b. the secretary of the navy and the secretary of the interior would purchase all lands north of VA 619 to round out the boundaries of the park, not to exceed 1,500 acres
    c. $10,000 would be allocated to acquire the land
    d. surplus navy lands (about 1,100 acres) would be transferred to the National Park Service
- **1950:** PL 640 authorized the secretary of the interior to make land exchanges with Recreation Demonstration Area lands.
- **1953:** PL 144 authorized Prince William Forest Park to exchange land "within established watersheds and boundaries" (also allowed for utility corridor easements).
- **October 8, 1958:** A revocable special use permit was issued to the Department of the Navy for the continued use of the 4,862 acres of land until the stipulations of the 1948 act could be met.
- **December 12, 1968:** A memorandum of understanding between the National Park Service and the Department of the Navy was drafted to provide for continuing the navy's use of the 4,862 acres, and included a course of action toward resolution of the problem.
- **May 1969:** Compromise agreement between the National Park Service and the Department of the Navy whereby the Park Service was to introduce legislation to increase the limitation of funds established in the 1948 legislation. The Office of Management and Budget returned the latest bill of August 1970 for future consideration.
- **1972:** The General Services Administration surveyed the Quantico base lands and recommended 20,000 acres as surplus to their needs (use of base has increased since this time).

- **March 16, 1972:** A new special use permit was issued to the Navy for the continued use of 4,514 acres. The National Park Service retained the "full" use of 348 acres for the Chopawamsic backcountry area.
- **1973:** The park's master plan process began but was never completed.
- **1984:** Effort was renewed to develop a general management plan for the park
- The assistant secretary of the interior signed an amendment to the special use permit agreeing to a new permit condition providing that the permit could be revoked only by the Department of the Interior upon the "mutual agreement" of both secretaries.
- **January–October 1985:** Current general management planning effort was begun with issues and concerns scoping document and the initial draft planning document issued for public comment. Two public workshops were conducted to provide a forum for the discussion of issues. Throughout the early course of the planning project, meetings were held with representatives of Prince William County, the Quantico Marine Corps Base, the Quantico National Cemetery, the U.S. Fish and Wildlife Service, the Virginia State Historic Preservation Office, and the Advisory Council on Historic Preservation.
- The initial draft plan produced from information collected in 1985 was sent back by the office of the assistant secretary, fish, wildlife, and parks for revision to include more recreation information.
- **1989:** The Marine Corps and the National Park Service took a joint position against a proposed regional jail facility in the upper-watershed lands.
- The General Services Administration declared that approximately 177 acres of land in the upper watershed (northern tip) were excess to Marine Corps needs. The National Park Service requested these lands if/when they were formally surveyed; Marine Corps notified the General Services Administration that lands were needed.
- **June 12, 1989:** Four of the five historic CCC-era cabin camps were accepted on the National Register of Historic Places as "historic districts."
- **June 1990:** The *Draft General Management Plan* was ready for release but was held up due to discussions with the Marine Corps regarding the special use permit lands in the preferred alternative.
- **February 1993:** New version of the *Draft General Management Plan,* which fully addressed the alternatives, was released for public review and comment.
- **1996:** Final plan was developed, pending discussions with the Marine Corps.
- **March 1998:** A memorandum of understanding was signed by the park superintendent and the commanding general, Quantico Marine Corps Base, to resolve the land issue through mutually agreeable land assignment to support the mission of each agency, effectively fulfilling PL 80-736. The memorandum of understanding also established a 300-foot "green corridor" along the federally owned portions of VA 619.

APPENDIX C: MEMORANDUM OF UNDERSTANDING

A Memorandum of Understanding between
Prince William Forest Park and
Marine Corps Base, Quantico

[as signed on 10 March 1998 by Superintendent Robert S. Hickman, PWFP, and F. C. Wilson, Commanding General, MCB, Quantico]

This Memorandum of Understanding is made and entered into between the Marine Corps Base, Quantico, Virginia (hereinafter called MCB), and Prince William Forest Park (hereinafter called PWFP).

WHEREAS, the Prince William Forest Park and Marine Corps Base, Quantico, Virginia, represent separate Federal agencies with distinct missions;

WHEREAS, these entities own and manage contiguously located land parcels that affect several different watersheds within the Commonwealth of Virginia;

WHEREAS, these entities are currently Parties to several separate agreements including the Special Use Permit of 16 March 1972, as amended, and the Watershed Management Plan for the South Fork of Quantico Creek;

NOW THEREFORE, these entities, acting as Parties under the terms of this Memorandum of Understanding (Memorandum), hereby resolve as follows:

To pursue with all deliberate speed and commitment the mutual goals set forth in this Memorandum; and

To abide by the conditions set forth in this Memorandum unless formal written direction to the contrary is received from their higher headquarters.

PART ONE: MUTUAL GOALS

Maintain and protect the mission needs of the United States Marine Corps (USMC) Base at MCB Quantico and the mission needs of the National Park Service (NPS) at PWFP.

Establish a "green corridor" along the federally owned portion of Route 619 to enhance its integrity as a scenic, two-lane, low speed roadway, which serves as the partial drainage between two federally protected watersheds.

Establish a mutual plan, which will require higher agency approval and legislation to implement, to revise, and redefine the border between MCB and PWFP in a manner that is designed to better facilitate the autonomous utility of each agency's lands.

To abide in the spirit of Public Law 80-736 in proposing legislation and effecting changes to meet the overall goals of this Memorandum.

To prepare and sponsor jointly proposed legislation required to implement the Parties' intent and goals to revise the designated border between the Parties' land, to pursue reversionary rights in the land so designated, to substitute this Agreement and implementing legislation as compliance/ fulfillment with PL 80-736 and to address the jurisdictional and any other remaining issues necessary for successful implementation of this Agreement.

PART TWO: ACTIONS

MCB will designate in its Master Land Use Management Plan (MLUMP) those USMC-owned parcels along Route 619 as "no development" and make such other Amendments as are consistent with this Agreement.

MCB and PWFP will establish a green corridor zone 300 feet wide on each side of Route 619 along their parcels to ensure integrity of the greenway corridor. The green corridor zone shall not require demolition or revision of existing structures along the current agency-owned corridor, nor shall it prohibit either agency from constructing access roads in support of identified mission requirements to ingress and egress internal parcels. Every effort will be made to limit the number of access roads constructed through coordination of planning and review of access road proposals by both agencies.

MCB will pursue alternative actions in lieu of construction of an on-site landfill west of I-95 in the northern training areas.

MCB/PWFP will individually and jointly pursue, through their chain of command, a land plan designed to round out the borders of each agency's property according to the map set forth in Attachment A hereto and to eliminate special use permitted land in favor of single agency land ownership and use. Recognizing that successful pursuit of such actions requires higher level agency approval and legislation, the Parties agree to coordinate and communicate their collective and individual progress in pursuing higher level approvals.

PWFP will amend its General Management Plan (GMP) to reflect a new course of action premised upon pursuit and completion of this Memorandum. The GMP process will serve as the Park's forum for presenting this Agreement to the public.

MCB/PWFP will develop jointly a Watershed Management Plan for those portions of the Chopawamsic Creek Watershed flowing through lands under the jurisdiction of PWFP.

MCB/PWFP will develop a joint Recreation Plan for use of Breckenridge Reservoir and address issues of visitor access to Breckenridge.

MCB/PWFP will update and amend the Watershed Management Plan for the South Fork of the Quantico Creek as set forth in Park IV of this Agreement.

PART THREE: CONDITIONS

Any legislative recommendation for a land plan to round out the borders of each agency's property must include the reversion clauses such that if either agency no longer has a need for the land it secures from the other as part of this process for "rounding out the borders," and such land becomes excess to the needs of the gaining party/agency, that such land shall revert to the prior owner-agency at no cost for its use in meeting its agency mission requirements. Only if that agency then declares the

land "excess" to its needs may sale, disposal, or use of same under federal property disposal rules proceed.

To ensure adequate, timely notification at the local level for all joint issues and to ensure coordination of actions to resolve issues at the local level, whenever possible, the Parties have agreed that no proposal for the land plan set forth in Attachment A to round out each agency's borders through transfer, new survey, or any other means shall be presented through the agency's chain of command or to personnel in other agencies, organizations, or the public unless the Parties to this Agreement have discussed the substance and boundaries of such proposal and either agreed upon same or defined the points on which they have "agreed to disagree" in advance and in writing.

NPS and USMC personnel will work together in preparing and approving joint interpretive items including research of key archaeological sites.

The current Watershed Management Plan, as proposed for revision, shall serve as the model for format and substance of the plan to be established for the Chopawamsic Creek Watershed Management Plan.

PART FOUR: REVISIONS TO CURRENT WATERSHED MANAGEMENT PLAN

Recognizing the protected nature of the Quantico Creek Watershed, the Parties have resolved to make the following changes to the language in their current Quantico Creek Watershed Management Plan:

Amend Part II, D., page 2, by substituting the following for the current language:

Forest Management will be carried out in accordance with the Virginia Best Management Practices and fulfillment of the Marine Corps Order P5090.2. The secretary of the interior, or his designee, shall be notified in advance of any proposed logging operations. The intent of forest management within the watershed shall be to protect and maintain water quality and to maintain the forest cover in this watershed to the maximum extent practicable. When forest clearing/logging operations are proposed within the watershed, the management restrictions outlined below will be followed to minimize resource damage:

Hardwood silviculture will employ a wide variety of even and uneven aged management systems. The use of clear-cutting will be minimized except in cases involving insect, disease, or weather-related damage. Reforestation may be supplemented by planting, especially where necessary for erosion control, but will normally be accomplished by natural regeneration.

Even-aged management, specifically, clear-cutting for final harvest, will be used to manage pine stands. Special care will be taken concerning spatial distribution and size of units, with any clear-cutting limited to 25 acre units or less and 20% of the total pine acreage per forest compartment at each ten year entry interval within the watershed absent any catastrophic event. Reforestation will normally be accomplished by replanting.

Forest clearing may be employed where necessary to enhance military training (e.g., for areas like landing zones), but BMPs will be used to stabilize any cleared areas. These areas will be returned to forest cover as soon as practicable when they no longer required for such training use.

Amend Part II, H., page 2, by substituting the following current language:

Construction of permanent structures and road in the South Fork Quantico Creek Watershed area will be limited to that which directly supports field training operations specifically conducted by the Marine Corps and authorized by the Commanding General, Marine Corps Base, Quantico. The secretary of the interior or his designated representative shall be notified in advance of any proposed logging operations or projects that will result in forest clearing within the Quantico Creek Watershed and invited to participate in appropriate scoping, environmental planning, and Environmental Impact Review Board meetings. Construction will be conducted in accordance with applicable federal and state guidelines. Clearing of wooded areas for construction will be kept to a minimum.

[Signed on 10 March 1998 by Superintendent Robert S. Hickman, PWFP, and F. C. Wilson, Commanding General, MCB, Quantico]

APPENDIX D: MISSION STATEMENT

Prince William Forest Park conserves and protects outstanding and significant natural, cultural, and historic resources and objects while providing for resource-based recreation that does not impair resource values.

The park provides outstanding opportunities for research and ecological study in a significant expanse of federally protected Piedmont and Coastal Plains forests.

Quantico Creek, which ultimately drains into Chesapeake Bay, is a high-quality aquatic resource that is used as a "reference stream" for scientific research.

The fall line between the Piedmont and Coastal Plains physiographic provinces, which bisects the park, provides outstanding opportunities for the in-depth study of geology.

The park is a haven for diverse wildlife, including such rare species as the star-nosed mole, the tiger beetle, and the Diana butterfly. The small whorled pogonia *(Isotria medeoloides),* a federally listed threatened plant, can also be found in the park.

Established as a Recreation Demonstration Area under the New Deal programs of President Franklin D. Roosevelt, the park preserves approximately 200 structures constructed by the Civilian Conservation Corps (CCC) that are listed on the National Register of Historic Places, together with their associated landscapes. During World War II the park was used for training by the U.S. Army Office of Strategic Services, the forerunner of the Central Intelligence Agency (CIA). In addition, the park preserves documented archeological sites dating from the Colonial period.

The park offers diverse recreational opportunities for inspiration, wildlife observation, and interaction with the natural environment. In the midst of a rapidly growing urban area, Prince William Forest Park offers an introductory wilderness experience.

APPENDIX E: SOILS

The park's soils have been categorized into five soil association areas, as described below.

Soil association area 1 makes up about 50% of the total park area.

This soil association area is located in the piedmont. It consists of deep, gently sloping to very steep slopes and is rated good to fair for urban uses. Approximately 20% of this association is subject to flooding. Some ridgetops have a thin mantel of coastal plain sediments.

Soil association area 2 makes up about 9% of the total park area.

This soil association area is located in the piedmont. It consists of gently sloping to very steep slopes and is rated good to fair for urban uses. About 22% is covered with a thin mantle of coastal plain sediments; 16% is subject to flooding; and 10% has thin subsoils.

Soil association area 3 makes up about 13% of the total park area.

This soil association area is located in the piedmont. It consists of gently sloping to very steep slopes and is rated fair to poor for urban uses. Ridges are capped with coastal plain sediments. The main limitations are slope, high content of shrink-swell clay, shallowness to bedrock, and moderate to slow permeability. About 34% is subject to flooding.

Soil association area 4 makes up about 18% of the total park area.

This soil association area is located in the coastal plain. It consists of gently sloping to steep slopes and is rated fair to poor for urban uses. It is characterized by thin ridges and slow permeability. The main limitations are clay subsoils, shrink-swell clays, slow permeability, and slope. About 37% is subject to flooding.

Soil association area 5 makes up about 10% of the total park area.

This soil association area consists of floodplain areas, colluvial areas, and stream terraces and is rated poor for urban uses. It contains areas of frequent flooding. The main limitations are flood hazard and wetness.

APPENDIX F: PARK VISITOR SURVEY

Visitor Services Project
Prince William Forest Park
Report Summary

This report describes the results of a visitor study at Prince William Forest Park during October 7–13, 1996. A total of 395 questionnaires were distributed to visitors. Visitors returned 337 questionnaires, for an 85% response rate.

This report profiles Prince William Forest visitors. A separate appendix contains visitors' comments about their visit. This report and the appendix include summaries of those comments.

Forty-six percent of the visitor groups were family groups. Forty-two percent of visitor groups were groups of two. Thirty-five percent of visitors were aged 36–55.

Forty-two percent of visitors were making their first visits to Prince William Forest. Sixty-nine percent of the visitor groups spent less than a day at the park, and 17% spent one or two days. Of those groups that spent less than a day at the park, 55% spent two or three hours.

United States visitors were from Virginia (57%), the District of Columbia (9%), Maryland (6%), Florida (5%), and 28 other states. There were not enough international visitors to provide reliable information.

On this visit, the most common activities were walking or hiking (69%), driving the scenic loop road (49%), and camping in developed campgrounds (32%).

The most used sources of information by visitor groups were from previous visits (49%), highway signs (27%), friends and relatives (22%), and camping guides or tour books (21%).

Forty percent of visitor groups indicated that recreation was a primary reason for visiting the northern Virginia area. Another 35% reported that visiting Prince William Forest Park was a primary reason for visiting the area.

The park features that received the highest proportion of "extremely important" or "very important" ratings were recreational opportunities (81%) and solitude (69%).

The most commonly visited sites in the park were trails other than the Farms to Forest Trail (46%), the visitor center (33%), Travel Trailer Village (21%), and the Pine Grove picnic area (20%).

In regard to the use, importance, and quality of services, it is important to note the number of visitor groups that responded to each question. The services that were most used by 228 respondents were the park brochure/map (72%) and park directional signs (56%). According to visitors, the most important services were self-guided trail signs (92% of 123 respondents) and garbage collection/ recycling (89% of 44 respondents). The highest quality services were information from park personnel (95% of 65 respondents) and the park brochure/map (92% of 157 respondents).

In regard to the use, importance, and quality of facilities, it is important to note the number of visitor groups that responded to each question. The facilities that were most used by 275 respondents were trails (68%) and restrooms (63%). According to visitors, the most important facilities were campgrounds (96% of 95 respondents) and trails (95% of 186 respondents). The highest quality facilities were campgrounds (95% of 92 respondents) and trails (88% of 180 respondents).

Thirty-nine percent of visitor groups spent no money on lodging, travel, food or "other" items such as souvenirs, film, and gifts in Prince William County, while 28% spent from $1 to $50. Of the total expenditures by groups, 40% was for lodging and 31% was for food.

Ninety-four percent of visitor groups rated the overall quality of visitor services at Prince William Forest as "very good" or "good." Less than one percent of groups rated services as "very poor."

For more information about the Visitor Services Project, contact the University of Idaho Cooperative Park Studies Unit; phone (208) 885-7129 or 885-7863.

APPENDIX G: FINDING OF NO SIGNIFICANT IMPACT

FINDING OF NO SIGNIFICANT IMPACT
PRINCE WILLIAM FOREST PARK
GENERAL MANAGEMENT PLAN

Proposed Action

The National Park Service (NPS) has prepared and made available for public review the General Management Plan, Environmental Assessment (GMP/EA) that documents the alternatives considered for managing the Park. Prince William Forest Park will undertake actions to improve visitor experiences and enhance general public use of park facilities. The Resources Management Plan has been developed to ensure long-term protection of significant resources, and land protection options would be initiated to protect the Quantico Creek watershed.

The GMP/EA considered various alternatives to determine the best management strategy to ensure long-term preservation of its significant resources and to provide for the future needs of the visiting public. This plan is needed to address issues related to resource protection, visitor use and education, public awareness of the park's identity as part of the National Park system, and park operations.

The Proposal and Alternatives Considered

The EA contains descriptions of the proposed action and alternatives.

Alternative A: The Plan (Proposed Action)

In summary, the proposal contained in the EA calls for the following major actions:

Under this alternative the National Park Service would undertake actions to improve visitor experiences and enhance general public use of park facilities at Prince William Forest Park while retaining and expanding existing facilities and current patterns of use. The "Resources Management Plan" has been developed to ensure long-term protection of significant resources, and land protection options would be initiated to protect the Quantico Creek watershed.

To address the Public Law 80-736, a memorandum of understanding (MOU) between the park superintendent and the commanding general at Quantico was signed in March of 1998. This document works toward a settlement of the land issues that will both fulfill the 1948 legislation at no cost to the government and solve longstanding boundary and jurisdictional confusion.

Alternative B: Continue Existing Management and Operations

Under alternative B there would be little change in present management of the park. Managers would continue to accommodate traditional recreational activities while preserving important natural and cultural features; the approved "Resources Management Plan" would provide direction in preservation efforts. Existing facilities would be modified to meet basic health and safety requirements. The land protection strategy would be to continue to work cooperatively with adjacent landowners and management authorities to ensure that the significant resources of Prince William Forest Park were not threatened. Under this alternative there would be no resolution to the 1948 legislation.

Alternative C: Consolidate Development, Restore the Core Park Area

This alternative would achieve many of the park's objectives by concentrating active use in an attractive natural setting near the park entrance and removing facilities and development-intensive activities from the core of the park. A forested area on Quantico Creek north of the Pine Grove, Telegraph Road, and cabin camp 3 developments would be designated as the main visitor use area in the park, and it would be linked with those developments to offer opportunities ranging from structured group picnicking and sheltered camping to casual play and nature study along stream banks. After the visitor use area was established, the loop road would be removed from the park interior, and this large area of mature piedmont forest would be restored to its natural condition, to be reached only on foot. To further meet the natural resource management objectives, the lands in the uppermost portion of the Quantico Creek watershed would be brought under National Park Service management through land exchanges under this alternative.

Summary of Environmental Consequences

The potential environmental consequences of the alternatives are in the Environmental Assessment.

The MOU works toward a settlement of this land issue that will both fulfill the 1948 legislation at no cost to the government and solve longstanding boundary and jurisdictional confusion. The MOU states that the National Park Service and U.S. Marine Corps will work together for legislation to divide the Special Use Permit (SUP) lands that were to go to Quantico in their entirety. The 1,700 acres that the park was intended to receive before transferring the lands would be carved out of the Chopawamsic lands themselves, from the land now under the SUP. The remaining acreage would be transferred to military jurisdiction, both requirements fulfilling the 1948 legislation. The two parties will establish a "green corridor" along the federally owned portion of State Route 619 to enhance its integrity as a scenic, two-lane, low speed roadway. Revisions will be made to the current Watershed Management Plan of Upper Quantico Creek and serve as the model for format and substance of the plan to be established for the Chopawamsic Creek Watershed Management Plan.

The visitor use strategy under the plan would reduce or eliminate impacts on the natural environment through more effective visitor dispersal and increased visitor awareness. The improvement of interpretive trails, including barrier free trails, in the Pine Grove/Telegraph Road area would entail the removal of some native vegetation, and increased use in this area could contribute to soil erosion and compaction and vegetation disturbance. The construction of a wayside and parking area at Carter's Pond would also involve the removal of a small amount of vegetation and wildlife habitat. Construction activities at proposed development sites would cause temporary increases in soil erosion and air and noise pollution. Surplus or unused facilities would be removed in some areas and their sites restored to natural conditions, thus reducing disturbances. Development in previously undisturbed areas would be kept to a minimum.

Rehabilitation and maintenance of park dams will preserve the park's primary wetland habitat. The periodic dredging of these facilities will ensure that sediment from storm water runoff does not impact the downstream freshwater habitats of Quantico and South Fork Quantico Creeks.

Cabin camp 3, a prime example of CCC work, has been adapted to serve as a camp for individual cabin rentals by the general public under park management. The option of a concession contract or historic leasing program which will accomplish rehabilitation and cost effective operation of this and other facilities will be explored. Similarly, some temporary modifications would probably be necessary to complete the renovation work on other structures. All work would be completed in compliance with law, policy, and *The Secretary of the Interior's Standards and Guidelines for Rehabilitating Historic Buildings*, and no alterations will be permitted that will substantially modify the historic fabric or require removal of significant architectural features. The historic character and ambiance of the sites would be maintained to the extent possible.

FINDING OF NO SIGNIFICANT IMPACT

After reviewing the comments on the General Management Plan/Environmental Assessment for Prince William Forest Park, the National Park Service adopts the preferred alternative. The implementation of the preferred alternative, as described, would not constitute major Federal action that would have significant impact on the quality of the human environment within the meaning of Section 102(2c) of the National Environmental Policy Act of 1969. Accordingly, the preparation of an environmental impact statement on the proposed action is not required.

Recommended: _____ Date: 1/28/99
Robert Hickman
Superintendent, Prince William Forest Park

Approved: _____ Date: 2/11/99
Terry R. Carlstrom
Regional Director, National Capital Region

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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 historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people 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 U.S. administration.

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