

PARK UNIT SHELVES


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CHESAPEAKE & OHIO CANAL

National Historical Park
Department of the Interior - Bureau of Land Management

General Plan

NATIONAL PARK SERVICE
WATER RESOURCES DIVISION
FORT COLLINS, COLORADO
RESOURCE ROOM PROPERTY



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National Historical Park

District of Columbia/Maryland

General Plan

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WATER RESOURCES DIVISION
FORT COLLINS, COLORADO
RESOURCE ROOM PROPERTY

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The photographs contained in this document are intended to reflect the variety of moods and uses of this park and were selected from the portfolio of Barbara Yeaman, Photographer, with one exception. The photograph of former Supreme Court Justice William O. Douglas, in the Historical Review section, was taken by Jack Rottier, National Park Service.



Introduction

Pursuant to Public Law 91-664, which established the Chesapeake and Ohio Canal National Historical Park in January 1971, the National Park Service began a new management era for this 184-mile historical resource. With a boundary expanded from 5,257 to 20,239 acres, a mandate to provide for the enjoyment of the park's resources in such a manner as to leave them unimpaired for future generations, and the advice of a 19-member citizen's advisory commission, the National Park Service set out to prepare a plan for the park. This general plan for managing the park is the result of a planning process which began when the advisory commission was established in December 1971, and is based on earlier studies.

It is not the purpose of this plan to spell out specific development proposals for the park. Rather it establishes an overall management philosophy which will be followed by more specific action plans.

This plan for the Chesapeake and Ohio Canal National Historical Park calls for the stabilization and partial restoration of the historic canal and its structures, the preservation of its charming natural setting, the interpretation of the rich array of historical and natural values found along the canal, and provisions for as much outdoor recreation as will not intrude upon or impair the resources which the park was established to protect. The initial task is to clarify the purpose of the park and establish management objectives for it.

The Purpose of the Park

In order to recognize the potential of the park resources, the purpose of the Chesapeake and Ohio Canal National Historical Park is to provide, in perpetuity, the opportunity for mankind

- ... to understand the canal's reason for being, its construction, its role in transportation, economic development and westward expansion, the way of life which evolved upon it, the history of the region through which it passes and to gain an insight into the era of canal building in the country.

- ... to appreciate the setting in which it lies and the natural and human history that can be studied along its way; and

- ... to enjoy the recreational use of the canal, the parklands and the adjacent Potomac River.

Management Objectives

The objectives for management of the park, which will be administered in the historical category of the National Park System, are:

- ... Preserve the atmosphere of past times and enduring natural beauty and safeguard historic remains and natural features.

... Impart to visitors an understanding and appreciation of an historic way of life blended into the natural setting of the Potomac Valley.

... Develop the potential of the park's recreation resources for safe yet stimulating enjoyment by the visitors within limits compatible with the other two management objectives.

It will be difficult to maintain the Park's atmosphere and other values while providing a minimum of recreation opportunities along the way. Although the lengthiness of the park will make possible a linear spreading of the park use, the very absence of any significant lateral dimension will ultimately make the canal and its already popular towpath trail a parkway filled with recreational travelers. Protecting for public enjoyment a historical park which will, more and more, become an outlet for urban seekers after outdoor recreation will be the difficult task facing the National Park Service in its stewardship of this limited resource.

The urban need for manmade playgrounds which provide structured recreational facilities can not be met by the Chesapeake and Ohio Canal National Historical Park. Instead, the role of this park is to provide its visitors with a natural and historic environment in which to enjoy such pursuits as hiking, biking, canoeing, camping, horseback riding, fishing, and boating.



The Resources of the Park

Historical Review

The Chesapeake and Ohio Canal, stretching for 184.5 miles along the Potomac River from the District of Columbia to Cumberland, Maryland, is the finest relic of America's canal-building era. Although abandoned as a vehicle for commercial transportation in 1924 and now mostly dry, derelict and ruinous, it is almost entirely intact, both in route and structure. Time and nature have lent mellowness, tranquillity and romance to this once bustling avenue of transport, enhancing its charm and the fascination of its rich history.

The C&O Canal was built to be a thoroughfare to the future. As Thomas Jefferson once noted to George Washington, the Potomac Valley route westward "offers into our lap the whole commerce of the western world." Today it is a way straight and deep into history. Along the Potomac River, it is a way also out of the hurly-burly of our crowded urban surroundings into that age-old dimension of human happiness—the natural world. As such, it is a precious resource for the American people, so many of whom either live near it or can enjoy it when they visit their National Capital nearby.

The canal was ceremoniously begun in 1828 to follow a route partly canalized previously through George Washington's vision of a vital route west to help unify the young country. (No doubt it influenced his choice of a Capital City site.) The canal reached Cumberland in 1850 after many legal, financial, and human tribulations. By then the railroad, against which it struggled for rights-of-way and transportation supremacy, had won the race west, and plans to take the canal route on to the Ohio Basin were abandoned.

Nevertheless, this useful and impressive transportation structure along the Potomac served until 1924 when at last it succumbed to floods and financial failures. Even today the engineering feat it represents is awesome. Its 11 aqueducts, 74 lift locks, 3,000-foot bricklined tunnel and other structures are magnificent examples of early engineering and construction in an era when no effort was too great to provide the only efficient means then known of transporting heavy, bulky cargoes across the land.

Beyond the historical significance of the canal itself, there is the evidence of man's use of these lands, spanning a period from prehistoric hunters and gatherers to the interstate highway builders of our time. And beyond all that are the natural histories: the migrations of birds and plants, the story of the water and the rocks, the life communities.

The C&O Canal is an access corridor opening upon the Potomac River and all its recreational attractions—a green oasis protective of the river's Maryland shore. The 20,239-acre canal park serves as a first step to safeguard the Potomac Riverscape as a significant natural preserve in our mid-Atlantic and National Capital landscape and as a recreational resource in this fast-growing region.

The property, originally a nucleus of 5,257 acres, first became a Federal entity when the United States Government purchased it in 1938 from the receivers of the defunct C&O Canal Company and placed it in the custody of the National Park Service. The lower 23 miles of the

canal were administered as part of the National Capital Parks system, and the 20-mile stretch from Georgetown to Violet's Lock was restored and rewatered by the Civilian Conservation Corps during 1938, 39, and 40.

The Chesapeake and Ohio National Historical Park Act, approved January 8, 1971, culminated 14 years of effort to preserve, restore and develop this remarkable Federal property, and retired Supreme Court Justice William O. Douglas deserves much of the credit for making this a reality.

It has been said that this is the first National Park ever walked into existence. By the Act of June 10, 1948, Congress ordered a joint survey and report by the National Park Service and the Bureau of Public Roads on the feasibility of the canal as a route for a vehicular parkway. In reaction to the joint study, reported upon August 16, 1950, conservationists led by Justice Douglas hiked the length of the canal in 1954 to point out to the press its historic and natural values as a place to walk and get away from roads and vehicles.

In a letter urging editors of a local newspaper which had supported the Parkway concept to accompany him on this walk, Justice Douglas described this natural sanctuary "... not yet marred by the roar of wheels and the sound of horns. . . . The stretch of 185 miles of country from Washington to Cumberland, Maryland, is one of the most fascinating and picturesque in the Nation. . . ."

On the last evening of the historic hike which took place during late March of 1954, Justice Douglas organized a committee to draft plans and make recommendations for land use for an expanded canal park. This ad hoc committee evolved into the C&O Canal Association in 1957, and canal clubs supporting park legislation formed along the upper river section of the canal. Under the leadership of Justice Douglas these and other organizations became an effective voice for a natural and historical national park.

Justice Douglas and other conservationists made their point; the parkway proposal was dropped and instead a plan was formulated to create a park enlarging upon the meager C&O Canal lands already owned, restoring and stabilizing canal structures, preserving and interpreting its historic and natural features, and providing other park facilities.

National Historical Park bills were considered in every Congress from 1957 until the 1971 enactment. President Eisenhower, in 1961, proclaimed the portion of the canal from near Seneca to Cumberland as a national monument, thus giving the entire canal official status as part of the National Park System. The national monument designation could not, of course, provide the additional lands so critically needed for park protection and development.

In 1967 and again in 1968, bills to establish a Potomac National River, as recommended by the report of the Interdepartmental Task Force on the Potomac, included the C&O Canal as an integral part of the national river, and recommended top priority for protecting its historic features. In 1969 the Secretary of the Interior decided to recommend a separate C&O Canal National Historical Park as the first step in the broader conservation of the Potomac Valley. This effort resulted in P.L. 91-664, which expanded the park boundaries to encompass 20,239 acres. This boundary includes the original 5,257 acres of canal lands as well as portions of the Potomac Palisades Parkway in the District of Columbia, the George Washington Memorial Parkway in Montgomery County, Maryland and Harpers Ferry National Historical Park in Maryland. This law was enacted in January of 1971. A chronological and legislative history has been placed in Appendix A.



The Natural Resources

Approximately 85 percent of the parklands lie within the 50-year flood plain (the level to which the river can be expected to rise once in every 50 years) of the Potomac River. Encompassing 191 miles of the Potomac River shoreline between Washington, D.C., and Cumberland, Maryland, the park cuts through a variety of landscapes. These landscapes provide a cross section of the geological processes and features common to the Eastern United States. The park begins in the soft, easily eroded rocks of the Atlantic Coastal Plain. In less than a mile, the Coastal Plain is left behind, and the park begins a 60-mile journey through the Piedmont Plateau. The first few miles are characterized by the falls and rapids of the "Potomac Palisades." Above Great Falls, the Piedmont Plateau is a rolling, hilly upland underlain by hard rocks. At the Harpers Ferry water gap, the Great Valley begins. The park follows the sweeping bends of the Potomac through the Great Valley to Hancock, Maryland. Above Hancock, the canal cuts through the folded ridges of the Appalachian Mountains to Cumberland, Maryland.

As it cuts through this varied topography, the park encompasses several types of natural environments. The flood plain is by far the most common, but upland and swamp environments occur in certain areas.

The plant life occupying the flood plain is that of a second or third growth eastern bottomland forest. The dominant tree species are sycamore, elms, silver maple, box elder, and green ash. Less common are birch, oaks, cottonwood, yellow poplar, locust, hickory, walnut, beech, cedar, and pine; although these may dominate in certain areas due to climatic or soil conditions. Common understory trees and shrubs include paw paw, dogwood, sumac, hornbeam, mountain laurel, spicebush, redbud, and osage orange. Several introduced species of trees such as ailanthus and pawlonia have become naturalized and are abundant in some localities.

Nearly 2,000 species of flowering plants and ferns are found in the park, including both native and introduced species. This great diversity is due to the differences in topography and soil conditions.

The variety in both topography and vegetation lends itself to a rich and equally varied wildlife population. Most commonly seen are the small mammals such as gray and fox squirrel, opossum, and cottontail rabbit. Skunk, raccoon, muskrat, mink, and groundhog are frequently observed. Larger mammals like the white-tailed deer and red fox are also present. The great variety of habitats coupled with the proximity of the eastern flyway makes the park a haven for both permanent and migratory bird populations. Permanent residents include wild turkey, turkey vulture, hawk, mourning dove, blackbird, woodpecker, robin, cardinal, quail, grouse, jay, wren, chickadee, and titmice. Migratory species include mallard, coot, wood duck, gull, finch, junco, heron, cat bird and vireo, to name but a few. The migratory birds such as the puddle ducks and warblers are especially abundant from Whites Ferry to Great Falls in Montgomery County and in the Brunswick area. Equally rich is the park's population of insects, fish, reptiles and amphibians.

Overall, the park contains a varied topography with equally varied plant and wildlife populations. Man's influence in the area has been pronounced but not disastrous. Gone is the original forest and the large mammals which once inhabited it. These changes, however, have encouraged the spread of animals and plants which adapted to live in the newly created environment. Herbivores have increased and with them have come added numbers of omnivores and carnivores. The increased number of plant species has given rise to increasing numbers of plant feeding insects, which in turn have given rise to a proportional increase in insect eating birds.



The Cultural Resources

The primary resource of the park is the physical remains of the Chesapeake and Ohio Canal: its bed, towpath, aqueducts, dams, culverts, locks, lockhouses and other associated structures or their ruins. The Paw Paw Tunnel and the Monocacy and Licking Creek Aqueducts are particularly impressive remains and striking testimony to the skill of canal engineers and craftsmen who constructed this 184-mile transportation system.

Since the canal ceased operation in 1924, little stabilization of the structures has taken place. During this period, when most of the canal has been dry, the structures have been subjected to freezing and thawing action, and four major floods have occurred. The canal was rewatered for 22 miles, from Violets Lock, to Georgetown in the 1940's; and extensive work was completed on the towpath and miscellaneous minor structures from Seneca to Cumberland in the late 1950's. These two major efforts produced a continuous towpath which had not existed since the flood of 1936.

Other major work on the canal structures includes the rebuilding of Dam 4 in 1936 by the Potomac Edison Company, the restoration of the Paw Paw Tunnel, the stabilization of Antietam Aqueduct in 1962, and the emergency stabilization of the Seneca Aqueduct in 1972.

The flood of 1972, generated by tropical storm Agnes, caused extensive damage from Hancock to Georgetown. The major destruction occurred in the 22-mile rewatered section and the 1-mile section below Dam 3 across from Harpers Ferry.

The numerous breaks in the towpath prism, erosion of the clay liner in the canal bed, and damage to the numerous historic structures have presented an enormous reconstruction project. The present objective is to return the canal to its pre-Agnes condition. In 1975 the cost of this undertaking was estimated at \$45 million. These monies will not restore the canal or its structures to their original appearance or operating condition.

Assuming that the recent flood damage is repaired to its pre-Agnes condition, the following is a general description of the historic structures on the canal.

Of the 11 aqueducts along the canal, 8 are currently stabilized, and the remaining 3 will be programmed for stabilization as soon as further study determines the extent of the necessary work.

Antietam Creek Aqueduct was stabilized 14 years ago and is in good condition.

Seneca Aqueduct is now stabilized. The western arch is temporarily buttressed with steel. This has prevented collapse of the remaining two arches but is a temporary solution pending availability of funds.

An interim stabilization program for Catoctin, Evitts Creek, Fifteen Mile Creek, Monocacy River, Sideling Hill and Tonoloway Aqueducts has been completed. Further studies will determine whether these aqueducts will remain as stabilized structures or whether they will be restored.

Conococheague, Licking Creek and Town Creek Aqueducts will be stabilized or restored as funds become available.



Of the 187 original culverts and square drains on the canal, 174 are still in place. The other eight were removed during the time the canal was in operation. Many of the remaining culverts need immediate attention to prevent failure from undermined foundations, cracked arches, and breaches in the inner part of the arches. The head and wing walls also need immediate repairs and stabilization. Over half of the culverts are badly silted or plugged and are potential hazards to the berm bank of the canal. This hazard will occur at times of local flooding when, because the culverts are obstructed, necessary water run-off will be impossible.

Of the 50 locks above Seneca, 12 appear to be near the point of collapse. These include five rubble locks near the Paw Paw Tunnel, formerly faced with timbers that have now rotted out.

In other locks the lack of water in the canal has caused the timber footings to dry out and rot. This, coupled with frost action, has caused the walls of the locks to tilt toward the chambers. Of the 12 nearing collapse, the walls have moved inward 10 to 14 inches at the top.

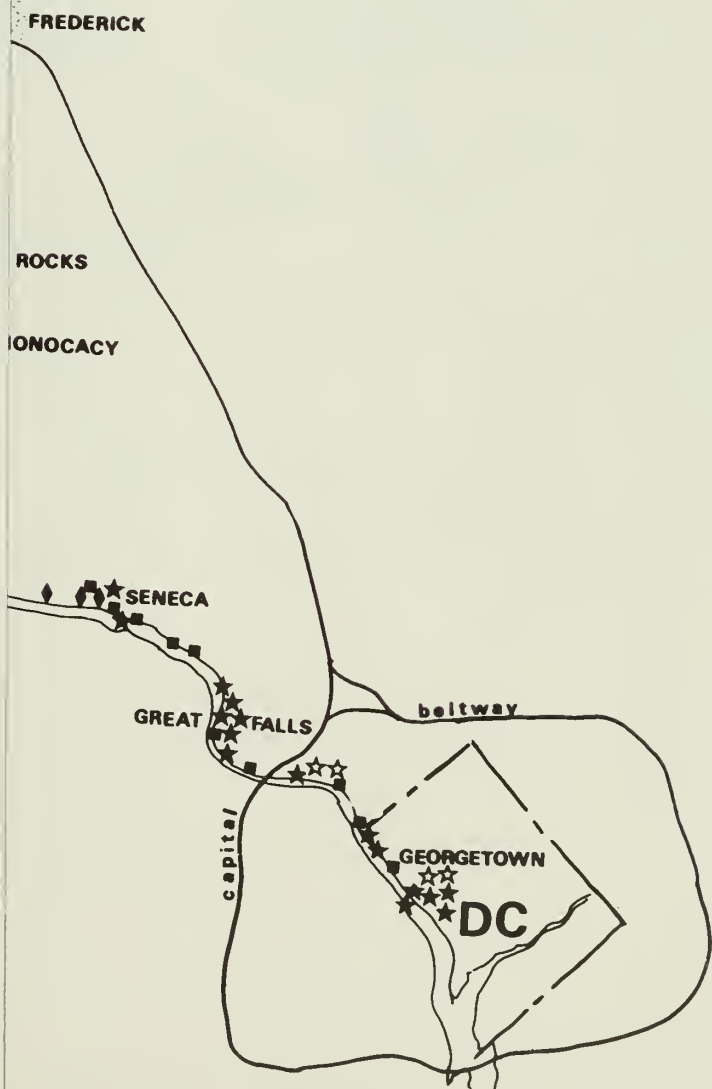
In addition, all of the other locks above Seneca show movement of up to 8 inches. The lock at Harpers Ferry has been buffeted by numerous high water stages, and the embankment has washed out, exposing the unprotected backing and the towpath wall.

The tunnel at Paw Paw has been restored to good condition, but the deep cut approach on the north end is in bad condition. Large slides have occurred and more can be expected. A slide of about 15,000 cubic yards of shale in late 1968 all but blocked the north portal, carrying away part of the facade.

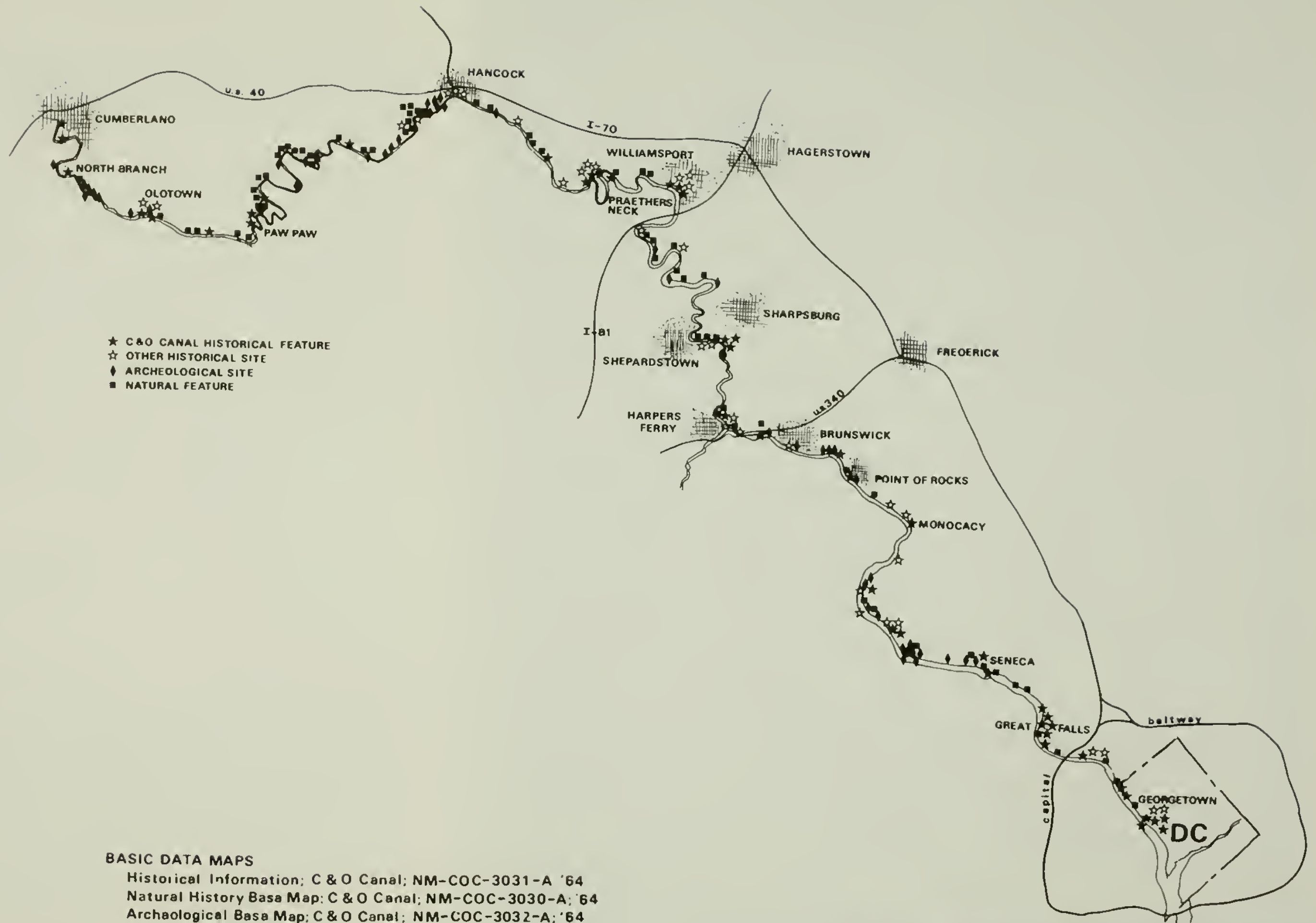
At Point of Rocks and Catoctin Tunnels, the Baltimore & Ohio Railroad has encroached on the canal. Although the railroad has the right of easement at these points and can utilize portions of the canal as needed, considerable clearing and revetting is necessary.

Of the 56 original lock tender houses, 19 are in ruin and 11 are missing entirely. The 26 remaining lockhouses, which are either wood frame, brick or masonry structures, are now in various states of disrepair and need immediate attention. Various mills, bridges, residential structures, historic remains, foundations and many known archeological sites also exist within the park boundaries.

Numerous historic studies have been made by National Park Service historians, private individuals and universities. Further, most of the official records of the Canal Company have been retained in the U.S. Archives. All these will be valuable tools to historians of the future who will be addressing themselves to approximately 550 historic structures and sites.



THE RESOURCES



THE RESOURCES

Existing Park Development and Use

Within the existing 7,080 acres of the park, 60 areas have been developed by the Park Service since 1938. The major visitor use facility is the 184-mile towpath. Consequently, a variety of facilities has been provided which are mainly oriented to the towpath user. Due to the previous narrow boundaries of the park, most facilities were located quite close to the canal. In some cases they intruded on the historic scene.

Access to the canal has been restricted due to private ownership of lands at the ends of access roads. This lack of access has caused overcrowding at some of the developed areas. Through careful development of the newly acquired lands and strong management policies, visitors can be dispersed along the canal to relieve the overuse which now occurs.

Thirty-one of the 60 developed areas are called "Hiker-Biker Overnights." These extend from Seneca to Evitts Creek and provide overnight tent sites for towpath users. Some accommodate as many as 30 tents while others contain three to five sites, for a total of 114 tent sites. Although some of these sites are full during heavy visitation on spring and fall weekends, the full capacity of all the camping facilities in the park is seldom reached. These sites contain pit toilets, water from hand pumps, and fireplaces. Some of these areas are also utilized by Potomac River canoeists.

The other 29 developed areas contain picnic sites, campgrounds, rental facilities, boat ramps, access to fishing and swimming areas on the Potomac River, and parking areas for towpath users. A summary of these facilities is listed below:

| | |
|---|-------|
| Parking spaces for towpath users | 1,400 |
| Picnic tables including parking | 600 |
| Drive-in campsites (parking slip, table, grill) | 65 |
| Walk-in campsites (parking lots, picnic table, grill) | 75 |
| | <hr/> |
| Total Parking Spaces | 2,140 |

Other Facilities

Interpretive Center - Great Falls Tavern

Interpretive Facility - Dam 4 (seasonal)

Rental Facilities in or adjacent to park

Bike and Canoe 4

Bike Only 3

Boat Ramps

NPS constructed 10

Private - Ten to be acquired and retained

Youth Hostel - One private to be acquired and retained

Due to the nature of visitor use along the canal, reliable estimates of park visitors are difficult to obtain. Although accurate counting methods for some areas such as Great Falls have been developed (750,000 visitors per year), visitation for most of the 60 developed areas has been estimated. From these estimates and counts, a total of approximately 2,000,000 users per year can be assumed for discussion purposes.

Although the canal is used all year, approximately 85 percent of the visitation occurs between April and October. At least 75 percent are repeat visitors who frequent the towpath on weekends, or even daily, in the more urban areas.

Park visitors can be divided according to activities. There are basically four types of users.



1. Tourists - These visitors are interested in seeing the canal as it was during its operation. They are often tourists, canal buffs, or historians. Certainly many are just curious about how the canal looked and functioned. Their visits are usually short-term and confined to the more spectacular historic areas. Currently, this is the smallest user group.

2. Short-Term Towpath Users - The short-term towpath users enter the park to walk, hike, bike, jog, canoe, ride horseback, or to study nature and history. They are day users who may spend 15 minutes or all day in the park. Most use it frequently and many are residents of the communities adjacent to the area of the park which they are using. Some are seeking a remote experience, while others feel more comfortable with a higher density of visitors around them. This is an extremely diverse group which presently makes up the major portion of the canal visitors.

3. Long-Term Towpath Users - These visitors are the long-term towpath users who are hiking, biking, or horseback riding. They spend at least one night in the park and often travel the entire 184 miles. The largest single user group consists of the Boy Scouts who belong to the five councils in the region surrounding the park. Approximately 90,000 boys and leaders have traveled over 2,000,000 miles on the towpath. Normally, traveling in groups of ten to twenty, they hike a section at a time to earn the C&O Canal Historical Trail Patch.

4. Non-Towpath Users - This park visitor is attracted by the parklands and the adjacent Potomac River. The picnicker and the park and walk camper, who are usually short-term towpath users as well, are included in this group. Mainly river oriented, the majority of this type of user includes the canoeist, motor boatist, fisherman, and ice skater. The parklands currently utilized by this group are minimal in that adequate facilities are minimal. However, traditional bank fishing and the use of boat ramps do provide some visitor activity. Concern over the conflict between river and towpath users has precipitated the Potomac River Report, with the State of Maryland, mentioned elsewhere in this plan.

Thus, with this understanding of the visitors, this plan provides a careful blend of facilities which will ensure a variety of quality experiences within the limits of the park's resources.

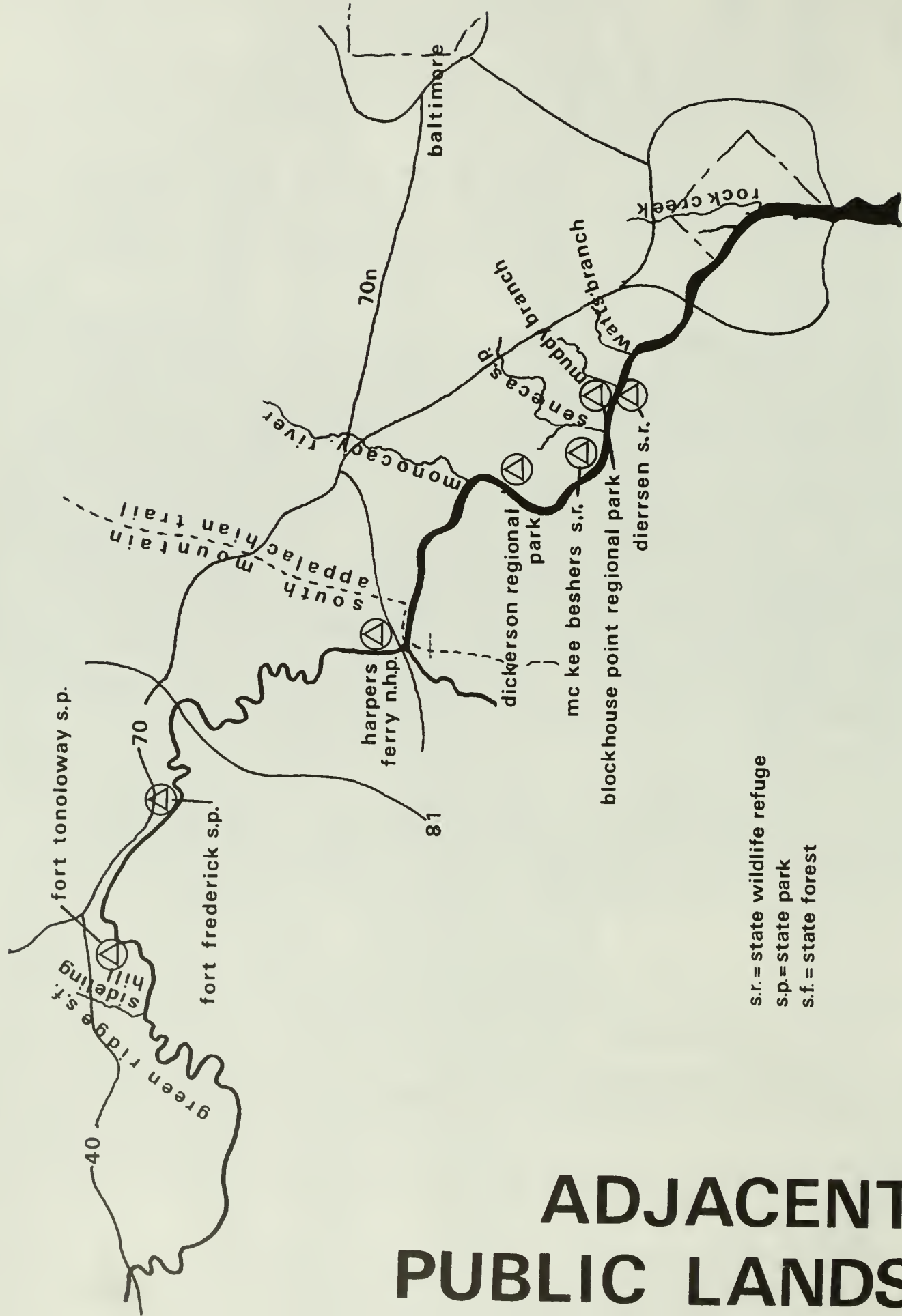
Land Acquisition Program

The ongoing land acquisition program, which is further described in an environmental assessment, is based on the concepts expressed in the land use plan. Under this program, the National Park Service is purchasing appropriate interests in lands to satisfy the anticipated needs of the park and its future visitors. Numerous land acquisition tools, such as scenic easements and long-term retention rights, are being utilized. It is hoped these methods will provide compatibility between the desires of existing landowners and the management needs of the park.

Scenic easements are being acquired on approximately 1,555 acres. The terms of these easements do not hold development to the status quo, but rather allow residential development restricting lot size, size of structure, slope of development site, etc. Public use of these lands will not be permitted.

The majority of the 8,228 acres in the fee acquisition program is on undeveloped flood plain which contains a mix of agricultural, woodland and a small amount of residential land. All the lands between the canal and the shoreline of the Potomac River fall in the fee acquisition area.

In P.L. 91-664 (See Appendix B), certain lands within the boundaries of the park were set aside for acquisition by the State of Maryland. Since that time, this proposal has been



s.r. = state wildlife refuge
s.p. = state park
s.f. = state forest

ADJACENT PUBLIC LANDS

modified as provided for in the act. The State is now acquiring 1,924 acres in fee to complement Green Ridge State Forest and Seneca and Fort Frederick State Parks.

The following is a breakdown of ownership which will exist when the land acquisition program is complete. The Federal portion should be completed by mid-1976.

National Park Service

| | | |
|--------------------------------|-------|--------------|
| Ownership prior to P.L. 91-664 | 7,080 | |
| Fee acquisition | 8,228 | |
| Scenic easement acquisition | 1,555 | |
| | | <hr/> 16,863 |

State of Maryland

| | | |
|--------------------------------|-------|-------------|
| Ownership prior to P.L. 91-664 | 936 | |
| Acquisition program | 1,924 | |
| | | <hr/> 2,860 |

Maryland National Capital Park & Planning Commission

| | | |
|--------------------------------|-----|-----------|
| Ownership prior to P.L. 91-664 | 351 | |
| Acquisition program | 106 | |
| | | <hr/> 457 |

| | | |
|--|----|----------|
| Other existing public lands prior to P.L. 91-664 | 59 | |
| | | <hr/> 59 |

| | | |
|---|--------|--|
| Total acreage within C&O Canal National Historical Park | 20,239 | |
|---|--------|--|

Relationship of the Park to Other Governmental Programs

Federal, State and Local Recreational Opportunities

A wealth of public lands provides recreational opportunities in the Potomac Valley, ranging from hunting and wilderness experiences in the 28,000-acre Green Ridge State Forest to wildlife management areas such as the 3,126-acre Sideling Hill State Wildlife Management Area and the Dierrsen and McKee-Beshers areas. Opportunities for warm water fishing exist at Dickerson Regional Park, and history is the theme at Fort Frederick and Fort TonoLoway State Parks. Scenery and solitude can be enjoyed at Blockhouse Point Regional Park and the Maryland portion of Harpers Ferry National Historical Park.

Two stream valley parks, Watts Branch and Muddy Branch, are being protected by the Maryland National Capital Park and Planning Commission. Rock Creek and Foundry Branch Parks are managed by the National Park Service. Seneca State Park, which is currently being acquired by the State of Maryland, will protect the flood plain of the Seneca Creek water shed from the encroachment of Montgomery County suburban sprawl. All five of these stream valley parks will contain tributary trail systems which will connect with the canal towpath. Frederick County should consider a similar proposal for the Monocacy River.

The State of Maryland has acquired interests on South Mountain, from the Pennsylvania line to the Potomac River, to protect the Appalachian Trail which follows along the ridgeline. The

State is utilizing acquisition and county zoning to retain the quality of this mountain. The recreational use of the lands is being restricted to the Appalachian Trail and other limited State park facilities.

The cities of Washington, Brunswick, Williamsport, and Cumberland, as well as Montgomery and Fairfax Counties, have their own park systems. These urban parks serve the playground, amusement, and picnicking needs of the local public. As is true of most urban parks, the facilities are normally overcrowded and their managers are constantly seeking ways to reduce this impact through new parklands and development of existing holdings. In this context, the Chesapeake and Ohio Canal National Historical Park is not seen as serving the need for these intensive, structured recreational playgrounds or other manmade facilities.

The proposed 875 mile Potomac Heritage Trail, which is currently being considered by Congress, would extend from Smith Point to Harpers Ferry along the Virginia shore and from Point Lookout through the District of Columbia to Cumberland along the Maryland shore. It would also extend to the Youghiogheny Reservoir in Pennsylvania and along the south branch of the Potomac in West Virginia to Spruce Knob. Along the Maryland shore, this hiking trail would incorporate the entire length of the C&O Canal towpath.

The Potomac River provides opportunities for boating, fishing, and swimming. This river is owned and managed by the State of Maryland within that State. The Potomac River shoreline has been under study by the Department of the Interior for a decade. The proposed Potomac National River would place all of the shoreline and the islands in Federal ownership. This would not affect the State of Maryland's management of the river waters. Presumably, the C&O Canal National Historical Park would fall within the boundaries of the Potomac National River if the proposal is implemented. The State of Maryland has and will continue to acquire islands in the Potomac. This acquisition program is endorsed by the National Park Service.

The private sector and State parks are beginning to provide trailer camping facilities throughout the valley, and it is anticipated that they will accommodate the demand for these facilities. Thus, the existing drive-in campgrounds will be phased out when private enterprise meets the demand, and no new sophisticated campgrounds will be constructed within the park.

State and County Land Use Planning

Montgomery County has zoned the area bordering the park as low density residential with a 2-acre-per-residence requirement. Montgomery County has zoned the area from Muddy Branch to the county line at the Monacacy River as 5-acre residential. Washington and Frederick Counties have enacted zoning regulations which place most lands adjacent to the park in a "conservation" zone. This zone permits single family houses on a minimum of 3-acre lots. None of the counties permits construction of structures or septic fields in the flood plain. The Park Service welcomes this zoning and will maintain vigilance to assure compliance. The Park Service encourages Allegany County to develop zoning of similar quality. This kind of environmental protection for the park will result in a green sheath along 191 miles of Maryland's Potomac River.

Much of the land within the canal boundary is agricultural and this use will be continued by retained ownership rights. These scenic agricultural areas also aid the local economy. Many adjacent lands are also in agriculture, and steps should be taken to protect these farms from potential subdivision for housing.

Careful coordination and planning will be required between county and Park Service officials to avoid possible conflicts and to guard against overloading existing county roads and utilities.

Consideration will be given to alternatives for funding road improvements which would assist the local jurisdictions in improving access to the park. This would be done in the context of the desired mood of a particular section of the park. For instance, a narrow gravel country road may be more appealing than a more sophisticated surfacing in some locations.

Three road proposals may have an impact on parklands. One is the proposed outer beltway which (as presently proposed) would cross the canal near Seneca. It would not have an interchange with River Road in the Seneca area and thus, probably would not produce a significant change in visitor use patterns. The ongoing suburban sprawl and potential overuse of Seneca State Park are apparently more of a threat than the proposed road. Careful attention will be given to the environmental impact of this road, if and when a final alignment is selected.

The airport connector road in Cumberland will pass close to the canal. It is presently in the design stage and the Park Service is participating in an effort to minimize the potential visual, noise, and water pollution impact on the park. It is believed that a carefully selected right-of-way and adequate planting can produce a viable solution to lessen the impact.

Route 51 from Cumberland to North Branch is currently under study for improvement to four lanes. This will provide better access to the North Branch Area, making it a viable visitor destination area. The concern is over the possible extension of this road to Spring Gap, which would run directly adjacent to the canal and encroach upon the mood of the park.

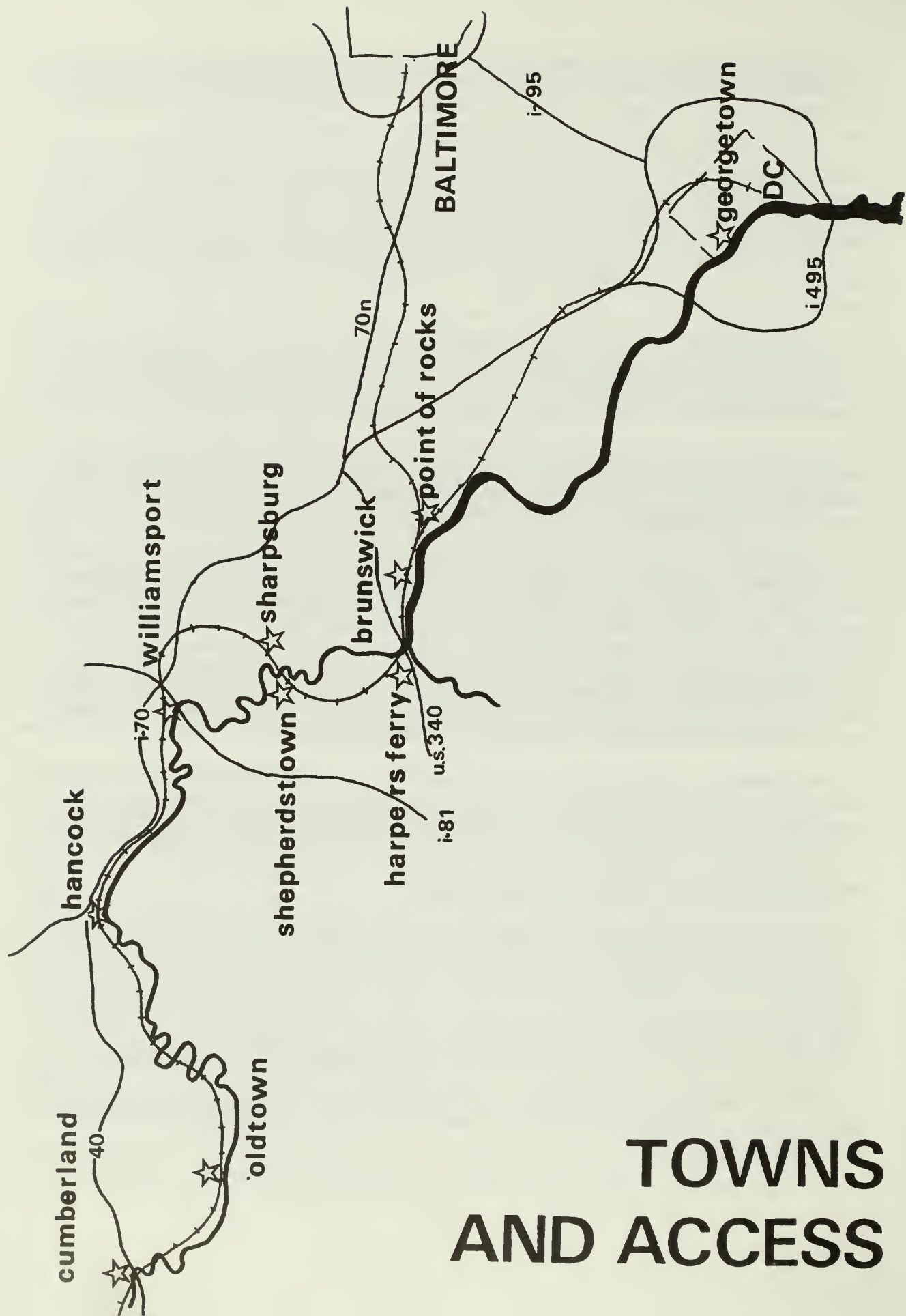
By legislation, (PL 184-83 see Appendix C) the Park Service must permit access to the Potomac River for utilitarian purposes. The Park Service works with the officials proposing the action to determine which alternatives have the least impact on park values. These proposals are currently being coordinated. A water intake facility is proposed by the Washington Suburban Sanitary Commission at its current facility at Watkins Island. The Potomac Electric Power Company proposes to quadruple its plant at Dickerson. Montgomery County is considering an advanced waste water treatment plant. The effluent line from this plant will have to cross canal lands. A nuclear power plant in the vicinity of Point of Rocks and numerous power and gas line proposals are also being considered.

To keep abreast of current programs, the National Park Service maintains liaison with county and utility officials and the C&O Canal National Historical Park Advisory Commissioners, who represent the various jurisdictions. It is through this continuing dialogue that park values will be considered in the initial planning stages of State, county, and municipal programs.

Potential Complementary Visitor Access and Services

The park is crossed by the Capital Beltway and, near Williamsport, Maryland, by Interstate 81. Four U.S. and four Maryland highways also cross it, and some 40 county roads provide access to the canal at fairly regular intervals. Many of these are narrow and tortuous and some are unpaved. Two primary highways lie immediately adjacent to the canal; the George Washington Memorial Parkway (and MacArthur Boulevard) from the District of Columbia to near Great Falls, Maryland; Maryland 51 from North Branch to Paw Paw. Elsewhere, Maryland 51 and 478, Interstate 70 and U.S. 340 run close to the canal but are separated from it by railroads.

This lack of developed access results from natural phenomena. Steep topography and flood plain conditions precluded development of towns or industries and the roads that would have accompanied them.



TOWNS AND ACCESS

Eight towns close to the canal have the potential of developing their own historic resources. They have good road and rail systems which could provide access and services for visitors and canal users.

If appropriate historic restoration is undertaken and visitor services are provided, these eight towns could develop a historic trail through the Potomac Valley which would be complemented by the C&O Canal historic restoration and interpretation. The use of railroad access as well as the existing road system could tie the historic trail concept together. Thus, the towns could become train stops along the way; and areas which would be taken up by parking lots could be placed in other use. Railroad use could also become a means of access to the canal at various locations. This use of mass transit to the Potomac Valley and parks could lessen the long-term energy demands of recreationists. Those who wish to hike, canoe, or bicycle from one location to another could utilize the railroad for the return trip to their automobiles. A study is recommended to explore the potential of this historic trail concept.

This suggested cooperative venture does not seek to overload the canal with visitors. Rather, it recognizes that the towns can become attractions in themselves with the canal a part of the scene. Thus, with this potential for development of visitor facilities along the canal, the need for sophisticated facilities within the park might be substantially reduced. It is on this basis that development within the park, other than hiker oriented overnight campgrounds, will be oriented to short-term day use.



The General Plan

The Land Use Plan

In analyzing the park's role in the National Park System, as well as the Potomac River Valley, it becomes apparent that there is a wide variety of visitors who can be expected to visit the park. The analysis of the visitation patterns indicates that the national visitor or tourist, the short-term recreationist, the long-term towpath user, and the users of the Potomac River, all place demands on the park. When we combine these visitor uses with the analysis of the cultural and natural resources, the available land areas within the park boundaries, the access to these land areas, the adjacent land use patterns as declared by local zoning or inherent uses, and the facilities available outside the park in adjacent communities, it can be seen that the park lends itself to sectional delineation for the various user groups.

The land use plan is a result of this analysis and is the method which will ensure that a variety of visitor experiences will be provided along this 184-mile park. It will be managed in the form of a zoning system. The zoning system contains five zones which range from complete restoration, with high density visitor activity, to remote natural areas with a very low density of visitor use. The five zones have been devised to recognize the values which various sections of the park contain. In applying these five zones to the park, the plan designates 32 sections as shown below.

Zone A – National Interpretive Center Zone

This zone defines areas containing major historic restoration opportunities where the park visitor will be able to see a functioning canal in a historic setting. The areas were also selected for accessibility, availability of parklands for development of visitor facilities, and the compatibility of the surrounding environment outside the park. These interpretive centers are expected to support the largest density of visitor use. Most of that use is considered to be short-term (1 to 2 hours). The concept of development of these areas is that of an outdoor living museum. Historical accuracy is imperative in these re-creations of historic scenes. Where appropriate, people in period costume will serve as interpreters of these museums in an effort to convey the construction, maintenance, function, purpose, shortcomings, commerce, and way of life on the Chesapeake and Ohio Canal.

Each of the selected areas represents a different setting and, therefore, would have a different theme. The proposed areas are:

| | <u>Length (miles)</u> |
|---|---------------------------|
| Georgetown - urban | 1.1 |
| Great Falls - rural with tavern and 6 locks | 4.2 |
| Seneca - industrial stone quarrying and Seneca Aqueduct | 1.6 |
| Williamsport - a canal town | 1.6 |
| Four Locks - four locks cutting across Praetners Neck | .7 |
| North Branch - the last three locks | <u>1.2</u> |
| Total Zone A | 10.4 |

Zone B – Cultural Interpretive Zone

This zone identifies sections of the park containing historic resources but the higher density of Zone A is deemed to be incompatible with the desired mood of the area. In most cases, the historic resources are not as accessible by road as those in the Zone A category. Further, most of these areas do not have adequate parkland around them upon which to construct adequate visitation facilities for a Zone A designation. The historic resources are often spread along the canal, producing a longer-term visitation than in Zone A. This is estimated at 1 to 3 hours.

These areas will not necessarily be completely restored, as the objective here is to introduce the visitor to towpath use with a lesser degree of historic interpretation. Rewatering of portions of all these sections is proposed. The extent of rewatering will be the subject of future engineering feasibility studies.

| | <u>Length (miles)</u> |
|---------------------------------------|---------------------------|
| Lock 8 to Anglers Inn | 4.0 |
| Whites Ferry | 1.5 |
| Lock 27 to Nolands Ferry | 3.1 |
| Brunswick | 1.0 |
| Harpers Ferry | 2.1 |
| Antietam Creek to Rumsey Bridge | 3.5 |
| Hancock | 2.0 |
| Paw Paw Tunnel, Lock 62 to Md. rt. 51 | 2.2 |
| Old Town | 3.0 |
| The terminus | 1.0 |
| Total Zone B | <hr/> 23.4 |

Zone C – Short-Term Recreation Zone

These sections are designated to serve the general towpath user seeking a leisurely stroll of 2 to 6 hours in a natural setting. These areas are limited in historic resources and available land for visitor facilities. The sections are short and often are links between two zones of higher density where cross traffic is considered desirable. The objective here is to ensure a leisurely recreational experience in a natural setting.

| | <u>Length (miles)</u> |
|--|---------------------------|
| Alexandria Aqueduct to Lock 8 | 7.2 |
| Swains Lock to Violets Lock | 5.6 |
| Whites Ferry Granary to Lock 27 | 6.0 |
| Hagerstown Filtration Plant to Lock 47 | 7.7 |
| Level 50 Waste Weir to Big Pool | 4.7 |
| Lock 75 to the Terminus | 7.9 |
| Total Zone C | <hr/> 39.1 |

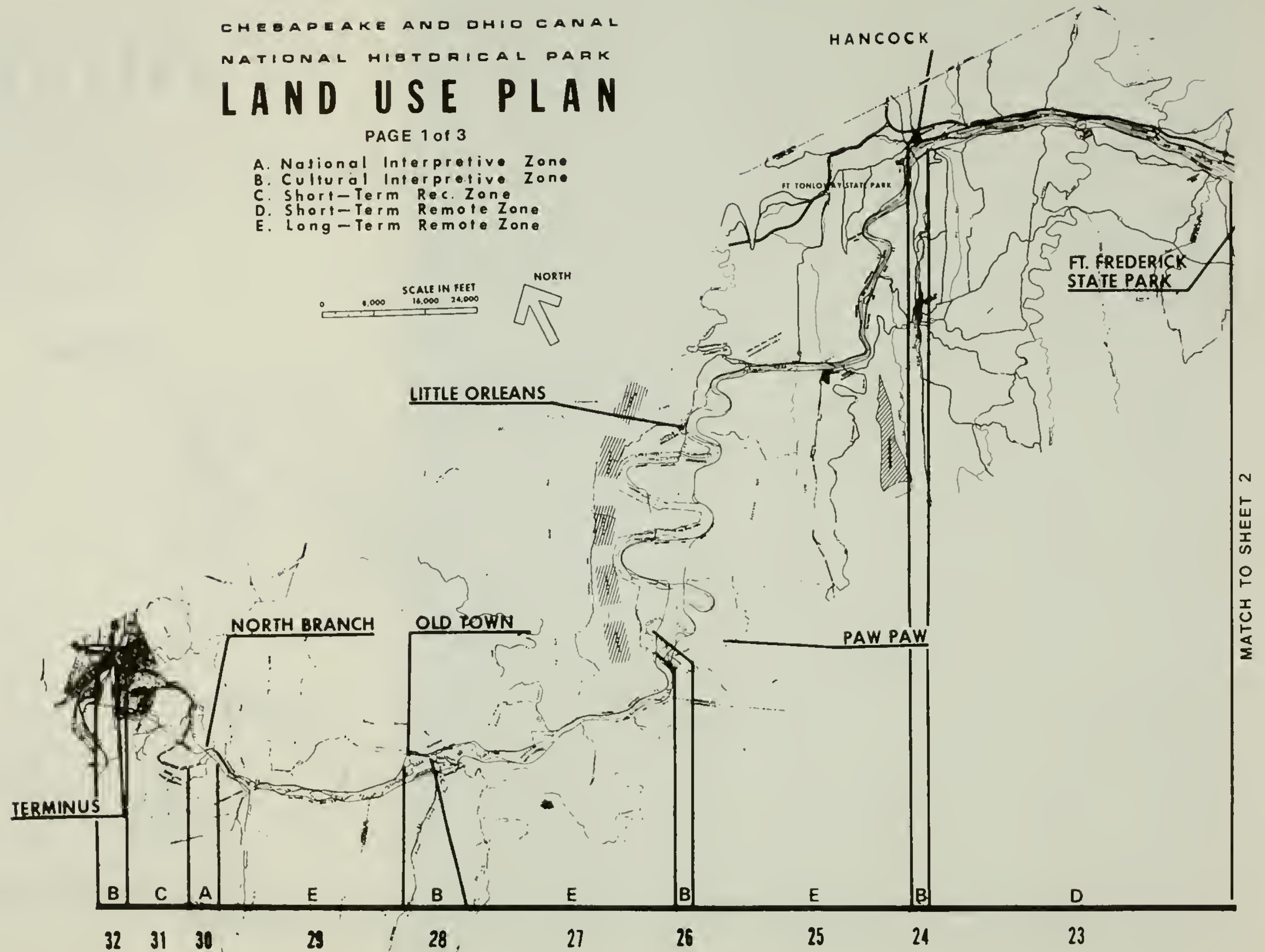
CHEESAPEAKE AND OHIO CANAL
NATIONAL HISTORICAL PARK
LAND USE PLAN

PAGE 1 of 3

- A. National Interpretive Zone
- B. Cultural Interpretive Zone
- C. Short-Term Rec. Zone
- D. Short-Term Remote Zone
- E. Long-Term Remote Zone

SCALE IN FEET
0 8,000 16,000 24,000

NORTH

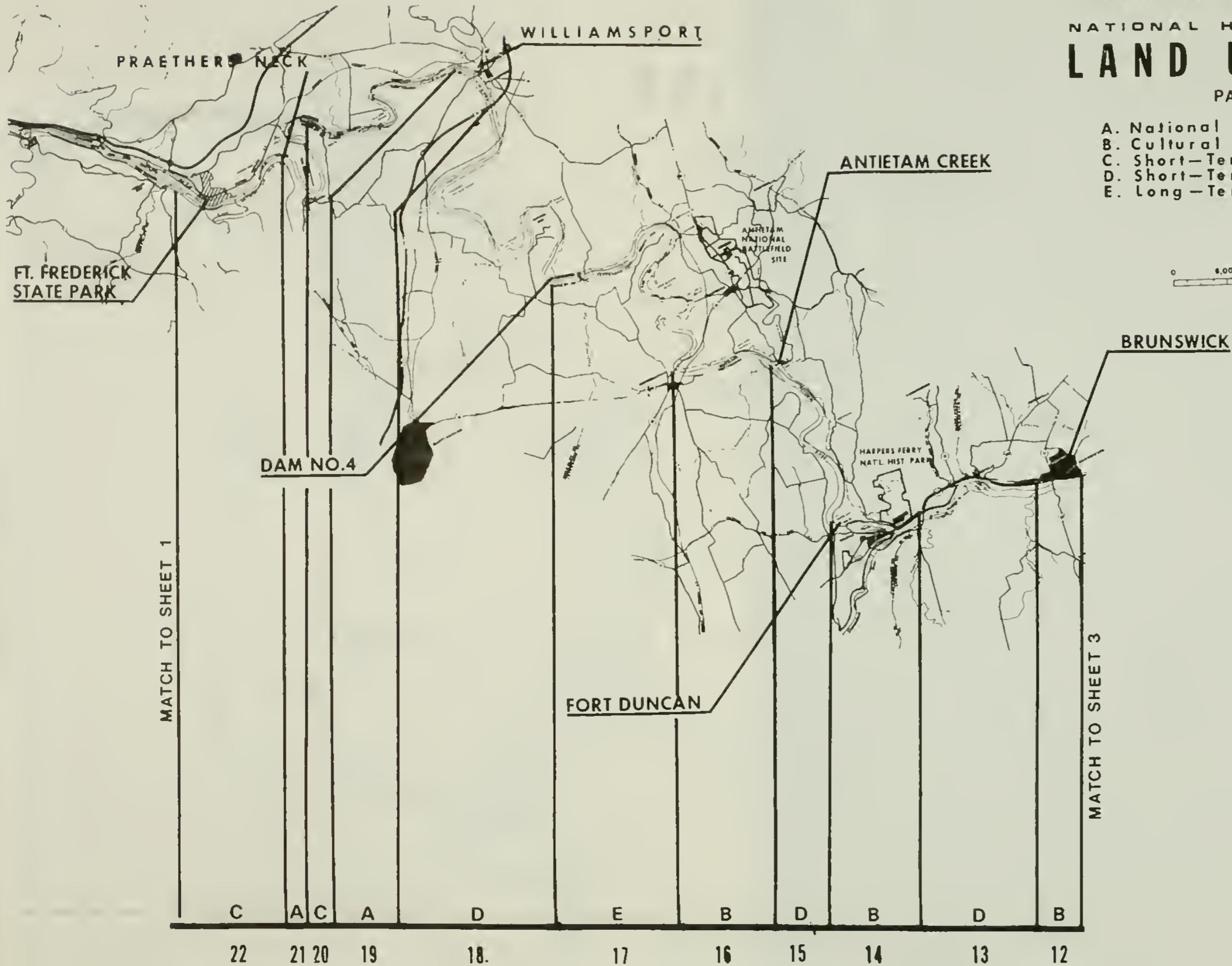


CHEBAPEAKE AND OHIO CANAL
NATIONAL HISTORICAL PARK
LAND USE PLAN

PAGE 2 of 3

- A. National Interpretive Zone
- B. Cultural Interpretive Zone
- C. Short-Term Rec. Zone
- D. Short-Term Remote Zone
- E. Long-Term Remote Zone

SCALE IN FEET
0 8,000 16,000 24,000



KE AND OHIO CANAL

HISTORICAL PARK

USE PLAN

1 Interpretive Zone
1 Interpretive Zone
erm Rec. Zone
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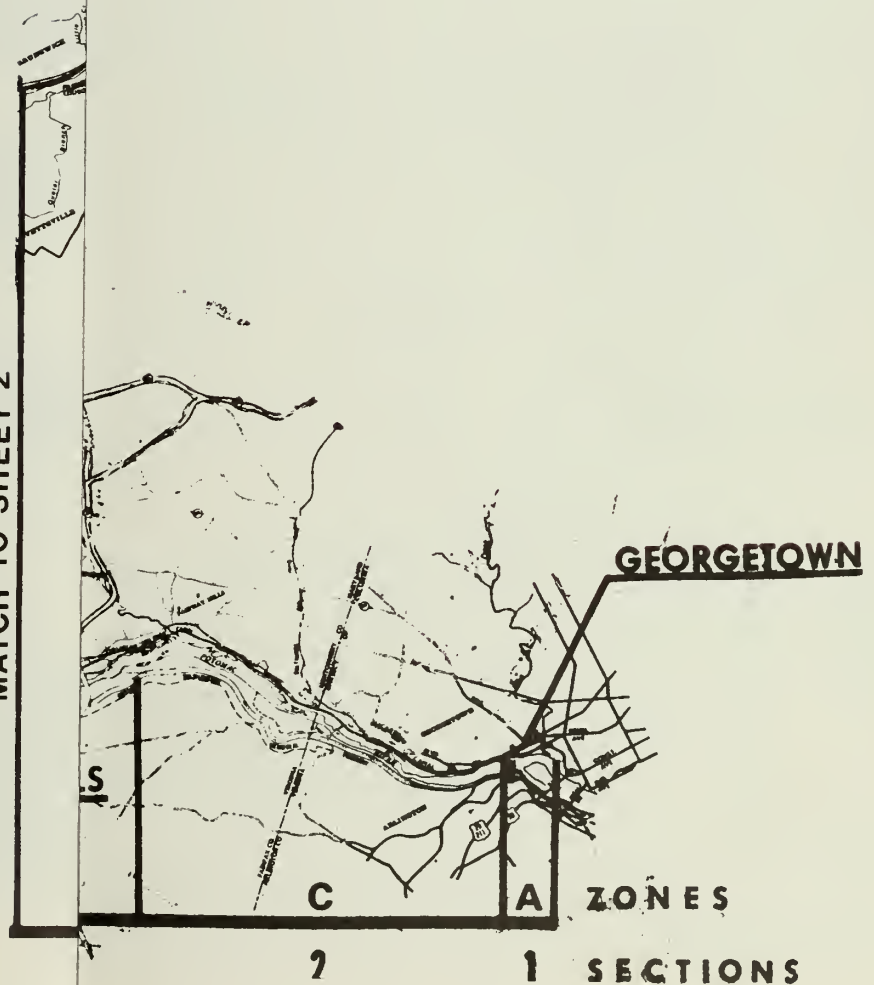
PAGE 3 of 3

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NORTH



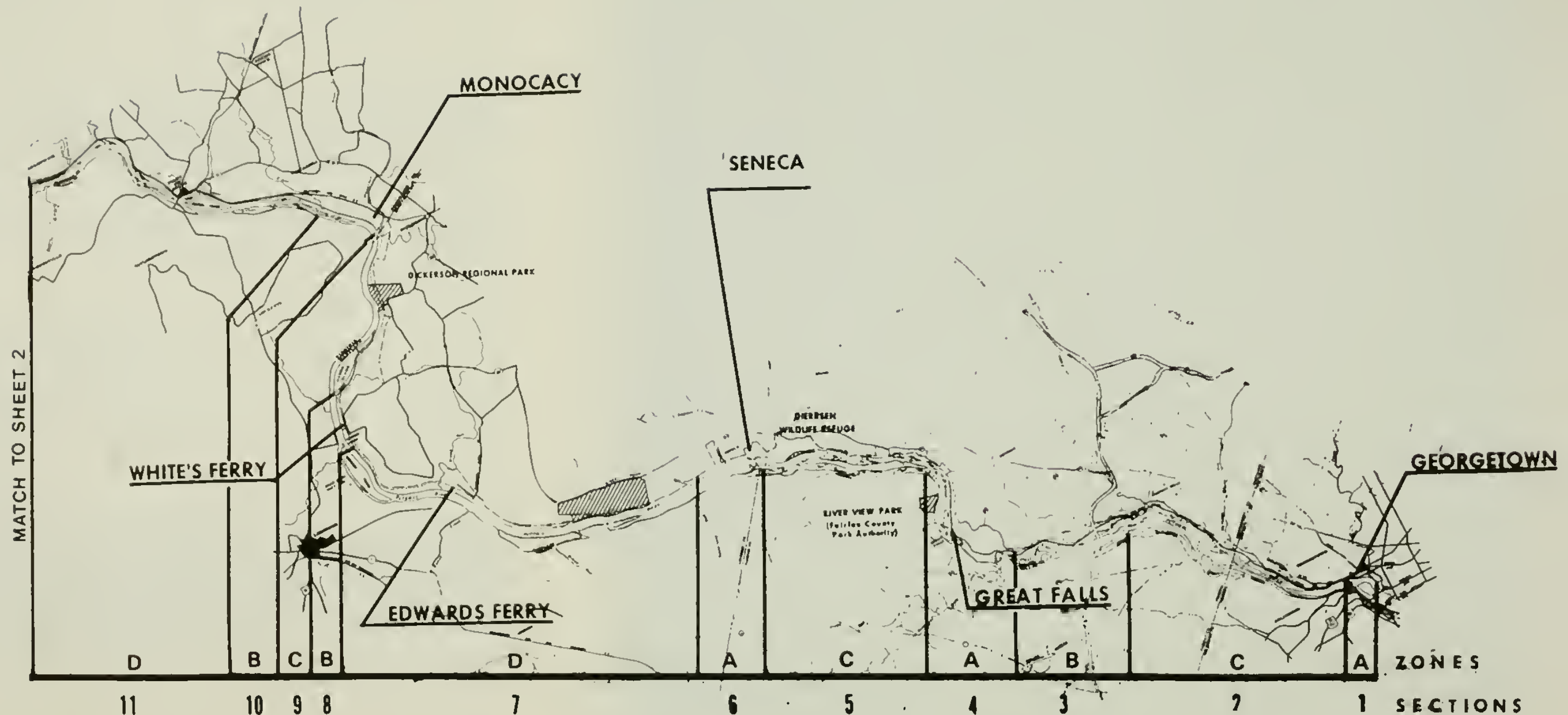
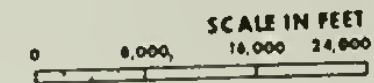
MATCH TO SHEET 2



CHESAPEAKE AND OHIO CANAL NATIONAL HISTORICAL PARK LAND USE PLAN

- A. National Interpretive Zone
- B. Cultural Interpretive Zone
- C. Short-Term Rec. Zone
- D. Short-Term Remote Zone
- E. Long-Term Remote Zone

PAGE 3 of 3



Zone D – Short-Term Remote Zone

Due to limited access, these sections can retain a remoteness which produces a low density use. Through proper management, the park visitor can be assured of finding solitude in a natural setting. The objective here is to provide those who desire it with an undisturbed day in a natural setting.

| | <u>Length (miles)</u> |
|--------------------------------------|---------------------------|
| Seneca Quarries to Whites Ferry | 10.3 |
| Nolands Ferry to Brunswick Town Park | 9.4 |
| Brunswick to Lock 32 | 5.2 |
| Lock 36 to Antietam Creek | 7.0 |
| Dam 4 to Lock 44 | 14.9 |
| Big Pool to Lock 44 | 8.6 |
| Slatecut to Lock 72 | 6.4 |
| Total Zone D | 61.8 |

Zone E – Long-Term Remote Zone

These sections provide the opportunity for a long-term primitive hiking, biking, or horseback experience. With limited access, high quality natural surroundings, and little development, these sections are for those who seek a near wilderness involvement with the environment. The objective is to ensure that these sections retain their wild character and continue to provide this type of experience.

Parking for towpath users will not be provided in Zone E as adjacent sections will be designed to provide access. If appropriate, parking for river users will be provided at carefully selected locations in Zone E sections.

| | <u>Length (miles)</u> |
|-----------------------------------|---------------------------|
| Rumsey Bridge to Dam 4 | 11.6 |
| Paw Paw Bends, Hancock to Lock 62 | 29.5 |
| Maryland Route 51 to Old Town | 8.5 |
| Total Zone E | 49.6 |

Development Standards

Sectional Development Plans

A plan will be devised for each of the 32 sections in this general plan. These plans will determine the number and locations of visitor facilities for each section. Complete public involvement which will include public workshops, meetings and/or hearings as appropriate will occur during the planning process. The plans will be accompanied by environmental assessments in compliance with the National Environmental Policy Act of 1969. Particular attention will be paid to potential impacts of Park developments on adjacent land use, communities, transportation systems and waste disposal systems.

In order to gain experience in planning for the 32 sections, the first of the sectional development plans will address itself to an existing situation. Much controversy exists concerning the Great Falls section. Is it overdeveloped? Is it overcrowded? Are visitors satisfied with their experience? What are their expectations from such a visit? Will they return? Is it underdeveloped? Poorly designed? An in-depth visitor study will address these questions and lend insight into whether there is a "problem" at Great Falls, what it is, and how to correct it. In addition, such a study may produce planning implications for the other sectional development plans to follow. Therefore, the first logical step in implementation of canal development is to examine existing facilities before developing new ones.

Development Priority

It is imperative that higher priority be given to the stabilization and restoration of historic structures than to new development. If this is not done, the danger of losing these fragile, limited, nonrenewable resources, for which the park has been established, becomes apparent. The Park Service's commitment to this concept is evidenced by its current priority to repair the flood damage to historic structures caused by tropical storm Agnes in June of 1972.

No new visitor use facilities will be constructed until emergency flood rehabilitation and aqueduct stabilization work has been funded and further research on stabilization and restoration of the cultural resources has occurred.

Resource Basic Inventory

All future planning will be preceded by a resource basic inventory, which will identify the natural and historical resources as well as sociological considerations. This inventory will be done for each section according to Park Service standards.

Visitor Use Density Control

In order to implement this zoning system, numerical densities could be superimposed on each zone. However, at this time, neither research nor management experience can provide a well proven numerical base to place density numbers on each zone (i.e. 300 users per mile in Zone A).

Further study and experience may provide such a numerical base in the future. In the absence of a numerical base, natural density control through visitor preference is considered adequate until further study indicates other means.

In addition, the zoning system fits the time commitment factor of user types and their existing numerical proportions in the outdoor recreation public. That is, more of the visitor public commits short time blocks to recreation than long time blocks. Thus, it is anticipated that more visitors will be attracted to the national interpretive centers (Zone A) than the long-term remote areas (Zone E).

Because each of the 32 designated sections is different in its resources, access, available parklands and adjacent land use, the towpath user densities will vary. Once the sectional development plan indicates a desired towpath user density for a particular section, the proper development within that area can be determined.

Developments will be designed to avoid the danger of overcrowding and overuse. For example, campgrounds may be designed to allow site rotation; thus, one area can rest while another is being used. Entrance stations will be placed at areas of high use. These can serve as a control

point to avoid overcrowding. Parking lots will be designed to accommodate the desired capacity of a particular area. Devices, such as guardrails and shrubs around parking lots will discourage overflow parking. Increased patrols can provide further control when necessary.

Rewatering the Canal

The plan proposes a total of 46 miles of rewatered canal. It is the current goal of the Park Service to rewater the canal from Violets Lock to Georgetown. This 22-mile section received much damage during tropical storm Agnes in June of 1972. In addition, all the Zone A and B sections not included in this 22-mile stretch are proposed for rewatering. These 13 sections, comprising an additional 24 miles, will be thoroughly studied to determine the water source and engineering feasibility. These studies may show that rewatering is infeasible or that longer stretches should be rewatered to transport water from a source to the Zone A or B section.

Canoeing and fishing will be encouraged in these rewatered sections as long as the activity does not interfere with historical demonstrations. Modest parking facilities will be provided where appropriate to assist the canoeist in putting in and taking out of the canal at access points and at locks.

In areas where rewatering is determined to be infeasible, but historic interpretation is still a valid objective, the canal bed would be cleared of natural vegetation, sodded and mowed. The remainder of the canal and many of the historic structures may be reclaimed by natural processes if historic studies and the sectional development plan deem it to be appropriate.

There are many sections of the canal where runoff from spring rains place water in the canal to a depth of from 1 to 2 feet. Unless damage to historic structures results from this, no action will be taken. However, no action will be taken to artificially dam these sections to produce a year round rewatered condition unless a study indicating the impact on vegetation in the canal has been completed.

Compatibility with Environment

With the land use plan as a planning and management tool, the development of visitor facilities can complement the sections designated.

All developments must be compatible with the historical atmosphere of the canal and the park's natural riverside environment. Care will be taken to avoid construction of major facilities within the 50-year flood plain, which comprises approximately 85 percent of the lands in the park. Developments should not be readily visible from the canal towpath or from the river. Visitor facilities will not be built between the canal and the river except where there is ample space or where they can be effectively buffered.

Allowable Visitor Facilities

In order to ensure that the intended mood for each of the five zones is understood, the following allowable facilities have been established. These guidelines are not meant to suggest that all of the allowable facilities will be constructed in every section. As each section varies in natural and historic resources, access and appeal, the facilities will, of course, vary. However, the permissible facilities established in these guidelines will not be violated to change the mood or intensity of use of a particular zone.

ALLOWABLE VISITOR FACILITIES IN EACH ZONE

| A | B | C | D | E | |
|-----|-----|-----|------|-----|---------------------------|
| 1-2 | 1-3 | 2-6 | 4-24 | 24- | TIME FRAME IN HOURS |
| IC | EX | EX | DV | HB | INTERPRETATION |
| ● | ● | ● | ● | | PARKING |
| ● | ● | ● | ● | | YOUTH HOSTEL |
| ● | ● | ● | ● | | MAINTENANCE |
| ● | ● | ● | | | ADMINISTRATION |
| ● | ● | ● | | | FOOD CONCESSION |
| | ● | ● | | | BIKE CONCESSION |
| | ● | ● | | | BOAT CONCESSION |
| | ● | ● | | | PICNICKING |
| | ● | ● | ● | | BOAT RAMP |
| ● | ● | ● | ● | ● | BOAT ACCESS |
| | ● | ● | ● | ● | CANOE STAGING |
| | | ● | ● | ● | hiker-biker CAMPSITE |
| | | ● | ● | ● | hiker-biker CAMPGROUND |
| | | ● | ● | | PARK & WALK CAMP |
| | | ● | ● | ● | GROUP CAMP |
| | | ● | ● | | ENV. ED CENTER |
| | | | | ● | PRIMITIVE CAMP |
| | | | | | |

Facility Definitions

Interpretation — Method by which resources may be described to the visitors:

IC — Interpretive center or museum

EX — Exhibits - outdoor displays, small information kiosks

DV — Devices such as signs, recorded messages, etc.

HB — Handbooks — no visible interpretive markers

Parking — Parking lots of defined size for towpath and/or river users.

Youth Hostels — Existing buildings within the park under management of a concessioner.

Maintenance — Areas located away from sight of the towpath or use of historic structures for storage of materials and equipment.

Administration — Administrative headquarters, district ranger stations.

Food Concessions — Restaurants or carry-out fast food service.

Bike Concessions — Rental of bikes.

Boat Concessions — Rental of rowboats and canoes for river and/or canal use.

Picnicking — Areas for picnics with tables, fireplaces and parking.

Boat Ramp — Paved boat ramp into the Potomac River (with parking) for trailer-carried boats.

Boat Access — Improved access (steps and/or dock) to the Potomac River (with parking) for launching hand-carried boats and canoes.

Canoe Staging Area — Sites for putting into and taking out from, the Potomac River, with road access to the river, parking, and tent camping.

Hiker-Biker Campsite — For hikers and bikers only with no road access; approximately 10 tent sites.

Hiker-Biker Campground — Areas for individual or small group towpath and river users, set back from the canal with no road access; approximately 50 tent sites.

Park and Walk Camping Area — Separated from parking lot by at least 200 feet; approximately 40 tent sites.

Group Camping Area — For groups (Boy or Girl Scouts, etc.) of towpath or river users with no road access; approximately 20 tent sites.

Environmental Education Laboratory — For school groups study areas, trails, cabins, dining hall, road access; approximately 100 residents.

Primitive Camping — Away from canal, no road access; approximately 3 tent sites.



Camping

As towpath use is the main visitor activity, an effort has been made to ensure that the through hiker or biker has an opportunity to camp at regular intervals. The following summary shows areas where towpath-oriented campgrounds are desirable. Further studies will determine the location, scope, and character of facilities in the context of the zone within which they occur. As these campgrounds are intended for the exclusive use of the towpath hikers and bikers, road access, other than that required for maintenance purposes, will not be provided.

| <u>Area Name</u> | <u>Miles From D.C.</u> | <u>Distance Between</u> | <u>Area Name</u> | <u>Miles From D.C.</u> | <u>Distance Between</u> |
|------------------|----------------------------|-----------------------------|------------------|----------------------------|-----------------------------|
| Marsden Tract | 12 | 12 | Dellinger Neck | 90 | 12 |
| Watts Branch | 18 | 6 | Falling Waters | 95 | 5 |
| Violets Lock | 21 | 3 | Praethers Neck | 109 | 14 |
| Edwards Ferry | 31 | 10 | Millstone | 118 | 9 |
| Chilton Wood | 38 | 7 | Roundtop | 127.6 | 10 |
| Point of Rocks | 48 | 10 | Indigo Bend | 139.2 | 12 |
| Catoctin | 51 | 3 | Kaescamp Bend | 150 | 11 |
| Dargan Bend | 65 | 14 | Town Creek | 162 | 12 |
| Horseshoe Bend | 78 | 13 | Oldtown | 168 | 6 |

Hiker-biker campsites (approximately 10 tent sites) will continue to be maintained at approximately 5-mile intervals for individuals who prefer a more leisurely pace.

Canoe staging areas will be placed at locations where river canoe trips put in. They will provide road access, parking, sanitary facilities, a ramp, and a campground in which to spend the night prior to departure.

To avoid conflicts in hiker-biker areas, separate campgrounds for river canoeists, with drinking water and sanitary facilities, will be provided. They will serve approximately 40 people. These canoe campsites will be delineated through a separate study in cooperation with the State of Maryland which has management jurisdiction of the Potomac River.

Primitive campsites will be sited to produce a feeling of remoteness. They will be carefully located in the sectional development plans for Zone E areas. These sites will be placed in a clearing in the woods and will be used on a "what you carry in, you carry out" basis. There will be no road access into these areas.

The present drive-in family campgrounds at Spring Gap, McCoys Ferry, and Little Orleans are facilities which require considerable acreage. Both their construction and use have created adverse impacts on the Park. This problem is accentuated when such facilities are to be located within the flood plain. Because of the steep topography of non-flood plain land, it is difficult to find locations where these facilities would not damage the resources.

However, private enterprise, on lands adjacent to the park, is beginning to provide drive-in camping to satisfy this need. In many cases, the demands are not only for campsites, but for sophisticated toilet facilities with showers, electrical hookups to the sites themselves, and sanitary dumping stations.

Knowing that this demand exists and that it is being satisfied by private enterprise, the Park Service policy will continue to be that drive-in campgrounds will not be constructed within the boundaries of the C&O Canal National Historical Park.



Park and walk campgrounds, such as those at Antietam Creek and Mountain Lock, will be provided throughout the park. These facilities provide a parking area located at least 200 feet from the camp site. The campground is designated for a maximum of 40 tents and contains pit toilets, fireplaces, water pumps and picnic tables.

Environmental Education Laboratories

These will be placed in areas of significant size and outstanding natural values to produce a quality learning environment for school groups. Similar to existing programs at Catoctin Mountain Park and Prince William Forest Park these laboratories, which will contain study areas, trails, cabins, dining hall, and road access, will accommodate approximately 100 residents. The objective of these facilities is to introduce school children to the natural environment so that they may better understand the interrelationships of natural systems and the impacts of man's activities upon them. They will be placed at Chiltonwood, Dargan Bend and Praethers Neck.

Youth Hostels

There are currently three youth hostels serving the canal visitor. The hostels at Sandy Hook and Seneca, which were established in the 1950's, are outside the park boundaries. The facility at North Branch has been acquired by the National Park Service and will be operated on a permit basis until the area is restored. The Park Service encourages American Youth Hostels, Inc. to continue to provide and expand this valuable year-round lodging experience for park visitors. AYH and NPS are currently studying in-park structures, which have recently been acquired, for possible hostel use. The Park Service hopes that other houses, outside park boundaries, can be acquired by AYH where in-park structures do not exist. Ideally a youth hostel should be available at 30 mile intervals along the canal.

Access

Access to the park development must be coordinated with State and county road officials to ensure that a development proposal within the park will not overload the design capacity of the existing access roads. This coordination will take place during the sectional development plan process.

Access from private developments outside the park, such as campgrounds, must be carefully controlled to avoid overloading the carrying capacity of a given section. In most cases, developments of this kind will not be granted private access but will be required to utilize existing public entry points to the park. Without this control, the land use plan becomes invalid and unmanageable.

Signs

Signs leading to the park as well as internal signs will have a uniformity of style to provide continuity and avoid visitor confusion. Signing, interpretive materials, and other information must reinforce the atmosphere of quality. They should blend with the surroundings yet still excite the eye and mind to greater receptivity. It is not desirable to consider signing for all natural, historical features which exist within the park. Neither aesthetics nor maintenance costs permit this. The interpretive plan will determine what areas should be signed.

A signing system will be developed which will inform towpath users what facilities are available to them in nearby towns or on adjacent parklands.

Entrance treatments will subtly introduce the visitors to the character of the particular area they are about to enter.

Cooperative agreements with local and State highway departments should ensure adequate signing to apprise would-be visitors of major park resources and facilities available to them.

Another problem to be analyzed is communicating to the visitor when certain areas are filled to capacity. This advance warning system will avoid the confusion and congestion which now occur on peak days in areas such as that from Fletchers to Seneca. Broadcasts over special radio frequencies, augmented with signing, will be explored as a means of directing visitors to less congested areas.

Utilities

Telephones will be included at all developed areas except at hiker-biker units or primitive campgrounds. Sanitary facilities will be provided at all developed areas as well as along sections which are commonly used for short walks along the towpath but do not contain developed areas at regular intervals. Utility lines will be carefully located, placed underground if soils permit, or designed to be unobtrusive.

Extensive analysis must be made in conjunction with local governments with regard to sewage treatment and solid waste facilities and the impact which internal park development will have on these local systems. Solutions such as in-park facilities will be considered.

Administration

The Chesapeake and Ohio Canal National Historical Park will be managed in accordance with the Service administrative policies for historical areas. For management purposes, the entire length of the canal and its visual environment, as defined in its National Register nomination, will be classified as a historic zone. The remaining parklands will be designated national environment subzones during the sectional development plan process.

Because of the linear configuration of the park, administration, under the direction of a single Superintendent, has been decentralized into three districts: Palisades District (Georgetown to Seneca); Piedmont District (Seneca to Williamsport); and Allegheny District (Williamsport to Cumberland). District headquarters will be established at appropriate locations when park programs and staffing requirements make separate headquarters practical and economical. Districts will be supplemented by subdistrict operations as required. The districts will be staffed with line personnel for day-to-day park maintenance and construction activities, visitor services and environmental education, and protection and resources management.

Staffing will be supplied as necessary to provide services in the professional disciplines of history and archeology; interpretation and environmental education; land and water resources management; protection; maintenance and engineering; and landscape architecture.

Administrative actions which will be required are: The surveying and monumenting of the boundary; installation of radio systems for internal communications; the uniform application of the Code of Federal Regulations to the entire park; and procurement of adequate staff.

Public Relations

The park administration will work closely with the Chesapeake and Ohio Canal National Historical Park Commission established by the authorizing act.

Special attention will also be given to public relations within the many communities contiguous to or associated with the canal and the Potomac Valley. The established practice of providing off-site interpretation and public services will be continued to further public support of the park and to facilitate research and collection of historical data and artifacts.

Cooperation With Other Agencies

Cooperative management agreements will be developed with the State and other abutting public landowners to ensure that compatible development and management concepts are applied by both agencies.

The Potomac River adjacent to the park in Maryland is under the jurisdiction of the State of Maryland. Pursuant to the Maryland Senate Resolution 42, passed on April 2, 1975, the Maryland Departments of State Planning and Natural Resources, in cooperation with the National Park Service, are preparing a Potomac River Report. The report will address the problems of recreational boating, hunting and fishing; water supply and wastewater treatment; land use and identification of critical areas; the scenic rivers program; and intergovernmental relations with regard to river access. It is hoped that methods concerning appropriate access points, carrying capacities, and other regulations can be carefully set forth in this report. The public and official bodies will be represented in this planning process.

The U.S. Army Corps of Engineers is responsible for issuance of permits for docks and boat ramps on the Potomac River from Chain Bridge to Cumberland along the West Virginia, Virginia, and Maryland shores. The permit process involves public notification prior to issuance of a permit. It is hoped that the carrying capacity recommendations of the Potomac River Report mentioned above can be the basis for permit issuance in the future.

Until the recommendations of the Potomac River Report have been adopted, the Park Service will manage the recreational use of the park as it relates to the river in the following manner.

1. No hunting will be permitted on Federal lands. Hunting will be permitted on State lands within the park boundary.
2. No action will be taken to eliminate or modify the existing boat access facilities to the Potomac River. Maintenance in the form of clearing the existing ramps of debris or silt will continue. No new boat ramps will be constructed.

Cooperative historic studies to develop historic districts in communities and lands adjacent to park boundaries should be undertaken. The objective here is to realize the value of historic areas or towns and to help them control the influx of potentially incompatible tourist facilities.

Land Use

Close attention will be given to management of agricultural uses, utility, highway and railroad crossings, landowner and hunter access, and other uses of parklands as may be continued under provisions of Public Law 91-664. (See Appendix B)

Public Utilities

Under the provisions of the Act of August 1, 1953, the Secretary of the Interior is authorized and directed to grant perpetual easements for rights-of-way through, over or under the park for public utilities as long as the Federal interests can be protected. (See Appendix C.) The



provisions of the National Environmental Policy Act and close coordination with other Federal and State regulatory agencies will be carried out in evaluating proposals for intake and discharge lines to the Potomac and other utility crossings.

Transportation Corridors

Cooperation from the managers of transportation corridors will be solicited to ensure that highway and railroad bridges are painted and prisms properly maintained to create a scene of neatness and well-being for visitors to the canal.

Nonhistoric Structures

Existing nonhistoric structures, including metal maintenance storage sheds, located in close proximity to the towpath or historic structures, will be studied to determine their necessity. If use of these structures is to continue, they will be relocated onto newly acquired lands away from historic structures and visitor use areas.

Towpath Use

The continuing policy will be that when the quality of experience becomes undesirable because of multiple use of the towpath, appropriate corrective action will be taken. In such situations, foot use will be given priority and bicycles and/or horses will be prohibited in these sections during periods of high use.

It might eventually become necessary to completely separate horseback users and cyclists on the towpath from pedestrians and, in turn, provide separate bike and bridle trails on the berm side of the canal or in large development areas where feasible.

To avoid conflict with towpath users, canoe portage trails will be provided around all dams and those rapids which are unnavigable.

Special attention will be directed to the types of vehicles which can be used on the towpath for patrol and maintenance.

Consideration should be given to utilizing barges or boats in rewatered areas of the canal for routine maintenance. In some locations, maintenance of exposed rock ledge sections of the towpath, which will be left in their existing condition, may also be performed from boats in the Potomac River.

Resource Protection

Cultural Resources

The requirements of the National Historic Preservation Act of 1966 will be complied with throughout the planning, development and management of the park. Historic structures, archeological sites and suspected sites will be strictly protected until adequate research establishes their nature and importance. If significant, they will be further protected and stabilized for study and interpretive purposes.

There are approximately 550 historic structures and numerous archeological sites in the park. Many, because of limited maintenance funds, are in poor condition. An impressive array of professional studies describing the condition of individual structures or archeological sites has

been completed. These studies, other related documents including all Canal records in the Archives, must be compiled and inventoried. All the information must be updated.

A "list of classified structures", a requirement of Executive Order 11593, May 13, 1971, is currently being compiled. This list will identify, locate and physically describe these structures. It will recommend specific action for each structure or site, establish priorities and provide cost estimates. Guidelines for use of habitable structures, interim management techniques and maintenance standards will be set forth.

A three year study by professional historians, historic architects, archeologists and other specialists, if needed, is underway. After completion this work will be kept up to date by professionals within the park. The study will:

1. Establish priorities for major stabilization work on historic structures so that the work may be properly programed.
2. Analyze the feasibility of restoration of the canal and other historic structures in the Zone A areas. This will provide the necessary data for the sectional development plans to follow.
3. Analyze the drainage patterns and recommend changes needed to accommodate increased runoff from tributary streams in the culverts, aqueducts, waste weirs, spillways, overflows, and bypass flumes.
4. Analyze the feasibility of rewatering the Zone B areas which have been selected in this general plan.

This study will also analyze flood protection of the canal in order to avoid, as much as possible, the threat of severe damage to the historic structures.

The known archeological sites in the park will be protected by designating buffer zones around them in the sectional development plans. This will insure that construction activities as well as visitor use do not encroach on them. An archeologist will be on site during any construction in areas of known historic resources.

Natural Resources

Ecological exhibits, plant communities, and wildlife habitats, highly important for scientific study, will be strictly protected, with the public allowed into the areas by special permit only. Further study to identify these areas fully and precisely will be completed during the resource basic inventory.

Forests will be maintained in a natural, healthy condition, and the river's edge will be kept forested. Trees will be selectively cut or trimmed to open resources for better interpretation, provide more sun on the towpath in wet areas where drainage problems cannot otherwise be solved, to give variety to the towpath route, or to offer scenic vistas in character with the historic canal atmosphere. All trees to be cut will be selected by appropriate members of the park staff. Clearcutting of trees will not be permitted except where the canal is to be rewatered. Since selective cutting for views from a road to the canal would expose the cars to the towpath as well, it will not be practiced.

All trees growing in historic masonry or wood structures will be removed.



Since agricultural lands are important to the economy of the Potomac Valley, the Park Service, through lease arrangements, will attempt to keep as much land in production as is practicable. Therefore, the interesting variety of vistas and wildlife which these areas provide will remain.

Revegetation by natural means or by plantings of native trees and shrubs will be utilized to screen intrusions upon the park and to separate and buffer park developments.

Interpretation

The six National Interpretive Zones are envisioned as outdoor museums. The canal in these areas, with operating locks and barges, together with surrounding structures, is seen as a living exhibit which will need modest interpretive support. Hopefully, period buildings can be converted for this interpretive use. Where appropriate, visitor centers may be constructed to illustrate major interpretive themes which cannot be understood from the historic restoration at the site.

With regard to the remainder of the park, the resource base map, in this plan, indicates the rich array of archeological, historical, geological, and biological resources that can be interpreted to visitors. So rich is this array that interpretive possibilities are limited only by the funds available and the energy and imagination of the interpretive staff.

Many of the historic features speak for themselves and the visitor's imagination is an important part of his experience. Graphic displays will be placed only where it is essential to visitor understanding of a major feature. Handbooks are also a valuable asset in providing interpretation for visitors.

The interpretive possibilities need to be broadened to emphasize the archeology, natural history, and history of the area as well as the history of the canal itself. Interpretive programs will include demonstrations and working exhibits wherever feasible. To that end, old buildings and other structures related to the historical atmosphere of the canal will be restored or rehabilitated when possible, to enhance the atmosphere. This concept would affect old houses, farm structures, mills, ferries and bridges.

The interpretive themes of the Chesapeake and Ohio Canal National Historical Park will derive from the human and natural history of the Potomac Valley. These will include:

- ... the canal's inception, purpose, construction, and operation;

- ... the canal's role in transportation history, economic development and westward expansion;

- ... the way of life that developed along the canal during its construction and operation including the role of cultural and ethnic minorities;

- ... the associated prehistory and history of the Potomac Valley;

- ... the natural history of the Potomac Valley, including its influence upon the construction of the canal; and

- ... the spiritual refreshment to be gained from outdoor activities along the canal and river.

The interpretive themes and methods outlined above will be further studied by interpretive planners. The first interpretive plan will cover the area which extends from Georgetown to Seneca and will give further guidance for the sectional development plans to follow. The interpretive plan will identify themes and methods required at a particular site to convey the interpretive message to the public. Complete public involvement will occur during this planning process.





Sectional Concepts

To guide future planners and managers and better inform the public, descriptions of the currently envisioned concept for each section are included. The historic and natural resources, access and existing facilities, adjacent land use, and existing and newly acquired parklands are discussed within each section.

The concepts expressed here may change significantly and will not be implemented until a sectional development plan for the entire section is completed.

1. Georgetown - Rock Creek to Alexandria Aqueduct: 0 - 1.1 miles; Zone A

The Resources

The numerous historic structures outside the boundaries of the park, but adjacent to it, are well documented elsewhere. If this section is to become a living museum, interpretation must be directed outward to recognize these amenities. Within the park the four locks, the footbridges, the old Alexandria Aqueduct, and the Tidal Lock should be stabilized and interpreted. A new canal barge is currently under design and may be launched in 1976.

Access and Existing Facilities

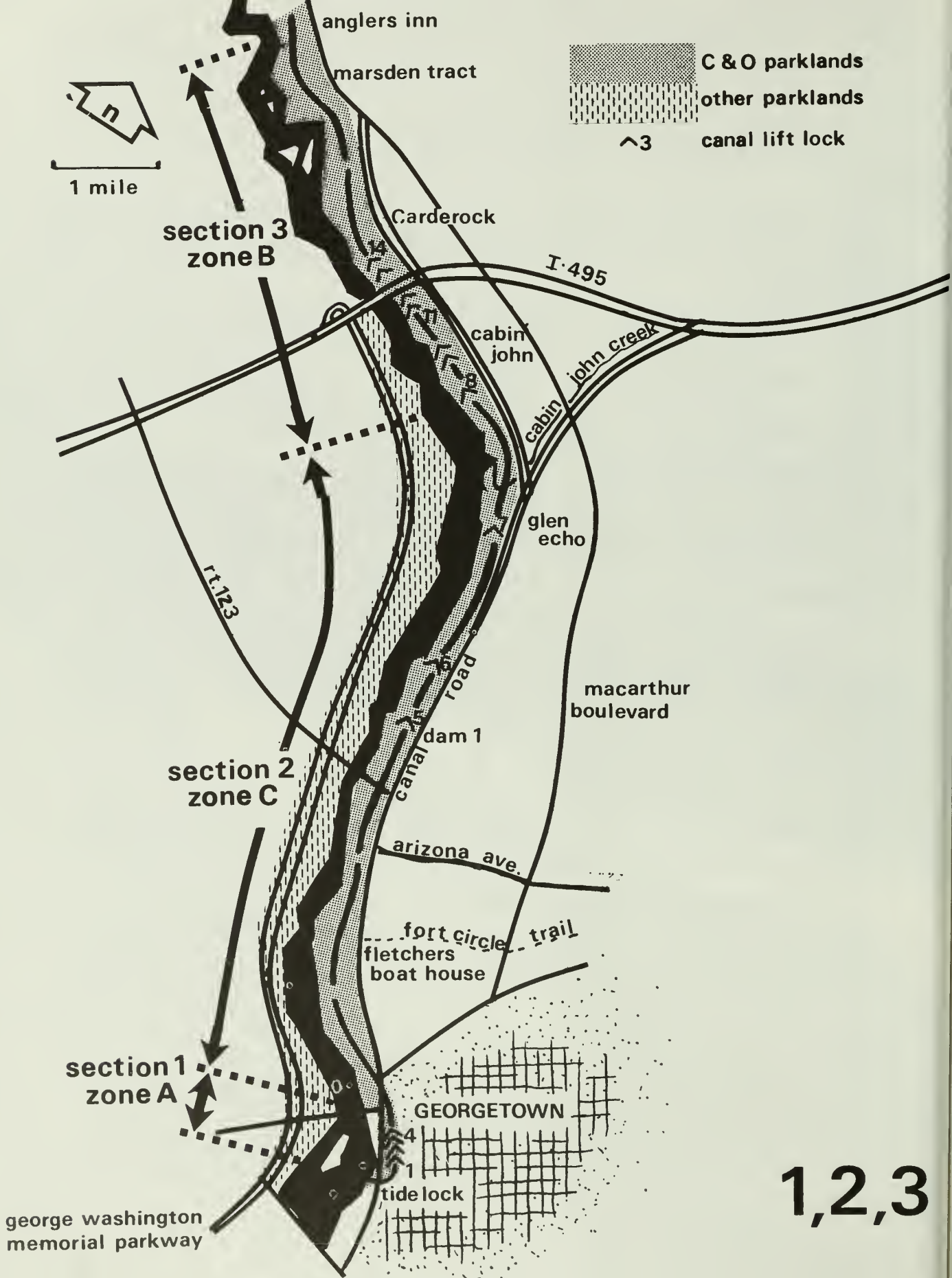
The predominant means of access is pedestrian with some parking on adjacent streets. Three footbridges provide direct access, and the towpath crosses three streets at grade. Existing development is limited to the barge landing. This facility, as well as the barge trips, is valid and will be retained.

Parklands and Adjacent Land Use

The canal is the major historic feature in a designated historic area (P. L. 808-81st Congress) and possesses a unique urban industrial character throughout this section. The entire Georgetown Waterfront area is steeped in history and has traditionally been an industrial and warehouse district dating from Georgetown's earlier days as a major port.

The boundaries of the canal park in this section are very confined, as one would expect in this urban setting. Despite this, the canal's setting is diverse; traversing the canal offers many varied moods. These scenes range from the canyon-like setting between Wisconsin and 33rd Street, formed by massive brick warehouses lining the canal, to stretches where small-scale rowhouses create a totally different view.

The entire Georgetown Waterfront, bounded by Key Bridge, M Street, Rock Creek and the Potomac River, is at the moment in a state of rapid transition. It is a classic example of an obsolete industrial area in a strategic urban location which is under development pressures. The area is proving attractive to large-scale developers for office and commercial purposes. Many large assemblies of land have already been made and, in fact, major construction is proceeding at two locations. One of these is immediately adjacent to the canal at Thomas Jefferson Street in a particularly sensitive location opposite the barge landing. This office-retail complex



1,2,3

capitalizes on the canal's charm, but there is an ironic risk in these situations. The new buildings, if not properly designed, could injure the canal environs, the very thing that attracted them in the first place.

Recent action by the District of Columbia Zoning Commission has changed the 90-120-foot-high industrial zoning to a commercial and housing mix. The height limitation adjacent to the canal is now established at 60 feet.

The National Capital Planning Commission hired consultants to prepare a development plan and program for the area. This was completed in January, 1975 and formed the basis for a staff draft plan which is now under review. The staff plan will incorporate a sectional development plan which is to form the basis for zoning revisions for the waterfront area.

It is doubtful, however, whether zoning alone will adequately protect the canal from crowding and overdevelopment resulting from the destruction of the historic buildings adjacent to the canal and their replacement with commercial buildings. The new daytime population, which will result from office and commercial redevelopment, might also bring overuse of the canal, since the towpath forms one of the main lateral pedestrian linkages in the area.

In view of the limitations of zoning as a development control process, to fully safeguard the canal at this critical location, a program of land acquisition by the National Park Service should be undertaken. This could be accomplished by both fee simple and easement purchases. Where opportunities exist for creating limited scale openings and expansions of the canal "frame" to heighten its variety and interest, fee acquisition should be undertaken. Limited expansions of the canal lands should also be made by property transfers of unused District of Columbia Government holdings. Where buildings of historic or architectural merit form part of the canal setting, historic preservation easements should be sought. Where development-prone land adjoins and is highly visible from the canal and where inappropriate renewal should be prevented, design review easements should be considered.

A detailed acquisition plan based on these design principles is articulated in the draft Plan and Program for the Georgetown Waterfront prepared by the staff of the National Capital Planning Commission dated July 25, 1975. This plan should be adopted and implemented as rapidly as possible.

These positive measures, supplemented by sound modern zoning techniques properly applied and administered, together with careful maintenance, will protect the canal from irreparable damage and deterioration.

2. Alexandria Aqueduct - Lock 8: 1.1 - 8.3 = 7.2 miles; Zone C

The Resources

The historic resources include the site of the old Foxhall Cannon Foundry, the incline plane, Lock 5 and Inlet-Lock 1, where Dam No. 1 provides water for the first 5 miles of the canal, the three locks and lockhouses, the Abner Cloud House, and old building foundations along the way. The Union Arch which carries the Washington Aqueduct is an historic feature located upstream from the canal on Cabin John Creek.

The outstanding natural feature is the Potomac Palisades, a granite schist formation which extends the entire length of this section. Most of the land between the canal and the river is within the flood plain and elm, green ash and sycamore are the predominant tree species. The endangered species, blue false indigo, grows along this section, as well as stands of Virginia

sida, rock ferns and an abundance of spring wildflowers and aquatic plants. This section is one of the most plentiful bird habitats on the entire canal. The annual spring run of the herring up the Potomac draws large crowds of fishermen to Chain Bridge, where parking is provided.

Access and Existing Facilities

This rewatered section in a natural setting is paralleled by roadway for its entire length. Access is presently developed to a point that additional access must be considered with extreme caution so as not to overload the density of the towpath. Pedestrian access occurs at three locations from communities on the palisades above. Vehicular access along the George Washington Memorial Parkway and four parking lots having a total of 60 parking spaces have been provided. The major recreation facility is at Fletchers Boathouse where food service, canoe and bike rentals, as well as rowboats for river use, are available. Parking for 160 cars is also provided at Fletchers. The only future access points which should be considered are from the communities of Cabin John and Glen Echo, Fort Circle Park at Fletchers Boathouse, and from Glover-Archbold Park at Foundry Branch. These would all be pedestrian access points.

Studies for improving vehicular access to Fletchers Boathouse should be undertaken. Upgrading existing facilities at Fletchers should also be studied because they provide valid services. The Abner Cloud House is currently being restored and will be used as a visitor contact station.

Available Lands and Adjacent Land Use

No additional acquisition of lands in this section was provided for in the enabling legislation. Adjacent land use is basically residential, and constant vigilance over proposed zoning changes is necessary to protect the future of the Potomac Palisades. Also, the proposed Three Sisters Bridge poses a potential threat to the lower portion of this section.

This section, then, is diverse in its attractions, access, and its combination of historical and natural resources. This diversity places enormous pressure for visitor use on this section. Care must be taken to control access and parking and to avoid overuse of this short-term recreational area.

3. Lock 8 to Anglers Inn: 8.3 - 12.3 = 4 miles; Zone B

The Resources

This section contains "Seven Locks" which are Locks 8 through 14. These seven locks raised the canal 56 feet in 1-1/4 miles as it moves from the flood plain to the Palisades in preparation for the route around Great Falls. The Carderock Pivot Bridge is also included in this section.

The section's natural attributes include the rock formations of the Palisades and spectacular views of the Potomac River Gorge. Stands of eastern hemlock and fragrant sumac are among the rare biological species to be found. Wildlife in the form of birds and mammals is abundant in this varied natural setting.

Access and Existing Facilities

Although paralleled by roads for most of its length, this section has three access points. Parking for 460 cars is provided, with 420 spaces at the 100-acre Carderock Recreation Area. Most of the activity at Carderock is not canal oriented, and group picnicking and rock climbing are the predominant pursuits. Thus, little impact is felt on the canal from the activities at

Carderock. There is some conflict between user groups within Carderock over parking facilities. Special provisions may be necessary to alleviate this.

Parklands and Adjacent Land Use

No additional acquisition of lands was provided for in the enabling legislation, but most of the adjacent lands are under the jurisdiction of the National Park Service.

In summary, this section is known for its historic Seven Locks, its Carderock Recreation Area, and its interesting geology. When the area is again rewatered, this Zone B section will complement the Zone A section upstream at Great Falls.

4. Great Falls - Anglers Inn to Lock 21: 12.3 - 16.5 = 4.2 miles; Zone A

The Resources

Historical resources here are well suited for a National Interpretive Zone. The six locks, Great Falls Tavern (Crommelin House) and the adjacent tract, with its gold mines, afford abundant opportunities for historic interpretation. Anglers Inn, adjacent to the canal park, provides food service for park visitors. The predominant natural resources are the Great Falls of the Potomac, the geological formations of the Piedmont, and the rocky gorges including Widewater and Mather Gorge. The interrelationship between the six locks on the canal and the Great Falls provide for a strong interpretive theme. The existing stands of American chestnut and fragrant sumac, as well as the concentration of the Alleghany Mound Ant, are rare species in this area. These resources, as well as Oak Spring at Swains Lock, will receive special protection.

Access and Existing Facilities

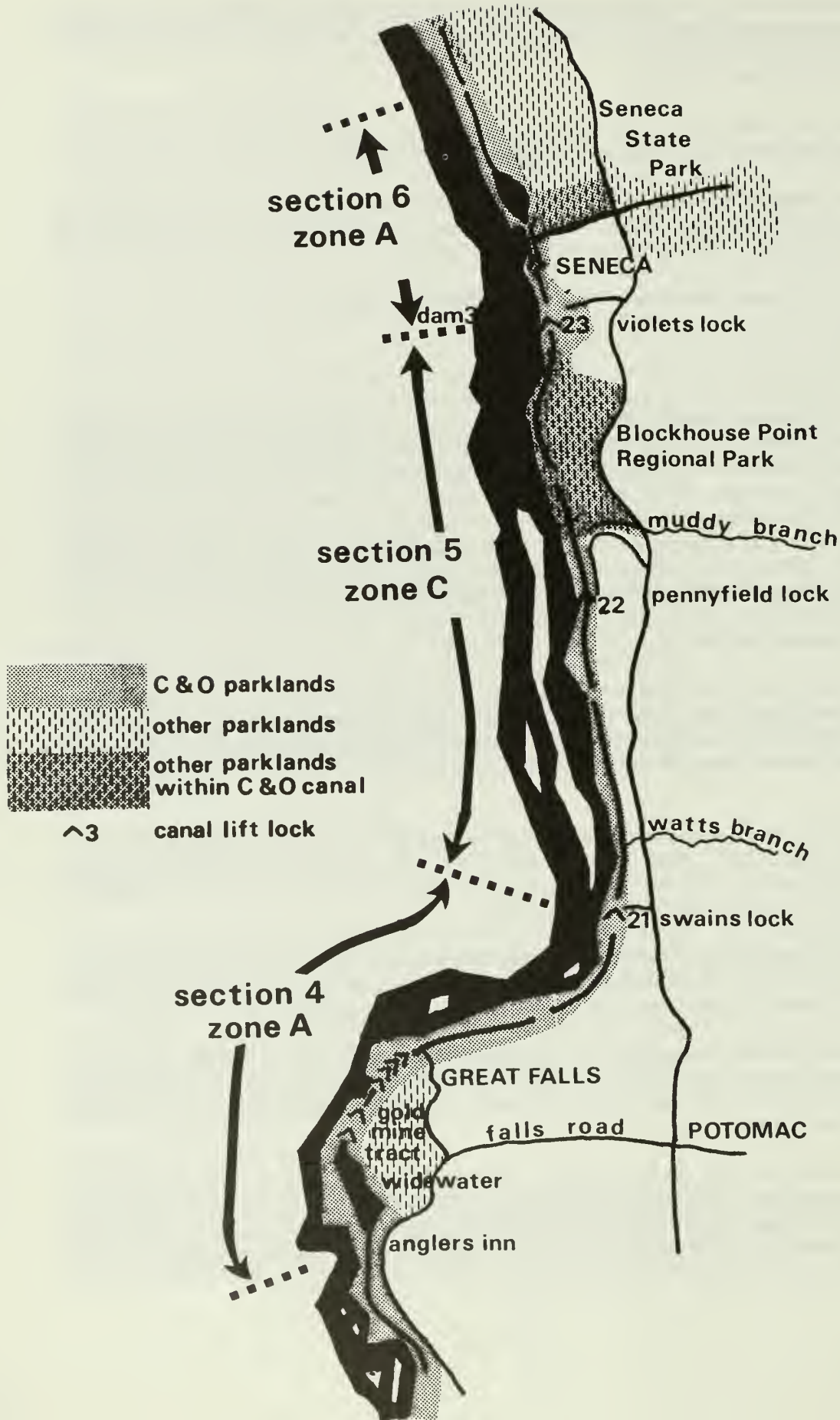
This long-established visitor use area contains a 535-car parking lot, food and bicycle concessions, the Great Falls Tavern museum and Administration Building. Access is also provided at Anglers Inn, where three gravel lots provide parking for fishermen, white water canoeists, and towpath users. These parking facilities should be redesigned to avoid overuse of the area.

The Berma Road, which serves as an alternate route for cyclists, goes around Widewater above Anglers Inn and terminates above Lock 16. Billy Goat Trail is a second alternate route which traverses the Palisades for 8 miles from Carderock to Great Falls. This provides a challenging hike and variety for those who enjoy rugged terrain.

Visitors to this area have been traditionally attracted to Great Falls rather than the C&O Canal. Because the 1972 floods destroyed the footbridges out to Great Falls, now is the time to study the future of this area. A sectional development plan has been undertaken as a first priority.

The study will consider the need for a new visitor center which could free the Crommelin House for historic restoration. The study will also analyze the existing maintenance area and visitor circulation patterns in the context of Zone A management and consider the potential for a bicycle trail bypass.

Great Falls and Anglers Inn provide access to the Potomac for white water canoe enthusiasts. This is a valid and desirable use of these areas and will be encouraged. Safety will be stressed as this section of the river is definitely not for novice canoeists. The annual Potomac white water canoe race is the highlight for canoeists and will be continued. The canal is also used by canoes



and kyacks to return upstream after a run on the river. This use will be continued. It is not anticipated that any facilities will be needed other than modest launching docks, where appropriate.

Available Lands and Adjacent Land Use

This section is contiguous to the 340-acre Gold Mine tract which provides buffer lands from Anglers Inn to Great Falls. Visitor facilities may be placed here in the future. However, the steep topography will ensure development of low impact. This tract will be included in the aforementioned study. No additional lands are being acquired in this area.

A bicycle trail is being constructed by Montgomery County along MacArthur Boulevard and Falls Road. While this trail may create problems by providing increased accessibility, it also offers an alternative to towpath use through the Great Falls area.

The numerous diverse attractions in the Great Falls area produce visitor overcrowding and circulation problems which must be resolved. The presence of such a wealth of resources in this area create a great challenge for future managers and planners.

5. Swains Lock to Violets Lock: 16.5 - 22.1 = 5.6 miles; Zone C

The Resources

Although rewatered, this section contains limited historic resources. Among them are two locks and accompanying lockhouses. The spectacular 125-foot-high cliffs of Blockhouse Point Regional Park and the Dierrsen waterfowl sanctuary dominate the natural resources of this section. These attractive resources will need special protection to avoid adverse use by visitors.

Cooperative management agreements will be developed with the State and county governments to ensure that this multiple land ownership is managed in a way which is compatible with the Zone C concept.

Access and Existing Facilities

Presently, three points of ingress are available to canal users in this section. Swains Lock provides 25-car parking with canoe and food concessions. This facility is deemed adequate and efforts to avoid overcrowded conditions will be made.

Pennyfield Lock is a secluded access point next to the Dierrsen waterfowl sanctuary which has long been a favorite with river fishermen and bird watchers. Care will be needed to handle increasing use demands without destroying its natural charm. Informal parking for approximately 100 cars is currently available. Violets Lock, which is located where the 22 mile rewatered section commences, is a favorite canoe-launching place for those running the Seneca Breaks and a preferred area for fishermen who wade the Potomac for small-mouth bass.

Parklands and Adjacent Land Use

Additional acquisition will provide opportunities for visitor facility development.

At Watts Branch a mature forest, a hill offering pleasant vistas, and a meadow beside the canal create an attractive park area of 45 acres. A campground for towpath users and a trail along the branch should be considered for this area. The trail would connect with another trail proposed by the Maryland National Capital Park and Planning Commission. The Commission



has acquired lands to protect much of this stream valley. Vehicular access is not contemplated here because it is incompatible with the camping proposal and would present safety hazards on River Road.

Additional lands are being purchased at Pennyfield Lock, which will permit construction of a limited formal parking lot for towpath users. Care must be taken to control access and visitation to Pennyfield so that it does not become a major recreation area which would, in turn, encroach on the Dierrsen wild waterfowl sanctuary managed by the Maryland Department of Natural Resources.

The Maryland National Capital Park and Planning Commission is an abutting property owner. The Commission is protecting the Muddy Branch in Travilah Regional Park and plans to provide a tributary trail to the towpath. The Commission also owns the 380-acre Blockhouse Point Regional Park, which will be managed as a natural area. This is compatible with the Zone C concept for this section.

At Violets Lock, additional lands are being acquired. These lands will serve both this section and the Seneca section. This acquisition will permit removal of existing facilities which are too close to the canal and located in the flood plain. A towpath user group camping area is planned for this area.

The Park Service is working with the Washington Suburban Sanitary Commission to produce a plan for the proposed expansion of the Watkins Island fresh water intake plant which will require the least possible impact on the Park.

6. Seneca - Violets Lock to Seneca Quarries: 22.1 - 23.7 = 1.6 miles; Zone A

The Resources

The first canal aqueduct, damaged in past floods, should be fully restored. Here also are the quarries from which much building stone was barged down to Washington. The remnants of the stone mill and the turning basin, where the canal boats were loaded, are still in evidence. The stone mill is presently owned by the State as part of Seneca State Park. It is anticipated that the mill will either be acquired by National Park Service or managed cooperatively and be stabilized or restored as part of the historical-industrial exhibit at Seneca. The old turning basin has become a marsh. This should be interpreted until such time as rewatering this section becomes feasible, and the basin is flooded as it was historically. A second turning basin below the parking lot should also be restored. This will need further historical research.

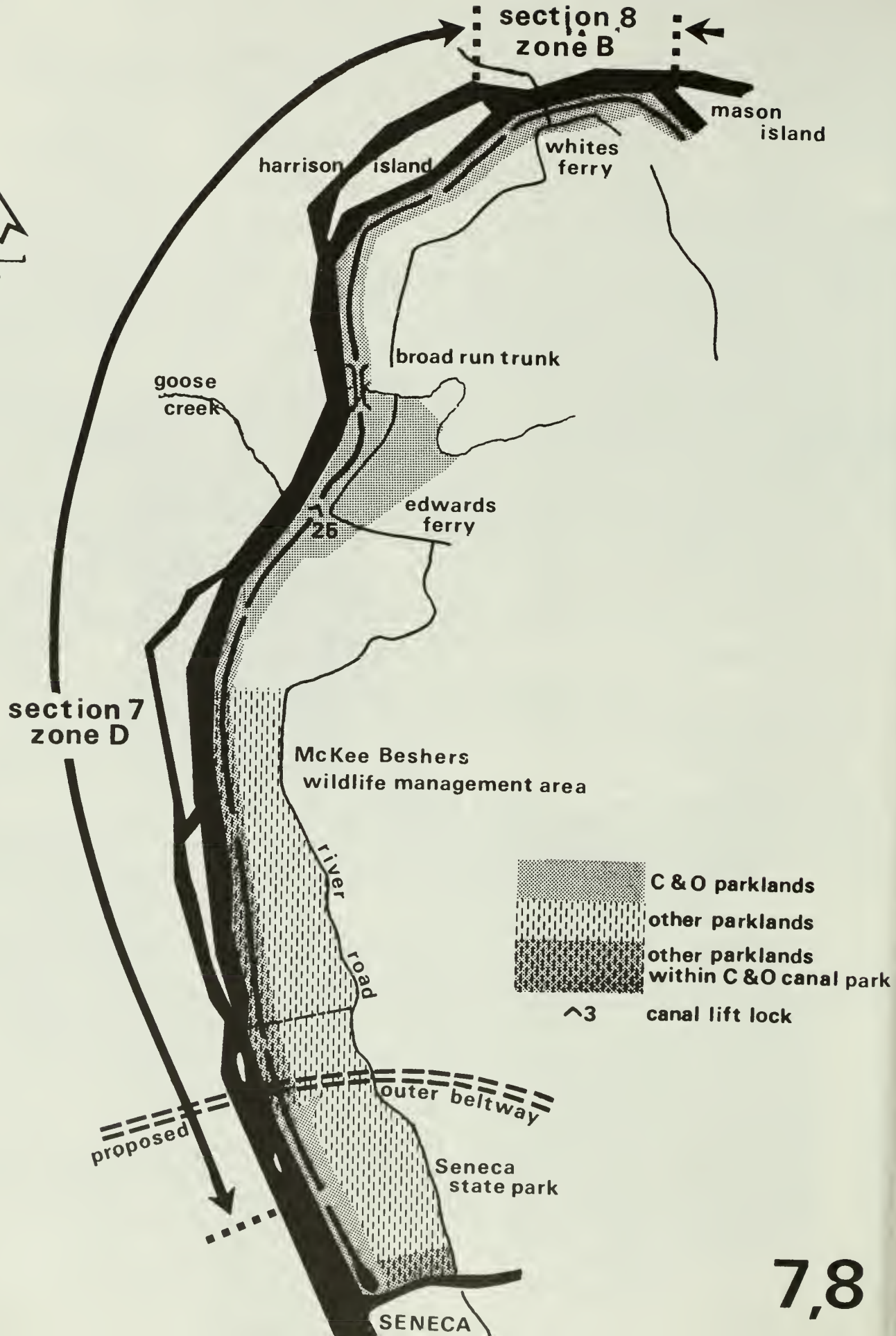
Access and Existing Facilities

Access to the 75-car parking area at Seneca comes from Rileys Lock Road. A boat ramp exists which serves the 5-mile slackwater created by Dam No. 2 at Violets Lock below. This ramp is currently under study and may be relocated by the State of Maryland.

This area is extremely overcrowded on weekends and requires additional planning to keep visitation within the carrying capacity of the existing facilities.

Parklands and Adjacent Land Use

The modest increase in lands at Seneca will not provide adequate space for parking and other facilities contemplated under the Zone A designation. However, the additional lands at Violets Lock, combined with those in the Seneca State Park, can provide the necessary acreage. The



cooperative use of State lands is critical to the Zone A designation. In the event sufficient land does not become available, this section will be redesignated to a Zone C category.

Sectional development for this area will be planned with the Maryland Department of Natural Resources and the Seneca State Park Advisory Commission. The plan will include all state and Federal lands between River Road, the river and the McKee Beshors Wildlife Refuge and Violets Lock. It will pay particular attention to the potential impacts on River Road and the planning and zoning objective of Montgomery County. State lands within the boundary of the national park should be managed under a cooperative agreement.

7. Seneca Quarries to Whites Ferry: 23.7 - 34.0 = 10.3 miles; Zone D

The Resources

Indian archeology and wildlife are the predominant resources throughout this section. Numerous artifacts have been retrieved on the banks of the river and the Potomac River islands. Harrison Island was occupied by the Canoy Indians during the 1690's. A myriad of birds and small wildlife inhabit this area along with the trillium which is especially spectacular in April. The Goose Creek Canal which once linked Virginia commerce with the C&O Canal through the river lock at Edward Ferry, an old store and Lock and Lockhouse 25 are all located here. The remains of Broad Run Trunk, which was a wood trough over a culvert, should be stabilized.

Access and Existing Facilities

There are only two access points to this section. One is along the gravelled Sycamore Island Road which passes through the 1,100-acre McKee-Beshors Wildlife Management Area. This area is under the jurisdiction of the Maryland Department of Natural Resources; and their wildlife management policies require extremely limited access. The second access is along the restrictive back roads leading to Edwards Ferry. These roads can support the limited use anticipated under Zone D management.

There are 2 hiker-biker units in this section and they should be retained. The existing boat ramp which serves fishermen should be improved or relocated to alleviate the siltation problem.

Parklands and Adjacent Land Use

The adjacent wildlife area is compatible with the objectives of Zone D. The long studied outer beltway may cross this section in the vicinity of Milepost 24. If this highway is constructed, this alignment has less impact on the park than other alternatives which have been studied. At Edwards Ferry approximately 450 acres have been acquired which can accommodate a variety of camping facilities.

8. Whites Ferry - Northern tip of Harrison Island to Southern tip of Mason Island: 34.0 - 35.5 = 1.5 miles; Zone B

Whites Ferry, the only operating ferry on the river, has operated since 1856. Representative of the 100 ferries which once operated on the river, it is a valuable part of historic interpretation and should be retained. It also provides access to Leesburg and other points in Virginia. The old iron, wood-planked bridge could be restored for access to Whites Ferry. Just above Whites Ferry is the site of an Indian Village and the foundation of the warehouse granary where chutes poured grain directly into the holds of canal barges.

Access and Existing Facilities

Whites Ferry Road provides access from Maryland and Virginia. Privately owned in the past, this area should be developed within the Zone B concept of intensity for day use activity. The existing boat ramp, picnicking and boat rental facilities, the store and ferry are all compatible with Zone B management.

Parklands and Adjacent Land Use

At Whites Ferry, the 130-acre site could accommodate parking for the ferry store and towpath users. An expanded picnic area is envisioned along with boat and bicycle rental facilities and the boat ramp. Existing and future residential development in Montgomery County will place enormous day-use pressure on this section. The Whites Ferry Sportsman's Club has retained a 25-year right of use. This land will provide space for future day-use facilities.

9. Whites Ferry Granary to Lock 27: 35.5 - 41.5 = 6.0 miles; Zone C

The Resources

Limited in historic resources to Lock 26, this section contains a topography which varies from flood plain farmlands and large river islands to 85-foot-high red sandstone cliffs. An abundance of wildlife and biological features create an extremely varied and scenic stretch of the Canal.

Access and Existing Facilities

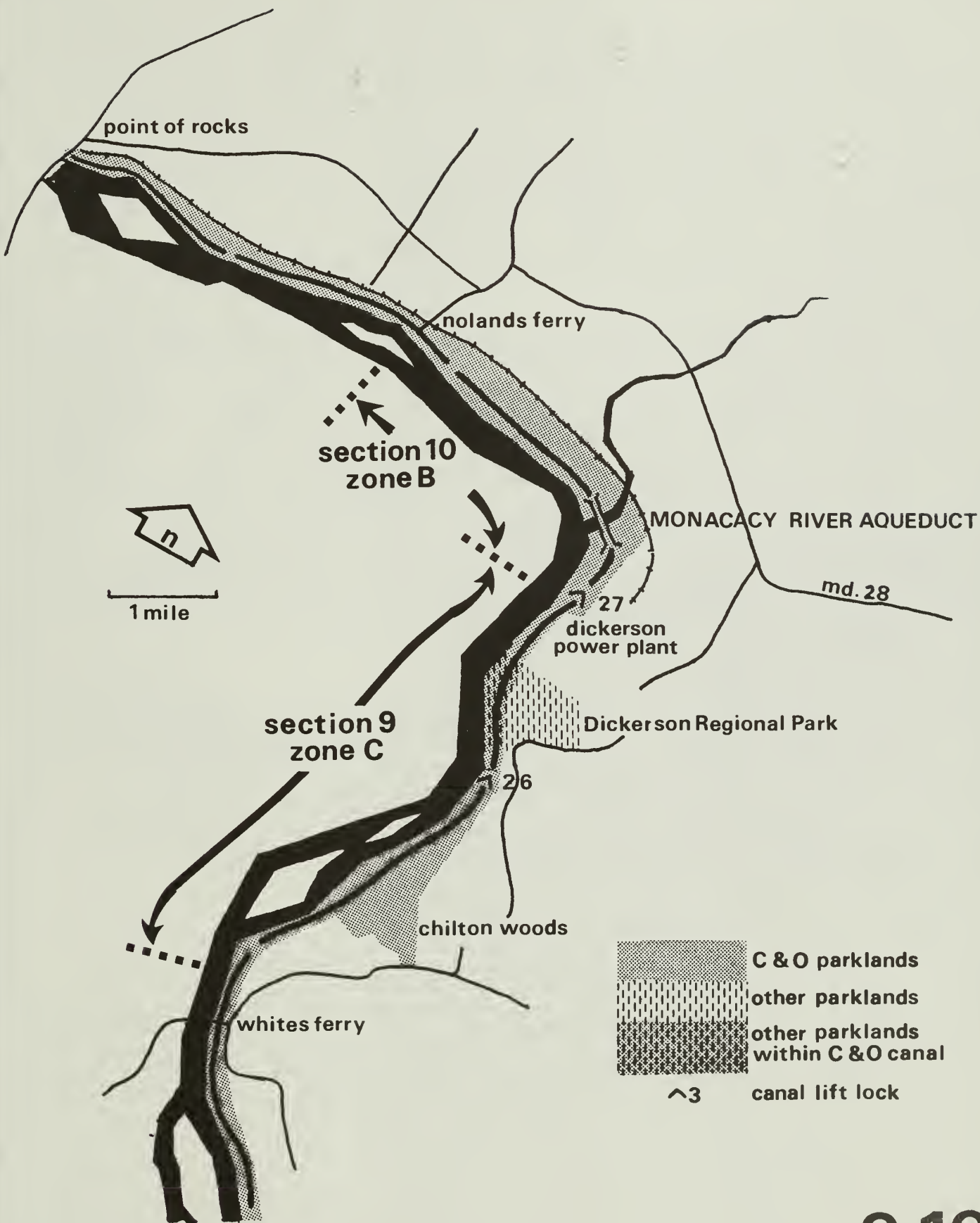
The only existing access is through the Maryland National Capital Park and Planning Commission's Dickerson Regional Park. This park provides access across the canal to the warm water fishing area in the river. The warm water results from the power plant above, which utilizes Potomac water for cooling. The current concept for management of Dickerson is one of primitive camping, limited picnicking and fishing access. This is compatible with the Zone C designation.

The Park Service facilities are presently limited to one hiker-biker unit. This section will link the Zone B areas on either side which should serve as the major access points.

Parklands and Adjacent Land Use

The Dickerson Regional Park is being planned and developed cooperatively to ensure that towpath density is kept in scale with the desired mood of Zone C designation. The proposed expansion of the power plant mentioned elsewhere in this plan is being coordinated with Pepco, the county, and the Public Service Commission of the State to ensure that a maximum degree of compatibility with the park's resources is achieved. Pepco has recently restored 1 mile of canal which had been filled with fly ash from their plant on the land above.

A rugged woodland of some 600 acres called Chilton Woods is being acquired above Whites Ferry. These lands are well suited for an environmental education laboratory, and most of the area should be devoted to this purpose. This would comprise an all-purpose building, including a dining hall, classroom and laboratories, and cabins. Due to management considerations and topographical limitations, separate cabins are recommended over the larger dormitory living accommodations. Serving the center would be a system of hiking and nature trails and nature study areas.



Group camping areas would be available for overnight outings by cabin occupants and towpath users. Sufficient acreage exists to provide campgrounds for individual towpath hikers and bikers as well. Chilton Wood is not seen as a general public access point to the canal. Rather, it will serve as a self-contained unit making little impact on the towpath.

If Mason Island, opposite Chilton Wood, can be acquired by the state, the study of flood plain agricultural usage which would take place on the Island, would add to the comparative studies between natural systems which are planned for the environmental education laboratory. This, of course, would have to be arranged by a cooperative agreement.

10. Lock 27 to Nolands Ferry: 41.5 - 44.6 = 3.1 miles; Zone B

The Resources

Dominated by the 516-foot-long Monocacy Aqueduct, this section contains many historical resources. Lock 27, a fine culvert over Little Monocacy River, remains of Boyds Mill, the Old Monocacy Basin and Granary, a prehistoric archeological site, and the area where the historic crossing of the Potomac at Nolands Ferry took place make up a wealth of historic interpretive possibilities.

Rewatering of the Monocacy Aqueduct is not envisioned under Zone B management at this time. If rewatering of the aqueduct is considered in the future, the conflict between towpath users and visitors wishing to see the aqueduct will have to be resolved. With water in the aqueduct, the 8-foot-wide towpath would have to accommodate all pedestrian crossings of the Monocacy River. With a dry aqueduct, the bed of the canal can serve to accommodate some of the visitors as it does today. If mule-driven barges are considered, this could become the sole method of transport across the aqueduct. The economics of rewatering this aqueduct will be considered.

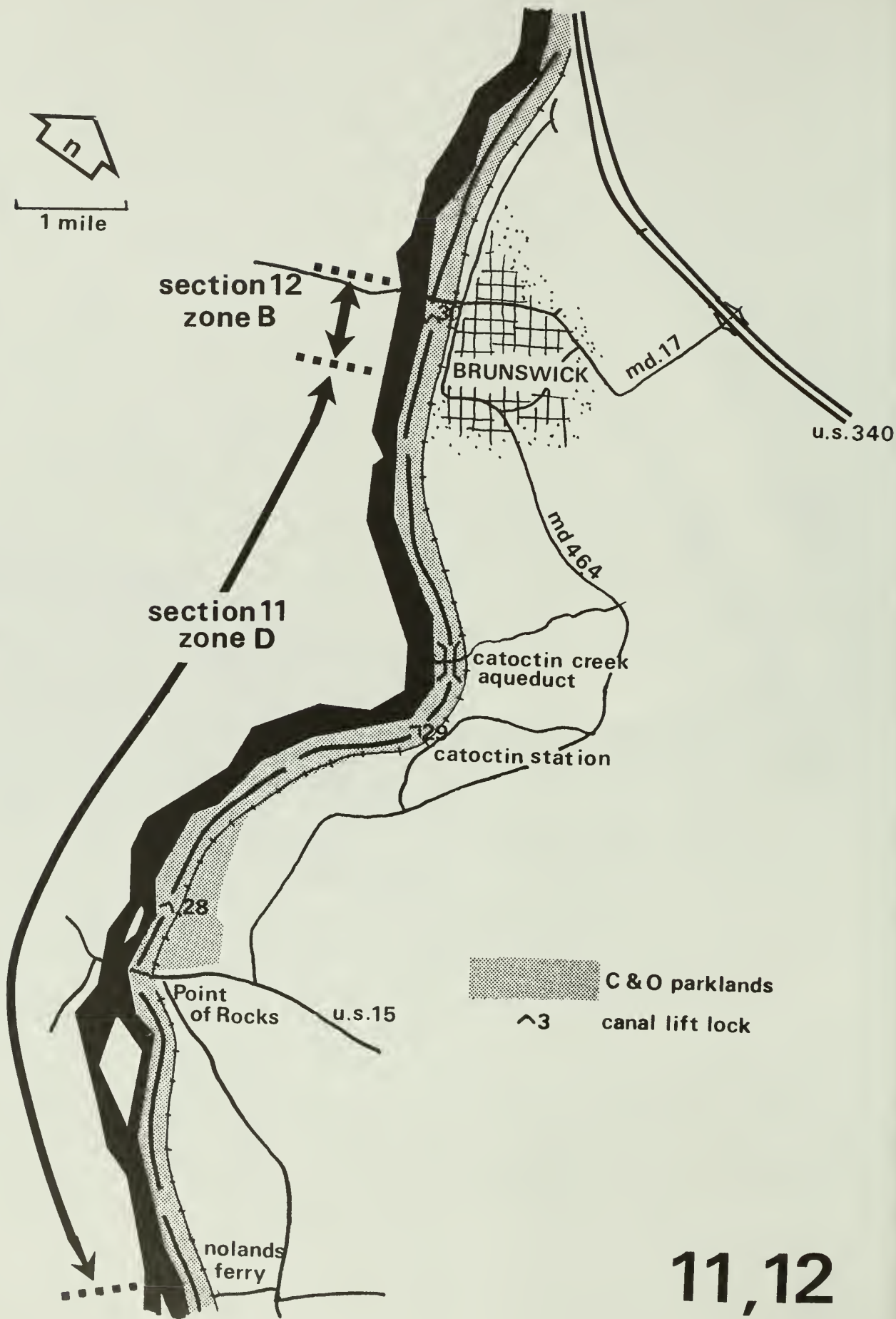
Access and Existing Facilities

Current facilities include a two-lane gravel road, a 15 car parking lot, a small picnic area, and boat access at Nolands Ferry. The access to Monocacy combines a grade crossing of the railroad and a narrow curved road which produce an undesirable entrance. Better access to the area can be developed, in cooperation with the county, from Nolands Ferry Road to the north. The existing parking, picnicking and boat ramp, adjacent to the aqueduct, should be phased out because they are incompatible with the historic scene. Although the upstream boat ramp could be retained, it might be more advantageous to locate it on the opposite side of the Monocacy River.

Parklands and Adjacent Land Use

Approximately 750 acres of agricultural land has been purchased adjacent to the towpath between the Potomac River and the railroad. Although much of this land is within the 50-year flood plain, development on carefully selected sites can provide facilities for a versatile combination of day-use activities. Parking, picnic areas, boat, canoe and food concession seem appropriate here. The existing farmstead could be made into a stable, and bridle as well as foot trails connecting with the Monocacy River Valley could be provided.





11,12

11. Nolands Ferry to Brunswick Town Park: 44.6 - 54.00 = 9.4 miles; Zone D

The Resources

Although paralleled by the railroad for its entire length, this section provides the second remote area along the canal. The historic resources are limited to Lock 28 and 29, the stabilized ruins of the Catoctin Creek Aqueduct, and the remains of the old Pivot Bridge at Point of Rocks. Its unusual natural features include a series of outcroppings and quarries of calico marble from which columns were carved for some of the buildings in Washington.

Access and Existing Facilities

The major entry point to this section will be at its midpoint, Point of Rocks. The existing Route 15 will serve visitors to this area. The road to the other access point, Catoctin Station, is dangerous and will be de-emphasized. The only existing facilities are a small parking area at Catoctin Station, a boat ramp at Point of Rocks, and two hiker-biker overnighiter units.

Parklands and Adjacent Land Use

The park boundary generally follows the railroad along this section. Most of the parklands are between the canal and the river and are subject to flooding. Thus, development of these lands should be very low key. Parking facilities for towpath users and a park and walk campground is envisioned for Point of Rocks. The view from the cliffs is outstanding and a side trail to this vantage point is envisioned. Provision for group camping at Catoctin Station, along with a campground for hikers and bikers near Catoctin Aqueduct, should be studied.

The State of Maryland owns 99 acres of land at Point of Rocks which are within the boundary of the park. This can be utilized for land exchanges between the State and the Park Service in other areas of the park. Heaters Island in the Potomac River was one of two islands occupied by the Canoy Inidans in the 1690's.

12. Brunswick-Town Park to Lock 30: 54.00 - 55.00 = 1 mile; Zone B

The Resources

This section includes Lock 30, which is one of four that were doubled in length by a wooden extension. The ruins of an old mill lie adjacent to the lock.

Access and Existing Development

Access is gained from the town of Brunswick by crossing the railroad yards. Existing use of the towpath by motor vehicles should be eliminated. The Brunswick Town Park provides camping and boat launching.

Parklands and Adjacent Land Use

The 90-acre park owned by the town of Brunswick will be further developed for camping and picnicking. A road to serve the park and the sewage treatment plant can be constructed between the towpath and the river. As the canal, towpath, and Lock 30 will be restored and rewatered, care must be taken to select a vehicular crossing of the canal which won't intrude on the historic scene. Parking for towpath users can be provided adjacent to the mill on the berm side. All remaining parklands here lie within the annual flood plain. Consequently, no other development is proposed. The Town of Brunswick, the railroad yards, roundhouse and

other historic structures could become a fine working exhibit. The town has good access by rail and road and can provide services for visitors as well.

The people of Brunswick are enthusiastic about the tourism potential of the town, the canal and the railroad yard. The Potomac Foundation has developed a railroad and canal museum. The town has held the "Potomac River Festival" for the past seven years. This August event, attended by 6,000 visitors, is a festival featuring arts and crafts, historical displays, and tours of the railroad facilities. If the town and the railroad develop a high quality living museum of the railroad era, the National Park Service will upgrade the zone designation of this section to Zone A. This planning must be undertaken jointly to coordinate plans for circulation, exhibitry and visitor service.

13. Lock 30 to 32: 55.0 - 60.2 = 5.2 miles; Zone D

The Resources

Locks 31 and 32, rapids in the Potomac River, shallow water in the canal, ruins of old buildings, and a flood plain habitat of wildflower combine to provide a remote area experience.

Access and Existing Facilities

Access is extremely limited and should continue to be so within the concept of Zone D management. Access to this section will come from Brunswick or Harpers Ferry via the towpath. The Appalachian Trail contributes to towpath use as it comes down from South Mountain and follows the canal to Sandy Hook. The only existing user facility is one hiker-biker.

Parklands and Adjacent Land Use

Acquisition here is limited to lands between the canal and river. It may prove necessary to provide a campground for towpath users, canoeists and Appalachian Trail hikers. The towns of Knoxville and Sandy Hook are adjacent to the park. Since these towns provide limited services and have a history of their own, side trails to them should be provided.

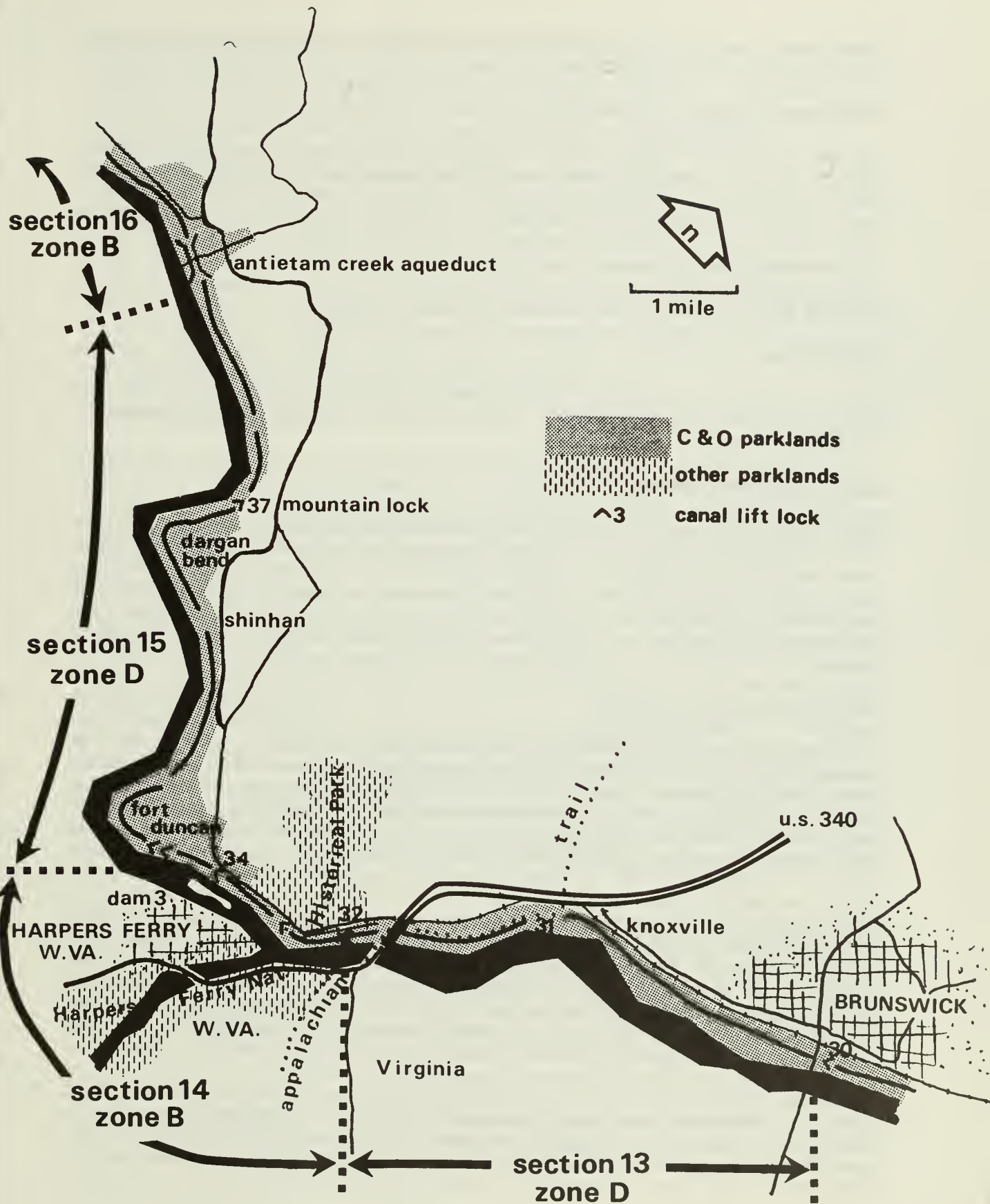
14. Harpers Ferry - Lock 32 to Lock 36: 60.2 - 62.3 = 2.1 miles; Zone B

The Resources

Although damaged by past floods at the confluence of the Potomac and Shenandoah Rivers, Locks 32, 33, 34, 35, and 36, together with Inlet Lock and Dam 3, the Salty Dog Tavern, and the view of historic Harpers Ferry, make this a very interesting section. The confluence, with its sheer cliffs and river rapids, provides scenic values as well as habitat for a number of wildflowers and ferns. The rare lipfern can be found on these cliffs.

Access and Existing Facilities

Present facilities are limited to parking along Harpers Ferry Road. Due to the topography, Harpers Ferry Road is extremely narrow and hazardous and cannot be improved. The possibility of rerouting this county road onto Elk Ridge is being explored by the county as a possible solution. The major future access is seen as being from Harpers Ferry across a footbridge constructed on the old bridge piers. This bridge can also be the Appalachian Trail



13,14,15,16

conduit into Harpers Ferry. Secondary access will come from park developments at Fort Duncan above.

Parklands and Adjacent Land Use

Harpers Ferry National Historical Park is contiguous to canal lands on Maryland Heights along most of this section. Compatible development in the form of trails is considered the best use of these lands. Because of restrictions imposed by the topography, circulation, and availability of visitor services in Harpers Ferry, this section should not contain any development. The historical canal features might be restored, but the canal below Lock 33 should not be rewatered due to the flood damage potential.

15. Lock 36 to Antietam Creek: 62.3 - 69.3 = 7.0 miles; Zone D

The Resources

River views, low cliffs, wildflowers, and interesting ravines make this one of the most scenic stretches along the towpath. Historical resources, such as Locks 36 and 37 and the drydock, complement the scene.

Access and Existing Facilities

The county road system serving this entire section is scenic. However, it cannot support volumes of traffic. Until this road system is improved, no facilities should be developed on newly acquired parklands. Shinhan Road provides access to the Dargan Bend Recreation Area which contains a boat ramp serving the 9-mile slackwater of Dam 3. The existing capacity of this facility is compatible with visitor usage and should be retained. The Mountain Lock Recreation Area provides a park-and-walk campground, which is considered to be a valid use of these lands.

Parklands and Adjacent Land Use

Two large parcels of land are being purchased in this section. The sites are separated from the towpath by steep topography; therefore, development and resultant visitor use can function independently of the canal. Four hundred and twenty acres are being acquired at Fort Duncan Bend. This high bend in the river, commanding scenic views of Harpers Ferry and surmounted by a Civil War earth fort, is one of the richest interpretive sites along the canal. It provides much-needed open space for visitors to the Harpers Ferry area which is restricted by steep terrain. To interpret the canal, the Harpers Ferry story, and other history and natural history of the area, an interpretive facility, overlooking the canal and river, and accessible by trail should be constructed. Trail access down and along the slopes of the bend is recommended to avoid scarring by roads and to provide for the leisured rambling conducive to full appreciation of these resources. A picnic area is compatible if located away from the canal. Careful siting and design will be necessary to prevent blighting the natural scenic beauty of Fort Duncan Bend as seen from Harpers Ferry across the river. The old earth fort should be protected and interpreted, and the old brick farmhouse, typical of those built in this part of Maryland during the first half of the 19th century, could be restored as an architectural example of its type.

The second large parcel of land in this section is at Dargan Bend. This scenic 400-acre bend, where the terrain sweeps down from a high ridge to the canal, is envisioned as a complement to Fort Duncan's day use and interpretive importance. Thus overnight recreational use in the form of group camps and a campground for hikers and bikers should be considered here. A trail system could follow the escarpment behind the bend and wind through its interesting

topography to a point on the ridge, where fine views of the river and valley can be found. A small 50-unit environmental education laboratory might be developed here. Road access is hazardous and should not be opened to general visitation. Access for permittees of the proposed environmental education laboratory might be allowed. However, improved road access would completely alter the desired function of towpath oriented camping.

16. Antietam Creek to Rumsey Bridge: $69.3 - 72.8 = 3.5$ miles; Zone B

The Resources

This section contains rich memories of the historic land uses around Antietam Creek. The aqueduct, O'Briens Basin, the Canal Workers Cemetery, and the Antietam Creek Bridge are all that remain of the ten mills and three factories which occupied this industrial area. The site of the old iron furnace (1764-1878) is outside the present park boundary on the south side of Harpers Ferry Road. Historic Pack Horse Ford, which provided the crossing for the confederate retreat after the Battle of Antietam, is at Mile 71.4.

Access and Existing Facilities

Access over Harpers Ferry Road from Sharpsburg, or Canal Road from Rumsey Bridge, is by roads that cannot accommodate large traffic volumes. The existing development provides towpath access and park-and-walk camping which will serve well until further development occurs. Where parklands permit, Canal Road might be relocated back from the berm of the canal, as it intrudes on the scene.

Parklands and Adjacent Land Use

Most lands being acquired are within the flood plain. Floods were a contributing factor to the demolition of the industrial complex which once existed here. Thus, locating large interpretive centers or other major buildings here is not feasible. The remaining lands are too steep for development and were included within the boundary for scenic control purposes. Day use development in the form of bike and river use boat concessions, picnic areas, and interpretive exhibitry is envisioned here. The feasibility of rewatering should also be studied. A trail may someday lead up Antietam Creek to Sharpsburg and the Antietam Battlefield. Additional land acquisition would be needed to provide this link and to obtain the site of the Antietam Iron Furnace. This proposal would require special legislation. Possible tours, by minibus from the historic community of Sharpsburg and the Antietam Battlefield above, could travel the 3-mile road down to Antietam Creek, returning along Canal Road to Rumsey Bridge and back to town.

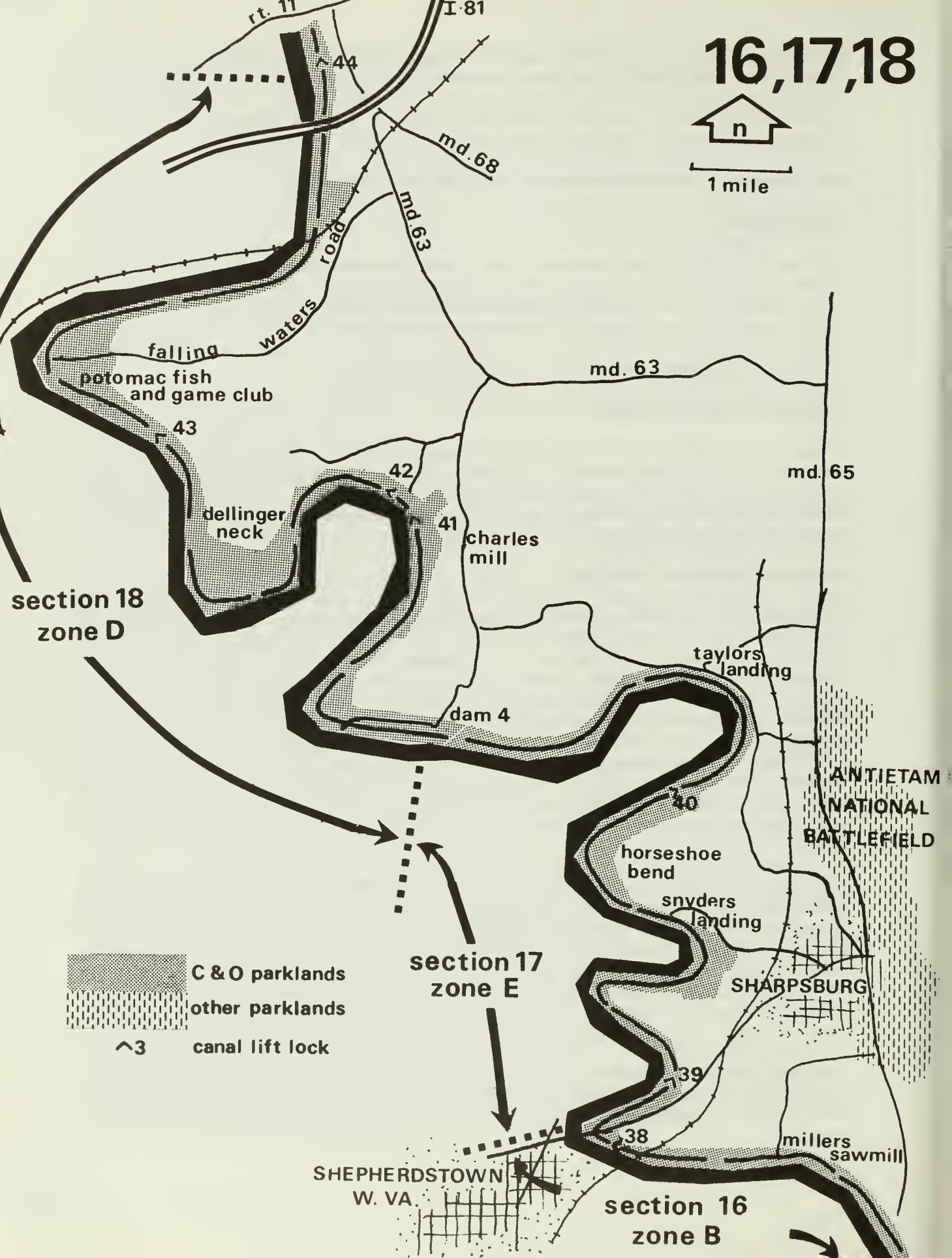
This section passes by the historic Sharpsburg District. The town, the battlefield, and the surrounding countryside have retained the character of the mid-1800's. Numerous buildings of historic significance exist outside park boundaries in this area. The Park Service encourages the town and the local residents to protect these resources, which contribute to the inherent regional charm, and to sensitively develop this base into a meaningful historic tourism center. The Zone B Management should complement the town's efforts to develop a tourism theme in their economy. A visitor service area for tourists has been proposed southwest of the town along Route 34. This would place the tourism center between the town and the canal.

The Ferry Hill Plantation above Rumsey Bridge needs further study to determine its ultimate use. Due to the access, suitability of the structure, and proximity to the center of the canal and Antietam Battlefield, this structure will be considered for a headquarters operation.

16,17,18



1 mile



C & O parklands

other parklands

^3

canal lift lock

section 17
zone E

SHEPHERDSTOWN
W. VA.

section 16
zone B

Presumably this would not be a major visitor contact center. Rather, an administrative function is envisioned.

17. Rumsey Bridge to Dam 4: $72.8 - 84.4 = 11.6$ miles; Zone E

The Resources

The natural attributes of the cliffs with their caves, the profuse wildflowers, and the towpath intermittently reaching the shore of the Potomac provide a low density primitive section of the canal. The historic resources are limited to the Shepherdstown River Lock and Locks 38, 39, and 40. Most of the other historic structures have been obliterated by floods.

Access and Existing Facilities

Access is limited to Rumsey Bridge, Snyders Landing, and Taylors Landing. The abandonment of a previously proposed scenic county road paralleling this section will further isolate and protect the primitive mood. Existing facilities include boat ramps at Snyders Landing and Taylors Landing which serve as an important access to the Potomac for local fishermen. There are 2 hiker-biker overnighers along this section.

Parklands and Adjacent Land Use

Land around all three access points is very limited. Public parking for towpath access should not be provided at any access points. A boat ramp which previously existed under Rumsey Bridge should be restudied to determine if alternate locations are feasible.

There is parkland suitable for development at Horseshoe Bend where a campground for hikers and bikers could be provided.

18. Dam 4 to Lock 44: $84.4 - 99.3 = 14.9$ miles; Zone D

The Resources

This section's natural setting is unique. Steep limestone cliffs, ravines, caves, and waterfalls make this a very scenic area. Dam 4 backs up the 14-mile "Big Slackwater" along the entire section. From Inlet 4 to Lock 42, the canal barges once went out into the river. The towpath was niched into the cliff and today presents a rugged narrow surface which is compatible with this Zone D designation and should not be altered. Wildflowers, stands of shagbark hickory, walnuts and sycamores provide vertical accents to the walled canyon effect of the limestone cliffs.

Historic resources include the dam with its winch house, Inlet Lock 4, and Locks 41, 42, 43, and 44. McMahon's Mill at Cedar Grove, which was built in 1784, is in remarkably good condition. This mill, one of the few remaining mills on the river, might be restored and operated.

Access and Existing Development

Public access presently exists at Dam 4 and the Old Charles Mill at Cedar Grove. The slackwater is used by power boats, which gain access from boat ramps at these two locations. The Dam 4 boat ramp and picnic area will be the subject of further study to determine the future management of these facilities. This will be considered with the river report being

prepared by the State of Maryland. The boat ramp at Charles Mill should be eliminated, as it is incompatible with the historic scene. Two hiker-biker units are located along this section.

Parklands and Adjacent Land Use

Ongoing land acquisition will provide a total of four public access points. This should produce the desired access for Zone D short-term remote towpath experience. No alterations will be made at Dam 4 until the previously mentioned river report is complete. At Cedar Grove, approximately 4 acres of land are being acquired to provide limited parking and a buffer for the Old Charles Mill. All nonhistoric buildings and services on the property should be eliminated. A trail on top of the cliffs could provide an interesting variety for hikers throughout much of this section.

Dellinger Neck, a wooded plateau above and removed from the canal, yet accessible by road, provides a suitable place for a park-and-walk campground. The 250-acre area could also support a towpath user campground, a group camp, and additional parking for towpath users.

At Falling Waters Ferry, a historic ferry site and Civil War crossing, lands are available for a river-oriented day use, especially boating activity, at the head of the Dam 4 slackwater. A development area on a farm adjacent to the Potomac Fish and Game Club could include a boat ramp, canoe staging area, and additional parking for towpath users. Adequate lands also exist for camping of various types. The recently acquired farmhouse is being considered for a youth hostel. Here again, cooperation with the county government is necessary due to hazardous road access.

19. Williamsport, Lock 44 to Hagerstown Filtration Plant: 99.3 - 100.9 = 1.6 miles; Zone A

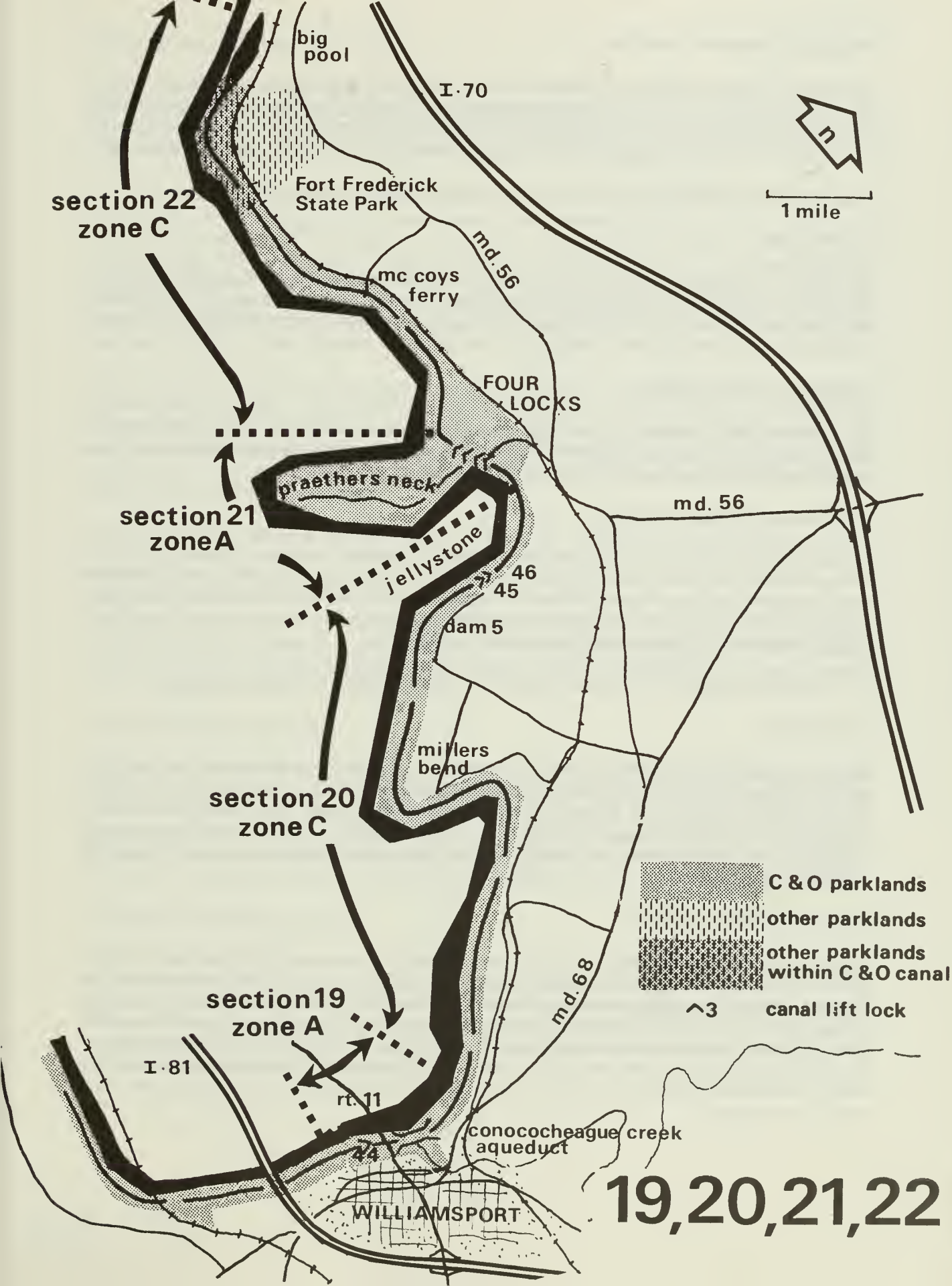
The Resources

Historic canal operations centered in Williamsport and the area offers a tremendous variety of historic resources which could be restored to produce a handsome outdoor museum. The Cushwa structure, located by the historic town square, could become the center for interpretive facilities. The barge turning and loading basin, the aqueduct, the railroad lift bridge, the Bollman vehicular bridge over the canal, Lock and Lockhouse 44 are among the resources available to help interpret canal history. Other points of interest include a cemetery overlooking the canal and an Indian burial site.

Rewatering of the canal and turning basin will be considered in conjunction with a study to determine the existing drainage from the city streets into the canal. The possibility of locating parking and other facilities along the historic town square will be explored in a cooperative planning effort with the town.

Access and Existing Facilities

Access to the town of Williamsport is provided by Interstate Highways 70 and 81 and the railroad provides transportation to the waterfront. Railroad use and a satellite parking area can be utilized to avoid parking problems in the canal area. The recreational attractions offered by the city along the river and its easy accessibility will combine to make Williamsport one of the major activity areas along the canal.



Parkland and Adjacent Land Use

The opportunity to combine canal restoration and the historic character of Williamsport into a reconstructed period town has tremendous potential. The Park Service has been coordinating this effort with the citizens and elected officials of the town and will continue to do so. We concur with the comprehensive plan which was prepared for and by the Town of Williamsport.

20. Hagerstown Filtration Plant to Lock 47: $100.9 - 108.6 = 7.7$ miles; Zone C

The Resources

The historic resources in this section are comprised of Dam and Inlet Lock 5, Locks 45 and 46, the remains of a mule crossover bridge, and the ruins of a second Charles Mill. The natural resources are dominated by the cliffs and large sycamore trees. This combination of historic and natural resources offers wide variety and interest to the towpath user.

Access and Existing Facilities

The major access is provide by the Williamsport and Four Locks Zone A areas to the east and west. The only other access is at Dam 5. Steep topography prohibits development of additional parking facilities at the dam site. One hiker-biker exists in this section.

Parklands and Adjacent Land Use

Parklands are very limited in this section, as steep topography isolates the canal from lands above. Adjacent land use includes quarrying operations, which have deposited rock in the canal over the years, and low density residential usage. Some additional lands will be purchased adjacent to the Dam 5 area. Provision for parking on these lands away from the canal could permit removal of the present inadequate parking at the dam.

21. Four Locks, Lock 47 to 50 Level Waste Weir: $108.6 - 109.3 = .7$ miles; Zone A

The Resources

Four Locks (47-50), all within a half mile, provide an opportunity to reconstruct an operating section of the canal in handsome natural surroundings. Special problems regarding the stability of the subsoils under Lock 48 will receive study. These studies may show that it is not economically feasible to rewater this lock. The study will address itself to alternative methods to recreate the historic scene. Lockhouses and numerous other structures existed here which might be reconstructed.

Access and Existing Facilities

Access along Four Locks Road, off Big Spring Road, is narrow and difficult to find. This access will have to be improved if Four Locks is to become a national interpretive zone. This problem will be worked out cooperatively with the county. This area may best be served by railroad access from Williamsport. Existing facilities consist of a parking and picnic area and a boat ramp which serves the 7-mile slackwater backed up by Dam 5. The future management of this boat ramp depends upon the study of river use by the State. The activity generated at the ramp is incompatible with the restored historic scene at Four Locks, and ultimately the ramp should be relocated.

Parklands and Adjacent Land Use

Visitor facilities to complement the outdoor museum could all be accommodated on the berm side between the canal and the railroad. This 340-acre area, which has been released by the State of Maryland from its acquisition plans, can provide parking and interpretive facilities. A picnic area might be included if a location can be found away from the canal and river.

The 700-acre Praethers Neck Area, which lies below Four Locks, should not be managed as part of the Zone A Four Locks area. Rather, low density visitor use in the form of an environmental education laboratory for groups and individuals is envisioned. Served by bridle and foot trails with campsites along them, the main center would contain a combination dining hall, classroom, and administration facility. Cabins would serve the sleeping needs of the users. This facility is similar to those planned for Chilton Woods in Montgomery County and Dargan Bend near Harpers Ferry. These lands can also support campgrounds for towpath hikers, bikers and river canoeists.

These proposals hinge upon the impact made by the Jellystone campground on the opposite shore in West Virginia. If the density of river and towpath use is substantially increased as a result of the proposed 10,000 person capacity of Jellystone, it might be unwise to encourage more visitation through the implementation of the Four Locks proposal. This, combined with structural and access problems mentioned before, makes this an area where the Park Service will proceed with extreme caution.

22. Level 50 Waste Weir to Big Pool (Upper End): 109.3 - 114.0 = 4.7 miles; Zone C

The Resources

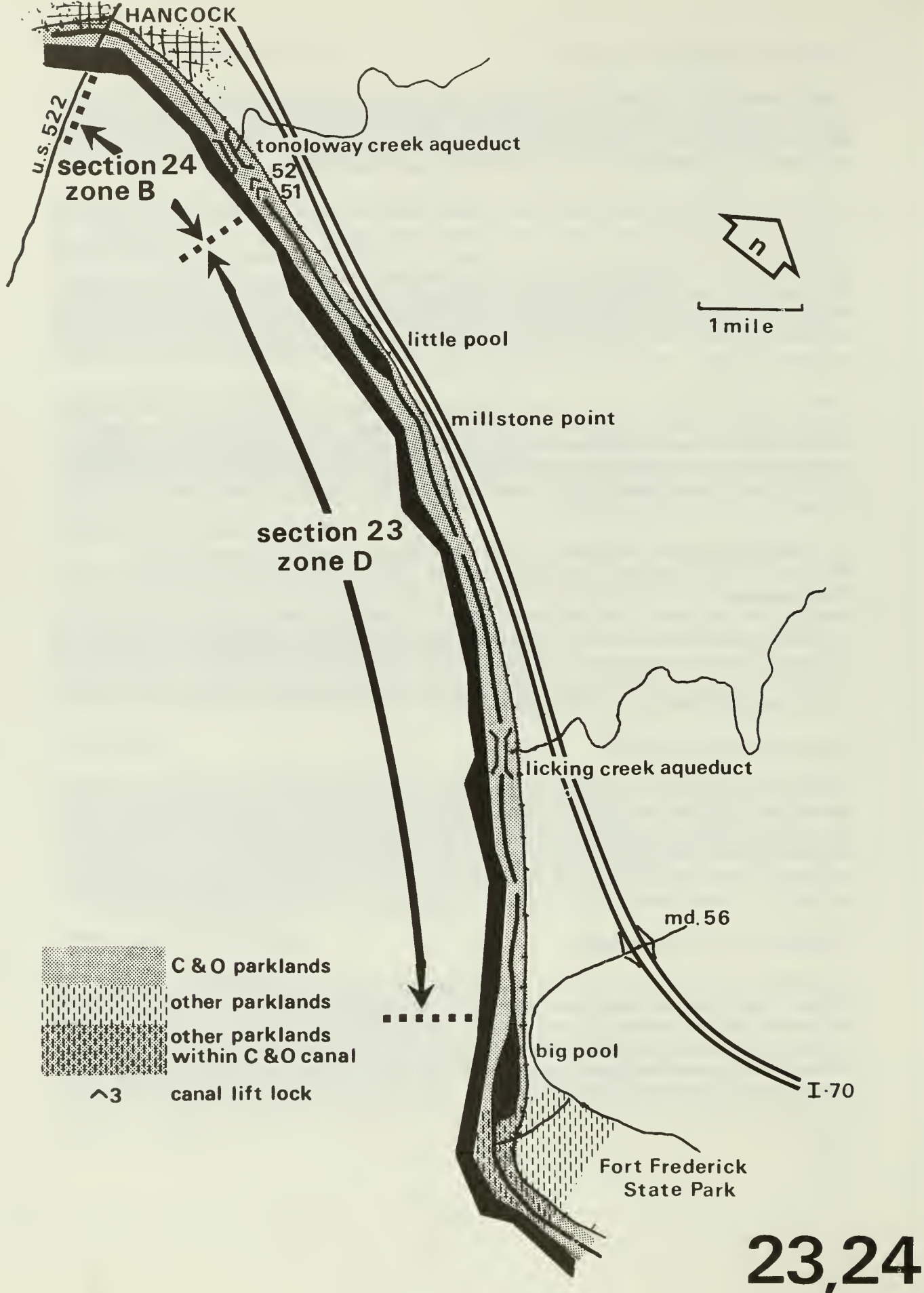
The canal is high above the river and has long straight stretches in this section. The historic site of McCoys Ferry is located at the midpoint. The bottom lands have been made into game habitats by private owners. Big Pool provides variety from the straight green tunnel character of the towpath on the rest of this section.

Access and Existing Facilities

The two major access points are at Fort Frederick and Praethers Neck where visitors will be encouraged to explore the canal. The other access is at McCoys Ferry, where boat ramp, picnic area, camping area and parking presently exist. This pleasant area should be converted to picnicking when camping is provided by private enterprise in the vicinity. One hiker-biker is provided. Access can also be found, for a fee, through Fort Frederick State Park adjacent to this section. A campground is provided here by the State as well as boat rental on Big Pool.

Parklands and Adjacent Land Use

Limited acquisition of parklands will occur as the boundary generally follows the paralleling railroad. Fort Frederick State Park was created to preserve and interpret the French Indian War Fort which is in excellent condition. State plans include further restoration of the fort and expanded interpretive programs. The canal and fort parks can provide interesting side trips for visitors to both areas. The State parklands within the C&O boundary should be managed under a cooperative agreement with the State.



23. Big Pool (Upper End) to Lock 51: 114.0 - 122.6 = 8.6 miles; Zone D

The Resources

The 90-foot Licking Creek Aqueduct is the longest single span aqueduct on the canal. Millstone Point, presently used as a group camp, was a Civil War encampment. Little Pool, a natural water body used as part of the canal, was controlled by Stop Lock 6 at the east end.

Access and Existing Facilities

The only current public access points to this section are from Hancock and Fort Frederick. This provides the towpath user with a 12.5-mile uninterrupted section. To alleviate the hazardous and illegal entry by fishermen at Little Pool, an improved access will be constructed by the State of Maryland. This would consist of an access and parking on State of Maryland lands along the right-of-way of Interstate Highway 70 with a grade crossing of the railroad and trail to Little Pool where a footbridge across the canal is maintained by the NPS. This will provide limited access for towpath users at the approximate midpoint of this section, and will be in keeping with the Zone D short-term concept for this area. One hiker-biker is provided at Little Pool. The Millstone Point Group Campground has a capacity of 1,000 and is used periodically by Boy Scout Groups for hiking jamborees on a permit basis.

Parklands and Adjacent Land Use

Paralleled by the interstate highway and railroad, this section is bordered by noise generators. With this inherent problem, the short-term day use zoning seems more appropriate than zoning encouraging overnight stays. This, combined with the flood plain conditions of most of the parklands, precludes development of any facilities other than carefully sited canoe campgrounds.

24. Hancock, Lock 51 to Route 522: 122.6 - 124.6 = 2.0 miles; Zone B

The Resources

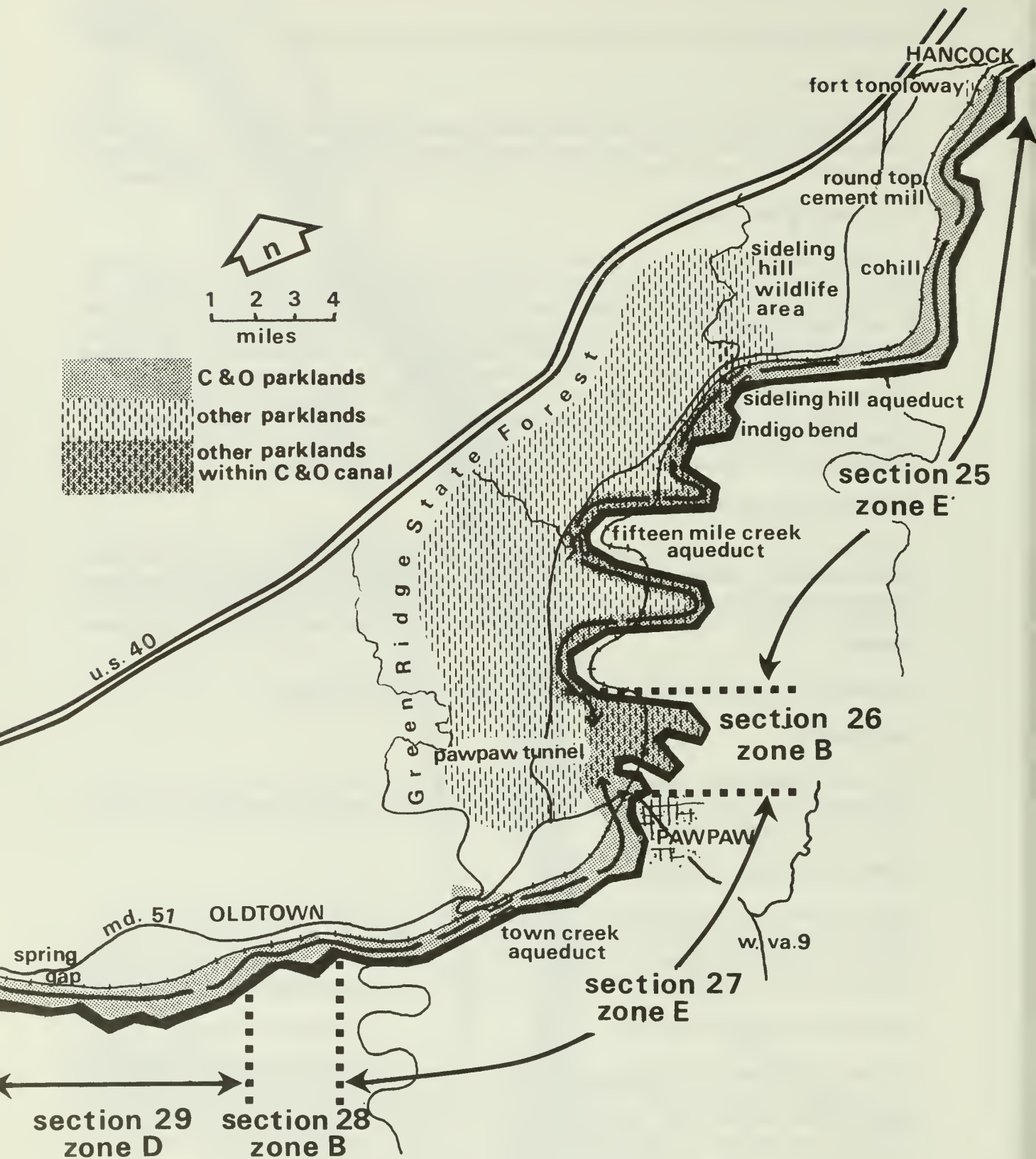
The Tonoloway Creek Aqueduct, Locks 51 and 52, and the town of Hancock are located in this historic area. Rewatering of this section is desirable to re-create the mood of the canal which passes near this historic town.

Access and Existing Facilities

Present access to the park is limited. However, access to the town via Interstate Highway 70 and the bridge from West Virginia makes this a crossroad in western Maryland. Existing facilities are limited to a small picnic area and a boat ramp at Little Tonoloway Creek. The existing railroad could provide visitor access to the park and the town in the future.

Parklands and Adjacent Land Use

The purchase of additional acreage within the boundary, plus a cooperative effort on the part of the town of Hancock, could produce a working historical exhibit here. The success of this venture would depend upon whether the town would be willing to reorient itself to an 1850-1900 appearance. If this section becomes a working exhibit, the existing visitor use facilities should be relocated, as they would be incompatible with the historic scene. Due to limited lands within the park boundary, a Zone A intensity is not recommended.



25,26,27,28,29

25. Paw Paw Bends, Route 522 to Lock 62: 124.6 - 154.1 = 29.5 miles; Zone E

The Resources

This section is to the canal what the designated wilderness areas are to most national parks. The natural resources are varied: geological features such as a superb anticline named Devils Eyebrow; the first stands of the American Basswood occur at Roundtop, although their habitat is normally in the Ohio Valley. The 15 ridges of the Appalachian Mountains begin here. Six of these ridges occur in this section and have produced the rugged beauty for which this area is famous. The historical resources are all canal oriented; no towns or industries were built in this area. Historic remains include nine locks, two aqueducts, Feeder Dam Six and the Roundtop Cement Mill. Although these resources will be stabilized, restoration is not contemplated in Zone E management.

Access and Existing Facilities

Access can currently be gained at Cohill, Little Orleans, and Sideling Hill Creek. Access from Hancock and Paw Paw will be carefully controlled, as these points should be the only towpath user access areas. The necessity of requiring use by permit is likely in the future.

At Little Orleans, the existing campground should be converted to a river use camping area and the river access restricted to hand-carried boats. At Cohill, access for river use should also be the only permissible use. At Sideling Hill Creek, Camp Strauss, owned by the Baltimore Council of the Boy Scouts of America, will contain a canoe base for this river-oriented camp. The railroad, which crosses the canal and river six times throughout this section, may provide future limited access. Existing facilities, other than at Little Orleans, are limited to six hiker-biker units.

Parklands and Adjacent Land Use

The Sideling Hill State Wildlife Management Area and the Green Ridge State Forest border the canal for approximately 20 miles. The remaining 9 miles are protected by steep topography and are not threatened by development. All lands within the park boundary which are owned by the State should be managed under a cooperative agreement.

River use by canoeists is increasing to the point that controlled access may become necessary to maintain the mood of the Potomac. Separate canoe campgrounds should be carefully selected along the river. Additional hiker-biker campsites and primitive campsites should be developed along with an integrated trail system in Green Ridge. Lands at Roundtop, Indigo Bend, and Kaescamp Bend should be considered for campground areas.

26. Paw Paw Tunnel - Lock 62 - Maryland Route 51: 154.1 - 156.3 = 2.2 miles; Zone B

The Resources

A beautiful gorge leads to the Paw Paw Tunnel which was built to bypass the 6 mile meandering route of the Potomac River through the Paw Paw Bend area. The 3 locks, carpenter's shop, boardwalk towpath and the 3,000 foot Paw Paw Tunnel could be restored. Restraint in developing visitor facilities is required to maintain the proper mood amid this spectacular scenery. Of high priority is the removal from the Canal of the dangerous rockslide at the north end of the tunnel.



Access and Existing Facilities

Access is from Route 51, which crosses into West Virginia at this point. Park Service facilities are limited to a small picnic area and hiker-biker campground.

Parklands and Adjacent Land Use

Once the 320 acres is acquired in the bend, an administrative and interpretive facility will be needed. Parking, picnicking, a park-and-walk campground, a canoe-staging area, and river access are the visitor facilities which are envisioned. A trail for wilderness hikers should pass through this area to the Zone E sections on either side. All facilities should be located away from the canal, with walking trails leading to the historic exhibit area. The flood plain must be recognized in development planning. Care must be taken to place the higher-density development away from the tunnel. Consideration should be given to locating parking and other day-use facilities south of Maryland Route 51.

27. Maryland Route 51 - Lock 68: 156.3 - 164.8 = 8.5 miles; Zone E

The Resources

This section is seen as a continuation of the experience from Hancock to Paw Paw. Although it is completely paralleled by the railroad, it has characteristics similar to the previous section. Two locks, the Town Creek Aqueduct, and a canal laborers cemetery make up the historic resources. The canal contains shallow water through most of this section which provides habitat for numerous mammals and waterfowl. This section contains the confluence of the north and south branches of the Potomac River.

Access and Existing Facilities

No public access exists nor should it be provided to this section. Access will come from Paw Paw and Oldtown via the towpath. Existing facilities are limited to three hiker-biker units.

Parklands and Adjacent Land Use

The boundary generally follows along the railroad. Large areas of land between the canal and the river provide ample space to develop canoe and hiker-biker campgrounds. Lands within the beautiful, big horseshoe bend in Town Creek, just before it passes beneath the canal aqueduct, can provide an unusually attractive camping place for hikers. Access, except for a narrow service road, can only be gained by walking from the towpath underneath the aqueduct and railroad bridge; and public crossing of the latter private property presumably would require special arrangements.

28. Oldtown, Lock 68 - Slate Cut: 164.8 - 168.0 = 3.0 miles; Zone B

The Resources

The canal passes an area that was once an Indian settlement and the first family settlement in Allegany County in the early 1740's. This area was significant from the French and Indian Wars through the Civil War, since it was the focal point of a number of routes to the west.

This rewatered section of the canal, which passes through three locks, has attracted fishermen for at least 23 years. A formation of fractured shale yielding unusual pencil-thin shards of rock, called slate cut, is a spectacular geological formation through which the canal passes. The cliffs on the berm at Mile 165.08 provide a fine habitat for native rhododendron.



Access and Existing Facilities

Access is obtained from Route 51. A low water toll bridge connects this area to Greenspring, West Virginia. The railroad also serves this community and may be used in the future by town and park visitors. Existing facilities are limited to a parking and picnic area which will serve for the time being.

Parklands and Adjacent Land Use

The 350 acres of lands contained in this section present exceptionally fine opportunities for park development. A fine old brick mansion overlooking the canal and town could serve as a center for interpretive facilities. Beyond it, well buffered from canal and river, is ample space for picnicking, park-and-walk camping, and group camping for canal towpath users. This area is far enough removed from the canal not to require Zone B management. Rather, a variety of river-oriented camping experiences could be provided. A canoe-staging area and river access are also compatible. A trail should be constructed to allow the wilderness hiker to bypass the developments. Upriver from Oldtown there is a high hill where a stable could be placed now and later would be especially suitable for group camping. It is now an open field, and vegetation should be selectively allowed to grow up and thereby provide shade, scenic interest, and screening.

The canal boundary passes through the rear yards of many Oldtown residents. Special efforts will be made to avoid visitor conflict with private residences.

29. Slate Cut - Lock 72: 168.0 - 174.4 = 6.4 miles; Zone D

The Resources

This relatively isolated section provides a varied short-term experience. Not particularly spectacular and containing limited historic resources, the main value of this section is its primitive state.

Access and Existing Facilities

Access is limited to Spring Gap, where camping, boat ramp, and a picnic area are provided. The drive-in campground should be phased out and redesigned as a canoe staging area.

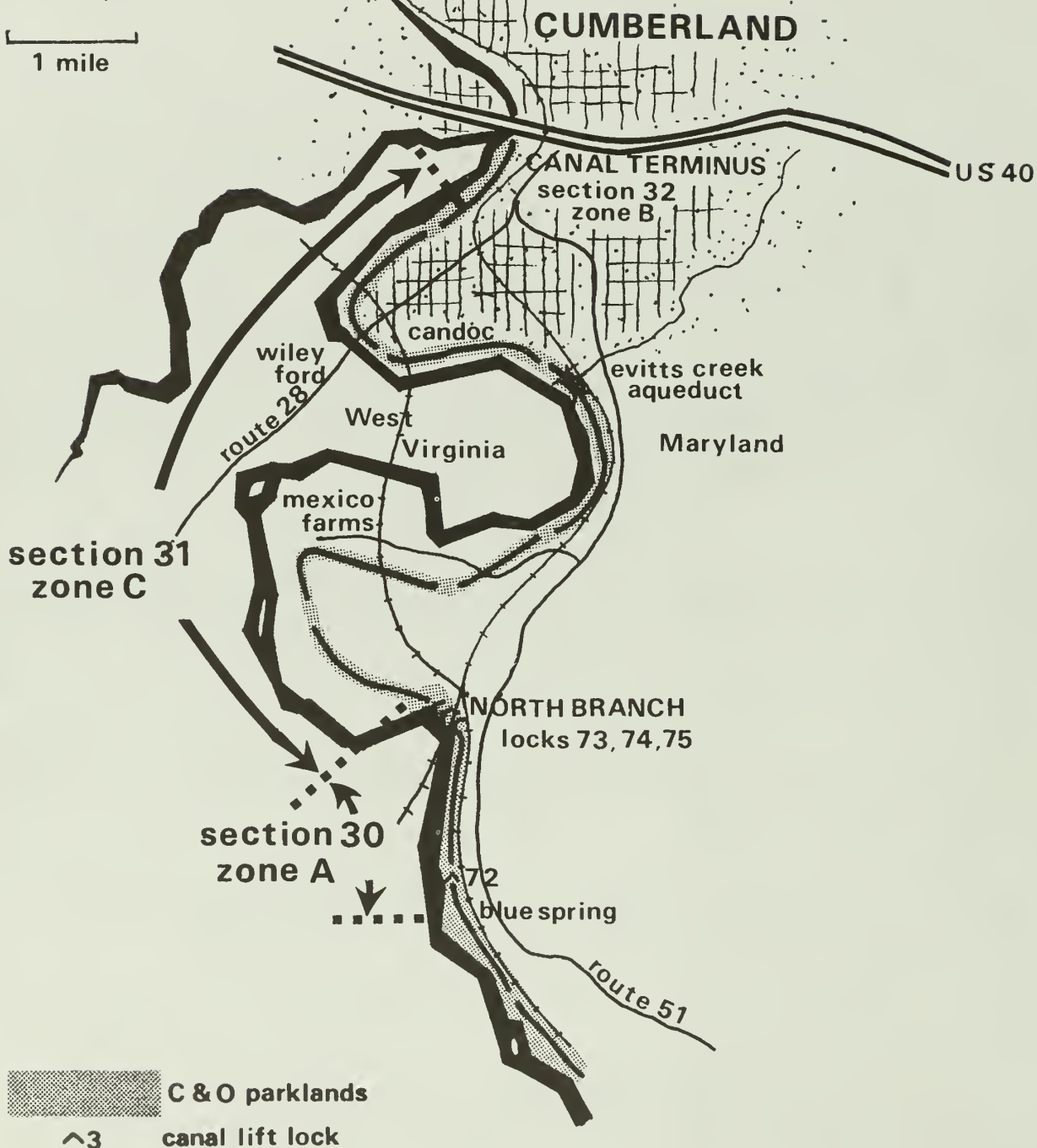
Parklands and Adjacent Land Use

The boundary follows the railroad close to the berm, and the only available parklands are between the canal and the river. These lands can serve the needs of the hiker, biker, and canoeist.

30. North Branch, Lock 72 - Lock 75: 174.4 - 175.6 = 1.2 miles; Zone A

The Resources

At North Branch, a series of four lift locks and two lockhouses in close proximity provides an excellent opportunity for an interpretive exhibit to illustrate the principles of the locks. Care must be taken to preserve Blue Spring near Lock 72, which is the largest spring in Maryland.



30,31,32

Access and Existing Facilities

Access is off Route 51 from Cumberland. This road is currently under study for widening and realignment within the next 3-5 years. Existing facilities consist of a hiker-biker unit and a picnic area. These will serve until further development takes place when they should be phased out. A youth hostel under the management of American Youth Hostels is located in a house which was recently acquired by the Park Service.

Parklands and Adjacent Land Use

Sufficient lands exist to provide parking and interpretive facilities for Zone A management. A canoe-launching facility is necessary here and will have to be carefully sited to avoid conflict with the major purpose of the area. The adjacent youth hostel constitutes a compatible use until rewatering and restoration occur. At that time, the hostel should be reevaluated to determine whether it should be relocated. A parking lot for towpath users may be necessary, since this is also a good stopping and starting place for towpath trips.

31. Lock 75 - The Terminus: 175.6 - 183.5 = 7.9 miles; Zone C

The Resources

Evitts Creek Aqueduct stabilization is of a top priority, and rewatering of this section should be planned with the cooperation of city officials. The storm drainage system for the city streets empties into the canal at numerous locations and will have to be relocated, by the city, under the canal to the Potomac River.

Access and Existing Facilities

This section can be reached via Offut Street at Candoc. The Candoc area of the canal is flooded by the city water department every winter for ice skating, and this activity should continue.

Parklands and Adjacent Land Use

Public Law 91-664, which established the park, did not provide for additional land acquisition in this area. The canal right-of-way through this entire section has an average width of 150 feet. This provides a buffer of trees approximately 45-feet wide on either side of the 60-foot wide canal and there is little space for anything other than the towpath; in the absence of any legislative authority to increase the width of this section, the towpath is all that can be envisioned here.

The citizens and elected officials of Cumberland offered a study in 1972 which illustrated their desire to amend the legislation to provide for acquisition of some 1,200 acres throughout this 8-mile stretch. They were successful in getting legislation introduced but, as of this publication, that legislation has not proceeded. Most of the acreage called for in this proposal lies between the canal and the Potomac River. This includes Mexico Farms, which is a residential community lying between the canal and the river. The Zone C designation in this area can be adequately protected if the county designates a conservation zone for the area immediately adjacent to the canal property.

The city of Cumberland owns approximately 150 acres between the canal and the river at Candoc. The sewage treatment plant is located here as well as a ballfield and the proposed Cumberland South End Recreation Center. This recreation center will provide high density

recreation for the citizens of Cumberland in the form of court games, ballfields, a golf driving range, and adequate parking to serve the complex. This proposal is compatible with the Zone C designation.

32. The Terminus - $183.5 - 184.5 = 1$ mile; Zone B

The Resources

This 1-mile section has been completely altered from its 19th century appearance. This took place when the railroads placed track in the bed of the canal and the Corps of Engineers carried out their Cumberland flood control project which buried the canal under 20 feet of fill. The resources remaining are the Inlet Lock from Dam No. 8, which fed the canal, and the turning basin in Cumberland. This Inlet Lock is currently under a railroad bridge and difficult to interpret.

Access and Existing Facilities

The terminus can be reached from numerous parking lots within the industrial-commercial complex which occupies the former site of the turning basin at the terminus. A sign which identifies the terminus and a grassy area surrounding the remaining Inlet Lock are the only existing amenities.

Parklands and Adjacent Land Use

The only sizable parkland in this area is the 4-acre "ball park site" adjacent to the old A&P parking lot. This has been studied in the past for a visitor contact station. Access is a problem in that the site is off the Industrial Boulevard, Maryland Route 51. An improved access might be developed from Wineo Street.

The adjacent land use patterns are commercial and industrial, composed of lumber yards, Kelly Springfield Tire Company, and other miscellaneous light industry. In order to implement the Zone B concept in this area, amendatory legislation would be required to expand the boundary of the park. This would require acquisition of some of the commercial and railroad property. The proposal for a park boundary expansion, described under Section 31 above, includes the railroad station which would become a major museum for the canal, the city, and the railroad.

It is doubtful that a rewatering of the canal in the Cumberland area could ever occur. It is economically improbable that funds would become available to remove the Corps of Engineers Flood Control Dyke or alter it to the degree which would be required to rewater the canal. Thus, the Zone B designation is given to the terminus in recognition of its importance rather than because it can be rewatered, as is contemplated in other Zone B areas.





Consultation and Coordination in the Development of the General Plan

Public Law 91-664 was enacted in January 1971. Development proposals made by National Park Service at congressional hearings on the legislation have since been rejected by numerous user groups as being insensitive to the resources of the C&O Canal. These objections were officially voiced by the C&O Canal Advisory Commission, which was established by the legislation and appointed in December of 1971. The major concern was that the National Park Service had proposed too much development within the boundaries of the canal park which would overcrowd the towpath and river, and therefore not fulfill the intent of the C&O Canal National Historical Park legislation.

The C&O Canal Advisory Commission advised the Park Service to consult with the public in an effort to produce a development concept which would be more responsive to the desires of the public and would better relate to regional planning and park resources. The National Park Service responded by holding a series of five public meetings during the months of May and June of 1972, at which time the existing problems and opportunities for restoration and development were discussed. One meeting took place in each of the four counties along the canal and in the District of Columbia. Approximately 1,500 people attended. Following each meeting, the planners for the C&O Canal were available for discussion for a 2-day period in each of the jurisdictions. Fifty people took advantage of these planning discussions.

Concurrent with these public meetings, the Park Service distributed a document entitled "A Study Plan for the C&O Canal National Historical Park." Copies of the study were made available in the local libraries, park offices and other locations throughout the C&O Canal region. The public was given the opportunity to comment on this study plan by writing the National Park Service. Over 60 letters were received by the Park Service through the month of August 1972.

Numerous meetings were held with local commissioners, elected officials and interested citizens concerning specific development proposals.

The Park Service, working with C&O Canal Advisory Commission, then produced a document entitled "Preliminary Draft Master Plan." This was supported by the Commission at its meeting in January 1973. That document was the basis for an environmental assessment for the proposed "General Plan" for the C&O Canal National Historical Park and was released for public comment on March 19, 1975. During the public review period of the environmental assessment, a series of five public hearings were held at which approximately 200 people were present and 40 offered testimony.

In addition, 13 briefing sessions were held with the county Commissioners of Allegany, Washington, and Frederick County; The Montgomery County Council; the Mayor, Council and Planning Boards of Brunswick, Hancock, Sharpsburg and Williamsport; the Montgomery County Planning Board; The National Capital Planning Commission; the Frederick County Council of Governments, the Potomac Valley League; and the Service Area Community 8 in Washington, D.C.

The 111 day review period ended on July 7 with 45 written responses received. In the revisions to the proposed General Plan, which are reflected in this final version, all of the verbal and written comments were carefully reviewed. Many revisions were generated through this public involvement process and the Park Service is committed to a continuance of this planning method with its management of the C&O Canal National Historical Park.

Coordination with the State Historic Preservation Officers in Maryland and the District of Columbia as well as the Advisory Council on Historic Preservation has resulted in compliance with Section 106 of the Historic Preservation Act. It has been determined that the implementation of the General Plan will not have an adverse effect on the historic qualities of the park which placed it on the National Register of Historic Places. (See Appendix D)

Through the process outlined above the National Park Service determined that the implementation of this General Plan does not constitute a major Federal action significantly effecting the human environment. Thus an environmental impact statement on the plan was not prepared. (See Appendix E.)

The following list represents those individuals and organizations who have participated in this planning effort through statements at public hearings, personal contact or written comment. Their interest and assistance is deeply appreciated by the National Park Service.

Organizations

Allegany County Landowners Association
American Canal Society
American Horse Council, Inc.
Audubon Naturalist Society
Boy Scouts of America
Brookmont Civic League
C&O Canal Association
Cabin John Park Citizens Association
Canal and River Rights Council
Canoe Cruisers Association
Capital Hiking Club
Carderock Springs Citizens Association
Citizens for the Potomac National River
Committee of 100 on the Federal City
The Conservation Foundation
Frederick City Chamber of Commerce
Friends of the Earth
Friends of the Great Falls Tavern
Georgetown Citizens Association
Glen Echo Heights Citizens Association
Great Falls Conservation Council
Hancock C&O Canal Club
The Izaak Walton League of America
John Humbird Civic Association
League of American Wheelmen, Inc.
Maryland Ornithological Society, Inc.
Maryland Wilderness Association
Maryland Wildlife Federation
Mexico Farms Citizens Association
Mohican Hills Citizens Association

National Association of Conservation Districts
National Parks and Conservation Association
National Recreation and Parks Association
National Wildlife Federation
The Nature Conservancy
Pallisades Citizens Association
Potomac Appalachian Trail Club
Potomac Area Council American Youth
Hostels
Potomac Fish and Game Club
Potomac Pedalers Touring Club
Potomac Valley Conservation And
Recreation Council
Potomac Valley League
Preservation Society of Allegany County,
Maryland, Inc.
Resources for the Future, Inc.
Seneca Valley Citizens Association
Seneca Valley Pony Club
The Sierra Club
Sugarloaf Regional Trails
Sycamore Island Club
Wanderbirds Hiking Club
Water Resources Council
Western Maryland Wildlife Federation
West Montgomery County Citizens
Association
The Wilderness Society
Wildlife Federation
Williamsport C&O Canal Club, Inc.

Individuals

| | |
|-------------------------------|---------------------------------|
| Mrs. Samuel Miner Anderson | Mr. Ed Lambeth |
| Ms. Katharine Anglemyer | Ms. Ruth Lauder |
| Ms. Mary Anglemyer | Mr. Howard W. Lehman |
| Mr. John F. Armentrout, Jr. | Miss Rae T. Lewis |
| Mr. Clarence S. Baker | Mr. Karl T. Leonhardt |
| Mr. Lee D. Barron | Mr. Carl A. Linden |
| Ms. Barbara Bennett | Mr. Charles H. Looney, Jr. |
| Mr. John A. Bennett | Mr. I. W. Malone |
| Mr. Jacob B. Berkson | Ms. Bonnie Maros |
| Mr. J. David Boyd | Mr. Alan D. Mighell |
| Mr. Gary Burnell | Mr. John D. Millar |
| Mr. William G. Care | Mr. Charles Morrison |
| Ms. Barbara Clark | Lt. Col. E. L. Morrissey (Ret.) |
| Mr. David Clunies | Mr. Jack Nolen |
| Mr. Douglas Cole | Mr. Jeremy Parker |
| Mr. Victor P. Conrad | Dr. Kenneth Phifer |
| Mr. Dennis Conroy | Mr. Thomas L. Phillips, Jr. |
| Mr. Fletcher Cox, Jr. | Mr. H. L. Powers, Jr. |
| Mr. Harold Cramer, Sr. | Dr. J. E. Rall |
| Mr. William E. Davies | Mr. Donald D. Ramsey |
| Mr. G. David Downton | Mrs. Louise K. Reynolds |
| Mr. and Mrs. Daniel H. Eberly | Mrs. Virginia L. Roberts |
| Mr. Reed M. Fawell, III | Mr. David Scull |
| Mr. Joe E. Fisher | Mrs. Lee Warren Shipman |
| Mr. Frank A. Foight, III | Miss Ann W. Shreve |
| Mr. Morris Fraden | Ms. Constant Southworth |
| Mr. William J. Frank | Mr. Draper K. Sutcliffe |
| Mr. Alan D. Franklin | Mr. Donald K. Steiner |
| Mr. Michael Frome | Mr. Michael H. Stottlemeyer |
| Mr. William A. Fuss | Mrs. Ray P. Teele |
| Mr. Charles Gasque, Jr. | Mr. Merle J. Van Horne |
| Mr. Paul L. Gomory | Ms. S. Lavenia Waskey |
| Mr. Oscar S. Gray | Mr. Richard F. Weaver |
| Mr. Samuel P. Hays | Mrs. V. E. Weggel |
| Mr. William B. Holton | Mr. and Mrs. Bruce Wood |
| Mr. Oliver A. Houck | Mr. Travis L. Yeates, Sr. |
| Ms. Carrie Johnson | Ms. Barbara Yeaman |
| Ms. Helen L. Johnston | Francis L. Young |

Federal

Advisory Council on Historic Preservation
Bureau of Outdoor Recreation
Bureau of Sports Fisheries and Wildlife
C&O Canal National Historical Park Advisory Commission
Department of Agriculture
Interstate Commission on the Potomac River Basin
National Capital Planning Commission
National Trust for Historic Preservation
U.S. Corps of Engineers
U.S. Environmental Protection Agency

State

District of Columbia City Council
District of Columbia Historic Preservation Officer
District of Columbia State Clearing House
Maryland Department of State Planning (State Clearing House)
Maryland Department of Transportation
Maryland State Historic Preservation Officer
Virginia State Clearing House
Virginia State Historic Preservation Officer
Virginia State Water Control Board
West Virginia State Clearing House
West Virginia State Historic Preservation Officer

Local

Allegany County Commission
County Committee of the Maryland Historical Trust, Allegany
County, Frederick County, Montgomery County, Wash-
ington County
Frederick County Board of County Commissioners
Frederick County Planning Commission
Maryland National Capital Parks and Planning Commission
Majors, Town of Brunswick, Town of Cumberland, Town of
Sharpsburg, Town of Williamsport
Metropolitan Washington Council of Governments
Mountomery County Council
Montgomery County Executive
Tri-County Council for Western Maryland
Washington County Board of County Commissioners
Washington County Economic Development Commission
Washington County Planning and Zoning Commission

National Park Service Concessioners

Fletcher's Boat House
Government Services, Inc.
Swains Boat Center

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Appendix A

A Chronological History of the Chesapeake and Ohio Canal

- 1784 to 1802 - Largely through the influence of George Washington, in October 1784, the Virginia Assembly passed an act incorporating the Potomack Company, and in November 1784, the charter was affirmed by the Maryland Assembly. The purpose of the company was to open the Potomac River to navigation. From 1785 to 1802, the company proceeded with construction of canals around the falls of the Potomac, completing the locks at Great Falls on the Virginia side in 1802.
- 1824 to 1825 - The Chesapeake and Ohio Canal Company was incorporated by the Virginia Act of January 27, 1824, and validated by the legislatures of Maryland and Pennsylvania and the Congress of the United States on January 31, 1825, February 9, 1826, and March 3, 1825, respectively.
- 1828 - C&O Canal construction began in Washington, D.C., area.
- 1831 - C&O Canal open for trade from Georgetown, D.C., to Seneca, Maryland.
- 1834 - C&O Canal opened to a point 26 miles above Harpers Ferry.
- 1850 - C&O Canal construction completed to terminus at Cumberland, Maryland.
- 1850 to 1924 - Canal in operation but troubled by labor and financial problems. Five major floods (in 1852, 1877, 1886, 1889, 1924), in addition to frequent smaller floods, caused great damage to the canal.
- 1924 - C&O Canal Company ceased navigational operation of the canal.
- 1938 - U.S. Government purchased C&O Canal Company for \$2 million.
- 1938 to 1940 - Civilian Conservation Corps repaired 22 miles from Great Falls to Seneca at a cost of \$98,000.
- 1948 - Pursuant to Public Law 618, 80th Congress, a reconnaissance study to determine the advisability of constructing a parkway along the route of the Chesapeake and Ohio Canal was initiated. The report on the joint survey and study by the Bureau of Public Roads and the National Park Service was completed in 1950.
- 1953 - Under the act approved August 1, 1953, Public Law 184, 83rd Congress, the Secretary of the Interior was authorized to grant easements for rights-of-way through, over, and under the Chesapeake and Ohio Canal.

- 1961 - Presidential Proclamation 3391 established the Chesapeake and Ohio Canal National Monument.
- 1969 - H.R. 658, 91st Congress, Chesapeake and Ohio Canal Development Act, January 3, 1969 (Saylor).
- 1969 - H.R. 2134, 91st Congress, Chesapeake and Ohio Canal Development Act, January 6, 1969 (Stratton).
- 1969 - H.R. 4836, 91st Congress, Chesapeake and Ohio Canal Development Act, January 28, 1969 (Morton).
- 1969 - S. 1859, 91st Congress, Chesapeake and Ohio Canal Act of 1969, April 18, 1969 (Mathias).
- 1969 - H.R. 11988, 91st Congress, Chesapeake and Ohio Canal Act of 1969, June 10, 1969 (Gude).
- 1970 - H.R. 658, et. al., Deletions and Amendments recommended by the Secretary of the Interior, May 27, 1970.
- 1970 - S. 1859, Deletions and Amendments recommended by the Secretary of the Interior, May 27, 1970.
- 1970 - Report No. 91-1553 to accompany H.R. 19342, establishing and developing the C&O Canal National Historical Park, and for other purposes, October 1, 1970.
- 1970 - H.R. 19342, 91st Congress, Chesapeake and Ohio Canal Development Act, October 6, 1970.
- 1970 - Report No. 91-1512, to accompany H.R. 19342, to establish and develop the C&O Canal National Historical Park and for other purposes, December 21, 1970.
- 1971 - Public Law 91-664, an act to establish and develop the Chesapeake and Ohio Canal National Historical Park and for other purposes, January 8, 1971.
- 1971 - Secretary of the Interior charged and administered oath to the 19-member C&O Advisory Commission in the Department of the Interior Office in Washington, D.C., December 20, 1971.

Appendix B



Public Law 91-664
91st Congress, H. R. 19342
January 8, 1971

An Act

To establish and develop the Chesapeake and Ohio Canal National Historical Park, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act shall be known as the "Chesapeake and Ohio Canal Development Act".

Chesapeake and
Ohio Canal
Development
Act.

DEFINITIONS

SEC. 2. As used in this Act—

(a) "Park" means the Chesapeake and Ohio Canal National Historical Park, as herein established.

(b) "Canal" means the Chesapeake and Ohio Canal, including its towpath.

(c) "Secretary" means the Secretary of the Interior.

(d) "State" means any State, and includes the District of Columbia.

(e) "Local government" means any political subdivision of a State, including a county, municipality, city, town, township, or a school or other special district created pursuant to State law.

(f) "Person" means any individual, partnership, corporation, private nonprofit organization, or club.

(g) "Landowner" means any person, local government, or State owning, or on reasonable grounds professing to own, lands or interests in lands adjacent to or in the vicinity of the park.

ESTABLISHMENT OF PARK

SEC. 3. (a) In order to preserve and interpret the historic and scenic features of the Chesapeake and Ohio Canal, and to develop the potential of the canal for public recreation, including such restoration as may be needed, there is hereby established the Chesapeake and Ohio Canal National Historical Park, in the States of Maryland and West Virginia and in the District of Columbia. The park as initially established shall comprise those particular properties in Federal ownership, containing approximately five thousand two hundred and fifty acres, including those properties along the line of the Chesapeake and Ohio Canal in the State of Maryland and appurtenances in the State of West Virginia designated as the Chesapeake and Ohio Canal National Monument, and those properties along the line of the Chesapeake and Ohio Canal between Rock Creek in the District of Columbia and the terminus of the Chesapeake and Ohio Canal National Monument near the mouth of Seneca Creek in the State of Maryland. The boundaries of the park shall be as generally depicted on the drawing entitled "Boundary Map, Proposed Chesapeake and Ohio Canal National Historical Park," in five sheets, numbered CHOH 91,000, and dated October 1969, which is on file and available for public inspection in the offices of the National Park Service, Department of the Interior: *Provided*, That no lands owned by any State shall be included in the boundaries of the park—

Boundaries.

84 STAT. 1978
84 STAT. 1979

(1) unless they are donated to the United States, or

(2) until a written cooperative agreement is negotiated by the Secretary which assures the administration of such lands in accordance with established administrative policies for national parks, and

(3) until the terms and conditions of such donation or cooperative agreement have been forwarded to the Committees on Interior and Insular Affairs of the United States House of Representatives and Senate at least sixty days prior to being executed. The exact boundaries of the park shall be established, published, and otherwise publicized within eighteen months after the date of this Act and the owners of property other than property lying between the canal and the Potomac River shall be notified within said period as to the extent of their property included in the park.

(b) Within the boundaries of the park, the Secretary is authorized to acquire lands and interests therein by donation, purchase with donated or appropriated funds, or exchange, but he shall refrain from acquiring, for two years from the date of the enactment of this Act, any lands designated on the boundary map for acquisition by any State if he has negotiated and consummated a written cooperative agreement with such State pursuant to subsection (a) of this section.

COOPERATIVE AGREEMENTS

SEC. 4. The Secretary shall take into account comprehensive local or State development, land use, or recreational plans affecting or relating to areas in the vicinity of the canal, and shall, wherever practicable, consistent with the purposes of this Act, exercise the authority granted by this Act in a manner which he finds will not conflict with such local or State plans.

ACCESS

SEC. 5. (a) The enactment of this Act shall not affect adversely any valid rights heretofore existing, or any valid permits heretofore issued, within or relating to areas authorized for inclusion in the park.

(b) Other uses of park lands, and utility, highway, and railway crossings, may be authorized under permit by the Secretary, if such uses and crossings are not in conflict with the purposes of the park and are in accord with any requirements found necessary to preserve park values.

(c) Authority is hereby granted for individuals to cross the park by foot at locations designated by the Secretary for the purpose of gaining access to the Potomac River or to non-Federal lands for hunting purposes: *Provided*, That while such individuals are within the boundaries of the park firearms shall be unloaded, bows unstrung, and dogs on leash.

ADVISORY COMMISSION

84 STAT. 1979
84 STAT. 1980

Establishment.

SEC. 6. (a) There is hereby established a Chesapeake and Ohio Canal National Historical Park Commission (hereafter in this section referred to as the "Commission").

(b) The Commission shall be composed of nineteen members appointed by the Secretary for terms of five years each, as follows:

(1) Eight members to be appointed from recommendations submitted by the boards of commissioners or the county councils, as the case may be, of Montgomery, Frederick, Washington, and Allegany Counties, Maryland, of which two members shall be appointed from recommendations submitted by each such board or council, as the case may be;

(2) Eight members to be appointed from recommendations submitted by the Governor of the State of Maryland, the Governor

of the State of West Virginia, the Governor of the Commonwealth of Virginia, and the Commissioner of the District of Columbia, of which two members shall be appointed from recommendations submitted by each such Governor or Commissioner, as the case may be; and

(3) Three members to be appointed by the Secretary, one of whom shall be designated Chairman of the Commission and two of whom shall be members of regularly constituted conservation organizations.

(c) Any vacancy in the Commission shall be filled in the same manner in which the original appointment was made.

(d) Members of the Commission shall serve without compensation, as such, but the Secretary is authorized to pay, upon vouchers signed by the Chairman, the expenses reasonably incurred by the Commission and its members in carrying out their responsibilities under this Act.

(e) The Secretary, or his designee, shall from time to time but at least annually, meet and consult with the Commission on general policies and specific matters related to the administration and development of the park.

(f) The Commission shall act and advise by affirmative vote of a majority of the members thereof.

(g) The Commission shall cease to exist ten years from the effective date of this Act.

ADMINISTRATION AND APPROPRIATIONS

SEC. 7. The Chesapeake and Ohio Canal National Historical Park shall be administered by the Secretary of the Interior in accordance with the Act of August 25, 1916 (30 Stat. 535; 16 U.S.C. 1, 2-4), as amended and supplemented. 39 Stat. 575.

SEC. 8. (a) Any funds that may be available for purposes of administration of the Chesapeake and Ohio Canal property may hereafter be used by the Secretary for the purposes of the park.

(b) There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act, not to exceed \$20,400,000 for land acquisition and not to exceed \$17,000,000 (1970 prices) for development, plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in construction costs as indicated by engineering cost indices applicable to the types of construction involved herein.

Approved January 8, 1971.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 91-1553 (Comm. on Interior and Insular Affairs).
SENATE REPORT No. 91-1512 (Comm. on Interior and Insular Affairs).
CONGRESSIONAL RECORD, Vol. 116 (1970):

Oct. 5, considered and passed House.

Dec. 22, considered and passed Senate.



Appendix C

Public Law 184 - 83d Congress
Chapter 310 - 1st Session
H. R. 5804

AN ACT

To authorize the Secretary of the Interior to grant easements for rights-of-way through, over, and under the parkway land along the line of the Chesapeake and Ohio Canal, and to authorize an exchange of lands with other Federal departments and agencies, and for other purposes.

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 is hereby authorized and directed to grant perpetual easements, subject to such reasonable conditions as are necessary for the protection of the Federal interests, for rights-of-way through, over, or under the parkway lands along the line of the Chesapeake and Ohio Canal, now or hereafter acquired, for the purposes of electric, telephone, and telegraph lines or conduits, gas, oil, and water pipelines, tunnels, and water conduits, or for other utility purposes incident to industrial, commercial or agricultural use, or to the supply of water for domestic, public, or any other beneficial use, where it is intended to use such rights-of-way for any one or more of the purposes hereinabove named. Chesapeake and Ohio Canal. Easements for rights-of-way. 67 Stat. 359. 67 Stat. 360.

SEC. 2. No part of said easements shall be used for any other than the purposes for which they are granted, and in the event of any breach of this restriction, or in the event of any failure to observe the conditions in said easements, either of which shall continue for a period of ninety days after notice thereof, or in the event the said easement is abandoned for the purposes granted, the entire interest herein authorized to be granted shall, upon a declaration to that effect by the Secretary of the Interior, revert to the United States.

SEC. 3. The Secretary of the Interior shall cause an appraisal to be made of the fair market value of the said easements, including the resulting damage, if any, to the residue of the parkway lands, which appraisal, after approval by the Secretary of the Interior, shall be paid in cash by the grantees requesting the easement as the consideration for said easements when granted by the United States.

SEC. 4. The Secretary of the Interior is further authorized, in his discretion, to grant perpetual easements, subject to such conditions as are necessary for the protection of the Federal interest, for rights-of-way through, over, or under the parkway lands along the Chesapeake and Ohio Canal, now or hereafter acquired, for railroad tracks or for other utility purposes: *Provided*, That such easements may be granted in exchange for the relinquishment of existing easements across land now or hereafter in Federal ownership within the parkway: *Provided further*, That the Secretary may cause an appraisal to be made of the value of such easements and may require payment to be made by the grantee as provided in section 3 of this Act: *Provided further*, That no part of said easements shall be used for any other than the purposes for which they are granted, and in the event of any breach of this restriction, or in the event of any failure to observe the conditions in said easements, either of which shall continue for a period of ninety days after notice thereof, or in the event the said easement is abandoned for the purposes granted, the entire interest herein authorized to be granted, upon a declaration to that effect by the Secretary, shall revert to the United States.

SEC. 5. The Secretary of the Interior is hereby authorized, in his discretion, when in the best interest of the United States, to convey, at the fair market value, to counties and municipalities for roads, streets, highways, or other municipal facilities, by proper deed or instrument, any lands or interests in lands of the United States within the parkway along the line of the Chesapeake and Ohio Canal, under Conveyances.

the jurisdiction of the Department of the Interior and located within the boundaries of such county or municipality, which are not needed for parkway purposes, but not to the extent of severing in any manner the continuity of the parkway lands from Great Falls to and including the city of Cumberland, Maryland.

Transfer of
jurisdiction.

67 Stat. 360.
67 Stat. 361.

Sec. 6. The Secretary of the Interior, and the heads of other departments and agencies of the Federal Government administering lands along or adjacent to the line of the Chesapeake and Ohio Canal, are hereby authorized, for the purpose of facilitating the development, administration, and maintenance of said parkway, to transfer jurisdiction between their respective departments and agencies over such portions of the lands under their respective jurisdictions along or adjacent to the line of said canal as are surplus to their respective needs, without reimbursement, and under such conditions as may be mutually agreed upon by the Secretary of the Interior and the head of the other department or agency concerned; and such transfer of jurisdiction by any department or agency of the Federal Government in possession of such lands is hereby authorized.

Approved August 1, 1953.

Appendix D



GOVERNMENT OF THE DISTRICT OF COLUMBIA

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
WASHINGTON, D C

21 NOV 1975

2/11/25
Mr. Manus J. Fish, Jr.
Director
National Capital Parks
National Park Service
1100 Ohio Drive, S.W.
Washington, D. C. 20240

Dear Mr. Fish:

I am writing in response to a letter of October 24, 1975, from Mr. Bradley of your staff requesting my review of the National Park Service's general management plan for the Chesapeake and Ohio Canal National Historical Park. This review is in accordance with procedures for the protection of historic and cultural properties established by the Advisory Council on Historic Preservation (39 F.R. 3366).

After reviewing the materials which you submitted, I concur in your determination that implementation of the general plan will not adversely affect the historic resources of that portion of the Chesapeake and Ohio Canal National Historical Park which lies within the boundaries of the District of Columbia. This concurrence is based on my understanding that subsequent detailed sectional development plans, as well as individual projects within the park, will be subject to future historic preservation review.

Thank you for consulting me in this historic preservation matter.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "L. Jacobs, Jr.", written over a horizontal line.

LORENZO W. JACOBS, JR.
State Historic Preservation Officer
for the District of Columbia



The Maryland Historical Trust

Shaw House, 21 State Circle, Annapolis, Maryland 21401
301: 267-1212 or 301: 267-1438

November 14, 1975

Mr. Abner Bradley
Acting Deputy Director
National Capital Parks
1100 Ohio Drive, S.W.
Washington, D.C. 20242

RE: L7617-NCP (CUCE)

Dear Mr. Bradley:

In response to your letter of October 22, 1975, I, as State Historic Preservation Officer, concur in your determination that the implementation of the general plan for the C & O Canal National Historical Park will not adversely impact the historic resources of the National Register property.

Sincerely,

John N. Pearce
State Historic
Preservation Officer

JNP:sh

cc: Mr. Law Watkins
Ms. Nancy Long
Ms. Ellen Ramsey
Mrs. June Sandifer

Advisory Council
On Historic Preservation

1522 K Street N.W.

Washington, D.C. 20005

January 14, 1976

2/1/79
Mr. Manus J. Fish, Jr.
Director, National Capital Parks
National Park Service
Department of the Interior
1100 Ohio Drive, S.W.
Washington, D. C. 20242

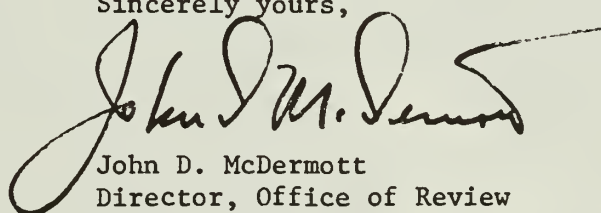
Dear Mr. Fish:

On December 15, 1975, the Advisory Council received National Capital Parks' (NCP) adequately documented determination that the proposed general plan for the Chesapeake and Ohio Canal National Historical Park would have no adverse effect on the Chesapeake and Ohio Canal National Historical Park, a property included in the National Register of Historic Places. The Council staff has reviewed National Capital Parks' determination of no adverse effect and notes no objection to the determination.

In accordance with Section 800.4(d) of the Advisory Council's "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Part 800), National Capital Parks may proceed with the undertaking.

Your cooperation is appreciated.

Sincerely yours,



John D. McDermott
Director, Office of Review
and Compliance





United States Department of the Interior

NATIONAL PARK SERVICE
NATIONAL CAPITAL PARKS
1100 OHIO DRIVE SW.
WASHINGTON, D.C. 20242

IN REPLY REFER TO:

L7617-NCP (CUCE)

January 29, 1976

Memorandum

To: Director, National Capital Parks

From: Associate Director, Cooperative Activities

Subject: Environmental assessment and review of proposed general plan for the Chesapeake and Ohio Canal National Historical Park

The enclosed environmental assessment and review have been prepared to analyze the proposed general plan for the Chesapeake and Ohio Canal National Historical Park. The plan has been developed with the advice of the Chesapeake and Ohio Canal National Historical Park Commission, and there has been extensive public involvement through public meetings, written comments, and group and individual discussions. As a result, the plan is noncontroversial and is acceptable to the Commission and to the general public.

The assessment process did not indicate a significant environmental impact from the proposed action. Therefore, I recommend that you determine that this project is not a major Federal action significantly affecting the quality of the human environment under Section 102(2)(C) of the National Environmental Policy Act of 1969. It is my opinion that the actions to be taken in connection with this proposal are consistent with the objectives and policies of the act. Thus, pursuant to Section 102(2)(C) of that act and to the Guidelines of the Council on Environmental Quality, this proposal would not appear to require the preparation of an environmental impact statement.

Richard L. Stanton
Richard L. Stanton

Enclosure

Finding

I find that the above project is not a major Federal action significantly affecting the quality of the human environment under Section



102(2)(C) of the National Environmental Policy Act of 1969. I further find that, pursuant to Section 102(2)(C) of the aforementioned act and to the Guidelines of the Council on Environmental Quality, this proposal does not require the preparation of an environmental impact statement.

Mannus J. Fish Jr.
Director, National Capital Parks

1/30/76
Date

ENVIRONMENTAL REVIEW

GENERAL PLAN

CHESAPEAKE AND OHIO CANAL NATIONAL HISTORICAL PARK

I. DESCRIPTION OF ACTION

Following enactment of Public Law 91-664, which established the Chesapeake and Ohio Canal National Historical Park in January 1971, the National Park Service, with the advice of a 20-member citizens' advisory commission, set out to prepare a plan for the management of the park to provide for the protection and enjoyment of the park's resources in such a manner as to leave them unimpaired for the enjoyment of future generations. The general plan which has evolved from the planning process is based on earlier studies. The plan calls for the stabilization and partial restoration of the historic canal and its structures, the preservation of the atmosphere of history blended into a charming natural setting, the interpretation of the rich array of historical and natural values found along the canal, and provisions for as much outdoor recreation as will not intrude upon or impair the resources of the park.

An analysis of the visitation patterns indicates that a wide variety of visitors can be expected--the national visitor or tourist, the short-term recreationist, the long-term towpath user, the user of the Potomac River, etc. To provide for a variety of visitor experiences, a zoning system is proposed consisting of five zones ranging from complete restoration, with high density visitor use activity, to remote natural areas with a very low density of visitor use. The five zones are as follows:

Zone A - National Interpretive Center Zone: Areas containing major historic restoration opportunities, selected for accessibility, availability of parklands for development of visitor facilities, compatibility of surrounding environment outside the park, and capability of supporting the largest density of visitor use.

Zone B - Cultural Interpretive Zone: Areas where historic resources occur but the high density of Zone A is incompatible with the desirable mood of the area and where the resources do not provide the accessibility, the available land, or the attractive qualities of those in Zone A.

Zone C - Short-term Recreation Zone: Sections designated to serve the general towpath user desiring a leisurely stroll of 2 to 6 hours in a natural setting. These areas are limited in historic resources and available land for visitor facilities.

Zone D - Short-term Remote Zone: Areas which, due to limited access, can retain a remoteness which produces a low-density use.

Zone E - Long-term Remote Zone: Sections with limited access and high quality natural surroundings which provide opportunity for long-term primitive hiking, biking, or horseback riding.

In applying the five zones to the park, the plan designates 32 sections, each of which is assigned to an appropriate zone. Sectional development plans will eventually be prepared for each of the 32 sections and will be presented to the public for review prior to implementation.

II. ENVIRONMENTAL IMPACT OF THE PROPOSAL

A. Zoning system

1. Makes clear the intent of the National Park Service without committing specific development proposals which are premature at this time. This will enable further study of visitor use and desired density patterns.

2. Insures a variety of user experiences distributed throughout the park.

3. Visitors will have access to parklands which were previously not readily accessible due to private ownership.

B. Development

1. The slow and studied development of the park will avoid the pressures for hasty development which could destroy cultural or natural resources in the process.

2. Construction of new concessioner facilities, camping, picnicking and parking areas will displace vegetation and somewhat dispell the natural and rural character of the park in some areas. Such facilities, if not properly located and carefully designed during the next stage of the planning process, could encroach on the historic scene.

3. Nonhistoric intrusions will be removed from the canal scene.

4. The proposal commits the National Park Service to increased expenditures for historic restoration, development of visitor facilities, increased maintenance costs and visitor service personnel, subject to the funds being made available through the budgetary process.

C. Tourism

It is not anticipated that the concepts expressed for development within the park will make a significant contribution to tourism and the economics of the local communities adjacent to the park.

III. ALTERNATIVES TO THE PROPOSED ACTION

A. Use a Planning Method which Makes Specific Development Proposals for Suitable Lands within the Park

B. Use Land Classification System of the Department of the Interior

C. A Three-zone Land Use Plan

D. Revise the Allowable Visitor Use Facilities within Each Zone

E. No Action

IV. CONSULTATION AND COORDINATION IN THE DEVELOPMENT OF THE PROPOSAL

Early development proposals made by the National Park Service at congressional hearings on Public Law 91-664 were rejected by numerous user groups as providing too much development within the park which would produce an extremely overcrowded towpath and river. Upon the advice of the Chesapeake and Ohio Canal National Historical Park Commission to consult with the public, the National Park Service held a series of five public meetings during the months of May and June 1972, at which time the existing problems and opportunities for restoration and development were discussed. One meeting was held in each of the four counties along the canal and in the District of Columbia. Following each meeting, the planners for the canal were available for discussion for a 2-day period in each of the jurisdictions. Approximately 1,500 people attended the public meetings and 50 people took advantage of the 2-day planning discussions. Concurrent with the public meetings, a document entitled "A Study Plan for the C&O Canal National Historical Park" was distributed and

copies were made available in local libraries, park offices, and other locations throughout the canal region. More than 60 letters of comment on this document were received by the Park Service through the month of August 1972. Numerous meetings were held with local commissioners, elected officials and interested citizens concerning specific development proposals.

Responding to the comments received and working with the C&O Canal Advisory Commission, the National Park Service then produced a "Preliminary Draft Master Plan." That document was the basis for the enclosed environmental assessment for the proposed "General Plan" for the park. In March 1975, copies of the assessment were widely distributed to numerous individuals, organizations, and local, State, and Federal agencies. Following this, during the months of May and June 1975, the Park Service held another series of five public meetings, one meeting in each of the four counties along the canal and in the District of Columbia. We have given careful consideration to all comments and suggestions received during the review process, making minor revisions in the general plan where appropriate. As a result of this extensive public involvement, it is apparent that controversial issues concerning management of the park have been satisfactorily resolved and the proposed plan has the approval of the general public. In addition, the State Historic Preservation Officers for Maryland and the District of Columbia and the Advisory Council on Historic Preservation have expressed their concurrence with the plan.

