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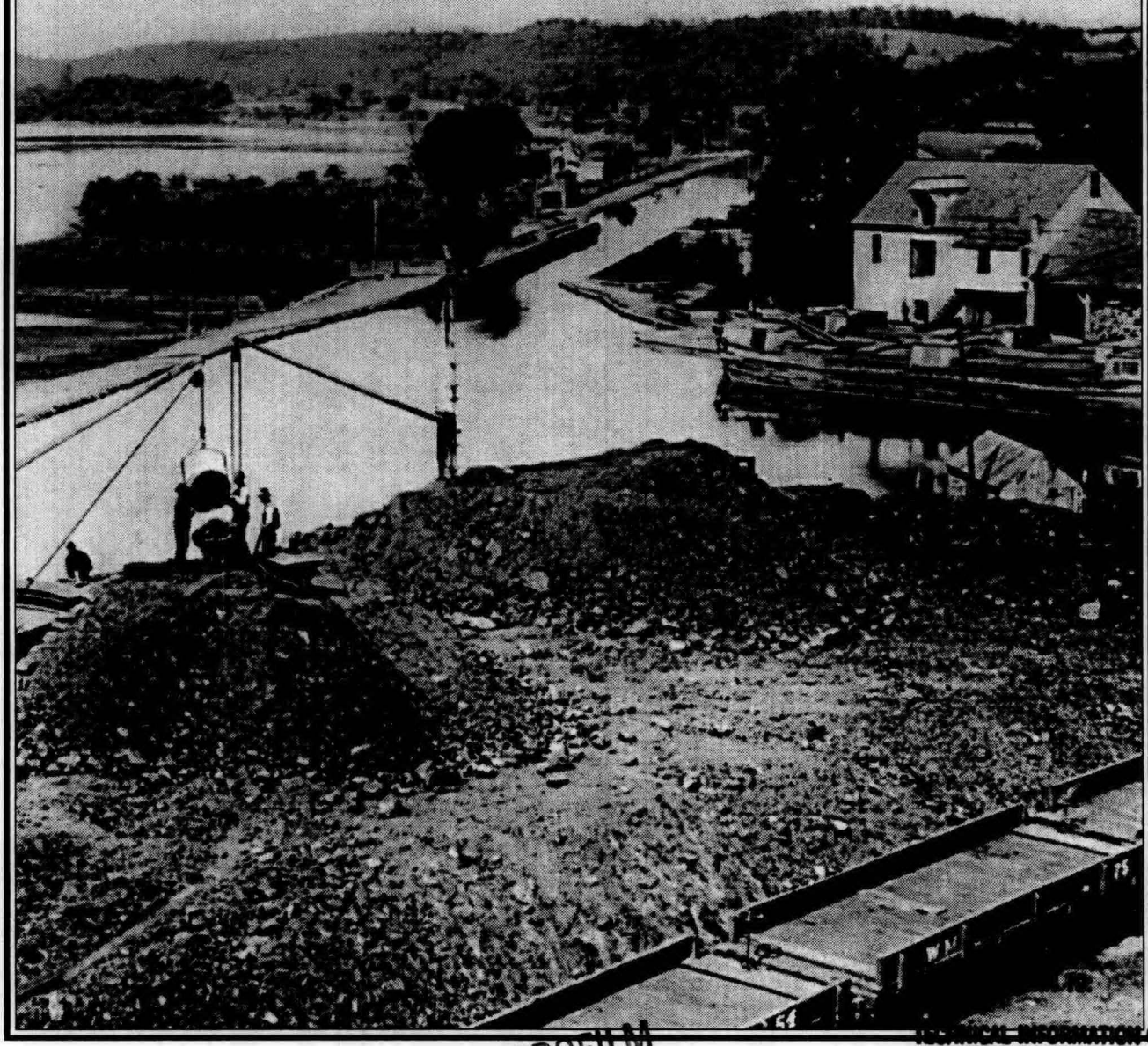
CULTURAL LANDSCAPE REPORT

CHESAPEAKE & OHIO CANAL

· NATIONAL HISTORICAL PARK ·

WILLIAMSPORT, MARYLAND



• NATIONAL PARK SERVICE •

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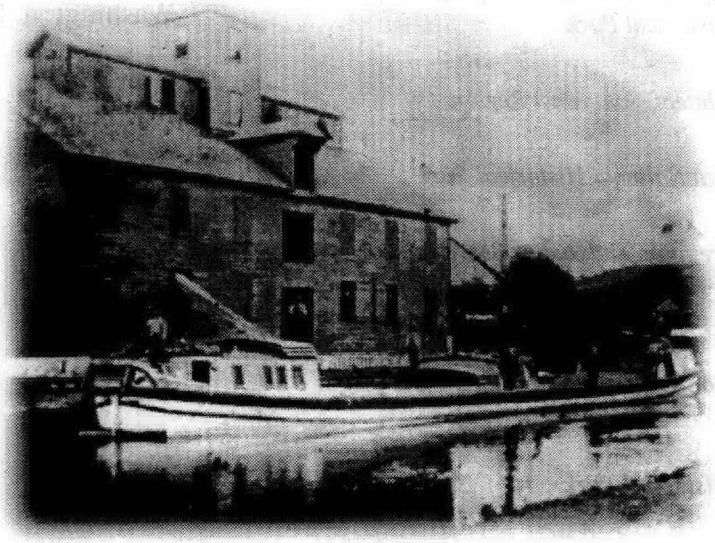

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for

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C&O Canal National Historical Park

National Capital Region

1994

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1 MANAGEMENT SUMMARY

1.1 PROJECT BACKGROUND AND PURPOSE

In the fall of 1992, the National Park Service (NPS) developed a scope of work for preparation of a Cultural Landscape Report (CLR) for the Chesapeake & Ohio (C&O) Canal National Historical Park (NHP) at Williamsport, Maryland. NPS contracted with Oehrlein & Associates, Architects of Washington, D.C., and Land and Community Associates (LCA) of Charlottesville, Virginia, to undertake the project. The CLR would supplement the 1976 *General Plan,* which discusses treatments for individual structures and buildings but does not address a long-range vision for the park's cultural landscape.

The C&O Canal NHP is presently undertaking an extensive rewatering project at Williamsport from the Cushwa loading basin to Lock 44. (Historically, the basin has been referred to by various names; in this report, it will be referred to as the Cushwa loading basin for ease of identification). Current plans also call for visitor facility development in Williamsport. The purpose of this CLR is to assist park management in making informed decisions concerning the future use and rehabilitation/restoration of the Cushwa loading basin and related structures from the Conococheague Aqueduct to Lock 44, as well as to determine the cultural landscape impacts of visitor facility development.

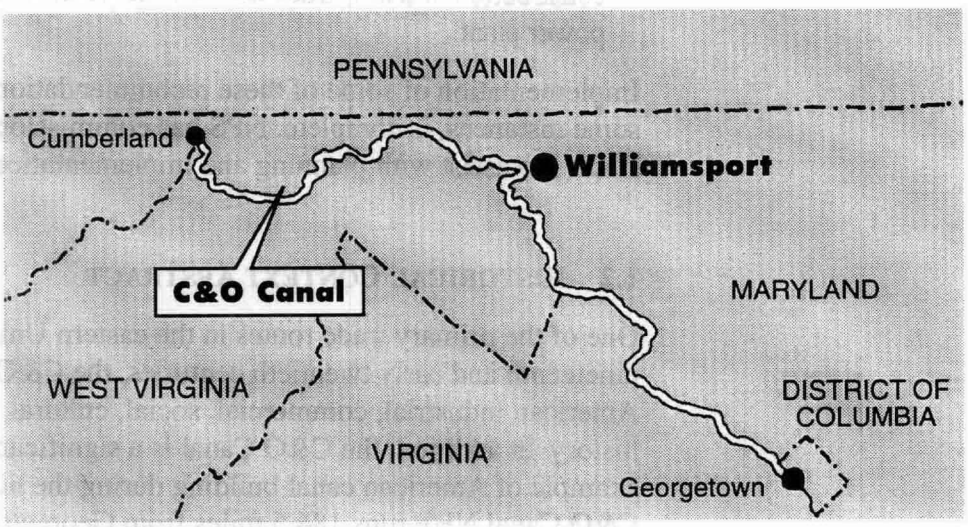

Figure 1. Context Map

The 1976 *General Plan* for the entire park identified Williamsport as one of the canal's six "National Interpretive Center Zones." The plan defined it as follows:

> This zone defines areas containing major historic restoration opportunities where the park visitor will be able to see a functioning canal in an historic setting. The areas were also selected for accessibility, availability of parklands for development of visitor facilities, and the compatibility of the environment adjoining the park. These interpretive centers are seen as supporting the largest density of visitor use. Most of that use is considered to be short-term (one to

> two hours). The concept of development of these areas is that of an outdoor living history museum. Historical accuracy is imperative in these re-creations of historic scenes.[1]

The 1983 *Development Concept Plan* (DCP) for the canal at Williamsport outlined a methodology for accomplishing this goal. The plan recommended the following:

- reconstruction of the stone wall at the Cushwa loading basin
- stabilization of the Conococheague Aqueduct
- restoration of Lock 44 and the Lockkeeper's House
- restoration of the exterior of the Cushwa Warehouse and Power Generation Station
- landscaping of the area near the Cushwa Warehouse, Power Generation Station, and historic town square
- location of visitor parking areas and access roads in areas where their impact on historic resources is mitigated
- relocation of NPS maintenance structure
- removal of the former Potomac Edison Company power plant access road across the canal
- construction of a new truck access route to the Potomac Edison Company power plant.

Implementation of some of these recommendations has begun, and in some instances, is complete. NPS has commissioned several separate studies to assist with planning and implementation of these projects.

1.2 HISTORICAL CONTEXT ABSTRACT

One of the primary trade routes in the eastern United States in the late nineteenth and early twentieth centuries, the C&O Canal is significant in American industrial, commercial, social, cultural, and transportation history. In addition, the C&O Canal is a significant nineteenth-century example of American canal building during the historic canal era. The C&O Canal NHP runs 184.5 miles from Georgetown in the District of Columbia northwest to Cumberland, Maryland, and generally parallels the Potomac River. Williamsport, located in Maryland at the confluence of the Conococheague Creek and the Potomac River, was a major center of trade, commerce, and industry associated with the C&O Canal. Land adjacent to the Williamsport canal segment possesses historic resources that range in dates of construction from the 1800s through the early twentieth century. The canal at Williamsport also has associations with Civil War military history and prominent local entrepreneurs, industrialists, and businesses. Williamsport, along with Cumberland and Georgetown, was a primary center of trade.

1.3 STUDY BOUNDARIES

The Williamsport study area of the C&O Canal NHP is an approximately 15-acre site located in the center of the 184.5 mile canal. The Town of Williamsport abuts the canal site to the east, occupying a knoll above the confluence of the Conococheague Creek and the Potomac River between Hagerstown, Maryland, and Martinsburg, West Virginia. Approximately three miles from the Route 11 exit of Interstate Route 81, Williamsport is linked with West Virginia via U.S. Route 11 and the Washington-Berkeley Bridge.

The study area is defined as the approximately one-mile section of the C&O Canal NHP between mileposts 99.85 and 98.96, adjacent to Williamsport, Maryland. Located east of the Potomac River, the study area is bounded on the west by the Potomac Edison Company power plant and River Bottom Park; to the east by the Town of Williamsport and Riverview Cemetery on the knoll above the site; undeveloped woodland to the south; and an undeveloped woodland, residential neighborhood, and the Garden State Tannery and its waste ponds on the north. Refer to Figure 2, the *Study Boundary Map*.

Extant within the study boundary are the canal prism and related historic, cultural, and natural features and elements. This area possesses a variety of landscape, architectural, and archeological resources that represent both the canal's and Williamsport's physical evolution. Given the number and diversity of resources in good condition found in this short segment of the canal, Williamsport has considerable potential for development as an interpretive site for visitors.

1.4 METHODOLOGY AND SCOPE OF PROJECT

This report contains four major components:

- management summary
- site physical history
- site analysis and evaluation
- treatment recommendations and phasing

Four operational phases were completed to fulfill these requirements:

- research
- site documentation
- analysis and evaluation
- schematic design

Research was conducted at the C&O Canal NHP, National Archives, Library of Congress, Maryland State Archives, U.S. Geological Survey, Washington County Historic Society, Western Maryland Room of the

Washington County Free Library, Williamsport Town Hall, and Alderman Library at the University of Virginia. Historic maps and photographs and a variety of primary and secondary written resources were consulted as well. Previously prepared reports that supplemented the research included historic structure reports conducted in the Cushwa loading basin area, such as those evaluating the Cushwa Warehouse, Power Generation Station (also known as the power station), Bollman Bridge, and Lift Lock 44, along with a preservation study of the Railroad Lift Bridge, a restoration study of the Cushwa loading basin, a stabilization study of the Conococheague Creek Aqueduct and archeological studies of the Power Generation Station and the Miller Brothers Lumber Mill site.

The project area's small size—approximately one mile long and averaging a few hundred feet wide—enabled thorough documentation of both large- and small-scale features. Using 1937 and 1992 aerial photographs, a base map supplied by NPS, and the 1979 U.S.G.S. Williamsport, MD, 7.5-minute quadrangle map as points of departure, LCA developed an updated base map reflecting current conditions at the scale of one inch equals eighty feet (1" = 80'). This map provided a foundation for additional field work. Photographic documentation occurred in both winter and summer seasons to provide more comprehensive representation of the site.

The photographic resources used to prepare this document were collected from a variety of sources and, consequently, vary considerably in condition and quality. Every effort has been made to reproduce these images with the greatest degree of clarity and consistency, including—in some instances—the use of computerized image enhancement.

During the site analysis and evaluation phase, available resources were reviewed, and the canal's history was divided into the following eight distinct periods of landscape development:

1787-1828	Development of Williamsport prior to the arrival of the C&O Canal
1828-1850	Canal construction
1850-1861	Opening of the canal to the outbreak of the Civil War
1861-1865	The Civil War
1865-1889	Post-war reconstruction to the flood of 1889 (known as the "Great Flood")
1889-1924	Canal re-opening after the flood of 1889 to the abandonment of the canal
1924-1937	Deterioration of the canal
1937-1993	NPS acquisition and management.

Historic base maps depicting the site's landscape development periods were created, and existing conditions compared and contrasted with the site's appearance during these periods.

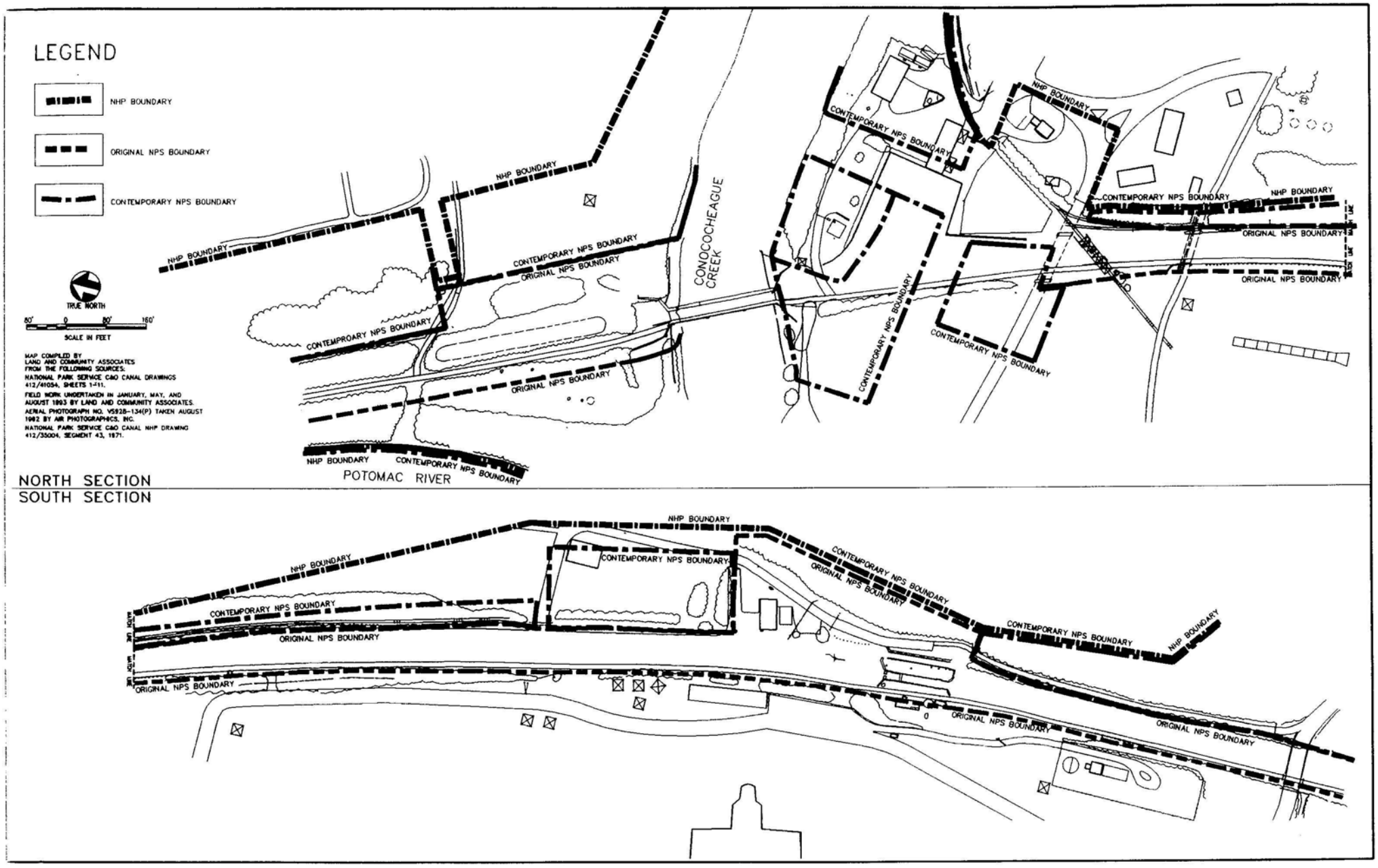

Figure 2. Study Boundary Map

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Individual landscape components, including buildings and structures, archeological resources, circulation systems, vegetation, and small-scale features, were evaluated using the National Register of Historic Places criteria for significance and integrity. Landscape Character Areas—areas with concentrations of significant historic values, patterns, and features and that possess integrity, or areas that have clearly defined programmatic roles in the landscape—were identified and became the basis for analysis and evaluation. These areas were identified in accordance with the guidance concerning evaluation established in *National Register Bulletins 18* and *30*.

Treatment recommendations were developed for the NHP that can be implemented in three phases. Chapter Four presents the primary goals of the landscape management philosophy, long term goals for the phased treatments, and the specific recommendations. The three phases accommodate current, interim, and future uses of the canal and adjacent areas. In each phase the recommendations are presented on three maps—Overall Canal North Section, Overall Canal South Section, and Cushwa Loading Basin. The recommendations are organized according to the same landscape components cited above. The treatment recommendations and phasing plans were reviewed by the park and regional staff.

Preparation of additional design drawings or construction documents is not within the scope of this project. Prior to further implementation of adaptive reuse of historic structures, however, assessments of the structures and their materials and additional documents will be necessary.

1.5 ADMINISTRATIVE CONTEXT FOR THE WORK

The 19,390-acre C&O Canal NHP possesses a variety of features including canal-based resources such as aqueducts, dams, the towpath, lockkeepers' houses, culverts, holding and loading basins, associated resources such as warehouses, mills, bridges, and railroad-related buildings and structures.[2] A small portion of the park, approximately 124 acres, lies in West Virginia; the remainder is in Maryland and Washington, D.C.

In September 1938, NPS purchased the 184.5-mile C&O Canal right-of-way between Georgetown and Cumberland, Maryland, using funds allotted by the Federal Emergency Administrator of Public Works. Immediately following this purchase, NPS initiated restoration and rehabilitation of the 23-mile stretch between Washington, D.C., and Seneca, Maryland, to be maintained for public recreation. North of Seneca, however, the canal and canal-related resources received minimal attention. According to a 1948 survey of the canal area, "the canal and the structures in this area have received little or no maintenance attention, have become overgrown, are inadequately policed, in some areas constitute unhealthful conditions and give rise to constant problems of administration."[3] Despite its condition, the canal was declared a National Historical Monument in 1961.

A new phase of NPS management began in 1971 with Congressional passage of Public Law 91-664, which created the C&O Canal NHP to preserve and restore the canal's resources for historical interpretation and public recreation. Known as the "Chesapeake and Ohio Development Act," the law authorized the Secretary of the Interior to maintain and restore the canal for recreational purposes. The act also provided for acquisition of specific lands in the canal corridor by the State of Maryland. Existing utility easements, special use permits, and other rights were protected by the act. Almost three-quarters of the park's lands are owned by NPS; the remainder are divided equally between state and local areas and private property.[4]

Figure 3. C&O Canal interpreter leading walk along the canal in Williamsport

1.6 SUMMARY OF FINDINGS

The C&O Canal NHP at Williamsport retains many significant features that represent the development, growth, and decline of the C&O Canal over a one-hundred-year period. Surviving features represent the evolution of an industrial landscape spanning the entire period of significance—from the beginning of canal construction in 1828, to the opening of the canal at Williamsport in 1835, to the collapse of the Conococheague Aqueduct in 1920, and, finally, to the ultimate closing of the canal in 1924. Both the canal and its setting retain considerable integrity. Williamsport's historic buildings and their proximity to the canal enhance the site's character by providing an appropriate setting that emphasizes the historic association between canal and town. Treatments detailed in Chapter Four, and outlined below, are intended to preserve, maintain, and enhance this historically significant landscape.

Summary of Treatment Plan Recommendations and Phasing

Rehabilitation, which can accommodate new compatible designs and uses while preserving the historic setting and extant structures, is the proposed landscape treatment recommendation for the Williamsport segment of the C&O Canal National Historic Park. The following is a summary of the recommendations presented in more detail in Chapter Four for each of the three phases.

PHASE ONE

Phase One (years one to five) consists of temporarily *accommodating* the needs of the current users of the facilities, primarily the Williamsport Preservation Training Center. The primary recommendations for the first phase are to

- protect the known historic resources along the canal by limiting vehicular access to the site, pedestrian access to sensitive areas, and by establishing a cyclical maintenance program that promotes preservation,
- provide parking spaces for daily and weekly employees and visitors in the area between the Cushwa Warehouse and Power Generation Station, but prohibit parking beyond the eastern wall of Cushwa loading basin,
- establish a universally accessible vehicular entrance to the site,
- establish a visual connection between the canal and the sites discussed in Chapter Four through selective removal of vegetation,
- undertake archeological investigations (in order of priority) for the canal prism and towpath, Miller Brothers Lumber Mill, Cushwa Cement and Phosphate Warehouse, the Lockkeeper's House landscape, the carpenter's shop and pivot bridge site, the area south of the Cushwa Warehouse, the mill sites north of Lock 44, the holding basin and DeFrehn Chair Factory area, and the house site southwest of the Bollman Bridge to allow for interpretation in future phases,
- interpret sites discussed in Chapter Four using a walking tour brochure, and incorporate existing interpretive sign at Lock 44,
- evaluate the aqueduct, the bridges, Lock 44, the flume, the Cushwa Warehouse, the Power Generation Station, canal wall remnants, the Lockkeeper's House and all other related elements to determine stabilization and rehabilitation needs,
- remove existing earth causeways that cross the canal as indicated in the rewatering sequence,
- encourage Town of Williamsport to limit building activities in River Bottom Park to maintain views between the canal and the Potomac River,
- negotiate with Town of Williamsport to acquire the maintenance yard and the gas station, and to discuss additional visitor parking needs,

- protect the Conococheague Aqueduct from further deterioration by stabilizing arches and limiting access to the eastern side of the structure; construct a replica wood parapet wall on its eastern side,
- protect historic signs and newly repainted signs,
- negotiate with C&O Canal Days Inc. for use of the current C&O Canal Museum on Potomac Street as an interpretation center during the first phase,
- rehabilitate the YACC building for the relocation of park maintenance facilities until a decision can be made about off-site relocation,
- develop an interpretive plan for displays and exhibits to be installed in phase two, and
- develop a site furnishings plan for the NHP.

PHASE TWO

Phase Two implementation (years five to ten) is anticipated to begin after the relocation of the Williamsport Preservation Training Center. The primary recommendations in the second phase are to

- rehabilitate the Power Generation Station to accommodate a proposed visitor contact facility housing exhibits and restroom facilities,
- provide a new design for vehicular access to the Cushwa loading basin area that includes handicapped parking, a drop-off and orientation plaza in front of the visitor contact station (newly rehabilitated Power Generation Station), and limited visitor parking,
- provide a planting design for the visitor contact station that incorporates a limited palette of native plant materials,
- remove the temporary trailers east of the Power Generation Station,
- construct a visitor parking area at the end of Fenton Avenue,
- rehabilitate the Cushwa Warehouse for use as a park ranger station, administrative offices, and, possibly, a small library for park interpreters,
- relocate maintenance activities to the YACC building,
- install new interpretive signs based on the interpretive plan, findings of the archeological investigations and historic research developed in phase one,
- conduct archeological investigation of former farm site, and Williamsport maintenance yard if acquired in phase one,
- repoint the aqueduct wing walls,
- develop a lighting plan for the park, including security lighting around visitor facility areas,

- establish a preferred pedestrian circulation route based on the interpretive plan, including a pivot bridge at Lock 44 if this area is rewatered, and
- incorporate a canal boat concession in the Cushwa loading basin area after the canal is re-watered. Refer to the section of Chapter Four, titled Rewatering of the Canal for specific recommendations.

PHASE THREE

Phase Three recommendations are not time sensitive. The proposed implementation schedule (years eleven and twenty) reflects current realities of funding and staffing. Increases in funding or programmatic changes could result in earlier implementation. The primary recommendations in the third phase are to

- negotiate with C&O Canal Days Inc. to use the current C&O Canal Museum building as an accessory visitor contact facility in case of emergency during a flood,
- rehabilitate the Lockkeeper's House into a ranger station and/or visitor contact facility for supervision of the rewatered canal and lock operation,
- use a portion of the Lockkeeper's House for displays of artifacts and period furnishings,
- install and display artifacts and exhibits in the Power Generation Station to interpret its historic function,
- rehabilitate the gas station or construct a new building on its site as a permanent visitor contact facility on higher ground, thereby increasing the amount of available space for interpretive displays and site orientation, and relocate existing interpretive displays to the new space,
- interpret additional areas according to the findings of continued archeological investigation and historical research, and
- relocate maintenance facilities and any other functions not tied to the park to a building off-site as determined in phase two.

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[1] National Park Service, National Capital Team, Denver Service Center, *Development Concept Plan and Assessment: C&O Canal Williamsport* (May 1983), v.

[2] *Chesapeake and Ohio Canal National Historical Park: Statement for Management* (April 1991). Acreage referred to was as of June 30, 1990. When the land acquisition program is complete, the park will include a total of 20,781 acres.

[3] Bureau of Public Roads and the National Park Service, *Report on Joint Reconnaissance Survey and Study of the Chesapeake & Ohio Canal* (Authorized by Public Law 618, 80th Congress, 2nd Session, June 1948), 1.

[4] *Chesapeake and Ohio Canal National Historical Park: Statement for Management* (April 1991), 7.

2 SITE PHYSICAL HISTORY

2.1 DEVELOPMENT OF WILLIAMSPORT PRIOR TO THE ARRIVAL OF THE C&O CANAL, 1787-1828

(Reference Figure 56: *1787-1828 Historic Base Map*, following page 3-31)

Introduction

The Town of Williamsport, first incorporated in 1786 under the name "Williams Port," and incorporated again in 1823 under its present name, lies at the southern extremity of the Hagerstown Valley, a fertile land mass in the same valley system as the Shenandoah and Cumberland valleys. The valley is bounded on the west by the North Mountain range, the east by the South Mountain range, the south by the Potomac River and Shenandoah Valley of Virginia, and the north by the Cumberland Valley of Pennsylvania. The area's rich soils, abundant water supply, diverse native animal and plant life, and temperate climate attracted first Native American and then European settlers to the region. Although prone to flooding and of little value for permanent development, the Potomac River basin possesses some of the area's richest agricultural lands.[1]

The Potomac River, which over time cut approximately thirty feet through a broad and fairly level landscape, created the broad floodplain and steep hillsides upon which the Town of Williamsport was founded. Prior to European settlement, large and superior quality timber covered the greater part of the ridges and bottoms in this area.[2] The region's natural geomorphology influenced the town's siting above the floodplain created by the juncture of the Potomac River and the Conococheague Creek.

This location, which ensured river access, provided the settlement with natural advantages in transportation and commerce. Both Native American and European inhabitants depended on the area's river corridors for transportation; the rivers' navigability not only influenced the siting of Williamsport but also affected land use in the area. More than 12,500 years before the European settlement at Williamsport, Native Americans inhabited the area near the confluence of the Conococheague Creek and the Potomac River, establishing a large village in the region during the Late Woodland Period, circa 900 to 1600 A.D.[3] European settlers found the area attractive for similar reasons, and a shallow point in the river to ford or ferry cargo made the area an ideal location for a town.

European Settlement of Washington County

The first known Europeans, most likely trappers, passed through the Washington County area prior to 1730. Permanent settlement of the region, called Conococheague, began around 1732. Most early settlers were of German and Scotch-Irish descent, and had migrated southward from Pennsylvania to the Monocacy Valley, east of the Catoctin Mountains in the early 1730s. By 1748, the region contained a population large enough, albeit dispersed, to justify creation of a new county. Frederick County was formed and included present-day Washington, Montgomery, Allegany, Garrett, and part of Carroll counties. Washington County was created in 1776.

The Frederick County Court appointed Edward Wyatt to keep a ferry across the Potomac in 1749, just south of its juncture with the Conococheague Creek.[4] Located on a major north-to-south road leading from Hagerstown into the Shenandoah Valley, the ferry proved to be a major Potomac River crossing for more than a century and became an important strategic crossing during the French and Indian and Civil wars.

Throughout this period, settlers acquired land rapidly. Originally, the area known as Lord Baltimore's Manor of Conococheague and Reserve extended over much of Frederick County and included the area at the mouth of the Conococheague Creek. Lord Baltimore apparently leased the property near the creek and other areas to a number of individuals. In 1739 Charles Friend, upon purchasing a 260-acre parcel named "Sweed's Delight" on the north side of the creek, became the first settler to obtain legal title to land near Williamsport. A series of individual purchasers followed; and in 1780 Jacob Friend purchased the area's last tract, a 1 3/4-acre parcel which he named "None Left."[5]

The Creation of Williamsport

In the 1780s, General Otho Holland Williams, known for his leadership in the American Revolution, began assembling a series of parcels near the mouth of the Conococheague Creek. He gained title to all of the land near the mouth of the creek upon purchasing a 569.5-acre tract called Ross's Purchase, which had been his childhood home, and an adjacent 160-acre parcel called Leeds. In November 1786, Williams recorded the deed that created the town of William's Port, located south of the Conococheague Creek overlooking the Potomac River. The same month, the Maryland General Assembly passed the first act of incorporation for the Town of William's Port; both the town's name and the general assembly act's language indicated the river's importance to trade in the area.[6]

According to a plat map included with the deed creating the town, Williamsport was divided into a series of rectangular lots separated by the main streets of Potomac, Salisbury, Church, and Frederick running east to west, and Vermont and Conococheague streets running south to north. Commerce Street ran diagonally, from the western edge of Church Street, northwest to the area "laid off for a public square" that contained approximately four town lots. The town also featured a number of small alleys. The plat did not show the Potomac River basin, although it appears that only Potomac, the northernmost street, extended into this region and thus to Wyatt's Ferry.[7] Potomac Street later provided access to warehouses and other facilities that would be built near the river.

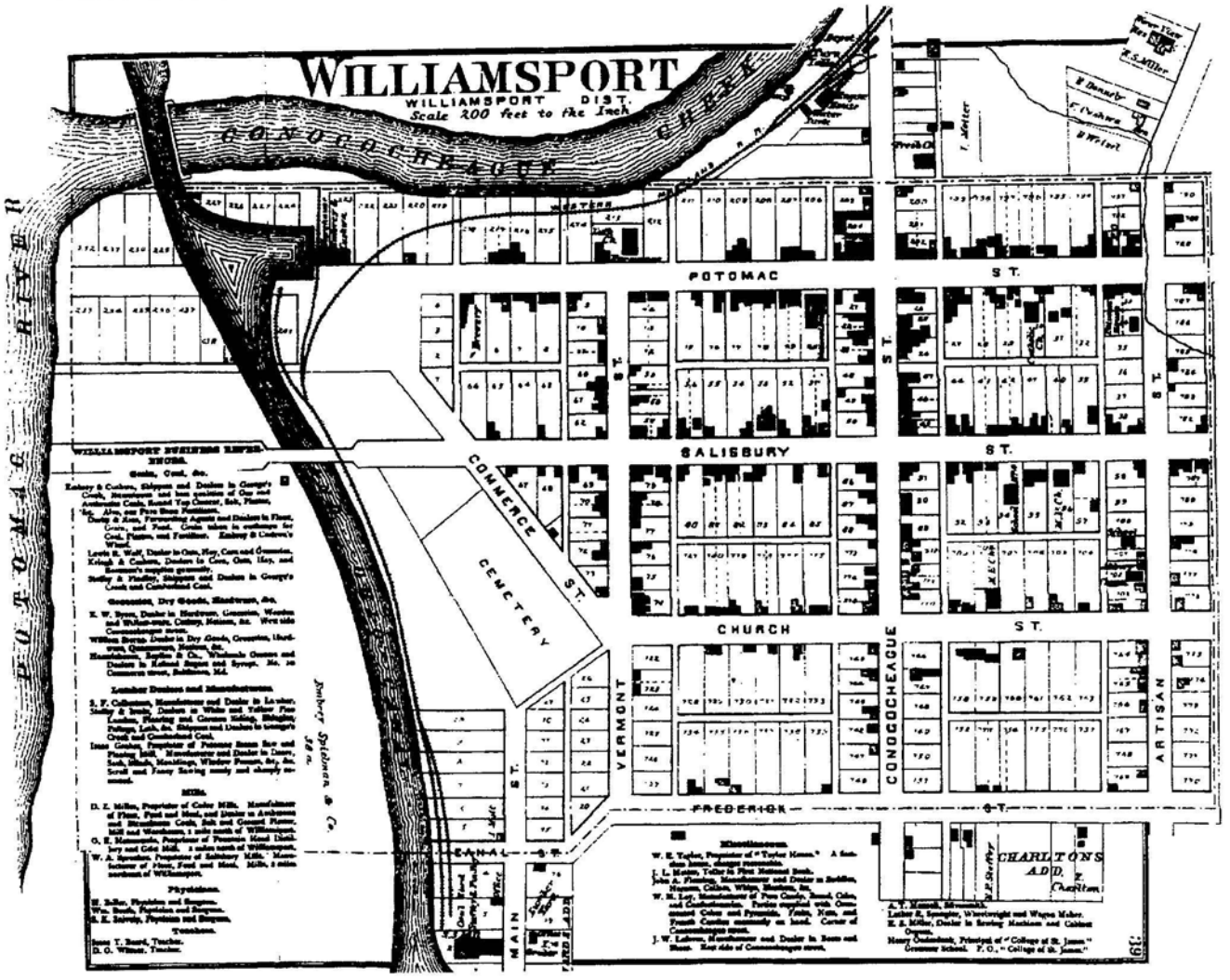

Figure 4. Map of the Town of Williamsport, 1877, Drawn from the Original 1786 Plat Map in An Illustrated Atlas of Washington County, Maryland

Williams' subdivision largely determined the organization of the town's landscape according to a grid layout and promoted Williamsport's close physical and commercial/industrial relationship with the Potomac River. Yet development of the town on the plain overlooking the Potomac River differentiated it from the steep hillsides along the river's bank below the town. These regions remained distinct spatial entities until the development of the C&O Canal, which forced a merging of the two areas.

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Williams' layout also facilitated use of the road network between Williamsport and other local and regional centers. Roads leading to Hagerstown, Frederick, Sharpsburg, and Martinsburg, as well as numerous other smaller towns, all revealed the crossing at Williamsport as a critical trade juncture. In fact, the primary road between Williamsport and Hagerstown ran from the ferry access point on the Potomac. Smaller roadways ran parallel to the river, connecting numerous towns to the trade center. In addition, traffic from inland mills on the Conococheague Creek accounted for considerable circulation up and down the Potomac River.

Since the original settlers were from Pennsylvania and of Germanic descent, there was a strong Western European influence in building form and style and the use of log and brick as construction materials.[8] By the time the canal was constructed, a mostly temporary stand of buildings had been constructed. These structures stood until more permanent structures could be built. The more permanent structures reflected the agrarian traditions of the area, with the I-house a predominant building type.

Potomac River Navigation and the Potomac Company

According to the first act of incorporation, Williams established the town to take advantage of the Potomac Company's improvements to navigation on the Potomac River. Chartered by Maryland and Virginia in 1784 and 1785, respectively, the Potomac Company organized to open the Potomac to the "highest point of permanent navigation," thought to be Fort Cumberland (now Cumberland), approximately eighty-five miles north of Williamsport.[9] Although the Potomac Company was not the first to use the Potomac as a major trade route, prior to the company undertaking its improvements, a boat leaving Williamsport could travel only thirty-five miles southeast before encountering major obstacles above Harpers Ferry. In addition, there were four other areas between Harpers Ferry and Georgetown through which a boat could not pass.

The Potomac Company planned to build a series of bypass canals around those unnavigable portions of the Potomac. By 1789, the company had completed three bypass canals, permitting an occasional boat to travel from Cumberland to Georgetown. In 1792, the company contracted with Thomas Beall to open the river from Cumberland to Williamsport by creating canals through all shoals.[10] Although Beall was to finish the work in one year, a final settlement was not reached until 1799. Some doubt exists as to whether the work was completed.[11]

In addition to constructing canals for passage through difficult areas on the Potomac, the Potomac Company attempted to improve several of the river's tributaries, including the Conococheague Creek at Williamsport. Around 1810, workers widened and deepened approximately fifteen miles of the Conococheague north from the Potomac to accommodate the passage of larger boats. Yet, according to historian Walter S. Sanderlin, these efforts diverted resources from the company's main objective—clearing the Potomac for navigation—and eventually contributed to the company's decline.[12]

Despite the Potomac Company's continued financial difficulties, improvements to the Potomac River caused Williamsport to prosper as a center for trade, with wheat and flour its main commodities. By 1800 Williamsport possessed a number of diversified businesses including taverns, merchants, physicians, wood suppliers, distillers, shoemakers, brewers, weavers, tanners, and coal suppliers.[13] Charles Varlé's 1808 map of Washington

and Frederick counties showed Williamsport as a medium-sized town surrounded by several plantations owned by different members of the Williams family. The map depicted several grist and merchant mills along the Conococheague Creek; all were north of the town. Along the Potomac River, in the area where the canal eventually would be constructed, only Watkins' Ferry (previously Wyatt's Ferry) was visible, crossing the Potomac River to Virginia (now West Virginia) just south of the river's junction with the Conococheague. An extensive road system connected Williamsport with major towns to the north, south, and east. The number of roads declined substantially west of Williamsport, indicating its significance as a community on the edge of the frontier.[14]

During the town's early development, a warehouse, presumably part of the present building known today as the Cushwa Warehouse, was constructed on land along the Potomac River basin. The building's original date of construction is not known. Architectural evidence indicates that part of the brick portion of the building was constructed between 1790 and 1810. There may have been earlier buildings on or near its site. Harlan D. Unrau suggested that the warehouse originally may have been the town's market house, which opened in 1810.[15]

The Coming of the C&O Canal

Construction of New York's Erie Canal in the early 1800s initiated an era of canal building in the United States. In 1823, several efforts were made to charter a company to construct a canal along the Potomac River. When these attempts failed, canal supporters looked to Congress for federal aid. In December 1823, President James Monroe, in his annual message to Congress, mentioned the first C&O Canal convention, which had met in Washington, D.C., the previous month to stimulate support for canal construction. Monroe urged Congress to consider appropriations for "the employment of a suitable number of the officers of the corps of engineers, to examine the unexplored ground, during the next season," and to report their findings.[16] Congress responded by appropriating $30,000 for a survey of the proposed canal route by the U.S. Board of Engineers.

An 1824 map created by Lieutenant E. H. Courtenay of the Army Corps of Engineers showed the proposed canal route following closely the northern bank of the Potomac River. Courtenay recommended following a straight, inland line of approximately nine miles between Sharpsburg and Williamsport rather than staying parallel to the river, which wound through slate for approximately twenty-three miles between these two points.[17] When constructed, the canal closely followed Courtenay's recommended route, although it remained parallel to the Potomac rather than taking a straight line between Sharpsburg and Williamsport.

On January 27, 1824, the Commonwealth of Virginia passed an act that would incorporate the C&O Canal Company. Maryland confirmed the act

on January 31, 1825, and the federal government followed on March 3, 1825. Pennsylvania was hesitant, but eventually confirmed the Virginia act in the early months of 1826. On February 14, 1825, the United States Board of Engineers released its preliminary report on the C&O Canal, with the findings that a canal could connect the upper Potomac with the Youghiogheny or Monongahela rivers.[18]

Yet the final report of the Board of Engineers estimated that the cost of building the canal could exceed $22 million. This estimate shocked canal supporters, who had anticipated a cost of approximately one-fourth that amount. A second canal conference was organized to discredit the Board of Engineer's estimate and call for a new survey to provide a more accurate construction cost estimate. Convention participants formed a committee to investigate costs assessed in the original proposal and found inflated prices for labor, masonry, and excavation. President Adams then agreed to investigate the conflicting figures and appointed James Geddes and Nathan Roberts to conduct the survey. Completed in 1827, the survey revealed that a larger canal could be constructed from Georgetown to Cumberland at an approximate cost of $4.5 million. Canal supporters embraced this figure as more accurate than the Board of Engineers' estimate.[19] Following Congressional passage of an act subscribing $1 million to the company's stock, the canal company organized formally on May 24, 1828.

From the start, the canal company encountered difficulties implementing its plans. In particular, competition from the Baltimore and Ohio (B&O) Railroad Company hindered rapid completion of the canal as originally conceived. During the 1820s, both railroad and canal supporters had chosen the Potomac Valley as the course for reaching western markets. The C&O Canal Company—convinced of its authority over the route since its predecessor, the Potomac Company, had received rights in this area—secured an injunction to prohibit railroad construction beyond Point of Rocks, where it was to enter the Potomac Valley. The B&O Railroad Company, however, argued that the Potomac Company's rights were no longer valid, and that the railroad had received rights to locate in the area in 1827 when it received its charter in Maryland. Although the canal company's rights were upheld eventually, the dispute, which was resolved by an 1832 Maryland Court of Appeals decision, resulted in a costly four-year delay in canal construction.

2.2 CANAL CONSTRUCTION, 1828-1850

(Reference Figure 57: *1828-1850 Historic Base Map*, following page 3-31)

Introduction

According to the canal company's original charter, 100 miles of the project were to have been completed by 1833. When the court issued its ruling in January 1932, construction had been completed to Point of Rocks, slightly less than half the distance. Contracts to complete work to Williamsport were negotiated quickly; however, severe winter weather suspended work above Harpers Ferry. Still, the requirements of the charter were met in spirit by June when water was let into the first 100 miles of the canal, with slackwater navigation at some points.[20] Boats actually were not able to reach Williamsport, just below the one hundred-mile marker, until 1834; and then they were traveling on slackwater above Dam 4, approximately fifteen miles below the town.[21]

Williamsport's location encouraged the belief that the canal would transform the town into a major commercial and industrial center. The area's reliable water sources—the Potomac River and Conococheague Creek—set the stage for the establishment of mills and supporting enterprises in town. Because the B&O Railroad did not extend this far into Western Maryland, Williamsport was seen as a potential hub for the area, particularly because of its proximity to Hagerstown, the county seat. Although it never became the envisioned regional trading center, Williamsport did become an important center for local trade.[22]

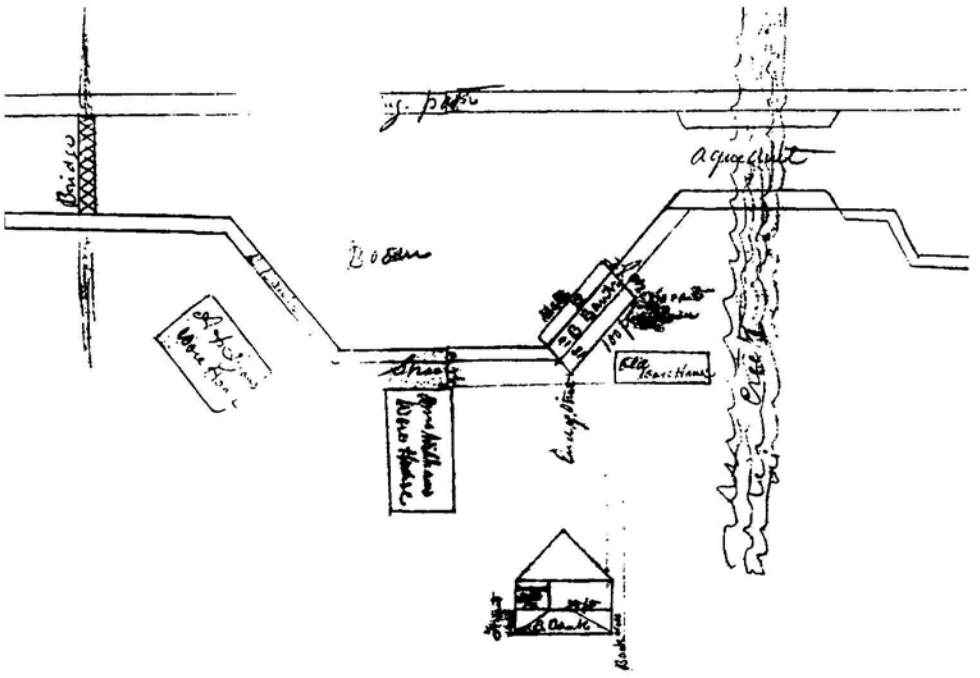

Figure 5. Map of the Basin at Williamsport, Report of G.W. Rodgers, December 15, 1838. (National Archives)

Residents expected the canal to promote rapid commercial development in the Town of Williamsport. Already the shipping business had proved prosperous, as is evident from the number of businesses that developed to take advantage of the convenient location for shipping goods. Peter and Christian Ardinger ran a business from their warehouse on the Conococheague Creek, near the Conococheague Bridge upstream from its confluence with the Potomac River. James Shoaff, who owned a tavern on the Williamsport public square, took over the Ardinger's Warehouse and boating business by 1828.[23] The lumber business also developed into a major industry at this time. Charles A. Warfield and his brother, Dennis, operated a lumber company and also sold general merchandise near the town center.

Anticipating that the canal would continue to improve the town's economy, other businesses opened in Williamsport. By 1828, Joseph Hollman had established a warehouse and boating business "situated near the mouth of Conococheague creek," in what may have been the 1790-1810 brick building. (This warehouse may have been later known as Ann Williams' Warehouse.)[24] Hollman, who later worked as a contractor on the canal, was the keeper of Lock 44, and owned a tavern and a mill near the lock.[25] Other businesses in Williamsport included several taverns, a distillery, merchant shops, a blacksmith shop, two doctors' offices, an attorney's office, a private school, and a bank.[26]

Construction of the C&O Canal at Williamsport

Construction of the approximately one-mile stretch of the canal within Williamsport began in 1832. Disease and violence, however, continuously interfered with construction on sections 186-188, which encompassed land south of Williamsport, Lock 44, the Conococheague Aqueduct, and land north of Williamsport.[27] In the late summer of 1832, Asiatic cholera appeared on the canal near Harpers Ferry and spread upriver to Williamsport. Joseph Hollman, a contractor on the canal and resident of Williamsport, noted in a letter dated September 4, 1832, that one of his men had come down with cholera the night before. He stated that all work to this point had been completed without interruption, but that if the cholera proved fatal, his employees might leave work. Eventually most of his laborers and contractors did abandon the line from Point of Rocks to Williamsport.[28] The cholera epidemic disappeared from Williamsport by October, but lingered in nearby towns, leaving uneasy workers and residents in Williamsport. As the weather turned cold, the epidemic ended.

In the summer of 1833 cholera again hit the canal, first appearing in Williamsport. The outbreak was not as serious as the year before; although lives were lost and construction again interrupted. The cholera epidemic of 1833 ended by October, but only a short time passed before construction on the canal was interrupted again, this time by labor violence.[29]

Two rival groups of Irish laborers—the Corkonians and the Fardowners of Longfords—worked on the canal near Williamsport. The Corkonians were employed in the area of Dam 5, approximately seven miles north of Williams-

port, and the Longfords were employed south of Williamsport at Dam 4. On January 20, 1834, the two groups clashed below Williamsport. Several people were wounded and many more arrested by militia from Hagerstown. Both sides began to amass more arms for a future confrontation. Despite efforts of Williamsport residents to separate the two groups by patrolling the aqueduct, the Corkonians soon marched along the canal, committing several acts of violence.[30] On January 24, 1834, Williamsport citizens stopped 300 Longfords—armed with clubs and guns—at the aqueduct. After convincing the residents that they intended no harm, the Longfords were allowed to cross the Conococheague. The Longfords joined with hundreds more of their group on the other side of the aqueduct, however. The combined force encountered about 300 Corkonians near Dam 5. The Corkonians, outnumbered, were forced to retreat. The following day, Williamsport citizens organized a militia, called the Williamsport Riflemen. The Clear Spring Militia and two Hagerstown troops arrived to maintain order until the U.S. Army arrived from Fort Henry. Once leaders of the rival Irish groups were brought together and a peace agreement signed, construction on the canal resumed.

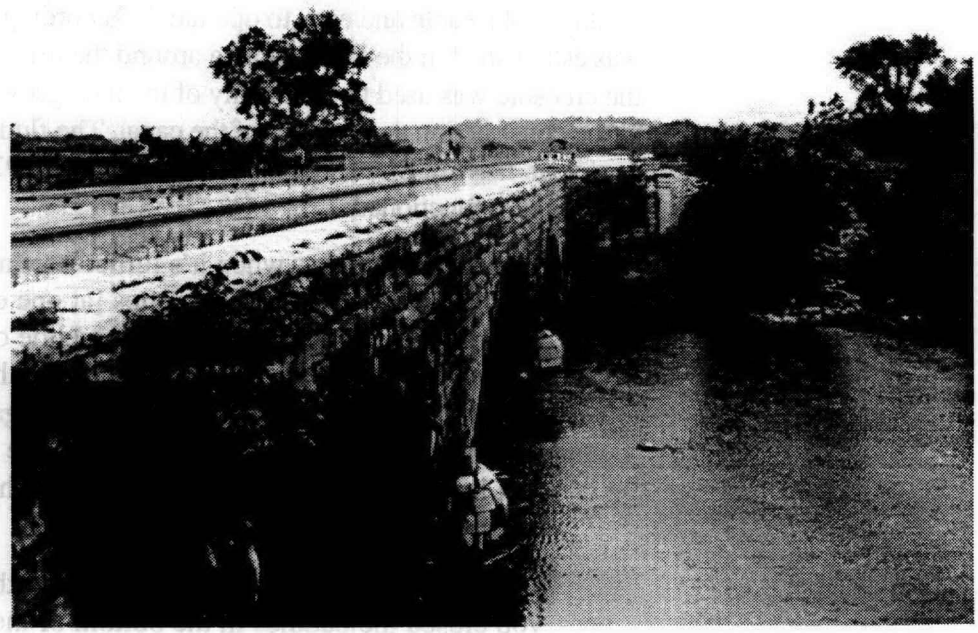

Figure 6. Conococheague Aqueduct, circa 1900. (Robert G. Merrick Collection, Maryland State Archives, Annapolis, Maryland)

When the canal officially opened in 1835, the C&O Canal Company had several structures on its property near Williamsport including the Conococheague Aqueduct, Lock 44, the canal prism, the towpath, and the Cushwa loading basin.[31] A private contractor by the name of Michael Byrne received contracts for the building of the aqueduct and lock in 1832. He is believed to have completed construction on both by the end of 1834.[32] The three-span, stone aqueduct, constructed of compact, blue limestone from a local quarry, traversed the Conococheague Creek near its mouth at the Potomac, taking the canal approximately 260 feet over the creek.[33] The

towpath occupied the aqueduct's downstream or west side, and a decorative, wrought-iron railing prevented mules and pedestrians from stumbling into the creek.[34] Canal company and Town of Williamsport records indicate that a waste weir, or type of dam used to regulate the flow of water, also was constructed along the Conococheague Creek near the aqueduct at the time of the canal's development; the exact location of this structure is not known.

Construction of Lock 44 appeared to follow general specifications for lock construction as outlined by the canal company. These specifications called for construction of a rock or hewn-timber foundation; excavation of a pit for the lock; placement of masonry walls—"the entire length of which, measured in the continuation of the lock walls, from end to end of the wings, shall be 143 feet, viz; 22 feet above the upper side of the main sill—100 feet between the upper side of the two main sills—and 21 feet below the upper side of the lower sill. The wings shall splay 12 feet each in eight feet, measured in the direction of the lock, and shall be connected with the main walls by a radius of four feet."—and a flume, the length of which "shall be as great as in the judgment of the Engineer."[35] Like the Conococheague Aqueduct one-half mile north of the lock, Lock 44 was constructed primarily of limestone. The lock's gates were constructed of wood, a material prone to deterioration but readily replaceable and easy to operate.[36] According to NPS, a creosote vat was established in the Lock 44 area around the time of canal construction, and the creosote was used to treat many of the lock gates and wood members used in the construction and upkeep of the canal. The flume was constructed the next year. Harvey Brant, keeper of Lock 44 from 1916 to 1924, described how the structure functioned:

> There's a wicket ... when it's turned around, it turns the paddles in the bottom of the gates [at one end of the lock]. There's two square paddles on each [side of the gate], down at the bottom. That leaves some water in there and the lock fills up. When the lock fills up, you get against the beam and push the gates open on each side. The beam is about 20 feet long and 12 by 12 inches. You push them gates back open, the boat could pull in the lock.
>
> The lock would be full. Then you closed these gates and you closed the paddles in the bottom of them so no more water could get in. You went down to the lower end of the lock—you had to go down to the other end to cross—and you got wickets to open the paddles in the *lower* gate. You turn them paddles and you leave the water out of the lock down to the lower level. Then you open them gates down there and the mules will pull the boat right out.[37]

Although the building of a lockkeeper's house often accompanied construction of a canal lock, records indicate that this was not the case at Lock 44. The company also commonly included construction of a pivot bridge

Figure 7. Cushwa Loading Basin at Williamsport, early twentieth century. (From George "Hooper" Wolfe's I Drove Mules on the C&O Canal)

for pedestrian access over the lock. At Lock 44, this structure was completed in 1838 by Byrne and Company at a cost of $662.[38]

The canal prism was approximately 60 feet wide at the water line and 42 feet wide at the base, with a depth of 6 feet.[39] Clay was used to line the prism walls initially; stone walls, remnants of which still exist along the east, or berm, side of the canal, may have been constructed at a later date. The ten- to-twelve-foot-wide, dirt and crushed stone towpath followed the western, or river, side of the canal prism.[40] Most later development took place on the berm side of the canal in the areas directly south of the Conococheague Aqueduct and north of Lock 44. On the berm side of the canal, between these two developed areas, a steep hillside led to the town. On top of the hill, Riverview Cemetery overlooked the canal and river.

The Cushwa loading basin, an extension of the canal prism located south of the aqueduct, allowed a number of canal boats to load and unload goods without disrupting the flow of traffic and provided an area to store canal boats not in use during the winter months. Ann Williams' Warehouse stood directly on the Cushwa loading basin's approximately 150-foot-long eastern wall. The northern and southern walls were approximately 180 and 115 feet long, respectively. Material used to construct the original walls is not known. The existing stone walls, however, do not date from this early period, and Williamsport town officials rejected a canal company recommendation to build such walls in 1836.[41] The basin's elevation was at 350 feet, the same as that of the canal proper.[42] An early-twentieth-century photograph of the Cushwa loading basin shows the close relationship between the basin and surrounding buildings, in particular the William's Warehouse, called "Cushwas" by the turn of the century.

The Opening of the Canal at Williamsport

By the summer of 1834, the canal was navigable, with the aid of slackwater in the northernmost sections, from Georgetown to Williamsport. The Williamsport section of the canal was not completed officially until April 1835, when water from Dam 5 was let into section 187. The *Williamsport Banner* described the Cushwa loading basin after the canal's official opening at Williamsport:

> The basin at the foot of Potomac Street has been for upwards of a week past, crowded with boats, arks, & c. laden with coal and flour, and that the busy, bustling appearance which the arrival of the boats has given to that part of the town, in the vicinity of the canal, is truly gratifying, and brings to mind the wharves of a commercial city.
>
> "It was a glorious site to see" the numerous boats as they lay in the basin by night, each illuminated by a glowing coal fire, which cast "a long level rule of light" across the water; and the silence of night was not unpleasantly interrupted by the cries of the hoarse boatmen, as they were disturbed from their moorings by new arrivals, and driven to closer contact with their neighbors.[43]

Despite the canal's dominance as Williamsport's commercial transportation route, ferry service continued to be important for transport across the Potomac River. On October 4, 1833, prior to the official opening of the canal at Williamsport, Eli Stake proposed construction of a bridge over the canal, near the location of the present-day Bollman Bridge. His probable intention was to accommodate access to the ferry. An 1838 sketch of the Cushwa loading basin area showed the location of this bridge south of the basin.[44] Yet a significant amount of traffic on the Conococheague and the Potomac transferred to the canal, with considerable emphasis on the Cushwa loading basin and Lock 44, where the construction of warehouses, residences, and sheds created focused centers of commerce and trade. Roadways within the town continued to improve and were kept repaired during this period.

Private Development Along the Canal

The opening of the canal at Williamsport spurred a series of requests for water rights, building permits, and other commercial-based privileges from local citizens and merchants. These requests were placed before the canal company's board of directors, who approved or denied the applications. Documents discussing the various requests indicate whether or not the board approved them but not whether construction actually occurred. While some of the buildings and structures are known to have been constructed, other approved requests may or may not have been implemented. Most construction occurred directly adjacent to the Cushwa loading basin south of the Conococheague Aqueduct and on the berm side of the canal just above Lock 44.

Cushwa Loading Basin

In February 1835, Elie Beatty, who owned property adjacent to the waste weir near the Conococheague Aqueduct, filed an application requesting use of the aqueduct's water. The board approved his request, stipulating that the water was "to be applied only to the use of grinding plaster, sawing and a planing machine."[45] For this privilege, Beatty paid an annual fee of $150. Apparently, water from the waste weir later caused "serious injury to this land," and the canal company agreed to construct walls to protect Beatty's property.[46] A member of the canal company's board of directors, William Price, also received permission to use water on his property located "on the towpath side of the canal opposite the above mentioned waste weir."[47]

In December of 1838, the J. A. Magruder Company of Georgetown announced its intention to open a store in Williamsport. The canal company superintendent recommended granting Magruder permission to run boats on the canal and lease a parcel of canal company land between the Cushwa loading basin and the Conococheague Creek to build a warehouse. The warehouse is believed to have been built.[48] Between 1835 and 1840, increased trade along the canal led to the enlargement of Ann Williams' Warehouse located near the Cushwa loading basin to the present two-story, brick and frame building. This warehouse later was owned by Charles Embrey and then Victor Cushwa, two prominent members of the canal trade.[49]

In late December 1847, Charles Embrey requested permission from the C&O Canal Company board of directors to build a wharf on company-owned land along the berm side of the Cushwa loading basin, where "the county Road leading from Sharpsburg strikes the canal."[50] For several years Embrey had been leasing a warehouse at this site, possibly the Williams' Warehouse, from John Dovenberger, who may have managed the Williams' property. The board granted Embrey permission to build the wharf and it probably was completed by the spring of 1848.[51] Another approved application indicating the increase in trade in the late 1840s was submitted by John M. Stake. Stake notified the board that he was expecting a large shipment of produce and needed to relocate his new warehouse from the public square to the southeast edge of the Cushwa loading basin. In return for allowing him to move the warehouse, Stake promised to incorporate an office in the building, free of charge, for the canal company's collector of tolls.[52]

Lock 44

In 1835, Charles Warfield received permission to build a large produce warehouse and a basin on his property immediately above Lock 44. In a letter Warfield wrote to the canal company, this basin was described as requiring "an excavation of 15 to 20 feet fronting the Canal, running back parrellel [sic] with the Western line of the Company's lot, not less than 120 feet to a street, and to the debth [sic] of the Canal."[53] The Warfield basin remained a focal point of development along the canal in Williamsport throughout the nineteenth century.

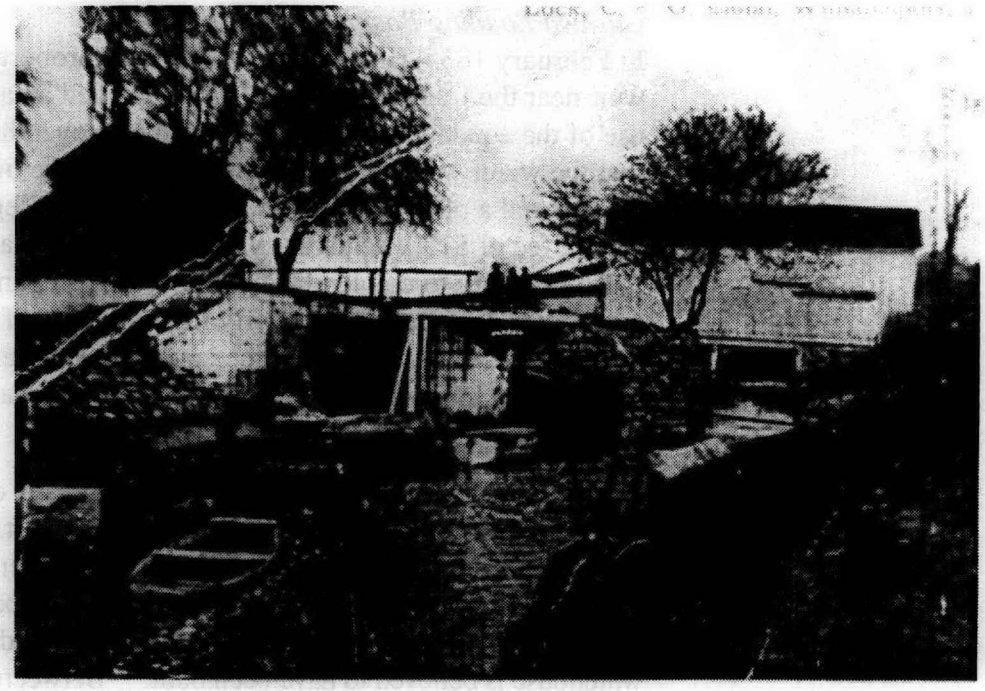

Figure 8. Lockkeeper's House and hay press/ carpenter's shop at Lock 44, circa 1919. (C&O Canal National Historical Park Photo Library)

In 1835, Joseph Hollman requested permission to construct a flume around Lock 44 and build a lockkeeper's house of brick or stone for the canal company. The flume, built parallel to the lock and separated from the lock by about 25 feet, was approximately 145 feet long with an interior width of about 9 feet.[54] Hollman also requested permission to construct a dry dock for boat repairs and paid $150 annually for the use of the water. The canal company appointed Hollman keeper of Lock 44, with $150 annual compensation; the Lockkeeper's House, however, apparently was not begun at that time.[55]

Increased trade along the canal in the late 1840s may have led the company to order construction of a lockkeeper's house at Lock 44 on December 8, 1848, but it is not known if the board's 1848 order was satisfied. [56]

In June of 1848, Charles Embrey requested permission to construct a building and landing on the canal company's vacant lot adjacent to Lock 44 "for the purpose of Pressing Hay."[57] This request was granted, and the building was believed to have been built directly over the flume to take advantage of the water power. A circa 1919 photograph of Lock 44 is the only known image of the hay press. Later the canal company used the press as a carpenter's shop. The photograph also indicates Lock 44's relationship to the flume and depicts the post-1867 Lockkeeper's House.

Additional Requests for Construction

During the 1840s, the board received additional applications to build and improve businesses, prompted by the expected opening of the canal from Georgetown to Cumberland. In conjunction with his intention to build a boat yard at Williamsport, Eli Stake requested permission "to cut the Berm Bank of

the Canal for the purpose of passing boats into" the yard.[58] Edward Greene Williams Stake requested permission to build a warehouse on company land. Canal company proceedings, however, do not indicate if these requests were granted.[59] In October 1847, the board granted Owen Ardinger permission to build and maintain a dry dock on the east side of the canal near Williamsport. It is not known whether the dock was ever constructed.

Despite the anticipation of increased trade along the canal following its expansion, the canal company did not prosper. Revenues were reinvested immediately to complete the unfinished portion of the canal north of Williamsport. The severe national recession of the late 1830s further contributed to the canal company's financial vulnerability. The State of Maryland attempted to sell bonds to subscribe $3 million to the canal company, but the bonds did not sell. Maryland then forced the canal company to improve its financial situation by ordering it to sell all excess lands. Between 1842 and 1844, the company sold excess lands along the canal; none, however, appeared to be within the town of Williamsport.[60]

2.3 OPENING OF THE CANAL TO THE OUTBREAK OF THE CIVIL WAR, 1850-1861

(Reference Figure 58: *1850-1861 Historic Base Map*, following page 3-31)

Despite the company's setbacks, the canal eventually was completed to Cumberland, and opened officially on October 10, 1850. With the canal opened to the west, merchants saw an opportunity to tap into the region's vast coal resources. The canal company hoped to increase revenues and possibly end its financial problems. By 1851, coal had replaced wheat and other agricultural products as the main article of trade on the canal and the primary source of canal revenue. The increase in tons of coal shipped on the canal between 1849 and 1852 was in excess of 77,000 tons.[61]

Some Williamsport residents may have anticipated the extent of the coal trade in their town, as evidenced by a number of requests to increase and improve commercial facilities. In July 1850, Henry Beatty asked to use a small strip of land on the north side of the Cushwa loading basin for a coal yard. After Beatty's death, two or three years later, the canal company purchased his hay press, presumably that constructed by Embrey in 1848, and converted it into a carpenter's shop. In 1852, the board allowed Charles Embrey to build stocks, partially on the canal company's land, to repair boats. These stocks were located "above Lock 44 in a ravine about 400 feet above the lock. The ravine is most on a lot in my possession, the Bal[ance] on the Ground of the Ches & O C Co."[62] Embrey also requested permission to construct a wharf along the canal; this wharf probably replaced his earlier wharf.[63]

Yet between 1852 and 1853, three major events occurred that significantly impeded the canal's success. In April 1852, a tremendous flood damaged the canal from Georgetown to Dam 6, with serious damage occurring in the twenty-mile segment between Dam 4 and Dam 5 that included

Williamsport. Estimates indicated that repair would take three months and cost $100,000. All navigation would be halted and revenue would be lost during the repair period. Around this time, the canal also was incorporated into the state's political spoils system, allowing the ruling political party to remove canal officials, including the lockkeeper, with each change of administration. This system promoted instability in local canal operations.

In addition, another major cholera epidemic struck the Potomac Valley; at least thirty-two persons in Williamsport died.[64] During the 1850s, "no year passed without some interference with navigation."[65] As a result many people lost confidence in the canal for safe and reliable transportation.

2.4 THE CIVIL WAR, 1861-1865

(Reference Figure 59: *1861-1865 Historic Base Map*, following page 3-31)

Introduction

The Civil War period witnessed destruction and damage along the canal in Williamsport. The only reference to new construction in this period was the establishment of entrenchments by Union forces on the hillside east of the canal and a wharf repair by a private citizen.

An early 1860s' photograph best represents this period. Buildings include a wooden house and outbuilding, perhaps a small warehouse, near the ferry crossing. Aside from this photograph, nothing is known about these structures. Only the original warehouse appears near the Cushwa loading basin; other buildings in this vicinity are presumed to have been destroyed early in the Civil War. Piles of coal await loading outside the warehouse.[66]

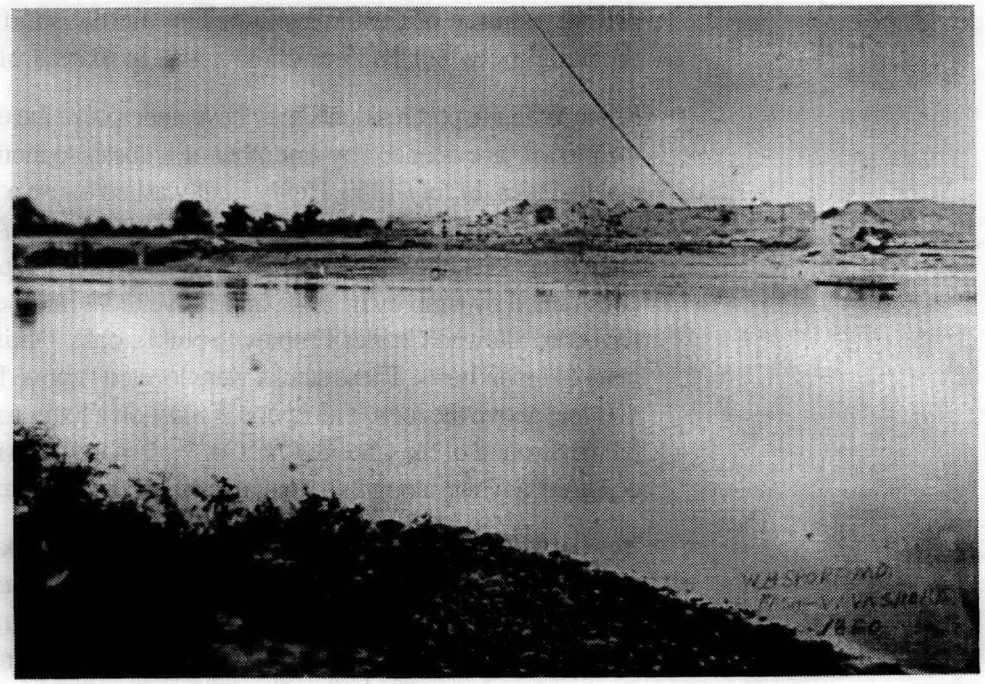

Figure 9. Ferry Crossing at Williamsport, circa 1860. (Chesapeake and Ohio Canal National Historical Park Photo Library)

The Civil War limited circulation on the canal; Union forces dominated control of the canal with occasional intervention by Confederate troops. The ferry and ford across the Potomac River were used heavily during the war, with both sides crossing numerous times. Damage to and destruction of vital areas such as dams, aqueducts, and locks limited commerce and trade along the canal throughout the war.

Harper's Weekly sketches of military crossings at Williamsport indicate bands of vegetation both along the Conococheague Creek and the Potomac River, with a large open area at the ferry crossing and along the banks of the C&O Canal. Trees are apparent in the background town, with the hillsides covered in a low grass, and three trees, of varying ages, are apparent in the open canal/ferry area.[67]

Military Action Near Williamsport

The canal's physical and financial condition declined throughout the Civil War, with the worst damage occurring during the first years. Positioned between the opposing states of Maryland and Virginia, where much of the fighting occurred, the canal became a vulnerable and frequent target for Confederate troops either trying to seize control of the waterway or render it useless for Union activity. Within a month after Virginia's withdrawal from the Union in April 1861, the opposing forces met in Williamsport. Approximately 1,000 Confederate troops stationed on the West Virginia side of the Potomac River opposite Williamsport temporarily seized Lemen's (previously Watkins') Ferry. There was an exchange of gunfire, but no casualties. Confederate forces soon left the area heading toward Martinsburg.[68]

The first major attack on the canal occurred in the summer of 1861 when a small group of Confederate soldiers was ordered to destroy the canal between Harpers Ferry and Williamsport.[69] The same month, heavy rains seriously damaged the canal, with repair time estimated at two months.

Before the repairs were completed, Union General Banks ordered the First Maryland Infantry under Colonel Kenly to establish a post at Williamsport on the hillside east of the canal, and entrenchments were constructed in the Riverview Cemetery. Viewpoints for military strategy most likely were important since this site often was contested. This post was responsible for the defense of the canal and river around Williamsport. By October, the First Maryland Infantry was relieved by two troops, the 13th Massachusetts and the 12th Indiana regiments. The 13th Massachusetts was responsible for defending the area from Harpers Ferry to Oldtown. The 12th Indiana posted units at canal dams 4 and 5, both Confederate targets, as well as at Sharpsburg.

During the winter of 1861-1862 military operations were curtailed along the canal. The Williamsport section opened to boats in February and, through the spring and up to mid-summer, trade along the canal at Williamsport seemed normal, although heavy rains as well as dry spells disrupted navigation on the canal for short periods. In the spring of 1862, Charles Embrey requested and received permission to construct a dry dock above Lock 44 on the same lot as his older repair site.[70]

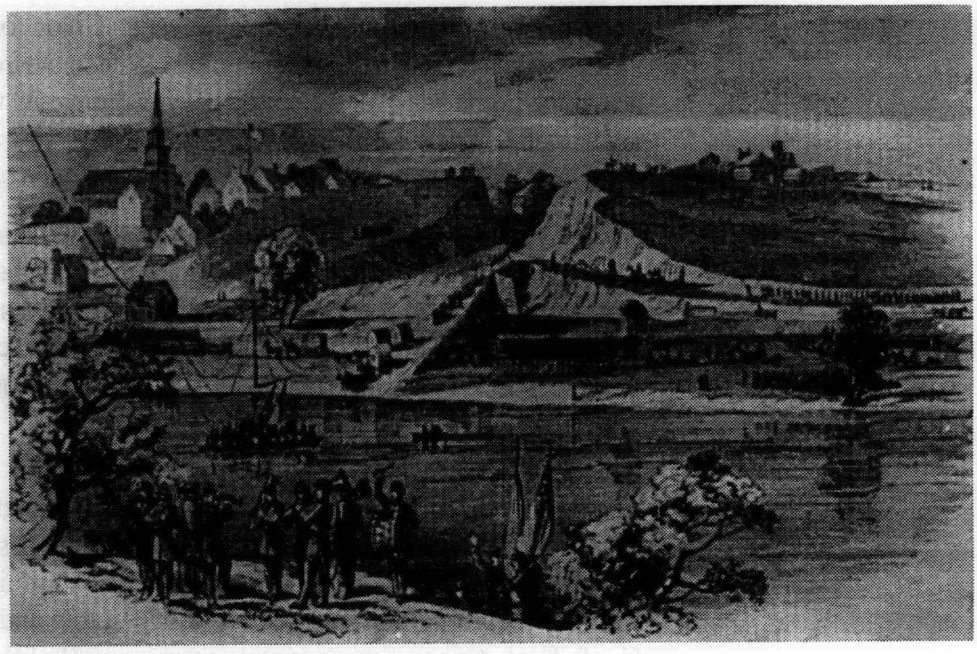

Figure 10. "War in the Shenandoah Valley—Division of the National Army Under Gen. Banks Recrossing the Potomac from Williamsport, Maryland, to Attack the Rebel Army Under Gen. Jackson—the Band of the 46th Pennsylvania Volunteers Playing the National Airs on the Virginia Shore." (Edwin Forbes, postcard reproduction of Harper's Weekly *sketch)*

In September, following the battle of Antietam, more severe military activity occurred at Williamsport. Union General McClellan ordered Captain Charles H. Russell's First Maryland Cavalry to burn the canal bridge and destroy the Conococheague Aqueduct at Williamsport to stop retreating Confederate troops. Russell's men destroyed the pivot bridge at Lock 44 and the main canal bridge near the Cushwa loading basin, but were unable to destroy the aqueduct. Some members of a Pennsylvania Militia, already stationed in Williamsport, helped the cavalry by burning about eleven canal boats. Confederate General Robert E. Lee's retreating troops planned to cross the river at Shepherdstown and created a diversion by sending General "Jeb" Stuart and his cavalry through Williamsport. When Stuart and his men arrived in Williamsport, they found the canal bridges had been destroyed. Stuart's cavalry was able to cross the canal by opening a road under the Conococheague Aqueduct, but before crossing, burned a canal boat and damaged the Lockkeeper's House at Lock 44.[71]

During the military operations of September 1862, both canal- and non-canal-owned properties sustained damage. The most serious damage to the canal was the burning of the lock gates at Lock 44, and these were repaired by mid-October. Damage to personal property may have been more extensive. A mill owned by Shoop and Lefevre at Lock 44 was burned.[72] Some buildings and warehouses were burned at the Cushwa loading basin. Charles Embrey stated in a letter to the board in May of the following year, that his two buildings were the only two left standing in the Cushwa loading basin area, and that all others had been burned.[73] Embrey also mentioned that he wanted to repair or replace his 1847 wharf.

Navigation during the following months was limited. Dam 5 developed a leak and the level of water in the canal became too low for a loaded boat.

Although the dam was repaired, severe winter weather conditions limited canal use. As requested by many Williamsport citizens, the bridge that had been burned by troops in September was replaced during this slow period on the canal. The canal reopened for spring navigation in mid-March.[74]

The Town of Williamsport saw no military action in the winter of 1862-1863, although Confederate soldiers occasionally conducted raids across other sections of the canal. On July 4, 1863, however, Lee's defeated army retreated from Gettysburg to Washington County where heavy rains made it impossible to ford the Potomac River at Williamsport. General Meade followed Lee's troops and several skirmishes occurred in the county at this time.

The canal suffered severe damage during Lee's retreat. The aqueduct's four corners were torn down and all coping and railing thrown into the Conococheague Creek. The gates at Lock 44 again were burned and one of the lock walls destroyed and thrown into the lock. Confederate troops also constructed four roads through the banks of the canal which required removal. Yet within a month the canal was repaired and navigation restored.[75]

In the spring of 1864 Confederate troops occasionally used the ferry at Williamsport to cross the Potomac River and raided Williamsport's stores and boats for provisions; they also damaged the aqueduct and parts of the canal. The raids which continued through the summer of 1864 damaged canal trade since most businesses feared their boats would be raided. In 1864, Mary Williams White, daughter of Anne Williams, and her husband moved to New York and sold their warehouse at the Cushwa loading basin to Charles and Thomas Embrey. The canal trade was back to normal, by fall, however, and actually rose slightly from the previous year.[76]

When the canal opened for spring traffic in March of 1865, navigation was halted almost immediately: the upper or north side of the aqueduct had fallen into the Conococheague Creek. The suspected cause of the collapse was thought to be years of freezing and thawing in the cracks of the aqueduct, with the additional effects of blasting during the war. By mid-March the aqueduct was repaired with a "wooden trunk" and the canal resumed operations again.[77]

Although operational at the end of the war, the Williamsport segment of the canal desperately needed repairs and improvements. The board ordered the dredging of parts of the canal, including the Cushwa loading basin. The board also ordered that the bridge over the canal be restored. In December 1867, the board ordered that a lockkeeper's house be built at Lock 44. It is possible that this house was to replace an existing lockkeeper's house; according to historian Edwin C. Bearss, "Jeb" Stuart's cavalry had damaged the Lockkeeper's House at Lock 44 after the Battle of Antietam,[78] but no other concrete evidence of this early Lockkeeper's House has been found. Finally, in 1869, the board authorized the repair of the Conococheague Aqueduct.

2.5 POST-WAR RECONSTRUCTION TO THE FLOOD OF 1889, 1865-1889

(Reference Figure 60: *1865-1889 Historic Base Map*, following page 3-31)

Introduction

Following reconstruction of canal features and private property damaged during the Civil War, the canal resumed operation as a major transportation corridor. New construction of lumber and grain mills near the Cushwa loading basin and Lock 44, the creation of coal yards adjacent to canal banks, building of the Power Generation Station for the power supply of the trolley to Hagerstown, and the installation of Western Maryland Railroad track spurs to warehouses and mill lots increased the density of use along the canal. Facilities remained on the eastern side of the canal between the town and the canal; the creation of the holding basin/dry dock area north of the aqueduct extended industrial growth to that region. (No information was discovered that gave an historic name for the feature referred to here as the holding basin.) Construction of the Bollman Bridge in 1879 created an important transportation route from the town to the river.

The end of the war prompted many Williamsport residents to file applications for construction with the canal company board of directors. In September 1865, Harry Grovel requested permission to use one of the canal's inlets. A. J. Potts, who informed the board in November 1865 that he had built a feed store at Lock 44 and was considering other improvements such as a hay shed, was granted a lease for the land for a period of at least ten years. The store soon was leased to Isaac Sharpless, and then to Theodore Embrey and his brother, sons of Charles Embrey. Benjamin Long, who operated the store for the Embrey brothers, obtained the lease to the property on February 14, 1867.[79]

Arrival of the Western Maryland Railroad and Prosperity for the Canal

In November 1873, the first passenger train of the Western Maryland Railroad reached Williamsport; the line officially opened in Williamsport on December 17, 1873. Great anticipation had accompanied the railroad's opening at the juncture of the canal and railroad. Both canal and railroad officials hoped the railroad line would provide fast and inexpensive access to Baltimore, thereby making Williamsport a regional trade center. Coal, in particular, was seen as a potentially lucrative product. A *Baltimore Sun* article conveyed this sentiment:

> A new avenue will be opened from Baltimore to the extensive coal fields in and around Cumberland. The intention is to transport coal from Cumberland to Williamsport by canal and there transfer it to the cars of the Western Maryland for shipment to Baltimore. For this purpose large and extensive transfer machinery is being erected at Williamsport by the company. By this arrangement the vast amount of coal which goes by canal to Alexandria, Va., and from there to New York and Boston ... will have a tendency to come to this market. The canal boats will find it more profitable to make short trips down to Williamsport between where and

> Cumberland there are few locks, than to make trips to Alexandria which distance has a much larger number of locks.[80]

As constructed, the railroad arrived in Williamsport from Hagerstown to the northeast. Before crossing the Conococheague Creek, a spur led to the canal, east of the Cushwa loading basin, and followed the canal prism to Lock 44. Shorter spurs, probably constructed later, ran through Embrey and Cushwa's Warehouse and to Embrey's Wharf, on the Cushwa loading basin's southwest corner. The "large and extensive transfer machinery" consisted of a steam loader, a wood frame shed with an attached crane used to transfer coal between canal boats and railway cars.

Railroad access resulted in increased business in Williamsport; the 1870s became one of the canal's most prosperous decades. Despite its successes, however, the communion of the C&O Canal and Western Maryland Railroad never prompted the level of trade envisioned. The railroad did not have direct access to Baltimore and was charged heavy fees to ship on other lines, dramatically reducing the amount of shipping that occurred.[81]

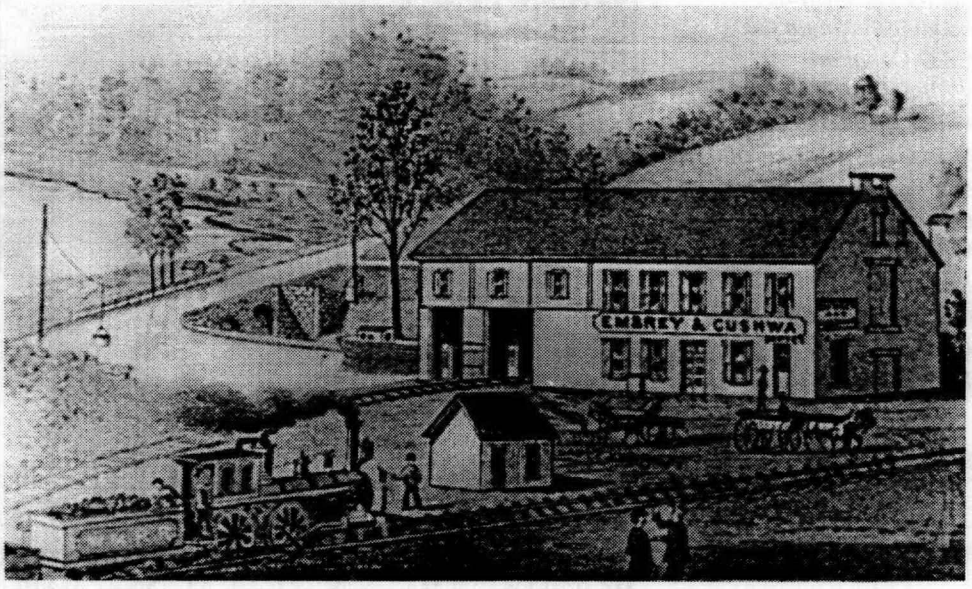

Figure 11. Lithographic Perspective of Aqueduct, Cushwa loading basin, Embrey and Cushwa Warehouse, and Western Maryland Railroad, circa 1872. (Chesapeake and Ohio Canal National Historical Park Photo Library)

Private Development Along the Canal in Williamsport

Cushwa Loading Basin

During the 1870s, several important figures in Williamsport business emerged. Victor Cushwa had moved to Williamsport to operate a tannery, but by 1870 had accepted a job in Hagerstown managing the Washington County Leather Manufacturing Company. He left that position in 1872 and by 1873 had returned to become involved in the coal trade at Williamsport. In 1874, Cushwa and Charles Embrey and Sons entered a partnership that would become one of the most prosperous businesses in Williamsport dealing in coal, cement, salt, plaster, and fertilizers. In 1880, Cushwa became the sole owner of the firm and named it Victor Cushwa. By 1888, he entered a partnership with his son-in-

law and changed the firm name to Cushwa and Sons.

In 1879, John A. and George A. Miller leased a parcel of land along the basin's north side from Victor Cushwa in order to build a plaster grinding mill. The mill was a two-and-a-half-story, frame building, and was powered in the summer months by water that Victor Cushwa leased from the canal company. During the winter, when the Cushwa loading basin was drained for repairs, the brothers moved the mill facilities uphill to the corner of West Potomac Street and the old Market Square, the present location of the Miller Brothers Lumber Company.[82]

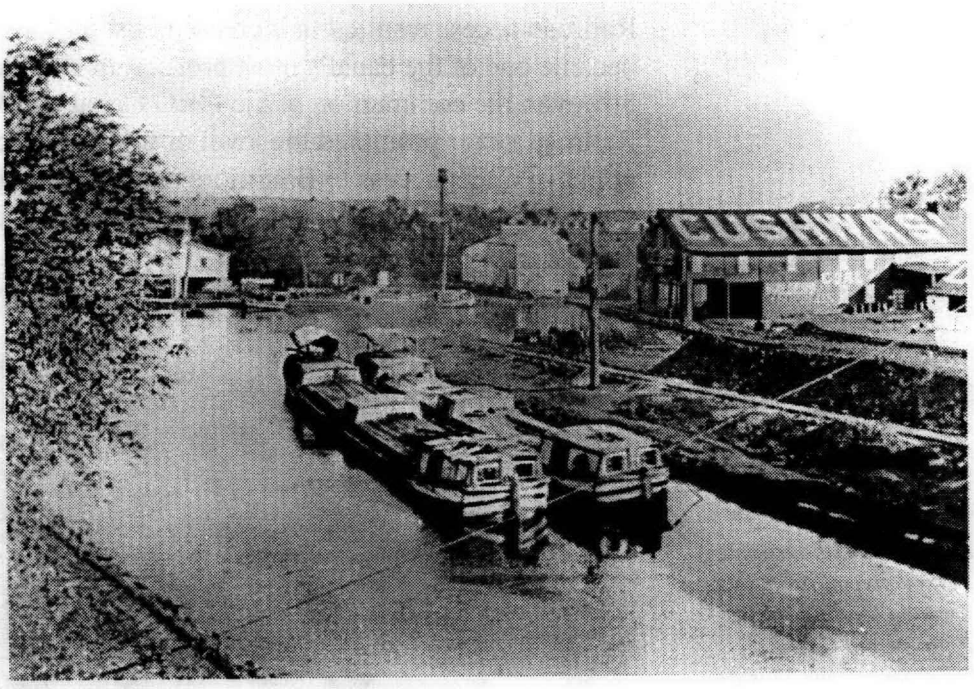

Figure 12. Cushwa Loading Basin on the C&O Canal at Williamsport Showing Miller Brothers Lumber Mill, Cushwa's Cement and Phosphate Factory, Cushwa's Warehouse, and Western Maryland Railroad Line Spur, 1916. (Chesapeake and Ohio Canal National Historical Park Photo Library)

Lock 44

In 1873, another important partnership was established when Edward Steffey and James Findlay began a coal and lumber firm named Steffey and Findlay. The firm was located on the east side of the canal immediately above the 1835 Warfield basin, just north of Lock 44. Other significant businesses emerged in the early 1870s. Darby and Rice, dealers in flour, grain, and feed established their business immediately south of the Steffey and Findlay Coal Yard and used the wharf owned by Embrey and Cushwa at the Cushwa loading basin south of the Conococheague Aqueduct. By 1880, F. H. Darby had probably become sole owner of the firm and changed the name to the Undine Milling Company.[83] (See title page for photograph of mill.)

Also in the early 1870s, Isaac Gruber established a saw and planing mill near the Warfield basin. His steam sawmill was located immediately below and adjacent to the Steffey and Findlay Coal Yard. In 1877, the name of the firm was changed to the Potomac Steam Saw and Planing Mill. Their major trade was in doors, sashes, blinds, moldings, and window frames. In 1878, Gruber

rented his mill to a Mr. DeFrehn who, for a short while, manufactured chairs. Gruber's Mill was demolished around 1880, forcing DeFrehn to find an alternate building for his chair factory. F. H. Darby of the Undine Milling Company built a new flour mill near the Gruber Mill site.[84]

North of the Conococheague Aqueduct

DeFrehn reopened his chair factory in the abandoned Culbertson Mill north of the Conococheague Aqueduct. Although little is known about the Culbertson Mill, it may have been constructed during the building boom that followed the Civil War: no evidence of its existence prior to or during the war has been found. The mill remained in use at least until 1877, when the flood led to a large loss in materials, after which it may have been abandoned.[85] A photograph taken after the mill's 1880 conversion into a chair factory shows a large, two-and-a-half-story, wood-frame building on the east bank of the canal, directly adjacent to the holding basin north of the Conococheague Aqueduct. Water turbines using canal water provided power for the mill's operation. Two smaller and apparently associated buildings also are shown—one along the Conococheague Creek upstream from the main building and the other northeast of the main building. Mature, deciduous trees flank the aqueduct's northern end, but little other vegetation exists within or surrounding the mill complex, making it visible from the creek's southern bank from where the photograph was taken.[86] The DeFrehn Chair Factory was forced out of business after the flood of 1889 destroyed much of its inventory.

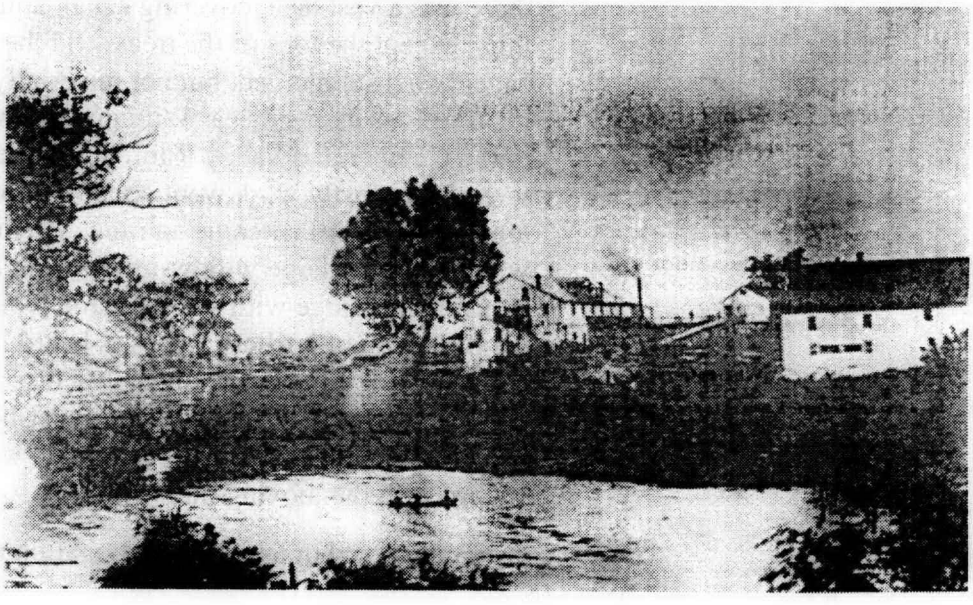

Figure 13. View of DeFrehn Chair Factory, 1880-1889. (Washington County Historic Society)

Photographic sources during this period indicate that spotty vegetation had begun to establish along the edge of the towpath, with natural shrubbery and the occasional clump of trees taking root. The floodplain, which continued to be covered with a low grass, was used primarily as pasture and occasionally for horse racing, according to long-time resident Melvin Kaplan.[87]

Fields appeared to be bounded by fences that provided areas where shrubs and trees could take root. Between the Potomac River and the canal there appeared to be areas of open land with little tree growth. One large tree was apparent at the western edge of the Bollman Bridge; at the Lockkeeper's House two large trees stood directly in front of the house with a third and fourth behind and immediately south of the house. Another smaller tree stood near the hay press/ carpenter's shop on the middle island at the south end of the flume. Later photographs in the 1890s and 1920s show thicker vegetation along the edge of the Potomac River north of the aqueduct.

Lean Years on the Canal

Canal trade began to decline following a nationwide depression that reached the area in 1876. A boatman's strike from June to August of 1877 also contributed to a decrease in trade. However, the event that most significantly hindered trade in the 1870s was the flood of November 1877. This flood was the greatest Williamsport had encountered to date, and severely damaged dams 4 and 5, significantly affecting trade in Williamsport. Damage in the immediate Williamsport vicinity was limited, although the Cumberland Valley Railroad bridge, which crossed the Potomac north of its confluence with the Conococheague Creek, washed completely away. J. Thomas Scharf described the flood at Williamsport in his work *A History of Western Maryland*:

> At the junction of the Conococheague and the Potomac there was a vast lake, covering canal, aqueduct, and everything except the tops of the trees... [T]he aqueduct on the canal [was] submerged, but not materially injured. The most serious damage near Williamsport was the injury done to the Cumberland Valley Railroad bridge. The superstructure of this costly work went about five o'clock on Sunday afternoon [when] ... came an immense float of drift-wood, which cut off a large willow-tree as with a knife, and, striking the bridge with a concussion which sounded like the discharge of artillery, and was heard in Williamsport, bore off with it the whole superstructure save only that which spanned the canal, and the canal-boat which was held in suspense was thus released and went down the stream with the moving mass.[88]

The canal was repaired quickly with navigation resuming in the spring of 1878.

In 1879, Wendell Bollman constructed a new bridge—the Bollman Bridge—over the canal and the river, just south of Cushwa's Wharf, above Lock 44.[89] The single-lane, vehicular bridge featured rubble-stone abutments, an iron truss system, and a wooden deck.

While the first years of the 1880s were profitable for the canal, overall the decade was characterized by "trade stagnation, financial depression, physical deterioration, political interference, and outside intrigue."[90] An even more severe flood that hit the Potomac Valley in 1889 caused significant damage to the town of Williamsport and the canal. Many blamed the so-called Great Flood of 1889 for sending the canal company into bankruptcy. Local businesses also suffered: the DeFrehn Chair Factory was forced to close because of the extensive damage caused by the flood; the Miller Brother's Lumber Mill was flooded and much of its lumber washed away; and the Cushwa Warehouse was flooded, although not badly damaged.[91]

2.6 CANAL RE-OPENING AFTER THE FLOOD OF 1889 TO THE ABANDONMENT OF THE CANAL, 1889-1924

(Reference Figure 61: *1889-1924 Historic Base Map*, following page 3-31)

B&O Railroad Ownership of the Canal

The Great Flood of 1889 created a debate regarding the future of the canal. Individuals associated with the canal supported restoration; those not involved in the canal trade supported its sale to the Western Maryland Railroad. Other options were considered, but the restoration movement eventually won the most support. The canal company's weak financial position placed its majority bond holder and long-time competitor—the B&O Railroad Company—in a position to decide the outcome of the canal. The railroad ultimately supported restoration, fearing that if it did not, a forced sale could allow a competing railroad to buy it.

The Washington County Circuit Court and the District of Columbia Court quickly appointed receivers for the canal company to oversee the canal's restoration and operation. A shadow company—the Chesapeake and Ohio (C&O) Transportation Company—was created to ensure a profit be shown each year. In essence, the B&O Railroad Company loaned the C&O Transportation Company funds to cover operational expenses, and on paper the canal appeared to operate at a profit. The transportation company agreed to operate boats along the canal as long as the B&O kept the canal in good working order. The railroad was able to extend the contract from year to year as long as a profit was shown. The canal was fully restored in September 1891.[92]

The B&O Railroad managed to keep the canal in operation through the turn of the century. To guarantee profits, the Consolidation Coal Company, a subsidiary of the B&O, organized the Canal Towage Company to control freight rates. The towage company supplied boats, personnel, and equipment for the canal operations and established a regular schedule for boatmen to follow. To allow the towage company to reduce costs, almost all coal was to be provided by the Consolidation Coal Company; this situation forced many independent boatmen out of business.[93]

Development Along the Canal at Williamsport

Cushwa Loading Basin

In 1896, the first county trolley line was established from Hagerstown to Williamsport. Victor Cushwa donated land to the Hagerstown Railway Company for a Power Generation Station to be located northeast of the Cushwa Warehouse along the Conococheague Creek.[94] The location provided several advantages: the creek provided water to generate power, coal and other supplies were readily available from the Cushwa Warehouse and canal, and proximity to Potomac Street made the building easily accessible to traffic from the town. Construction of the Power Generation Station took less than four months. On August 8, 1896, the first trolley traveled the six-mile route from Williamsport to Hagerstown. The station provided electricity to the trolley and was responsible for the beginning of the local electric industry; it was used for only a few years until a larger station was built in Hagerstown.[95]

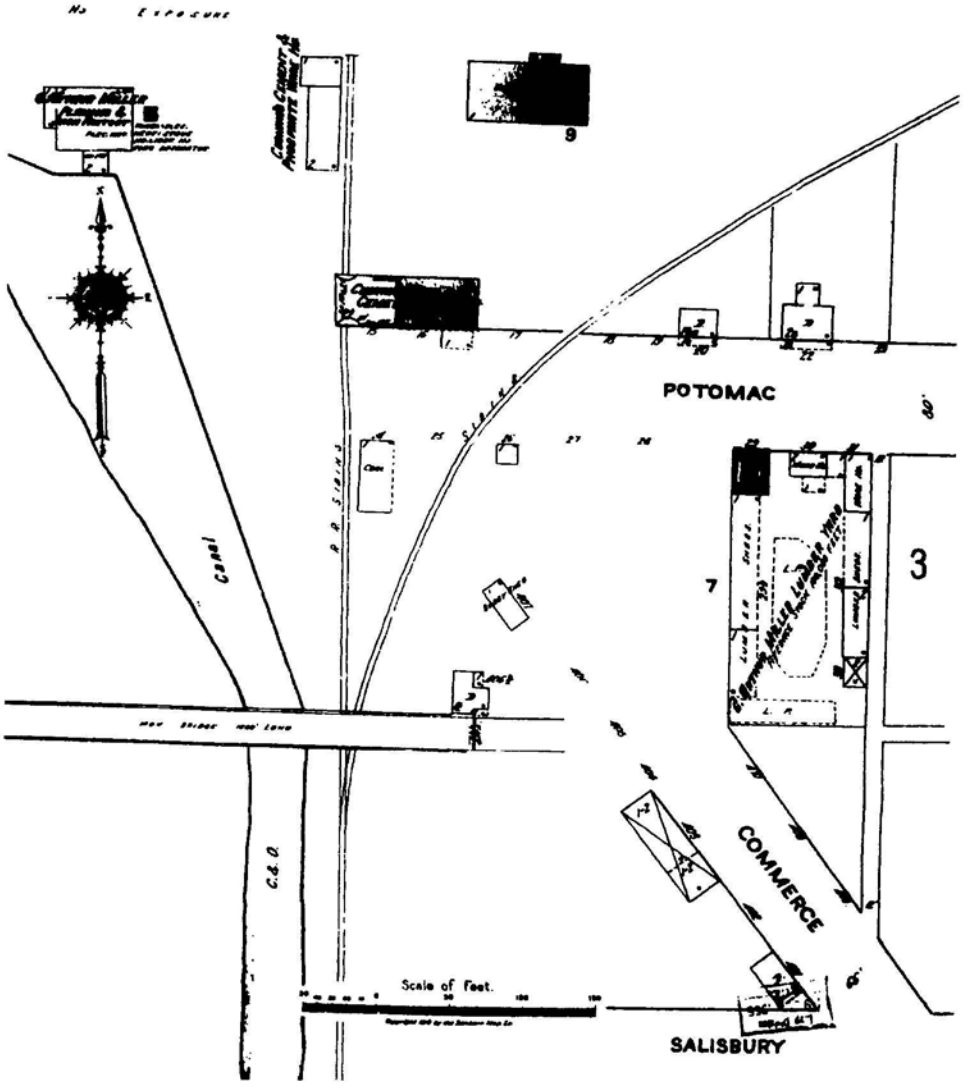

Figure 14. Sanborn Map Company, Portion of Map of Williamsport, Maryland, Showing the Area Surrounding the Cushwa Loading Basin, October 1918

Cushwa and Sons, still operating from their warehouse on the Cushwa loading basin, continued to grow. In April 1909, Victor Cushwa turned the business over to his sons and son-in-law. In 1911, they purchased the Power Generation Station to use for storage. In 1912, Victor M. and David K. Cushwa asked the Town of Williamsport to sell or lease to the Cushwa firm the part of the Public Square situated west of the Western Maryland Line. The Town Council agreed to lease the firm the property in question.[96]

The Cushwa Cement and Phosphate Warehouse probably was constructed during the late nineteenth or early twentieth century. The building appears on a 1918 Sanborn Insurance Map and in several period photographs.[97] Located on the Cushwa loading basin's northeast corner, north of the railroad siding leading through the Cushwa Warehouse, the large, two-story, wood-frame building replaced large trees in the area, and completed the triad of buildings surrounding the basin during this period, reinforcing its industrial character.[98] According to the 1918 Sanborn Map, however, the Cushwa loading basin appears to have been partially filled by this date. Industries and warehouses located here most likely relied on the railroad for most transport at this time.

The Miller Brothers Lumber Mill remained in operation next to the Cushwa Warehouse until 1917 when George Miller gained sole ownership of the mill and permanently moved the company to its winter location on Commerce Street. His brother John converted the mill into an ice plant and added a two-story ell to the south side of its main block. The ice stored by Miller was cut from rivers, ponds, and lakes. In 1921, Miller's ice house burned. Sawdust insulation may have been responsible for the fire. Although plans were made to construct a new ice house, it never was replaced. Around 1928, a concrete slaughterhouse replaced the ice house, and may have been built directly on the ice house foundation.[99]

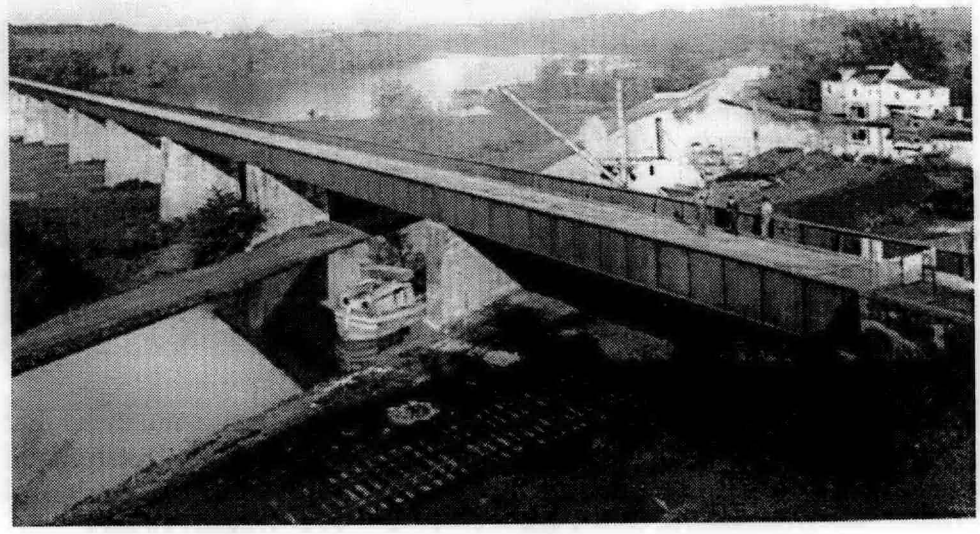

Figure 15. Washington-Berkeley Bridge, circa 1915. (Chesapeake and Ohio Canal National Historical Park Photo Library; photo is hand dated "1920" but image portrays earlier landscape features)

Another significant, early-twentieth-century event was construction of the Washington-Berkeley Bridge below the Cushwa loading basin and above the Bollman Bridge. The bridge replaced the ferry that had taken traffic across the Potomac River since 1749.[100] Efforts to build a vehicular bridge across the Potomac River began in 1907, and by 1908 construction had begun. An accident that killed some workers delayed construction; the bridge opened to traffic on August 10, 1909.

The modern steel and concrete bridge followed an alley that led to Potomac Street into the center of town. The bridge cleared the canal by approximately twenty feet, allowing easy passage for the low canal boats. Evenly spaced concrete abutments stood on canal company lands, but did not interrupt canal traffic.

Lock 44

In the first decade of the twentieth century, three major distributors were involved in Williamsport's coal trade: Victor Cushwa and Sons, Steffey and Findlay, and the A. C. Gruber Company. The B&O granted a lease to Cushwa and Sons and Steffey and Findlay north of Lock 44 for a large coal wharf. The wharf, located between the Undine Milling Company and the canal company's carpenter yard, was leased previously to Stanhope and Embrey.[101] The Undine Milling Company, owned by F. H. Darby, was destroyed by fire in 1904.

Figure 16. C&O Canal, Williamsport, showing Bollman Bridge in foreground, Steffey and Findlay Lumber Mill and associated buildings in background, circa 1900. (Robert G. Merrick Collection, Maryland State Archives, Annapolis, Maryland)

The canal and towpath were well maintained during this period. Theodore Lizer, whose family operated a boat on the canal, described some of the company's efforts:

> It was a good scene, with all the trees—and the canal company kept them trimmed so the boats wouldn't get into them. The towpath was cut, the weeds kept down. It was pretty. They kept it clean. They'd cut the weeds with scythes. Cut them down along the water so the towlines wouldn't get fastened.[102]

Harvey Brant, keeper of Lock 44, indicated that each foreman maintained an area, and competition arose as to whose area was the best maintained:

> The canal was *beautiful.* They kept the grass mowed just as pretty, and the trees trimmed even. If you'd get on a long straight line say, a mile or two, the trees would be trimmed and it looked just like a straight line on the trees. It was kept up beautiful. Each foreman tried to make his division look better than the other one did.[103]

The Lockkeeper's House stood on the towpath side of the canal, directly adjacent to Lock 44. The two-story, wood frame dwelling had a stone foundation and was surrounded by a series of residential and agricultural outbuildings including a privy, shed, corn crib, and hog pen. Deciduous trees surrounded the house in keeping with traditional siting practices, and a large garden area was located behind the building.[104]

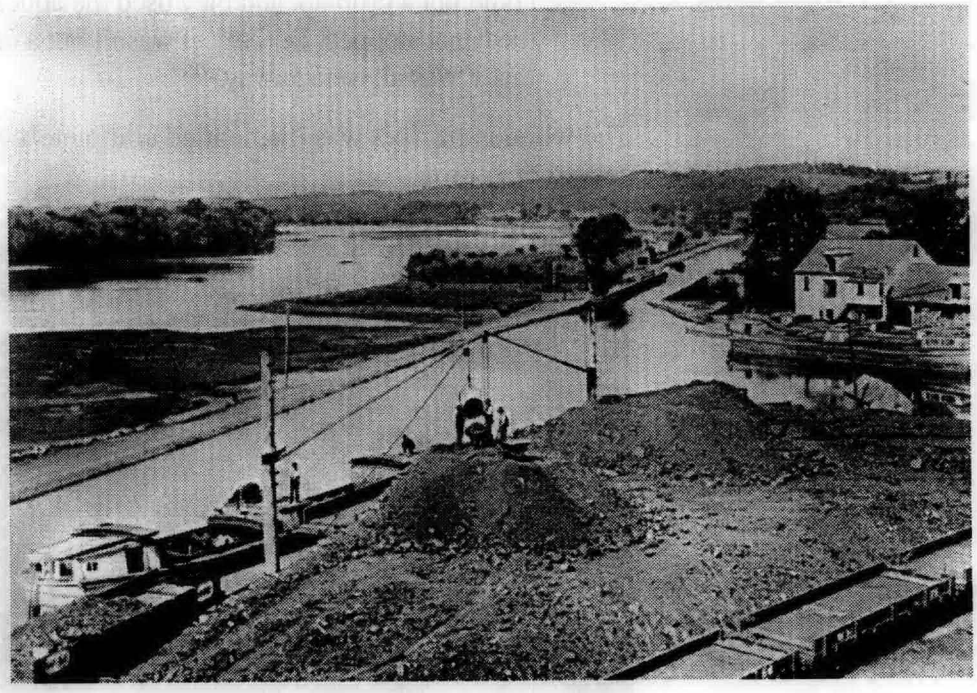

Figure 17. C&O Canal, Williamsport, showing farm northwest of the Conococheague Aqueduct, circa 1903. (See cover for detail of this photograph.) (Courtesy Melvin Kaplan)

North of the Conococheague Aqueduct

Photographs from this period indicate that the lands north of the aqueduct, between the canal and the Potomac River, were used for crop cultivation. A photograph taken around the turn of the century showed sparse vegetation lining the northern bank of the Conococheague Creek downstream of

the aqueduct. North of the aqueduct, a fence ran parallel to the towpath. These lines seemed to define the southern and eastern boundaries of a privately owned property, for within their margins stood a building, apparently a dwelling, surrounded by a cultivated field.[105]

The W. D. Byron Tannery also was established during this period and located northeast of the holding basin above the Conococheague Aqueduct. A series of waste ponds used by the tannery were constructed directly adjacent to the canal property. Factory buildings were constructed further east.

Final Years of the Canal Era

Many significant events occurred during the last four years of the canal's operation, including the collapse of the aqueduct's upstream wall, construction of the Potomac Edison Company power plant, and the partial or complete filling of the Cushwa loading basin. In 1920, the Conococheague Aqueduct's east parapet collapsed. Although there was a boat passing through at the time, no one was injured and the parapet was replaced by a wooden structure. According to Brant:

> They put a board siding in the aqueduct, planks 5 to 6 inches thick and 14 inches wide. They put logs down in there, from one side to the other, and concreted them in and let these logs stick out on one side. These logs run out far enough that they could put a prop up, and they used the aqueduct that way until the canal stopped. But, my, it wasn't but a couple of years after that it was all rotted away.[106]

The wooden parapet was dismantled completely some time after the canal ceased operation.

Figure 18. Berm side of the Conococheague Aqueduct with wood parapet, circa 1939. (Chesapeake and Ohio Canal National Historical Park Photo Library)

In 1922, the Potomac Public Service Company and its new subsidiary, the Williamsport Power Company, began construction of a power plant on the Potomac River, northwest of Lock 44 between the canal and the river. In addition to the main facility, the company received permission to construct a temporary track over the canal so that building materials could be carried from the Western Maryland Railroad to the power plant site. The Williamsport Power Company eventually signed an agreement that allowed permanent construction of a railroad lift bridge over the canal. The lift bridge was to be lowered only when there was no canal traffic.

The railroad spur crossed the canal and the iron lift bridge was constructed south of the Cushwa loading basin between the Washington-Berkeley and Bollman bridges. The metal truss system above the tracks remained stationary at all times, its pulleys and weights lifting the deck approximately 12 to 15 feet. The bridge and deck crossed the canal diagonally, with the approximately 15-foot deck just long enough to traverse the prism. The bridge was controlled from a small masonry control station located near its southwest corner on the towpath side of the canal. Completed on June 11, 1923, the lift bridge was used only once and the canal closed soon after its construction.[107]

By 1924, the company, which had changed its name to Potomac Edison, installed transmission towers along the canal to provide electricity to adjacent areas. The metal towers were spaced evenly and varied in height, although all were around 50 feet. A circa 1929 sketch showed the plans for electric wires crossing the canal over the Cushwa loading basin.

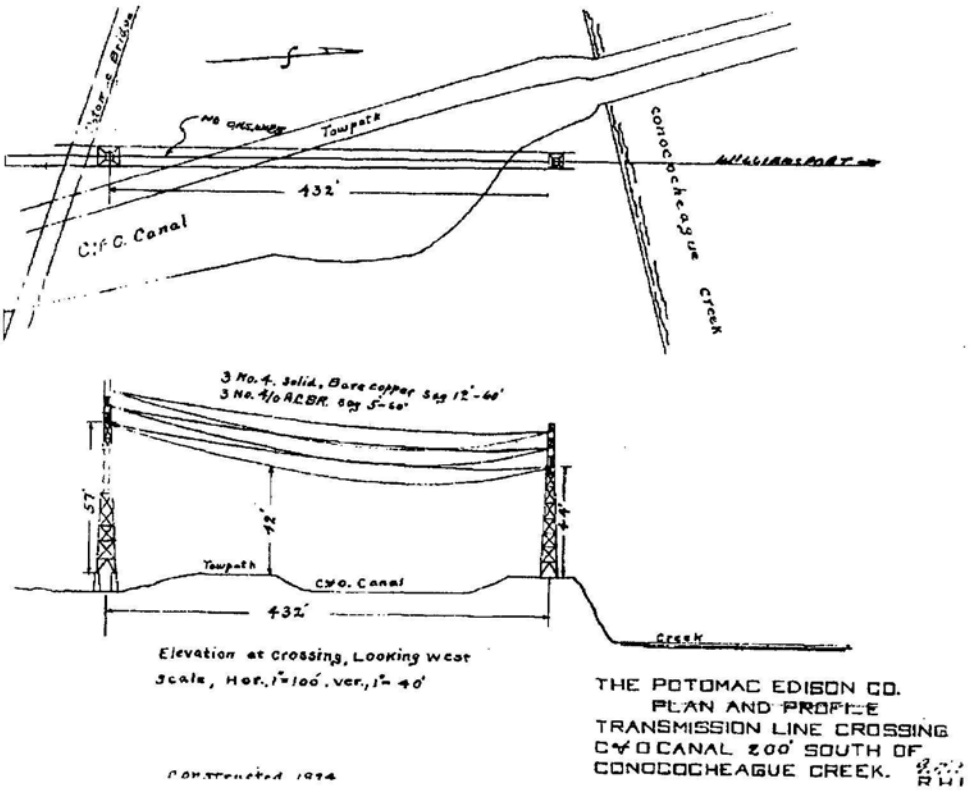

Figure 19. Potomac Edison Company Plan and Profile of Transmission Line Crossing the C&O Canal and Cushwa Loading Basin at Williamsport, circa 1929. (Potomac Edison Engineering Department Records)

Construction of the power plant had a major impact on the lockkeeper's residential complex near Lock 44. While the residence was retained, the power plant facilities came within 100 feet of the building, overpowering the scale of the house and destroying a significant portion of its surroundings. As described by Brant:

> My garden was behind the house. But when Potomac Edison bought these bottoms over here and started to build the power plant—that was just about the time the canal stopped—they got a bulldozer in there and just covered up my garden, and knocked down my fruit trees and my grape vines and everything. I had a hog pen back there. They knocked it down. And they never said a word to me.[108]

Brant continued to live in the Lockkeeper's House after the canal closed in 1924: "I stayed there [for thirty-seven years] and I only had to pay a dollar a month rent—just to show who it belonged to. A dollar a *year*, I believe it was."[109] Many of the buildings he described as part of the complex—an outhouse, log shed, and corn crib—remained around the Lockkeeper's House during his tenure.

The canal's closing also was preceded by the partial or complete filling of the Cushwa loading basin near Cushwa's Warehouse. A letter dated January 9, 1924, from the general manager of the canal company to the vice president of the Potomac Edison Company indicated that the Cushwa loading basin recently had been filled: "I am enclosing a pencil sketch of the Canal and boundaries of the canal property ... The basin up near Cushwa's has been filled since this map was made, consequently the lines do not correctly represent the water line of the canal at this date."[110] Harvey Brant also indicated that the Cushwa loading basin was not being used in the mid-1920s, and instead "the boats were loaded up here [at Steffey and Findlay's] for Cushwa's.... And then Cushwa's had another place to unload down here at Powell's Bend, down at the Cumberland Valley Railroad ... about two and a half mile [sic] below Williamsport."[111] Yet the above-mentioned 1929 sketch and a 1933 map showed the Cushwa loading basin, indicating it not been filled completely.[112]

The canal's decline as a major transportation route had been coming since the late nineteenth century. Since that time, the amount of trade on the canal had not justified its operation. Other factors also played a major role in the canal's decline: a lack of aggressive leadership to lobby for its continued operation, Georgetown's decline as a port, the Potomac River's decline as a transportation corridor, exhaustion of Cumberland's coal mines, recurring floods that damaged canal-related buildings and structures and interrupted navigation, and increased competition from the railroad. During its last few decades of operation, the canal had become more important as a pawn of the railroads, which sought control of the route it occupied, than as a tool for trade. Following the flood of 1924, the courts allowed the B&O Railroad Company to discontinue the canal's operation.[113]

2.7 DETERIORATION OF THE CANAL, 1924-1937

(Reference Figure 62: *1924-1937 Historic Base Map*, following page 3-31)

Introduction

With the abandonment of the canal in 1924, there was little use or circulation in the area except for those warehouses that remained in operation and depended on either rail or trucking to continue trade. The loading basins had been filled either naturally from flooding deposits or through deliberate intervention. Generally the canal was not used, stagnant pools of water had formed in the prism, and deterioration began. Natural vegetative succession occurred rampantly along the towpath, in the canal prism, on the floor of the aqueduct and in the adjacent unused lands during this period. Photographs of the 1936 flood showed a thick, unmanaged band of vegetation along the Conococheague, the towpath, the floodplain and the southern portion of the hillside.[114]

Closing of the C&O Canal

The canal finally ceased operation after the flood of March 1924, although no serious damage was attributed to it. The canal, left to deteriorate for almost fifteen years, was host to a number of hazardous and unhealthy conditions. When a typhoid epidemic struck Williamsport in 1928, the mayor requested state health officials to determine what risk the canal posed to Williamsport residents. It was determined that the canal posed a serious health hazard. The unhealthy conditions were caused by stagnant pools of water along the canal that were optimum breeding grounds for mosquitoes. State health officials also mentioned that abandoned canal boats provided shelter for "disorderly persons of various sorts."[115] The general manager of the canal was directed by the health officials to remedy unhealthy conditions.

Despite the general manager's assertion that conditions along the canal had been corrected by October 1928, all hazardous conditions had not been eliminated. It was decided ultimately that the only way to eliminate unhealthy conditions was to flush sections of the canal in the summer. Flushing the canal required repair of breaks in the canal at a cost of $10,000. The first flushing of the Williamsport section occurred in the summer of 1929. The Department of Health also warned that the abandoned canal boats must be removed. By September 1929, apparently, all conditions were corrected.[116]

Although the canal had closed, business continued near the Cushwa loading basin. Lester Cottrill and Percy Murray, who owned a meat shop in Williamsport, rented the lumber mill/ice house site from Victor Cushwa and constructed a concrete building to be used as a slaughterhouse. This business remained operational until it was washed away by the flood of 1936.[117] A Mr. Obits later leased the site from Victor Cushwa and built a storage shed.

Unhealthy conditions created by the canal again became an issue in 1933. The Washington County Board of Public Health made an effort to have the canal cleaned; the canal company, however, would not pay for the cleanup and

requested help from the Civil Works Administration. The Civil Works Administration agreed to drain stagnant pools of water and clear debris, weeds, and brush.[118]

In February 1936, flooding again damaged the canal. A 40-foot section of Dam 4 was carried away by an ice jam caused by the flood. Cushwa's lime storage shed, probably another name for the Cement and Phosphate Factory, and Cottrill's slaughterhouse washed away completely.[119] According to Conococheague Maintenance District Foreman Dick Marshall, Harvey Brant related how he built the shed behind the Lockkeeper's House from the remains of the carpenter's shop, which was damaged beyond repair in the 1936 flood. Another flood struck Williamsport in February of 1937, but no serious damage was reported. The Bollman Bridge survived these two floods; however the general manager had received complaints about its safety. Apparently the bridge was beginning to wash out and the deck was in very poor condition. In June 1937 the bridge was refinished.

Between the years of 1924 and 1938, the general manager heard many complaints about the condition of the canal and objectionable activities occurring along the canal. There were reports of people using the canal for illegal business, such as moonshining, and persons were found living in the abandoned canal company buildings. One woman, for example, was residing in the old collector's office. In 1936, the general manager received a report that an individual had laid claim to a portion of the towpath.[120] The presence of these and other squatters led to concerns that careless smokers in the area of the lumber yard and carpenter's shop could start fires.

The general manager also received letters from persons wishing to use materials that had been left along the canal. At first, no materials were sold or given away, but it is known that in 1935, the general manager received a letter requesting permission to use some "more than Half Rotten" old lumber from the carpenter shop for heating.[121] It is known also that in 1937 some scrap iron at the hay press/carpenter's shop was sold for 32 cents per 100 pounds.[122]

2.8 NPS ACQUISITION AND MANAGEMENT, 1937-1993

(Reference Figure 63: *1937-1993 Historic Base Map*, following page 3-31)

In September 1938, the C&O Canal officially became the property of the United States under the maintenance of NPS. The canal was declared a National Monument in 1961, and a National Historical Park ten years later. Park boundaries incorporated a combination of private and public land. In Williamsport, NPS was able to purchase the majority of canal-related property; however, the Town of Williamsport retained several significant parcels. A right-of-way continues to run from Potomac Street through the Cushwa loading basin to the shore of the Potomac River. The western wall of the Cushwa Warehouse may stand in the Water Street right-of-way, also controlled by the town.

The initial years of management were slow, with minimal clean up and removal of health hazards; however, in recent years management goals have instigated the restoration, stabilization, reconstruction, and rehabilitation of various structures and sites. The primary uses of the site currently include recreational activities such as hiking, walking, and cycling along the towpath, and visitor interpretation.

New development along the canal was minimal during this period; however, the concrete-block Young Adult Construction Corps (YACC) building, now used for NPS storage, was constructed in 1968 by the Town of Williamsport on the berm side of the canal north of Lock 44. In 1968, a wastewater treatment facility was constructed adjacent to the park, southwest of Lock 44. Originally owned and operated by the Potomac Edison Company, the facility included a pumphouse and a pit. The property is now used by the Town as a collecting bin. In 1964, NPS built two maintenance sheds north of Lock 44, one of which was removed except for its concrete foundation, in 1974. Finally, a bridge was built across a creek near Lock 44 in 1986 by NPS, and the Potomac Edison Company power plant built an access road across the canal in 1986. According to NPS, most of the wood used by Harvey Brant to construct the shed behind the Lockkeeper's House has since been replaced.

Photographs taken between 1956 and 1961 indicate that much of the site had become overgrown with vegetation by that time. Grasses had invaded the majority of the canal prism, and tree saplings and shrubs grew in many areas. Trees and shrubs occupied the hillsides and towpath margins, as well as the area surrounding the Lockkeeper's House. These photographs indicate that extensive cutting of the brush occurred within the canal prism and along the towpath, and that the landscape around the Lockkeeper's House was altered dramatically during this period. In a circa 1960 photograph of the Lockkeeper's House, two large deciduous canopy trees, most likely silver maples, appear on either side of the building's entryway. These trees appear in photographs as early as 1865-1889; however they are no longer present in a 1961 view. Between 1956 and 1961, the configuration of planting beds and the species present also changed in the vicinity of the Lockkeeper's House. The flume and the lock were barely visible because of the dense grasses growing in the prism. Vegetation also grew between the stones in the lock, flume, and aqueduct walls. Some vegetation appeared to have been removed from these areas in conjunction with the removal of the two large canopy trees and the reconfiguration of the planting beds in the vicinity of the Lockkeeper's House in the 1961 photograph.

The Power Generation Station used to provide electricity to the Hagerstown Railway Trolley system was sold by David Cushwa III to NPS in 1974. It was rehabilitated in 1987; the Cushwa Warehouse was rehabilitated in 1981; the Cushwa loading basin and the flume were reconstructed in 1993. In addition, the Lockkeeper's House was stabilized in 1981, as was the Conococheague Aqueduct in 1983. The storage shed used by Mr. Obits (built on the foundation of the Miller ice house) was

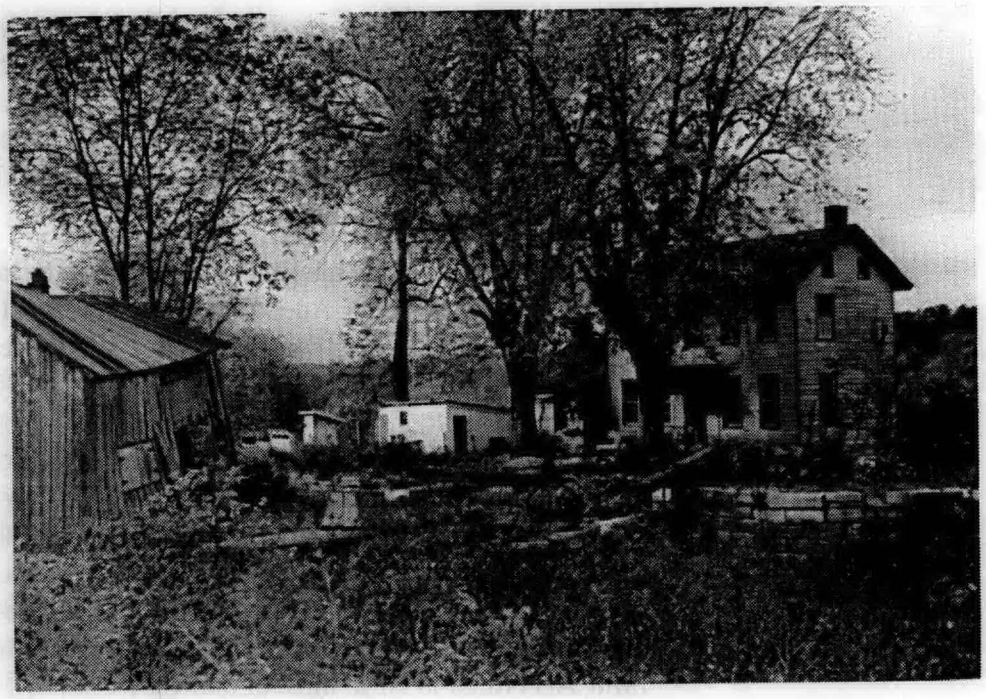

Figure 20. Lockkeeper's House at Lock 44, circa 1960. (Chesapeake and Ohio Canal National Historical Park Photo Library)

demolished in 1976 after the Cushwa loading basin was acquired by NPS. The State of Maryland Highways Department made extensive repairs to the Washington-Berkeley Bridge between 1984 and 1986, including new steel and concrete work.

In 1993, vegetative growth north of the Conococheague Creek along the canal is comprised predominantly of boxelders and silver maples. Saplings and young to medium-aged trees occur in all areas of the site except for the towpath and including the canal prism. Grasses, composites, and some woody shrubs are evident along the aqueduct floor and within the decaying arches. Low grasses line the canal prism at the Cushwa loading basin. A variety of deciduous canopy and understory trees of various ages flank the Conococheague Creek. Vegetation along the creek has grown up to such a degree behind the Power Generation Station that the branches of some trees have almost come into contact with the building. Several medium-sized deciduous canopy trees—silver maple, tree-of-heaven, sycamore, and boxelder—have been maintained in the former lumber mill/coal warehouse and coal yard area. The treeline along the towpath at the Cushwa loading basin is relatively thick and includes red mulberry, tree-of-heaven, honeylocust, black locust, sycamore, hackberry, boxelder, multiflora rose, Japanese honeysuckle, and grape vines. The towpath margin opens up just south of the Washington-Berkeley Bridge, the Railroad Lift Bridge, and the Bollman Bridge. Two large trees—a sycamore and a honeylocust—surround the control station and the lift bridge. The remainder of the area is maintained in open grass and ground covers.

In 1984, the Potomac Edison Company planted a line of arborvitae south of the Bollman Bridge; the arborvitae replaced a deteriorated wooden

privacy fence. South of this planting, the vegetation increases in density on both sides of the canal, except where broken by structures and circulation systems. Species found in this area include red elm, boxelder, black cherry, hackberry, silver maple, tree-of-heaven, honeylocust, sycamore, white oak, sumac, multiflora rose, and Japanese honeysuckle. In the areas where the canal retains water, hydrophytic plants such as reeds, cattails, and sedges dominate. In the early 1990s, four or five trees, maples and spruce, were cut out of the middle island between the flume and the lock to protect the flume walls from deterioration by the tree roots.[123] A dense thicket of vegetation occurs behind the Lockkeeper's House. It is composed of deciduous species of trees and shrubs such as silver maple, red elm, hackberry, tree-of-heaven, black locust, boxelder, multiflora rose, and Japanese honeysuckle. Two breaks occur in this thicket of vegetation, to the north and to the south of the building, where access roads to the Potomac Edison power plant previously existed.

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[1] J. Thomas Scharf, *History of Western Maryland*, vol. I (1882; reprint, Baltimore: Regional Publishing Co., 1968), 33.
[2] Scharf, *History of Western Maryland*, vol. I, 36.
[3] Several archeological studies of canal-associated resources in Williamsport have been prepared for the National Park Service. For more information on the area's archeological resources, see Douglas Comer, "Preliminary Archeological Report, Excavations at Cushwa's Warehouse" (1977); William Andrefsky, "Archeological Investigation of the By-Pass Flume at Lock #44" (1978); Steven J. Phillips, "Archeological Excavation at the Power Station, Williamsport, Maryland" (1978); and Ellen M. Seidel, "Archeological Investigations at the Miller Brothers Lumber Mill Site" (1981).
[4] Scharf, *History of Western Maryland*, vol. I, 419.
[5] Thomas John Chew Williams, *History of Washington County, Maryland*, 2 vols. (Hagerstown, Maryland: Runk and Titsworth, Publishers, 1906), I: 22.
[6] Edward D. Smith, "Historic Resource Study: Williamsport, Maryland" (Report prepared for the National Park Service, Denver Service Center, National Capital Team, July 25, 1979), 17-18.
[7] Washington County Land Records, Liber E, Folio 421, November 1786. Circuit Court, Hagerstown, Maryland.
[8] Preservation Associates, Inc., "National Register of Historic Places Nomination: Williamsport Historic District" (Prepared for the Maryland Historical Trust, Annapolis, 1980), 2.
[9] Smith, "Historic Resource Study," 18.
[10] James W. Thomas and T. J. C. Williams, *History of Allegany County, Maryland*, vol. I (1923; reprint, Baltimore: Regional Publishing Company, 1969), 203. In the mid-eighteenth century, Beall's family moved from southern Maryland to the part of Washington County that eventually would become Allegany County. He owned a large amount of land in Allegany, was responsible for laying out plans for Cumberland in 1786, and played a role in the creation of Allegany County in 1789. (Ibid, 444-445.)
[11] Smith, "Historic Resource Study," 20.
[12] Walter S. Sanderlin, *The Great National Project* (Baltimore: The Johns Hopkins Press, 1946), 37-38.
[13] Smith, "Historic Resource Study," 44.
[14] Charles Varlé, *A Map of Frederick and Washington Counties, State of Maryland*, engraved by Frederick Shallus, Philadelphia, 1808 (Historic Society of Frederick County, Frederick, Maryland).
[15] Smith, "Historic Resource Study," 46.

[16] *Cumberland Maryland Advocate*, December 15, 1823. From Smith, "Historic Resource Study," 55.
[17] E.H. Courtenay, *Map of the Country Between Washington and Pittsburg Showing the Proposed Routes of the Chesapeake and Ohio Canal*. 1824 (Washington, D.C.: National Archives Cartographic Division, call no. G3842.C4 1824 .C6)
[18] Smith, "Historic Resource Study," 56.
[19] Sanderlin, *The Great National Project*, 55-56.
[20] Sanderlin, *The Great National Project*, 91.
[21] Sanderlin, *The Great National Project*, 113.
[22] Sanderlin, *The Great National Project*, 166.
[23] Smith, "Historic Resource Study," 59.
[24] *Hagerstown Torch Light and Public Advertiser*, February 28, 1828. From Smith, "Historic Resource Study," 60. This property was owned by Ann Williams when the canal company was in the process of purchasing lands on which to build the canal. A search of land records failed to reveal information regarding the property and the possible transfer of a portion of it to the C&O Canal Company.
[25] Smith, "Historic Resource Study," 61.
[26] Scharf, *History of Western Maryland*, vol. II, 1224-1229.
[27] Profile maps of sections 186-188, found in drawings and other records concerning construction, 1828-1937, C&O Company. Reproduced in Smith, "Historic Resource Study," 259-261.
[28] Smith, "Historic Resource Study," 85.
[29] Smith, "Historic Resource Study," 86-88.
[30] Smith, "Historic Resource Study," 88.
[31] For the purposes of this report, the basin south of the Conococheague Aqueduct will be referred to as the "Cushwa loading basin." In previous studies, it has also been referred to as the main basin and the turning basin.
[32] Smith, "Historic Resource Study," 84.
[33] John Milner Associates and Edward H. Richardson Associates, "Stabilization Study: Conococheague Aqueduct" (Prepared for the National Park Service, Denver Service Center, September 1978), 1.
[34] Milner and Richardson, "Conococheague Aqueduct," 3.
[35] National Archives, RG 79, Records of the C&O Canal Company, specifications of locks, n. d. From John Milner Associates, "Preliminary Historic Structure Report, Lift Lock No. 44, Chesapeake and Ohio Canal National Historical Park, Williamsport, Maryland" (Study prepared for the National Park Service, Denver Service Center, C&O Canal Restoration Team, August 1978), 20-22.
[36] Sanderlin, *The Great National Project*, 163.
[37] Elizabeth Kytle, *Home on the Canal* (Cabin John, Maryland: Seven Locks Press, 1983), 205-206.
[38] Edwin C. Bearss, "Historic Structure Report: C&O Canal—The Bridges," (Report prepared for the National Park Service, Historical Data Section, Division of History, Office of Architecture and Historic Preservation, January 31, 1968), 109.
[39] Letter from E. K. Burlew, Acting Assistant Secretary of the Interior, to Sam Rayburn, Speaker of the House of Representatives, "Chesapeake & Ohio Canal Report" (81st Congress, 2d session, House Document No. 687, August 16, 1950), 4.
[40] Sanderlin, *The Great National Project*, 161.
[41] Smith, "Historic Resource Study," 111-112.
[42] John Milner Associates and Keast and Hood Company, "Turning Basin Restoration Study: Chesapeake and Ohio Canal National Historical Park, Williamsport, Maryland" (Study prepared for the National Park Service, Denver Service Center, Chesapeake and Ohio Canal Restoration Team, September 1978), 1.
[43] *Williamsport Banner* as quoted in the *Niles' Register* XLVIII (April 11, 1835), 89. From Smith, "Historic Resource Study," 93-94.

[44] Sketch map of basin area, 1838, from Rogers' report to Ingle, December 28, 1838, letters received, C&O Canal Company. From Smith, "Historic Resources Study," 84, 262.
[45] National Archives, RG 79, Proceedings of the President and Board of Directors of the C&O Canal Company, D, 230, 314. From Smith, "Historic Resource Study," 97.
[46] National Archives, RG 79, Proceedings of the President and Board of Directors of the C&O Canal Company, E, 98, 155. From Smith, "Historic Resource Study," 112-113.
[47] National Archives, RG 79, Proceedings of the President and Board of Directors of the C&O Canal Company, D, 314-315. From Smith, "Historic Resource Study," 97.
[48] Smith, "Historic Resource Study," 114.
[49] Smith, "Historic Resource Study," 98.
[50] National Archives, RG 79, Letter from Charles Embrey to President and Board of Directors of the C&O Canal Company, December 30, 1847. From Smith, "Historic Resource Study," 129.
[51] Smith, "Historic Resource Study," 127-129.
[52] Smith, "Historic Resource Study," 130-131.
[53] National Archives, RG 79, Letter from Charles Warfield to President and Board of Directors of the C&O Canal Company, July 27, 1835. From Smith, "Historic Resource Study," 107.
[54] John Milner Associates and Edward H. Richardson Associates, "Historic Structure Report: Lift Lock No. 44" (Prepared for the National Park Service, Denver Service Center, August 1978), 11.
[55] Smith, "Historic Resource Study," 96. According to Smith, Hollman, who died in 1848, never fulfilled his agreement to construct a house at Lock 44.
[56] Smith, "Historic Resource Study," 131-132.
[57] National Archives, RG 79, Letter from Charles Embrey to President and Board of Directors of the C&O Canal Company, June 13, 1848. From Smith, "Historic Resource Study," 129-130.
[58] National Archives, RG 79, Proceedings of the President and Board of Directors of the C&O Canal Company, F, 207. From Smith, "Historic Resource Study," 120.
[59] Smith, "Historic Resource Study," 120.
[60] Smith, "Historic Resource Study," 123.
[61] Smith, "Historic Resource Study," 135.
[62] National Archives, RG 79, Proceedings of the President and Board of Directors of the C&O Canal Company, H, 525. From Smith, "Historic Resource Study," 137.
[63] Smith, "Historic Resource Study," 143-144.
[64] Smith, "Historic Resource Study," 139.
[65] Sanderlin, *The Great National Project*, 210.
[66] Photograph of the Williamsport ferry crossing looking from the West Virginia side of the Potomac River, facing Williamsport, c. 1860, National Park Service, C&O Canal National Historical Park Photo Library, Sharpsburg, Maryland.
[67] Theodore R. Davis, "Williamsport, Maryland, and the Ford Across the Potomac." Sketch in *Harper's Weekly*, October 18, 1862. Edwin Forbes, "War in the Shenandoah Valley—Division of the National Army Under Gen. Banks Recrossing the Potomac from Williamsport, Maryland, to Attack the Rebel Army Under Gen. Jackson—the Band of the 46th Pennsylvania Volunteers Playing the National Airs on the Virginia Shore." Postcard reproducing sketch from *Harper's Weekly*.
[68] Smith, "Historic Resource Study," 149-150.
[69] Smith, "Historic Resource Study," 151.
[70] Smith, "Historic Resource Study," 158.
[71] Smith, "Historic Resource Study," 164.
[72] National Archives, RG 79, C&O Canal Company Records, Proceedings of the President and Board of Directors, K, 323. From Smith, "Historic Resource Study," 166.
[73] National Archives, RG 79, C&O Canal Company Records, Letters Received, Embrey to President and Board of Directors, May 2, 1863. From Smith, "Historic Resource Study," 166.

[74] Smith, "Historic Resource Study," 168-169.
[75] Smith, "Historic Resource Study," 176-177.
[76] Smith, "Historic Resource Study," 179.
[77] National Archives, RG 79, Chesapeake and Ohio Company Records, letter from Masters to Ringgold, March 6, 1865. From Smith, "Historic Resource Study," 181.
[78] Smith, "Historic Resource Study," 189.
[79] Smith, "Historic Resource Study," 185-187.
[80] Harold A. Williams, *The Western Maryland Railway Story* (Baltimore: Western Maryland Railway Company, 1952), 50.
[81] Williams, *The Western Maryland Railway Story*, 3.
[82] Ellen M. Seidel, "Archeological Investigations at the Miller Brothers Lumber Mill Site, Williamsport, Maryland" (Study prepared for the National Park Service, Denver Service Center, Branch of Historic Preservation, July 1981), 1.
[83] Smith, "Historic Resource Study," 195-196, 202.
[84] Smith, "Historic Resource Study," 196, 202.
[85] Smith, "Historic Resource Study," 200.
[86] Photograph of DeFrehn Chair Factory, Williamsport, Maryland, circa 1880-1889. Washington County Historical Society Vertical Files, Hagerstown, Maryland.
[87] Melvin Kaplan, conversation with Cari Goetcheus and Julie Gronlund, June 1993.
[88] Scharf, *History of Western Maryland*, vol. II, 1201.
[89] Smith, "Historic Resource Study," 198.
[90] Sanderlin, *The Great National Project*, 248.
[91] Smith, "Historic Resource Study," 204.
[92] Sanderlin, *The Great National Project*, 266-267.
[93] Smith, "Historic Resource Study," 213-214.
[94] For the purposes of this report, this building will be referred to as the "Power Generation Station." Previous studies have called it the power station, generation station, generating station, and trolley power station.
[95] Phillips, "Archeological Excavation of the Power Station," 5-6.
[96] Smith, "Historic Resource Study," 217.
[97] National Archives, Geography and Mapping Division, Sanborn Map Company of Williamsport, October 1918.
[98] Washington County Historical Society, Photograph Files, Canal Boat in front of Cushwa's Wharf, circa 1885.
[99] Seidel, "Archeological Investigations at the Miller Brothers Lumber Mill Site," 2.
[100] Smith, "Historic Resource Study," 216.
[101] National Archives, RG 79, Leases and Other Records, lease, Joseph Bryan, John K. Cowen, and Hugh L. Bond, Jr., Trustees to Victor Cushwa and Sons and Steffey and Findlay, January 1, 1901. From Smith, "Historic Resource Study," 215.
[102] Kytle, *Home on the Canal*, 219.
[103] Kytle, *Home on the Canal*, 203.
[104] Photograph showing the Lockkeeper's House, Lock 44, and the hay press/carpenter's shop, circa 1919. C&O Canal National Historical Park Photo Library. Also Kytle, *Home on the Canal*, 211.
[105] Maryland State Archives, Robert G. Merrick Collection, MSA SC 1477-4758, Photograph of the C&O Canal, Williamsport, circa 1903.
[106] Kytle, *Home on the Canal*, 209.
[107] John Milner Associates and Keast and Hood Company, "Railroad Lift Bridge, Chesapeake and Ohio Canal National Historical Park, Williamsport, Maryland: Preservation Study" (Study prepared for the National Park Service, Denver Service Center, Chesapeake and Ohio Canal National Historical Park, September 1978), 1.
[108] Kytle, *Home on the Canal*, 211.
[109] Ibid.

[110] National Archives, RG 79, letter from the general manager to Harris, January 9, 1924. From Smith, "Historic Resource Study," 224-225.
[111] Kytle, *Home on the Canal*, 205.
[112] National Archives, RG 79, blueprint accompanying letter of proposal to drain stagnant water from the canal at Williamsport, December 1, 1933. From Smith, "Historic Resource Study," 325.
[113] Sanderlin, *The Great National Project*, 272, 277.
[114] Kelley's Studio and Camera Shop, "Bridge at Williamsport, Maryland." Washington County Free Library, Hagerstown, Maryland, Vertical files—Williamsport.
[115] National Archives, RG 79, Correspondence of the C&O Canal Company, Wolman to Office of Trustees, October 2, 1928. From Smith, "Historic Resource Study," 227.
[116] Smith, "Historic Resource Study," 230.
[117] Seidel, "Miller Brothers Lumber Mill Site," 2.
[118] Smith, "Historic Resource Study," 231.
[119] Smith, "Historic Resource Study," 242.
[120] Smith, "Historic Resource Study," 237.
[121] National Archives, RG 79, C&O Canal Company Records, Letters Received, Wine to Nicolson, September 4, 1935. From Smith, "Historic Resource Study," 239.
[122] National Archives, RG 79, C&O Canal Company Records, Letters Received, Wine to Nicolson, March 13, 1937. From Smith, "Historic Resource Study," 239.
[123] Conococheague Maintenance District Foreman Dick Marshall, in conversation with Liz Sargent, January 1994.