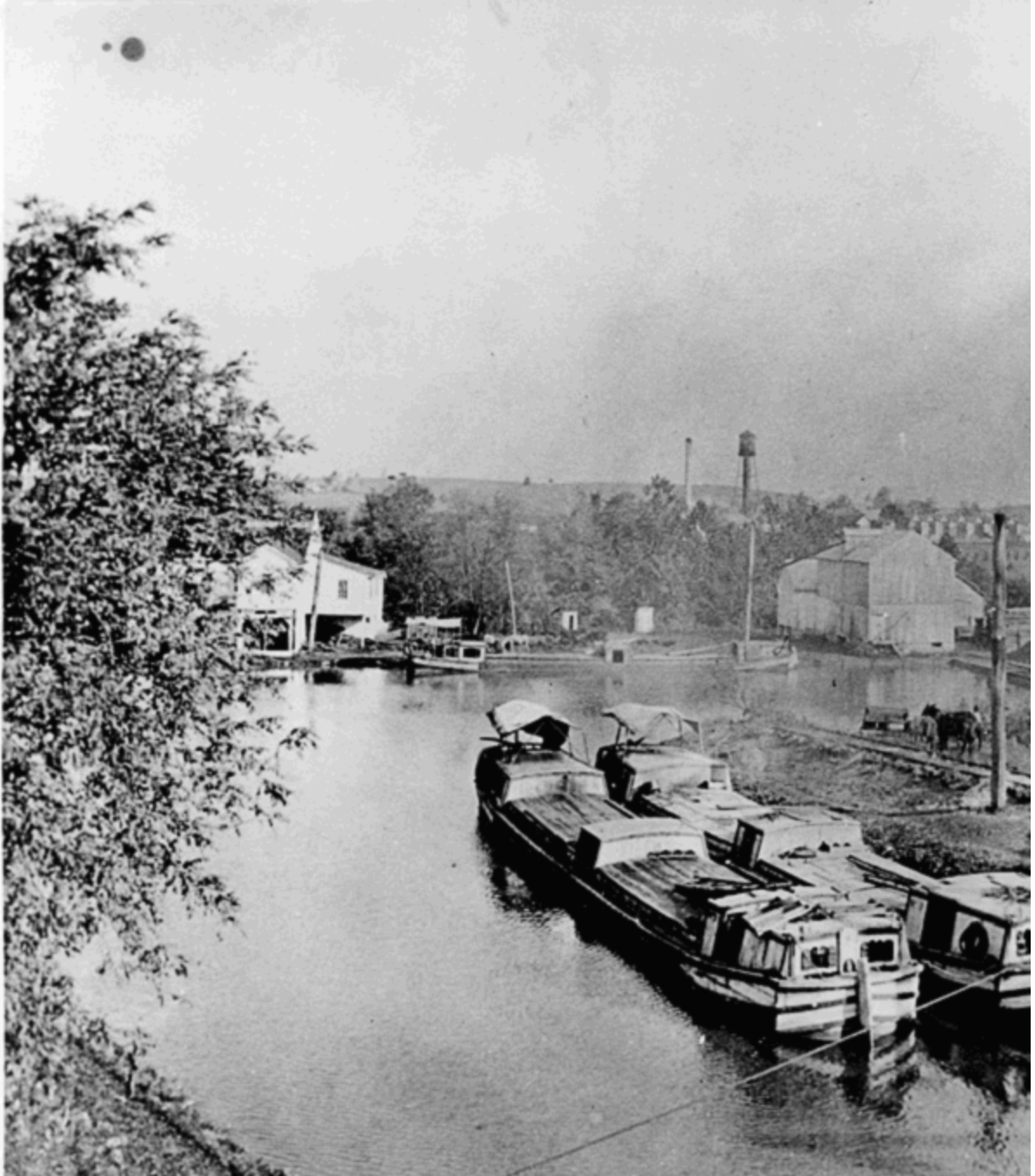

National Park Service
Cultural Landscapes Inventory
2012



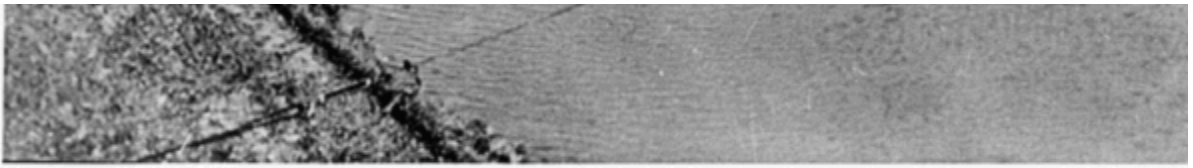


Table of Contents

Inventory Unit Summary & Site Plan

Concurrence Status

Geographic Information and Location Map

Management Information

National Register Information

Chronology & Physical History

Analysis & Evaluation of Integrity

Condition

Treatment

Bibliography & Supplemental Information

Inventory Unit Summary & Site Plan

Inventory Summary

The Cultural Landscapes Inventory Overview:

CLI General Information:

Purpose and Goals of the CLI

The Cultural Landscapes Inventory (CLI) is an evaluated inventory of all significant landscapes in units of the national park system in which the National Park Service has, or plans to acquire any enforceable legal interest. Landscapes documented through the CLI are those that individually meet criteria set forth in the National Register of Historic Places such as historic sites, historic designed landscapes, and historic vernacular landscapes or those that are contributing elements of properties that meet the criteria. In addition, landscapes that are managed as cultural resources because of law, policy, or decisions reached through the park planning process even though they do not meet the National Register criteria, are also included in the CLI.

The CLI serves three major purposes. First, it provides the means to describe cultural landscapes on an individual or collective basis at the park, regional, or service-wide level. Secondly, it provides a platform to share information about cultural landscapes across programmatic areas and concerns and to integrate related data about these resources into park management. Thirdly, it provides an analytical tool to judge accomplishment and accountability.

The legislative, regulatory, and policy direction for conducting the CLI include:

National Historic Preservation Act of 1966 (16 USC 470h-2(a)(1)). Each Federal agency shall establish...a preservation program for the identification, evaluation, and nomination to the National Register of Historic Places...of historic properties...

Executive Order 13287: Preserve America, 2003. Sec. 3(a)...Each agency with real property management responsibilities shall prepare an assessment of the current status of its inventory of historic properties required by section 110(a)(2) of the NHPA...No later than September 30, 2004, each covered agency shall complete a report of the assessment and make it available to the Chairman of the Advisory Council on Historic Preservation and the Secretary of the Interior... (c) Each agency with real property management responsibilities shall, by September 30, 2005, and every third year thereafter, prepare a report on its progress in identifying... historic properties in its ownership and make the report available to the Council and the Secretary...

The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act, 1998. Standard 2: An agency provides for the timely identification and evaluation of historic properties under agency jurisdiction or control and/or subject to effect by agency actions (Sec. 110 (a)(2)(A))

Management Policies 2006. 5.1.3.1 Inventories: The Park Service will (1) maintain and expand the following inventories...about cultural resources in units of the national park system... Cultural Landscape Inventory of historic designed landscapes, historic vernacular landscapes,... and historic sites...

Cultural Resource Management Guideline, 1997, Release No. 5, page 22 issued pursuant to Director's Order #28. As cultural resources are identified and evaluated, they should also be listed in the appropriate Service-wide inventories of cultural resources.

Responding to the Call to Action:

The year 2016 marks the 100th anniversary of the National Park Service. A five-year action plan entitled, “*A Call to Action: Preparing for a Second Century of Stewardship and Engagement*” charts a path toward that second century vision by asking Service employees and partners to commit to concrete actions that advance the agency’s mission. The heart of the plan includes four broad themes supported by specific goals and measurable actions. These themes are: Connecting People to Parks, Advancing the NPS Education Mission, Preserving America’s Special Places, and Enhancing Professional and Organizational Excellence. The Cultural Landscape Inventory relates to three of these themes:

Connect People to Parks. Help communities protect what is special to them, highlight their history, and retain or rebuild their economic and environmental sustainability.

Advance the Education Mission. Strengthen the National Park Service’s role as an educational force based on core American values, historical and scientific scholarship, and unbiased translation of the complexities of the American experience.

Preserve America’s Special Places. Be a leader in extending the benefits of conservation across physical, social, political, and international boundaries in partnership with others.

The national CLI effort directly relates to #3, Preserve America’s Special Places, and specifically to Action #28, “Park Pulse.” Each CLI documents the existing condition of park resources and identifies impacts, threats, and measures to improve condition. This information can be used to improve park priority setting and communicate complex park condition information to the public.

Responding to the Cultural Resources Challenge:

The Cultural Resources Challenge (CRC) is a NPS strategic plan that identifies our most critical priorities. The primary objective is to “*Achieve a standard of excellence for the stewardship of the resources that form the historical and cultural foundations of the nation, commit at all levels to a common set of goals, and articulate a common vision for the next century.*” The CLI contributes to the fulfillment of all five goals of the CRC:

- 1) *Provide leadership support, and advocacy for the stewardship, protection, interpretation, and management of the nation’s heritage through scholarly research, science and effective management;*
- 2) *Recommit to the spirit and letter of the landmark legislation underpinning the NPS*

- 3) Connect all Americans to their heritage resources in a manner that resonates with their lives, legacies, and dreams, and tells the stories that make up America's diverse national identity;*
- 4) Integrate the values of heritage stewardship into major initiatives and issues such as renewable energy, climate change, community assistance and revitalization, and sustainability, while cultivating excellence in science and technical preservation as a foundation for resource protection, management, and rehabilitation; and*
- 5) Attract, support, and retain a highly skilled and diverse workforce, and support the development of leadership and expertise within the National Park Service.*

Scope of the CLI

CLI data is gathered from existing secondary sources found in park libraries, archives and at NPS regional offices and centers, as well as through on-site reconnaissance. The baseline information describes the historical development and significance of the landscape, placing it in the context of the landscape's overall significance. Documentation and analysis of the existing landscape identifies character-defining characteristics and features, and allows for an evaluation of the landscape's overall integrity and an assessment of the landscape's overall condition. The CLI also provides an illustrative site plan that indicates major features within the inventory unit and generates spatial data for Geographic Information Systems (GIS). The CLI also identifies stabilization needs to prevent further deterioration of the landscape and provides data for the Facility Management Software System

Inventory Unit Description:

The approximate one-mile stretch of canal near Williamsport, MD (mile 98.90-mile 99.95) is a component landscape of the Chesapeake & Ohio Canal National Historical Park (C&O NHP). The Williamsport cultural landscape (project area) is positioned about half-way along the 184.5 mile-stretch of the C&O Canal, between Dams 4 and 5, and about eight miles southwest of Hagerstown, MD. The project area is bordered by Conococheague Creek to the north (upstream); the Potomac Edison Power Plant, Potomac Park, and the Potomac River to the west (towpath side); Riverview Cemetery and the town of Williamsport to the east (berm side); and finally, marking the southern boundary (downstream), a wastew weir just below Lockwood Road.

Its strategic location made the area a major center of activity during the construction and operation of the Chesapeake & Ohio Canal (C&O Canal). The period of significance for the component landscape is the same as for the C&O NHP – 1828 to 1924 – the years that span the canal's construction, operation, decline and final closure. Like the rest of the canal, the Williamsport cultural landscape reflects the ascent of canal-based transportation and its ultimate decline in nineteenth-century America. Therefore, the landscape and its events have made a significant contribution to the broad patterns of history (National Register Criterion A). Illustrative of vernacular and industrial stone construction, the canal landscape also contains individual resources that embody the distinctive characteristics of a type, period or method of construction (Criterion C). In addition, the Williamsport cultural landscape has yielded or is likely to yield, information important to prehistory or history (Criteria D).

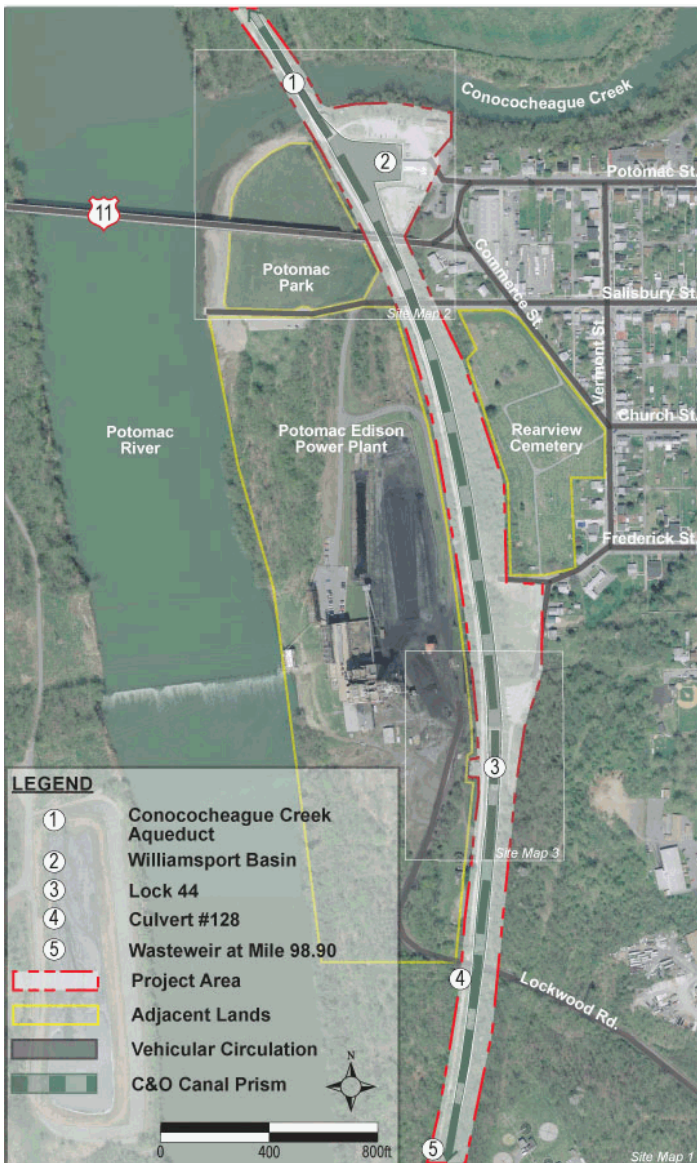
Although the C&O Canal is defined as a historic district having national significance, its National

Register nomination does not adequately or completely document all of the contributing landscape features. The 1979 nomination, and subsequently filed Determinations of Eligibility (DOEs) primarily describe the buildings and structures of the canal. The Williamsport cultural landscape contains individual features and landscape characteristics that are not recognized in the National Register nomination or DOEs. These elements should be incorporated into the nomination file if an update to the National Register is written.

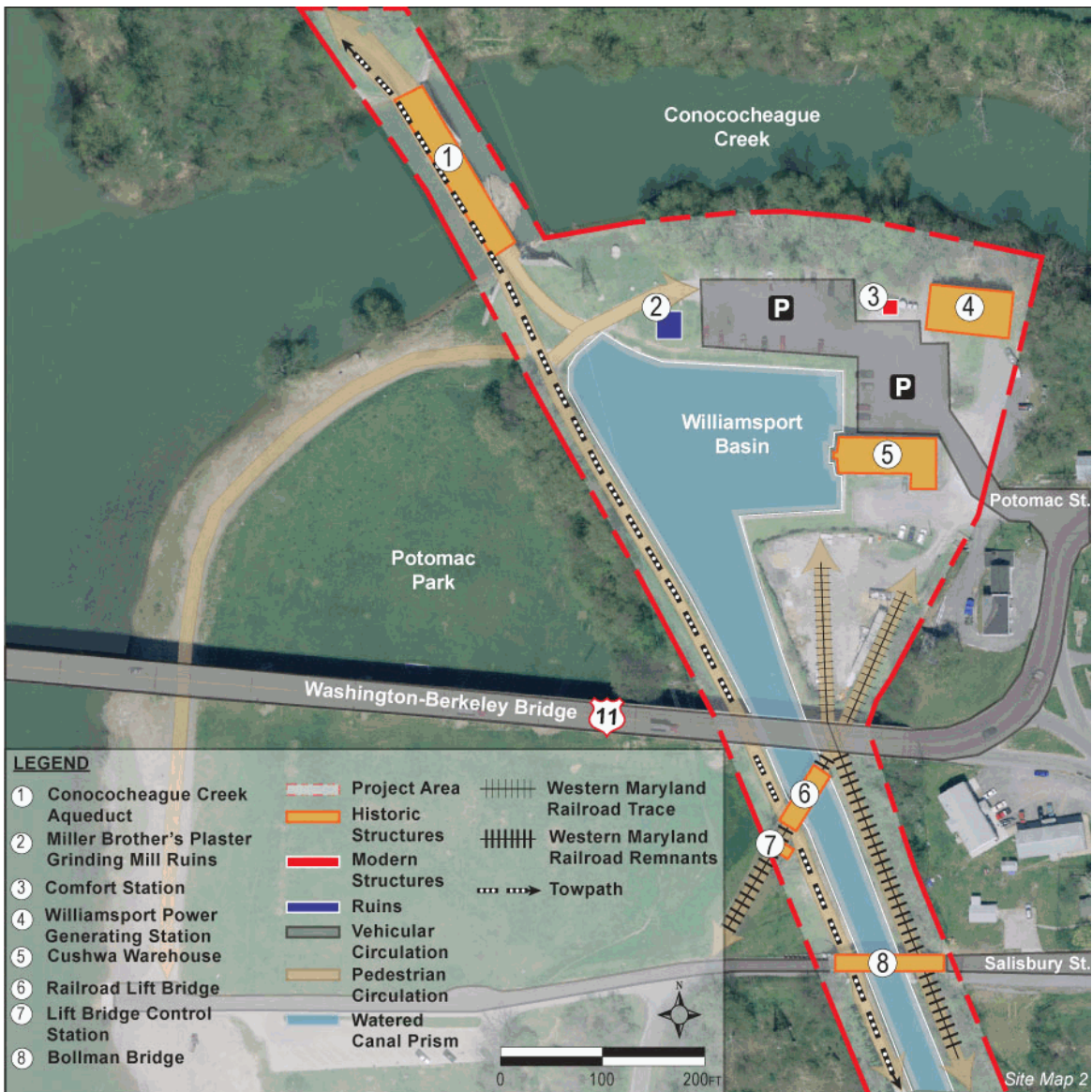
After the C&O Canal was acquired by the National Park Service (NPS) in 1938, and designated a National Historical Park in 1971, the property is a popular recreational spot, where the canal towpath is primarily used by the public for hiking and biking.. However, the Williamsport cultural landscape continues to display many historically significant remnants of the transportation era; representing all the major structural features of the canal including towpath, aqueduct, lock and lockhouse, and boat basin. Other structures unique to only this area of the canal include Cushwa Warehouse, the Williamsport Power Generating Station, Bollman Bridge, and most importantly, Western Maryland Railroad's Lift Bridge. In addition to these historic structures, topography, natural systems, and spatial organization are the primary landscape characteristics which are critical to the integrity of the Williamsport cultural landscape. The confluence of the Potomac River and Conococheague Creek, along with the expanse of a flat floodplain, allowed for the development of a larger industrial element to the Williamsport cultural landscape, and greatly influenced the spatial organization of the project area.

This CLI finds that the cultural landscape retains integrity for its period of significance, 1828-1924, with all seven aspects of integrity represented. While there have been some changes to the landscape, especially in the vegetation, and the loss of some features, the overall integrity of the landscape invokes the historic significance of the property.

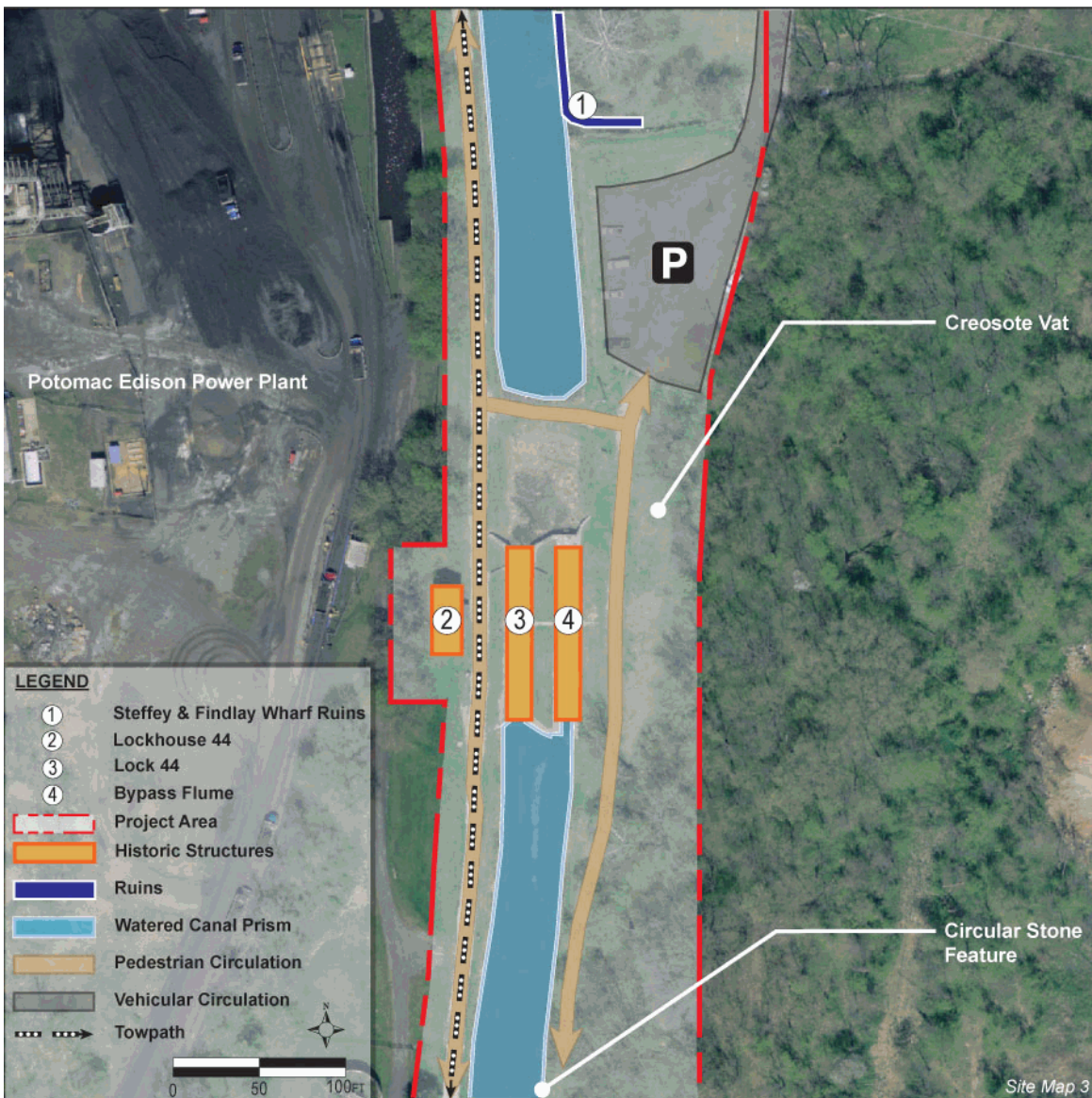
Site Plan



Site Map 1: Williamsport project area. GIS layers provided by NPS/NCR.



Site Map 2: Williamsport Basin and surrounding structures and features.



Site Map 3: Lock 44 and surrounding structures and features.

Property Level and CLI Numbers

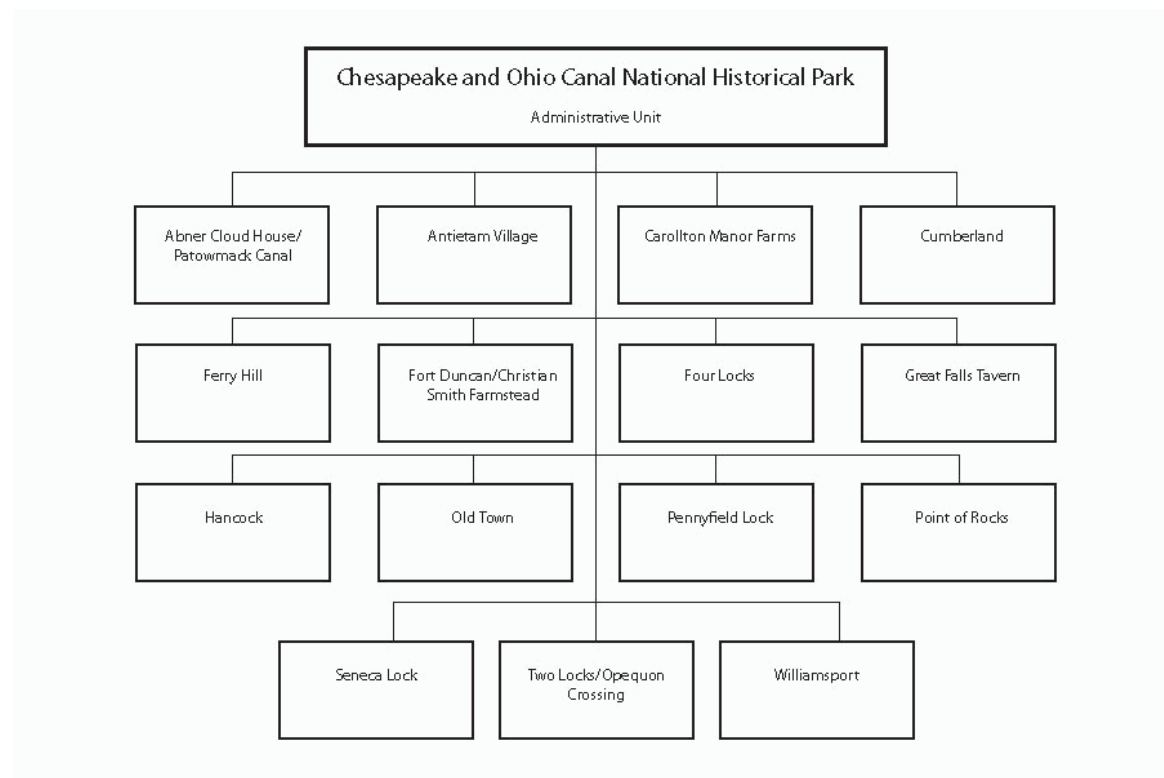
Inventory Unit Name:	Williamsport
Property Level:	Component Landscape
CLI Identification Number:	600278
Parent Landscape:	600268

Park Information

Park Name and Alpha Code:	Chesapeake and Ohio Canal National Historical Park -CHOH
Park Organization Code:	3100
Park Administrative Unit:	Chesapeake and Ohio Canal National Historical Park

CLI Hierarchy Description

The Williamsport project area is a component landscape of the Chesapeake and Ohio Canal National Historical Park. The cultural landscape includes Lock and Lockhouse #44, a bypass flume, an aqueduct, and several unique buildings and structures, all of which preserve the atmosphere and role of Williamsport as an industrial landscape.



The Chesapeake and Ohio Canal National Historical Park has identified fifteen component landscapes so far, each defined by individual histories, characteristics and conditions, which contribute to the significance of the park as a whole.

Concurrence Status

Inventory Status: Complete

Completion Status Explanatory Narrative:

This CLI represents a continuation of the documentation of component landscapes at Chesapeake and Ohio Canal National Historical Park. Both primary and secondary sources were consulted, and resources from both within and outside the National Park Service were utilized. In depth site investigations were conducted by the National Capital Region Cultural Landscape Program (CLP) for the Analysis and Evaluation section.

This report was written and researched by Nancy Vazquez, National Council for Preservation Education Intern. Martha Temkin, Regional Cultural Landscapes Inventory Coordinator, and Ahna Wilson, Historian at Chesapeake and Ohio Canal National Historical Park, provided valuable insight during the inventory process. Also, the following regional staff assisted: Maureen Joseph, Regional Historical Landscape Architect, NCR; Frances McMillen, Landscape Historian; Mark Cyhanick, C&O NHP Cartographer; and Cynthia Wanschura, GIS Specialist, NCR.

Concurrence Status:

Park Superintendent Concurrence:	Yes
Park Superintendent Date of Concurrence:	07/20/2012
National Register Concurrence:	Eligible -- SHPO Consensus Determination
Date of Concurrence Determination:	09/20/2012

Concurrence Graphic Information:

Williamsport
Chesapeake and Ohio Canal National Historical Park



United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

July 6, 2012

Memorandum

To: Cultural Landscapes Inventory Coordinator, National Capital Region
From: State Historic Preservation Officer, Maryland
Subject: Statement of Concurrence, Williamsport Cultural Landscapes Inventory

I, J. Rodney Little, Maryland State Historic Preservation Officer, concur with the findings of Williamsport Cultural Landscapes Inventory as submitted on July 6, 2012.


J. Rodney Little
Maryland State Historic Preservation Officer

9-20-12
Date

Concurrence memo signed by the MD SHPO on September 20, 2012.

Williamsport
Chesapeake and Ohio Canal National Historical Park

 **United States Department of the Interior**
NATIONAL PARK SERVICE
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

July 6, 2012

Memorandum:

To: Cultural Landscape Inventory Coordinator, National Capital Region

From: Superintendent, Chesapeake and Ohio Canal National Historical Park

Subject: Statement of Concurrence, Williamsport Cultural Landscape Inventory

I, Kevin Brandt, Superintendent of Chesapeake and Ohio Canal National Historical Park, concur with the findings of the Cultural Landscape Inventory for Williamsport including the following specific components:

MANAGEMENT CATEGORY: Must Be Preserved and Maintained

CONDITION ASSESSMENT: Good

Good: indicates the inventory unit shows no clear evidence of major negative disturbance and deterioration by natural and/or human forces. The inventory unit's cultural and natural values are as well preserved as can be expected under the given environmental conditions. No immediate corrective action is required to maintain its current condition.

Fair: indicates the inventory unit shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some degree of corrective action is needed within 3-5 years to prevent further harm to its cultural and/or natural values. If left to continue without the appropriate corrective action, the cumulative effect of the deterioration of many of the character defining elements will cause the inventory unit to degrade to a poor condition.

Poor: indicates the inventory unit shows clear evidence of major disturbance and rapid deterioration by natural and/or human forces. Immediate corrective action is required to protect and preserve the remaining historical and natural values.

The Cultural Landscapes Inventory for Williamsport is hereby approved and accepted.

 7/20/2012
Kevin Brandt Date
Superintendent, Chesapeake and Ohio Canal National Historical Park

Concurrence memo signed by the CHOH Superintendent on July 20, 2012.

Geographic Information & Location Map

Inventory Unit Boundary Description:

The project area consists of an approximate 4.5 acres and spans approximately a one-mile stretch of canal near the town of Williamsport, MD. The northern (upstream) boundary of the project area is Conococheague Creek while its southern (downstream) boundary stops along the wasteweir at mile 98.90. The eastern (towpath) boundary consists of the Potomac River and its floodplain. Closing the boundary on the western (berm side) edge is the town of Williamsport and Rearview Cemetery.

State and County:

State: MD

County: Washington County

Size (Acres): 4.50

Boundary Coordinates:

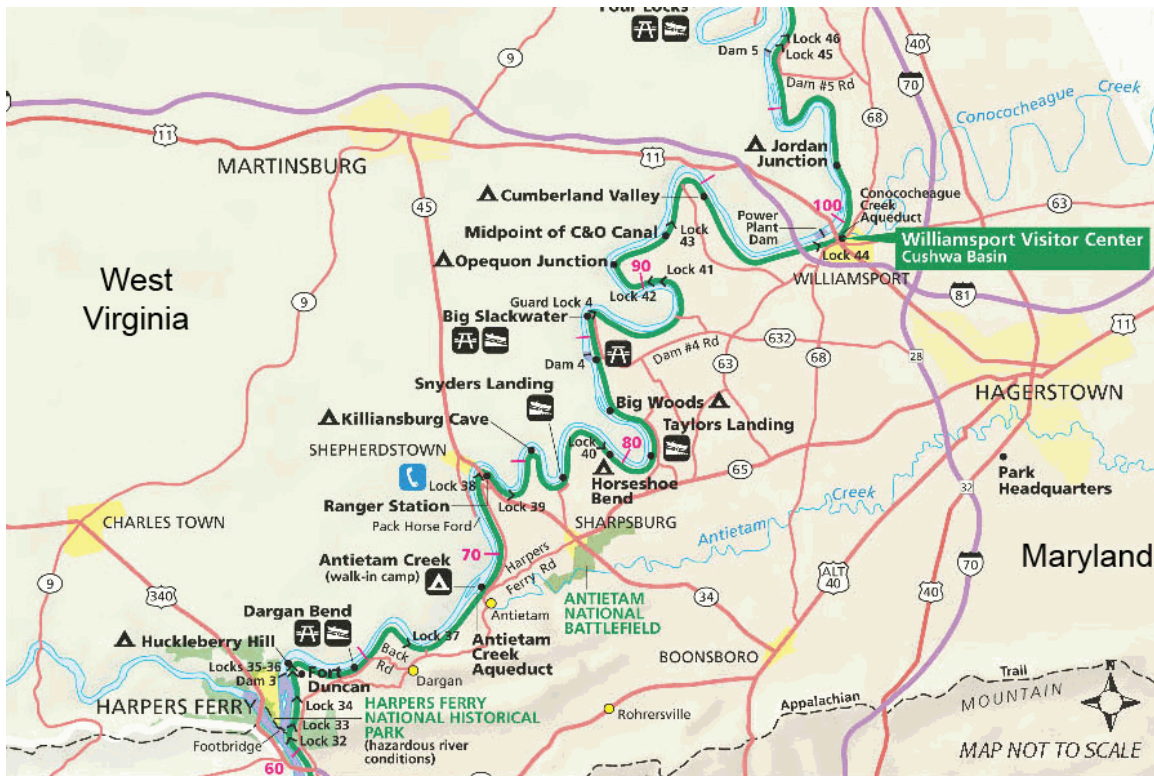
Source:	USGS Map 1:100,000
Type of Point:	Point
Latitude:	-77.8292583763
Longitude:	39.6027426060
Boundary Datum Other:	Northern-most point (upstream) in the project area.
Source:	USGS Map 1:100,000
Type of Point:	Point
Latitude:	-77.8261404540
Longitude:	39.5893600640
Boundary Datum Other:	Southern-most point (downstream) in the project area.
Source:	USGS Map 1:100,000
Type of Point:	Point
Latitude:	-77.8254161991
Longitude:	39.5941701390
Boundary Datum Other:	Eastern-most point (towpath/river side) in the project ar
Source:	USGS Map 1:100,000
Type of Point:	Point
Latitude:	-77.8259424937
Longitude:	39.6005262380
Boundary Datum Other:	Western-most point (berm side) in the project area.

Williamsport
Chesapeake and Ohio Canal National Historical Park

Location Map:



Location Map 1: Williamsport in relation to the entire length of the C&O Canal. Source: washingtonstatesearch.com.



Location Map 2: Williamsport is highlighted in green at the top right of map. Source: Chesapeake & Ohio Canal National Historical Park map.

Management Information

General Management Information

Management Category: Must be Preserved and Maintained

Management Category Date: 07/20/2012

Management Category Explanatory Narrative:

Several structures and features within the project area are included in the National Register Nomination for the Chesapeake & Ohio Canal. The management category is 'Must be Preserved and Maintained' because the park is listed in the National Register Nomination as nationally significant. The date of the management category is the date the CLI was approved by the CHOH Superintendent.

NPS Legal Interest:

Type of Interest: Fee Simple

Public Access:

Type of Access: Unrestricted

Explanatory Narrative:

As part of the Chesapeake and Ohio Canal National Historical Park, the Williamsport cultural landscape is open to the public during daylight hours year round.

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

There are three structures located along or within the Williamsport cultural landscape that are not owned by the NPS but were established or in use during the period of significance. These include Potomac Edison Company's industrial building, located between the Potomac River and canal; the Washington-Berkeley Bridge (Route 11), located downstream of Williamsport Basin; and a ferry landing, historically located somewhere on the Maryland side of the Potomac River between the Bollman Bridge and Conococheague Creek.

There are three other features within the component landscape which were built post period of significance. These features are not part of the historic scene but currently have an impact on the cultural landscape. These features include Lockwood Road, located downstream of Lock 44 and serving as an access route to Potomac Edison's industrial site; Potomac Edison's transmission towers, placed evenly along the canals towpath side and crossing over to the berm side just upstream of Williamsport Basin; and Potomac Edison's arborvitae hedge, located on the towpath's river side just downstream of Bollman Bridge.

National Register Information

Existing National Register Status

National Register Landscape Documentation:

Entered Inadequately Documented

National Register Explanatory Narrative:

The approximate one-mile stretch of canal near the town of Williamsport is a component landscape of the Chesapeake and Ohio Canal National Historical Park (C&O Canal NHP). It is located between Mile 98.90 and Mile 99.95. The National Register nomination, authored by Philip S. Romigh and Barry Mackintosh, was accepted by the Keeper on August 9, 1979. The Chesapeake and Ohio Canal is listed on the National Register under Criteria A and C for its architecture, engineering, commerce, transportation, conservation and military history. The period of significance is listed as 1828–1924.

Although the C&O Canal is defined as a historic district having national significance, its National Register nomination does not adequately or completely document all of the contributing landscape features. The 1979 nomination, and subsequently filed Determinations of Eligibility (DOEs) primarily describe the buildings and structures of the canal. The Williamsport cultural landscape contains individual features and landscape characteristics that are not recognized in the National Register nomination or DOEs. These elements should be incorporated into the nomination file if an update to the National Register is written. This Cultural Landscape Inventory for Williamsport more adequately describes the landscape and records contributing characteristics and features. Should the cultural landscape at Williamsport be evaluated apart from the historic district for the National Register, it would be eligible for listing under Criterion A and C and retain all seven aspects historical integrity.

The C&O Canal was chartered in 1825, construction began in 1828 and it was completed to its terminus at Cumberland, Maryland, on October 10, 1850. Due to the rise of the Baltimore & Ohio Railroad, by the late 1870s, trade on the canal had begun to decline. Major floods in 1877 and 1886 strained the canal company's finances and a catastrophic flood in 1889 put the canal company into receivership. The B&O Railroad became the majority shareholder at this time and the canal trade continued to decline. Another major flood hit in 1924, and the railroad company decided not to repair the damaged canal, and it ceased operations.

In 1938, B&O Railroad sold the canal property to the US government for \$2 million dollars. The Civilian Conservation Corps restored much of the canal from Georgetown to Seneca during the Depression and the canal from Seneca to Cumberland was designated a National Historic Monument in 1961 by President Dwight D. Eisenhower. Under the 1966 National Historic Preservation Act, the Canal was added to the National Register of Historic Places, having historical significance merits under architecture, engineering, commerce, transportation, military history and conservation. By a 1971 act of Congress, the Chesapeake & Ohio Canal National Historical Park was established. A confirmation National Register was approved by the Keeper on August 9, 1979. In addition to the 1979 National Register nomination, various Determinations of Eligibility have been filed with the Maryland State Historic Preservation Office, including several structures located within the inventory unit at Williamsport. These structures are: the Bypass Flume at Lock 44, Mile 99.30; a Creosote Vat, Mile 99.30; the Steffey & Findlay Wharf, Mile 99.38; and the Miller Brother's Plaster Grinding Mill Ruins,

Mile 99.60.

Existing NRIS Information:

Name in National Register:	Chesapeake and Ohio Canal National Historical Park
NRIS Number:	66000036
Primary Certification Date:	10/15/1966
Other Certifications and Date:	Additional Document - 8/19/1979

National Register Eligibility

National Register Concurrence:	Eligible -- SHPO Consensus Determination
Contributing/Individual:	Contributing
National Register Classification:	District
Significance Level:	National
Significance Criteria:	A - Associated with events significant to broad patterns of our history
Significance Criteria:	C - Embodies distinctive construction, work of master, or high artistic values
Significance Criteria:	D - Has yielded, or is likely to yield, information important to prehistory or history

Period of Significance:

Time Period:	CE 1730 - 1786
Historic Context Theme:	Peopling Places
Subtheme:	Colonial Exploration and Settlement
Facet:	American Exploration and Settlement
Time Period:	CE 1753 - 1758
Historic Context Theme:	Shaping the Political Landscape
Subtheme:	The American Revolution
Facet:	Politics and Diplomacy
Time Period:	CE 1753 - 1758
Historic Context Theme:	Shaping the Political Landscape
Subtheme:	The Civil War
Facet:	Secession: The Nation Divides, 1860-1861
Other Facet:	Battles in the North and South
Time Period:	CE 1828 - 1924
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Ways of Life
Facet:	Industrial Towns
Time Period:	CE 1828 - 1924
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Social and Humanitarian Movements
Facet:	Labor Organizations
Time Period:	CE 1828 - 1924
Historic Context Theme:	Expressing Cultural Values
Subtheme:	Landscape Architecture
Facet:	Impacts Of Railroads On The American Landscape
Time Period:	CE 1828 - 1924
Historic Context Theme:	Expressing Cultural Values
Subtheme:	Landscape Architecture
Facet:	Development Of Transportation And Land Tenure Systems

Time Period:	CE 1828 - 1924
Historic Context Theme:	Developing the American Economy
Subtheme:	Trade (Modern)
Facet:	Export-Import
Time Period:	CE 1828 - 1924
Historic Context Theme:	Developing the American Economy
Subtheme:	Power and Lighting
Facet:	Water
Other Facet:	Electric
Time Period:	CE 1828 - 1924
Historic Context Theme:	Developing the American Economy
Subtheme:	Shipping and Transportation by Water
Facet:	Canals
Time Period:	CE 1828 - 1924
Historic Context Theme:	Expanding Science and Technology
Subtheme:	Technology (Engineering and Invention)
Facet:	Transportation
Other Facet:	Industrial Production Processes (Including Agriculture)
Time Period:	CE 1828 - 1924
Historic Context Theme:	Transforming the Environment
Subtheme:	The Industrial Revolution
Facet:	Degradation of Natural Environment

Area of Significance:

Area of Significance Category:	Architecture
Area of Significance Category:	Commerce
Area of Significance Category:	Economics
Area of Significance Category:	Engineering
Area of Significance Category:	Exploration - Settlement
Area of Significance Category:	Industry
Area of Significance Category:	Landscape Architecture
Area of Significance Category:	Maritime History
Area of Significance Category:	Military
Area of Significance Category:	Transportation

Statement of Significance:

The inventory unit, between Mile 98.90 and Mile 99.95 of the C&O Canal NHP, is located adjacent to the town of Williamsport and includes the mouth of Conococheague Creek. The National Register nomination, accepted by the Keeper on August 9, 1979, lists the Chesapeake and Ohio Canal as significant under Criteria A and C for its architecture, engineering, commerce, transportation, conservation and military history. The period of significance for the Williamsport component landscape is the same as for the C&O NHP – 1828 to 1924 – the years that span the canal’s construction, operation, decline and final closure.

Like the rest of the canal, the component landscape reflects the ascent of canal-based transportation

and its ultimate decline in nineteenth-century America. Therefore, the project area and its events have made a significant contribution to the broad patterns of history (Criterion A). Illustrative of vernacular and industrial stone construction, the landscape also contains individual resources that embody the distinctive characteristics of a type, period or method of construction (Criterion C). In addition, the Williamsport cultural landscape has yielded or is likely to yield, information important to prehistory or history (Criteria D).

The principle areas of the canal's historical significance are architecture, engineering, commerce, transportation, conservation and military history. All of these areas of significance apply to this component landscape, with the addition of archeology. The project area and its associated structures serve as an excellent example of nineteenth-century canal-building technology and engineering. Along with these associated structures, the primary landscape characteristics of the Williamsport cultural landscape are topography, natural systems, and spatial organization.

In addition to typical canal features such as a lockhouse, lock, aqueduct, towpath, prism and wastewiers, the Williamsport cultural landscape also contains two unique engineered structures. The Bollman Bridge, designed by self-taught engineer Wendell Bollman, displays his innovative, but simple pony-Pratt type system, not to be confused with Bollman's suspended and truss bridges, which had a slightly different design. It was built for the canal company in 1879 as an extension of West Salisbury Street. The bridge maintained the important connection between Williamsport, the Potomac River and ferry crossing. The Western Maryland Railway's Railroad Lift Bridge, built in 1923, is a rare survival of this type of bridge, and is found nowhere else along the entire length of the C&O Canal.

At Williamsport, the confluence of the Potomac River and Conococheague Creek, along with the expanse of a flat floodplain, allowed for the development of a larger industrial setting and greatly influenced the spatial organization of the project area. The canal served as a major commercial trade route in the Potomac River valley during the mid-nineteenth century, conveying a significant amount of coal, lumber, and building materials. This commercial and industrial lifestyle led to the creation of numerous businesses along its path. This included a warehouse, lumber and grain mills, coal yards, furniture factories, wharves and dry-docks. Most notable of these is Cushwa Warehouse. It is the oldest building within the project area, dating to circa 1800. Cushwa Warehouse and Lockhouse 44 are the only buildings within the project area that survived the physical damages caused by war, floods, and fires during the period of significance. The area has also been the site of human habitation from prehistory, through the early colonial day, the Canal era and on into the present. Each of these historic periods has potentially left behind archeological resources.

Also located in the project area, are four structures; the Bypass Flume at Lock 44, a Creosote Vat, the Steffey & Findlay Wharf, and the Miller Brother's Plaster Grinding Mill Ruins; that date from the period of significance, are contributing features of the component landscape, and have been determined eligible by Maryland's State Historic Preservation Officer. It is recommended that if the National Register listing is updated, these features be added. The primary significance of virtually all buildings included in this documentation lies in their exterior appearance and their contribution to the historic scene.

Much of the canal property after 1924 was reclaimed by vegetation and the transfer of this land to the National Park Service in 1938 resulted in its conscious preservation for its historical, natural, and recreational values. The project area possesses major restoration opportunities that could help preserve the atmosphere of past times and allow future users to see a functioning canal in its historic setting.

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Historic Site
Vernacular

Current and Historic Use/Function:

Primary Historic Function: Commerce/Trade-Other

Primary Current Use: Outdoor Recreation-Other

Other Use/Function

Other Type of Use or Function

Interpretive Landscape

Current and Historic Names:

Name

Type of Name

Conococheague Settlement

Historic

Williams Port

Historic

Williamsport

Both Current And Historic

Chronology:

Year	Event	Annotation
CE 1730	Explored	The first known Europeans, most likely trappers, passed through the present day Washington County area.
CE 1739	Settled	The first land grants are distributed in the settlement area of Conococheague by Lord Baltimore. Charles Friend, who purchased a 260- acre parcel named Sweed's Delight, became the first settler to obtain legal title to land near Williamsport. Most of the early settlers in the area (what is now Washington County) were of German and Scotch-Irish descent.

CE 1749	Settled	Frederick County Court appoints Edward Wyatt to keep a ferry across the Potomac River just south of its juncture with Conococheague Creek. The ferry became an important strategic crossing during the French and Indian and Civil Wars. It remained in service from 1775 until 1909, when the construction of the Washington-Berkeley bridge made use of a ferry unnecessary. Throughout its lifetime, the ferry was also known as the Wyatt, Watkins, Lemen's and Ardinger Ferry.
CE 1750	Purchased/Sold	Colonel Thomas Cresap sold Spring Field Farm to Joseph and Prudence Williams; their son, Otho, who later becomes a General in the Revolutionary War and founder of Williamsport, is one year old.
CE 1753 - 1758	Military Operation	The Potomac River and Conococheague Creek confluence becomes an important military location during the French and Indian War. British General Edward Braddock and his army crossed the Potomac River near what is now the present day town of Williamsport.
CE 1774	Planned	George Washington believes it is crucial to open a trade route west and link the Ohio Valley with the eastern colonies. He introduces a bill to improve navigation along the Potomac River by means of an inland waterway. The bill does not pass due to the state of Maryland withholding its approval.
CE 1775 - 1783	Military Operation	During the American Revolutionary War, the area soon to be Williamsport became the capitol of the country for 28 hours.
CE 1776	Planned	Frederick County has grown large enough in population to warrant the division of smaller counties. As a result, Washington County is established and the town of Williamsport is designated within this new county area.
CE 1780	Purchased/Sold	Jacob Friend purchases the last tract of Lord Baltimore's Conococheague settlement area, a 1 ³ / ₄ acre parcel which he named None Left.

CE 1784 - 1785	Built	George Washington continues to lobby for legislation to open a route West. His efforts are rewarded when the Potomac (Patowmack) Company is chartered. This time, both the states of Virginia and Maryland give their approval. From 1784-1802, the company proceeds with construction of canals around the Potomac.
CE 1786	Established	General Otho Holland Williams gained title to all of the land near the mouth of Conococheague Creek upon purchasing 569.5- acres of land called 'Ross's Purchase' and an adjacent 160- acre parcel called 'Leeds'. Then, in November, he recorded the deed which created the town of Williams Port. The town was primarily established to take advantage of the Potomac Company's improvements to navigation on the Potomac River.
	Established	Williams Port campaigns to be selected as the prime location for the new nations capital. George Washington made an inspection of the town in October, but denied it because of the inability of large vessels to ascend the river to this point.
CE 1810	Altered	The Potomac (Patowmack) Company, headed by George Washington, order a 15 mile widening and deepening of Conococheague Creek at the confluence of the Potomac River in order to allow passage of larger water vessels.
	Developed	It is suggested, by Harlan D. Unrau, that the current Cushwa Warehouse may have been the town of Williams Port's original market house. The shop opens to the public during this year.
	Altered	On November 10, a major flood hits Washington County. The Potomac River and Conococheague Creek overflowed, inundating much of the town and surrounding countryside. Structures that were swept away included a bridge that had been built across the creek. Since this flood was the largest to hit the Potomac Valley prior to canal construction, engineers attempted to construct the waterway above its high-water levels.
CE 1824	Established	The Chesapeake and Ohio Canal Company (originally the Potomac Company) is incorporated by the Virginia Act of January 27, 1824. However, it takes an additional two years for legislation from Maryland, Pennsylvania, and the U.S. Congress to validate the company's charter.

CE 1827	Platted	Civil Engineers Geddes and Roberts survey the proposed canal route, noting the locations which would best provide readily available building materials along the waterway. One of the best locations for limestone quarries was three miles west of Williamsport.
CE 1828	Built	Groundbreaking occurs on July 4 for both the Chesapeake & Ohio Canal in Washington, DC and the Baltimore & Ohio Railroad in Baltimore, MD.
CE 1832	Expanded	Michael Byrne is contracted by the C&O Canal Company on August 25, 1832 to build an aqueduct, lock, and bypass flume near Williamsport. Work on Lock 44 begins in September.
	Built	Construction of the one mile stretch of canal at Williamsport begins.
	Neglected	Asiatic cholera breaks out along the C&O Canal during the summer. By September, it reaches Washington County and canal construction stops from Point of Rocks to Williamsport. The cholera epidemic disappeared from Williamsport by October, but lingered in nearby towns.
CE 1833	Built	Construction of Conococheague Creek Aqueduct begins in February.
	Engineered	During an inspection tour of the canal from Georgetown to Williamsport, company directors made a number of decisions relative to the construction of the canal. On May 30, they determine that the canal under construction at Williamsport should be extended to the rock cliffs above the Galloway Mill.
	Neglected	Construction of the canal at Williamsport is again interrupted by another outbreak of cholera. The epidemic ends in October, but many perished. In order to keep the epidemic and the dead as far away from the towns as possible, Father Ryan of St. Mary's Church in Hagerstown, took on an effort to provide cemeteries closer to the canal.

CE 1834	Developed	Conococheague Creek Aqueduct, fifth of a total of eleven aqueducts along the C&O Canal, is completed in 1834. According to early engineering reports from Pinesburg Quarry, the aqueduct was built of blue limestone gathered from the quarries within 3 miles of Williamsport. Lock 44, built of white and grey limestone, is also completed in November of 1834.
	Neglected	In January, labor strikes are responsible for a halt in canal construction at Williamsport. Two groups of Irish laborers - the Corkonians, employed at Dam 5, and the Fardowners of Longfords, employed at Dam 4 - clash after the fatal beating of John Irons, a Longford. A few days later, another confrontation takes place and the citizens of Williamsport fear local militia will be unable to cope with the violent masses. For the first time in our country's history, the U.S. Military is asked to intervene at Williamsport due to the labor strikes. A peace treaty is signed at Lyles' Tavern, under the direction of General Otho Williams, between the two parties on January 27, 1834 at Williamsport.
CE 1835	Built	Culvert #128 is completed along the canal at Williamsport.
	Developed	The Williamsport section of the canal was not officially completed until April 1835, when water from Dam 5 was let into section 187.
CE 1836	Designed	On August 17, board members decide that Williamsport Basin, also known as Cushwa Loading Basin, should to be walled.
CE 1838	Expanded	The pivot bridge at Lock 44 is completed by Michael Byrne and Co. on January 31 at a cost of \$662.
CE 1843	Altered	In mid-April, the highest freshet since construction of the canal strikes the Potomac Valley. The canal between Dams 4 and 6 received the most damage.
CE 1845	Built	During the month of June, the canal board authorizes Superintendent John G. Stone to build a lockhouse near Lock 44. During the summer of fall, it is presumed that a lockhouse, substantially larger than the standard lockhouses along the canal, was built for approximately \$300.

CE 1846	Altered	A freshet strikes the canal in July. From Williamsport to Dam 4, the water was higher than it had been in the 1843 flood. However, due to improvements made after the previous flood, damage at Williamsport was minimal.
CE 1847 - 1848	Built	Charles Embrey requests permission from the C&O Canal Company to build a wharf along the loading basin. Embrey is granted permission, begins construction, and the wharf is completed by the spring of 1848.
	Built	On December 8, Owen Ardinger requests permission from the board to construct a dry-dock on the berm side of the canal near Williamsport. All the dry-docks were to be constructed under the supervision of the chief engineer.
CE 1848	Built	In June, Charles Embrey requests permission from the C&O Canal Company to construct a hay press on a lot adjacent to Lock 44. The request is granted and the building was believed to have been built directly over the flume to take advantage of the water power.
CE 1850	Developed	The C&O Canal is completed from Cumberland to Georgetown and formally opens on October 10. The first downstream boats flow down the canal in a race following opening ceremonies in Cumberland. One of the race boats gives up the race upon reaching Williamsport.
CE 1850 - 1852	Purchased/Sold	The C&O Canal Company purchases Henry Beatty's hay press, presumably the one constructed by Charles Embrey in 1848, and converts it into a carpenter's shop.
CE 1861	Military Operation	The state of Virginia withdraws from the Union in April. Within a month, Williamsport sees the first exchange of gunfire as the Confederates temporarily seize Lemen's (previously Watkin's) Ferry on the Virginia side of the Potomac River. The Confederates soon leave and head toward Martinsburg, WV.
	Damaged	Confederate troops are ordered to destroy the canal between Harper's Ferry and Williamsport the summer of 1861. This marks the first major attack on the canal near Williamsport.

	Damaged	Heavy rains, as well as several military operations, severely damage the canal near Williamsport. Canal navigation is slowed by an estimated two month repair time.
	Excavated	The First Maryland Infantry, under the command of Union Colonel Kenly, are ordered to establish a post at Williamsport. Entrenchments were constructed on the hillside east of the canal (now Riverview Cemetery).
CE 1862	Demolished	In order to stop retreating Confederate troops, Union Captain Charles H. Russell is ordered to have his men destroy any form of passage connecting the canal to the Potomac River. Russell's army is able to destroy the pivot bridge at Lock 44, West Salisbury Street Bridge near Cushwa loading basin, and about eleven canal boats. However, they fail to destroy the aqueduct, which is later utilized by Confederate General Jeb Stuart and his cavalry. Repairs to the damaged canal were done by mid-October.
	Established	Charles Embrey requests and is granted permission to build another dry boat dock above Lock 44, presumably on the same lot as his old repair site.
CE 1863	Damaged	On July 4, General Lee's Confederate army retreated from Gettysburg to Washington County, where several skirmishes between opposing sides caused severe damage to structures along the canal. The aqueduct's four corners were torn down, all copings and railings were thrown into Conococheague Creek, and the gates at Lock 44 were burned. Within a month the canal was repaired.
CE 1864	Altered	Scattered rains in the Potomac Valley during April caused some flood damage along the canal. In Williamsport, the towpath remained underwater for a length of fifteen days. The canal was ready for navigation within five days.
	Damaged	Confederate troops manage to ferry back and forth along the Potomac River in order to raid Williamsport's stores and boats for provisions. The raids damaged canal trade as well as canal features.

CE 1865	Destroyed	Years of freezing, thawing, and military battle wounds cause the collapse of an upstream portion of the aqueduct. Navigation along the canal immediately stops. The aqueduct was temporarily repaired with a wooden trunk and resumed operation soon after.
CE 1867	Built	The canal company board of directors ordered that a lockkeeper's house be built at Lock 44, possibly replacing an existing lockkeeper's house, although there is no concrete evidence to support its prior existence.
CE 1869	Stabilized	The canal board authorizes a more sound repair of Conococheague Creek Aqueduct.
CE 1873	Built	The first official passenger train line opens in Williamsport on December 17. The railroad arrived to Williamsport from Hagerstown via a spur which branched off the main rail line right before crossing the Conococheague Creek. The spur led to the canal, east of Cushwa loading basin, and followed the canal prism down to Lock 44.
	Established	Steffey & Findlay establish a coal and lumber firm just upstream of Lock 44. Coal from Cumberland was brought here by canal boat and loaded onto trains bound for Baltimore. The firm was operational until the close of the C&O Canal in 1924.
CE 1874 - 1888	Land Transfer	Charles Embrey, owner of the warehouse located along the loading basin, enters a partnership with Victor Cushwa. The company becomes 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, in 1888, entered a partnership with his son-in-law. This partnership came to be known as Cushwa and Sons.
CE 1877	Altered	On November 24, Williamsport experienced its worst flood to date. Dam 4, Dam 5, and the land in between was severely damaged. Navigation and trade along the canal was significantly affected.

CE 1879	Built	A bridge is constructed over the canal beginning at West Salisbury Street. Known as the Bollman Bridge, it consisted of a single-lane and featured rubble-stone-abutments, an iron truss system, and a wooden deck. This and only one other structure remain of Wendell Bollman's architectural works.
	Land Transfer	John A. and George A. Miller lease a parcel of land from Victor Cushwa to build a plaster grinding mill. The parcel is located upstream of the boat basin. The structure was two-and-a-half stories tall and powered by water that Victor Cushwa leased from the canal company.
CE 1886	Altered	During April/May, three freshets occur within a period of six weeks. The towpath between Big Slackwater and Williamsport are considerably damaged. Above Lock 44, a break estimated about 30 feet long and extending three feet below the bottom of the canal was reported.
CE 1889	Altered	After the Great Flood, the Potomac River and Conococheague Creek confluence were described as having become a huge lake. The water level was 7½ feet above the 1877 level. Cushwa Warehouse was flooded, but not badly damaged; the railroads were entirely washed away; the towpath was badly washed; and the town had a slip on its river side about 100 feet long and 20 feet wide.
CE 1896	Land Transfer	Victor Cushwa donates land to the Hagerstown Railway Company for a Power Generating Station. The building is constructed along Conococheague Creek, northeast of Cushwa Warehouse. The location provided water to generate power for the business. Coal and other supplies were readily available from the warehouse, and proximity to Potomac Street made the building accessible to traffic from town. Although the station provided electricity to the towns trolley, it was used for only a few years.
CE 1900	Reconstructed	A new concrete waste weir, built to replace the original stone weir at mile 98.90, has three openings, each about 30 inches wide with a height of about 8 feet 6 inches. The original waste weir had wooden wicket gates or stop planks.

Williamsport

Chesapeake and Ohio Canal National Historical Park

CE 1904	Altered	Owned by F.H. Darby, the Undine Milling Company, also known as the Darby Mill, was destroyed by a fire in 1904. The mill was in close proximity to Lock 44 and the coal wharf owned by Cushwa and Sons.
CE 1907 - 1908	Destroyed	Efforts to build a vehicular bridge across the Potomac River began in 1907. In December of 1908, the not yet completed Washington-Berkeley Bridge crashed to the ground, killing eight workmen and halting construction until the spring of 1909.
CE 1909	Developed	The Washington-Berkeley Bridge is completed, and on August 10, a public dedication takes place on both the Maryland and West Virginia sides of the Potomac River.
CE 1911	Purchased/Sold	Cushwa and Sons purchase Williamsport Power Generating Station. The building is then used for storage.
CE 1917 - 1918	Established	The introduction of electricity dismisses the need for the Miller Brother's Plaster-Grinding Mill to be located near the canal for water power. The business is relocated and the building later converted into an ice house (known as Miller's Ice House).
CE 1920	Destroyed	On April 9, the berm side wall of Conococheague Creek Aqueduct collapses. Due to strong winds, an empty canal boat accidentally bumped into the wall, causing the damage. The conductor, Mr. Meyers, was able to jump from the boat before it fell into Conococheague Creek. Traffic on this part of the canal was suspended for over two weeks while repairs were undertaken.
CE 1921	Destroyed	A fire destroys the ice house. The site remained vacant until 1928.
CE 1922	Built	Construction of Potomac Edison's industrial building, between the canal and the river, northwest of Lock 44, begins. During this time, the Potomac Public Service Company and the Williamsport Power Company also gain permission to construct a temporary track over the canal in order to transport materials to the construction site. Unfortunately, construction of the power plant had a major impact on the lockkeeper's house, coming within 100 feet of the building and overpowering it in scale.

CE 1923	Developed	Potomac Edison's temporary railroad track over the canal evolved into a lift bridge. On June 11, this new permanent structure was completed and in use for less than a year.
CE 1924	Built	The Potomac Edison Company installs transmission towers along the canal, some which cross near Williamsport Basin. The towers, around 50 feet in height and evenly spaced along the length of the canal, provided electricity to adjacent areas.
	Altered	On March 30, a flood sweeps through the canal once more and although no serious damage occurred, it ultimately led to the closing of the canal. The Potomac Edison Company had to close their building temporarily because of the flood.
	Altered	Williamsport Basin, previously used to load and unload canal boats, is partially in-filled.
	Neglected	The Baltimore & Ohio Railroad Company discontinue canal operations. Boat navigation from Georgetown to Cumberland ceases, but industrial and commercial activity continues throughout various ports along the canal.
CE 1928	Abandoned	After the C& O Canal closed in 1924, it was abandoned and left to deteriorate. This neglect caused hazardous conditions along the canal which led to a typhoid epidemic in Williamsport. The general manager of the canal, a man by the name of Nicolson, was directed by health officials to correct the unhealthy conditions. His solution was to have Frank Wine, the canal representative, pour about two gallons of kerosene oil into all the stagnant pools between the aqueduct and Lock 44.
	Built	Cottrill's slaughterhouse is constructed over the foundations of Miller's Ice House.
CE 1929	Altered	Hazardous conditions along the neglected canal remained. Health officials declared that the only way to effectively rid the canal of its unhealthy situation was by flushing it entirely. The first flushing of the Williamsport section occurred in September of 1929.

CE 1930	Built	Canal trustees grant the Potomac Edison Company permission to pass a four-inch water line underneath the canal from Williamsport's city mains. Williamsport commissioners agree to run their part of the main down to the Steffey & Findlay railway siding.
CE 1933	Altered	Four years after the initial flushing of the canal, unhealthy conditions became an issue again. The Washington County Board of Public Health makes a request for the canal company to flush the canal once more, but they were unwilling to pay for the expenses and instead asked the Civil Works Administration to help.
CE 1935	Built	The sewage system installed at Williamsport at the start of the year also ran along the towpath and across the canal.
CE 1936	Altered	On March 18, the rising waters of the Potomac River sweep away several buildings, including Cottrill's slaughterhouse, and force Potomac Edison's industrial building to shut down. The company's closing temporarily left Williamsport without electricity. According to the Cumberland Evening Times, the river almost rose to its all-time high mark of 1889 and only 18 inches below its 1924 height.
CE 1937	Altered	Flooding of Williamsport occurs again in February. The Bollman Bridge, although a survivor of all previous floods, is unstable and causes safety concerns among Williamsport citizens. In June, the bridge is refinished with prime pine lumber from Florida and painted with creosote by canal representative, Frank Wine.
CE 1938	Purchased/Sold	In September, the National Park Service (NPS) purchased the 184.5 mile C&O Canal between Georgetown in Washington, DC and Cumberland, Maryland. With \$500,000 appropriated by Congress, restoration and rehabilitation efforts were initiated with help from the Civilian Conservation Corps, Public Works Administration, and private contracting firms for the first 23 mile stretch between DC and Seneca.

CE 1947 - 1954	Maintained	The physical condition of Dams 4 and 5 brought great concern to the Potomac Edison Company, a tenant at both locations. Due to the lack of NPS maintenance funds, a rental agreement was made between both parties, passing maintenance responsibility of the dams to Potomac Edison Company.
CE 1954	Altered	Hurricane Haze sweeps through during the month of October, causing damage to Dam 4. Repairs to the dam were completed by the Potomac Edison Company.
CE 1958	Rehabilitated	The NPS finished repairs along the entire canal by 1957. In September 1958, recreationalists could finally use the repaired 184.5 mile towpath without detouring around flood damage.
CE 1961	Established	The C&O Canal is declared a National Historical Monument.
CE 1968	Built	The Young Adult Construction Corps building is constructed on the berm side of the canal just north of Lock 44 and a wastewater treatment facility, owned by the Potomac Edison Company, southwest of it as well.
CE 1971	Established	The C&O Canal is declared a National Historical Park.
CE 1972	Altered	The worst flood since 1936, caused by Hurricane Agnes, struck the C&O Canal in June.
CE 1973	Established	To plan and oversee repair work post-Agnes, the NPS established the C&O Canal Restoration Team. The team occupied park structures at Seneca and Williamsport. The program was later superseded by the Williamsport Preservation Training Center.
CE 1974	Purchased/Sold	The Williamsport Power Generating Station, which used to provide electricity to Hagerstown's trolley system, was sold to the NPS by David Cushwa III.
CE 1976	Planned	The NPS publishes a general plan for the C&O Canal in January. The general plan divides the C&O Canal NHP into 32 sections, each assigned to one of five zones. Williamsport is assigned to Zone A, labeling it a National Interpretive Zone, where emphasis would be on historical restoration and interpretation of the site.

	Demolished	A storage shed, built on the foundation of the slaughterhouse after the 1936 flood, is demolished by the NPS after the Williamsport Basin was acquired.
CE 1978	Restored	The exterior of the Lockkeeper's House at Lock 44 is restored by the NPS.
CE 1979	Altered	The creosote vat, located on the berm side of the canal; adjacent the Lockhouse and Lock 44, is buried in fill by the NPS.
CE 1981	Rehabilitated	Cushwa Warehouse is rehabilitated by the NPS.
	Stabilized	The Lockkeeper's House is stabilized by the NPS.
CE 1982	Planned	A development concept plan (DCP) is completed for the section of Williamsport in August 1982. The DCP prescribed actions needed to stabilize, restore, and rewater the canal.
CE 1983	Stabilized	Conococheague Creek Aqueduct is stabilized by the NPS.
	Rehabilitated	The Power Generating Station is rehabilitated by the NPS.
CE 1984 - 1986	Altered	Heavy rains within a period of twelve hours cause a major flood in the month of February. Flood damages were most prominent in Frederick and Washington counties.
	Reconstructed	The State of Maryland Highway Department makes extensive repairs to the Washington-Berkeley Bridge by means of new steel and concrete work.
CE 1985	Altered	High water affected the canal in November, with the worst damage occurring in the upper portion of the canal.

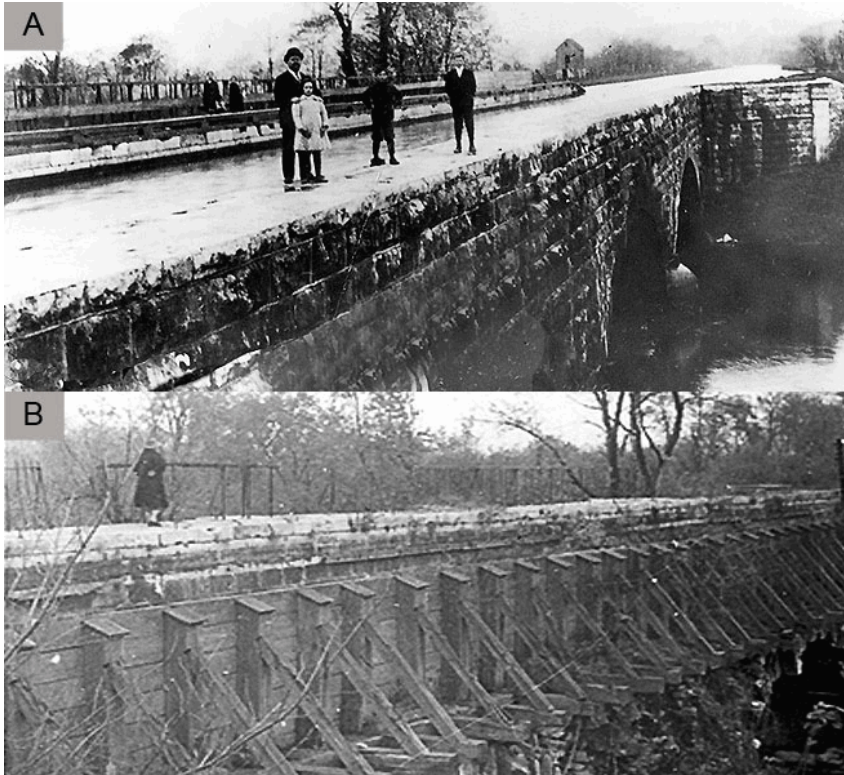
Williamsport

Chesapeake and Ohio Canal National Historical Park

CE 1986	Maintained	Post-1985 flood repairs were going fairly well for the NPS maintenance crew, but they still required help. NPS Superintendent Richard Stanton proposed a Cleanup Camporee (also known as Take Pride in America) where boy and girl scout troops would volunteer their time to pick up trash and debris along the towpath. The event kicked off on June 1 at Williamsport. Scouts efforts cleared the towpath by the end of August and it was reopened ahead of schedule.
	Built	Two circulation routes are constructed across or near the canal. The NPS builds a bridge across an unnamed creek upstream of Lock 44 and the Potomac Edison Company builds an access road (Lockwood Road) across the canal, just downstream of Lock 44.
CE 1987	Rehabilitated	Williamsport Power Generating Station is again rehabilitated by the NPS.
CE 1993	Reconstructed	Williamsport Basin and its retaining walls, the bypass flume, lock, and creosote vat are all reconstructed by the NPS.
CE 1994	Altered	The Miller Brother's Plaster Grinding Mill cellar is filled with earth by the NPS. Only the footprint of the structure is currently visible.
CE 1995	Rehabilitated	In May, a portion of the Cushwa Warehouse is converted for use as a temporary visitor contact center for the NPS.

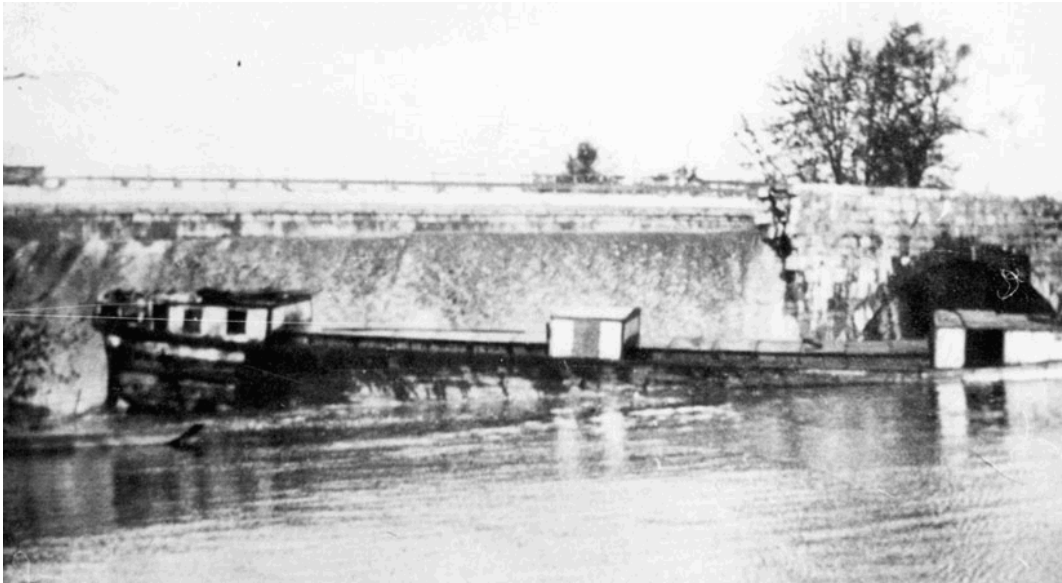
Physical History:

1828-1924



A: c.1863. View of aqueduct's berm side wall looking upstream (CHOH Historic Photo Collection)

B: Post 1920. Same view. Aqueduct after damaged berm wall was repaired (CHOH Historic Photo Collection)



1920. Canal boat in Conococheague Creek after bumping into and destroying the aqueduct's berm side wall. (CHOH Historic Photo Collection)



A: 1922. Temporary track over canal (CHOH Historic Photo Collection)

B: c.1923. Lift Bridge in its open position. Note control station along towpath & Western Maryland's tracks & tell-tale on berm side (CHOH Historic Photo Collection)



*A: 1885. Steffey & Findlay Coal & Lumber Firm
B: 1895. Darby Grain Mill
C: c.1919. Carpenter's shop over flume
D: c.1900. Miller Brother's Plaster Grinding Mill
(All images from CHOH Historic Photo Collection)*



A: 1936. Foreground: Bollman Bridge; Right-Center: Lift Bridge; Background: Washington-Berkeley Bridge (CHOH Historic Photo Collection)
B: 1936. Bottom-Right: Bollman Bridge; Background: Potomac Edison's industrial building (CHOH Historic Photo Collection)



1919. Lockkeeper Harvey Brant and his two daughters, Lula and Blanche, in front of Lockhouse 44. (CHOH Historic Photo Collection)



c.1900's. View of Williamsport Basin and wharf on an average work day. (CHOH Historic Photo Collection)



1860. View of ferry and ferry line going over the Potomac River. Photo taken from the Virginia shoreline. (CHOH Historic Photo Collection)

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

This section provides an evaluation of the physical integrity of the cultural landscape near Williamsport, a component landscape of the Chesapeake & Ohio Canal, by comparing landscape characteristics and features during the period of significance (1828- 1924) with the current condition. Landscape characteristics are the tangible and intangible aspects of a landscape that allow visitors to understand its cultural value. Collectively, they express the historic character and integrity of a landscape. Landscape characteristics give a property cultural importance and uniqueness. Each characteristic or feature is classified as contributing or non-contributing to the site's overall historic significance.

Landscape characteristics comprise landscape features. Landscape features are classified as contributing if they were present during the property's period of significance. Non-contributing features (those that were not present during the historical period) may be considered "compatible" when they fit within the physical context of the historic period and attempt to match the character of contributing elements in a way that is sensitive to the construction techniques, organizational methods, or design strategies of the historic period. Incompatible features are those that are not harmonious with the quality of the cultural landscape and, through their existence, can lessen the historic character of a property. For those features that are listed as undetermined, further primary research, which is outside the scope of this CLI, is necessary to determine the feature's origination date. Landscape characteristics and features, individually and as a whole, express the integrity and historic character of the landscape and contribute to the property's historic significance.

This section also includes an evaluation of the property's integrity in accordance with National Register criteria. Historic integrity, as defined by the National Register, is the authenticity of a property's identity, evidenced by the survival of physical characteristics that existed during the site's historic period. The National Register recognizes seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Several or all of these aspects must be present for a site to retain historic integrity. To be listed on the National Register a property, must not only be shown to have significance under one of the four criteria, but also retain integrity.

Landscape Characteristics and Features

Contributing landscape characteristics identified for the project area near Williamsport are natural systems and features, vegetation, topography, spatial organization, land use, views and vistas, circulation systems, constructed water features, buildings and structures, archeological features, and small-scale features.

The natural systems and features of the cultural landscape remain relatively unchanged since the period of significance. The Potomac River and its flood cycle, Conococheague Creek, and the intermittent streams, and wetlands continue to influence the project area.

The spatial organization of the cultural landscape closely resembles the layout from the period of

significance. The arrangement of buildings and structures is still organized in a linear fashion, oriented to the canal. While there has been some loss of features, the spatial organization continues to adhere to the landscapes historic configuration.

The historic topography of the project area is intact. There have been no significant changes to the floodplain or hillside within the cultural landscape.

Land use for the project area has changed since the period of significance. The industrial and commercial use that was predominant along the canal in the historic period has given way to one that is largely recreational and interpretive.

Historic views and vistas have been altered by the increase in vegetation along the canal and by an industrial building built in the early 1920's. The views and vistas during the period of significance would have been much more open, looking up and down the canal and out over the Potomac River to West Virginia.

There has been some loss of historical circulation patterns, specifically related to water travel along or near the canal. The berm wall of Conococheague Creek Aqueduct is no longer standing and portions of the canal have been filled, thus eliminating a once continuous flow of water and boat circulation. However, terrestrial circulation along and above the canal remains unchanged.

During the period of significance, vegetation found within the project area was minimal, consisting of mostly low pastures and a few trees. However, over the years the landscape began to change due to floods and neglect, especially towards the end of the canal's commercial life.

All the constructed water features from the period of significance remain. These include Conococheague Creek Aqueduct, Lock 44, the bypass flume, canal prism, Culvert #128, Cushwa Loading Basin, and a wastew weir. While the majority of the prism is no longer watered, making some structures inoperative, they retain their integrity of workmanship and location.

Many buildings and structures dating to the period of significance are found within the project area. They include Lock 44, the Lockkeeper's House, Cushwa Warehouse, Williamsport Power Generating Station, Conococheague Creek Aqueduct, and various ruins.

There are several archaeological features that have been identified within the project area. These significant resources include deposits associated with the Lockkeeper's House, the Cushwa Warehouse, Steffey & Findlay wharf, the Miller Brother's Plaster Grinding Mill, and the Darby Mill.

There are various small scale features within the project area, some of which contribute to the property's significance and others which do not.

The Seven Aspects of Integrity

1. Location is the place where the historic property was constructed. The approximate mile stretch of

canal near Williamsport that comprises the project area retains its historical integrity for the entire period of significance (1828 – 1924). Extant contributing features of the cultural landscape, including the town of Williamsport, remain in their historic locations.

2. Design is the combination of elements that create the form, plan, space, structure and style of a cultural landscape or historic property. Many of the significant structures on the property are extant and their arrangement within the Williamsport cultural landscape has not changed. This original configuration, along with the area's structural authenticity, retains the cultural landscape's integrity. The same is also true of the circulation in the project area.
3. Setting is the physical environment of a cultural landscape or historic property. The orientation of the project area to the canal remains. Yet there have been changes along the canal, especially in softscape, with the increase of invasive and planted vegetation. Despite these changes, the property's cultural landscape retains integrity of setting for the period of significance.
4. Materials are the physical elements of a particular period, including construction materials, paving, plants and other landscape features. Most of the extant buildings, structures and small scale features are composed of their original materials and retain integrity. There is less integrity in extant plant and paving materials.
5. Workmanship includes the physical evidence of the craft of a particular period. The buildings, structures and constructed water features all show evidence of the workmanship of the period of significance. Above all, the fact that most of the significant canal-era structures are still standing is a testament to the integrity of the workmanship.
6. Feeling is the property's expression of the aesthetic or historic sense of a particular period. The many extant canal structures of the project area combined with the bustling activity of the current use, albeit recreational, contribute to the integrity of feeling.
7. Association is the direct link between an important historic event or person and a historic property. The Chesapeake & Ohio Canal (C&O Canal) was one of the most impressive engineering feats of the nineteenth century. Building a shipping route that would connect the eastern seaboard to the trans-Allegheny west was a venture begun by George Washington in the late eighteenth century. With stockholders that included the Federal Government, Maryland, Virginia, the cities of Washington, Alexandria and Georgetown, and many prominent private investors, the building of the canal began in 1828. The town of Williamsport, centrally located between Cumberland and Georgetown, became one of the most important trade centers on the Chesapeake & Ohio Canal.

Conclusion

This CLI finds that the Williamsport cultural landscape retains integrity for its period of significance, 1828-1924, with all seven aspects of integrity represented. While there have been some changes to the landscape, especially in the vegetation, and the loss of some features, the overall integrity of the project area is high.

Landscape Characteristic:

Natural Systems and Features

The park includes several different natural environments. The most prominent natural feature of the cultural landscape is the Potomac River. For many early American settlers and explorers, the river and its surrounding landscape was viewed as a valuable resource and potential route to the west. So being, it was not long before this resource was exploited and turned into a major trade route.

The majority of the information presented comes directly from the 2011 Williamsport Environmental Assessment and the 1994 Williamsport Cultural Landscape Report, unless otherwise noted.

Historic and Current Conditions

The Chesapeake & Ohio Canal (C&O Canal) follows the sweeping bends of the Potomac River, beginning in Georgetown, Washington, D.C. and finding its terminal point in Cumberland, Maryland. The town of Williamsport is located about half-way between these two points and finds itself within the realm of Cumberland Valley, a geological site well known for its limestone (Sanderlin, 1967:4). There is evidence from two of Williamsport's predominant cultural landscape features (Conococheague Creek Aqueduct and Lock 44) where this limestone was manifested into useable material for construction.

A soil survey conducted in the project area indicates that the canal's surrounding environment consists of five different types of soils. On the towpath side there are three; Pope fine sandy loam where the Conococheague Creek and Potomac River meet; smooth Udorthents, contained within the general boundaries of Potomac Edison's industrial site; and at the tail end, Lindside silt loam. The last two soils are found on the berm side of the canal; one, a Berks-Weikert-Urban land complex, where Riverview Cemetery and the town to the east slope up, and second, an Opequon-Rock outcrop complex to the south of the cemetery, keeping its range close to the canal. Although the majority of these soils are found near floodplains and drain well, they can also cause moderate to severe erosion hazards.

Like many others towns along the C&O Canal, Williamsport is located within a 100-year floodplain environment (Parsons 1976:6). Unfortunately, settlement in this area meant exposure to reoccurring flood damage which continues to have an impact on the project area. Only high ground, including Rearview Cemetery and portions of the town at or above that level, is relatively safe from floodwaters. Since the construction of the canal within the project area, severe flooding has affected it many times; at least three major floods, including the Great Flood of 1889, and other numerous freshets. It took the canal company almost two years to repair the damage caused by the 1889 flood and the flood of 1924 sent the canal into receivership and ultimately led to its closure.

Converging with the Potomac River, and flowing underneath the aqueduct, is Conococheague Creek. The creek forms the northern most or upstream boundary of the project area while the

river dominates the landscape on the canal's towpath side. Although the project area has high recreational activity and little wildlife use, the cultural landscape still helps serve as a haven for a few permanent and migratory species.

Three small unnamed streams are also located in the project area. The first is located immediately downstream of Lockwood Road (Stream 1). Stream 1 flows east to west along a hillside paralleling the road and eventually reaching the canal via a culvert underneath Lockwood Road. Stream 2 enters the canal just downstream from the wharf ruins near the upper end of the parking lot on the berm side of Lock 44. It is crossed by modern pedestrian bridge. Stream 3 is considered ephemeral and also flows east to west. It enters the canal near the historic wastew weir at mile 98.90.

There are also two wetlands found within the project area, both in the immediate vicinity of Lock 44. As described by the US Army Corps of Engineers, wetlands are areas saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated conditions. At Lock 44, the first wetland is located immediately upstream of the wooden gates, those closest to the Steffey & Findlay wharf. This is an artificial wetland, installed by the National Park Service (NPS) as a maintenance tactic for Lock 44. The second wetland is a depression located immediately upstream of Lockwood Road. Both wetlands provide habitat for macroinvertebrates and floral species, aesthetics, and groundwater discharge.

Some change to the natural systems has occurred since the end of the period of significance. The lack of water in the prism has led to the development of several wetland environments within the project area. However, the two main natural systems features, the Potomac River and Conococheague Creek remain largely unchanged.

Character-defining Features:

Feature:	Potomac River
Feature Identification Number:	163129
Type of Feature Contribution:	Contributing
Feature:	Potomac River floodplain
Feature Identification Number:	163131
Type of Feature Contribution:	Contributing
Feature:	Conococheague Creek
Feature Identification Number:	163135
Type of Feature Contribution:	Contributing

Vegetation

The efficient function of the canal is what most likely dictated its surrounding appearance. Vegetation had to be carefully managed in order for it to be non-intrusive to the canal's operations. Although the original vegetative composition of the project area is not known, historic photographs, sketches, and personal accounts provide the most reliable information as to the study of this characteristic. The majority of the information presented comes directly from the 2011 Environmental Assessment of Williamsport and the 1994 Williamsport Cultural Landscape Report, unless otherwise noted.

It is very likely that the site, pre-settlement, once supported a much more native and denser forested area. Since the canal lies on a floodplain, it is safe to assume that the vegetation was in a state of constant flux due to the frequent, severe flooding that is natural for the Potomac River. The effects of flooding, such as silt deposition, also affected the overall composition. Any existing woodland that was not disturbed by floods or other natural phenomenon would have certainly been cleared once construction of the canal began.

According to the Maryland Department of Natural Resources' 2010 Current and Historical Rare, Threatened, and Endangered Species of Washington County Report, there is indication that a variety of the plant species listed have, or could potentially occur, within the mile stretch of the project area. These are: 1. Rare species that are in no danger of being threatened or endangered, including the slender-leaved bluets (*Houstonia tenuifolia*), Japanese honeysuckle (*Lonicera japonica*), and garlic mustard (*Alliaria petiolata*), with the latter two identified as being highly invasive; 2. Those rare and threatened, including arborvitae (*Thuja occidentalis*), Shumard's oak (*Quercus shumardii*), leatherwood (*Dirca palustris*), glade fern (*Diplazium pycnocarpon*), and black-fruited mountainrice (*Piptatherum racemosum*); 3. Finally, those rare and endangered species, that include the sweet-scented Indian-plantain (*Hasteola suaveolens*), Davis' sedge (*Carex davisii*), and the smooth cliffbrake (*Pellaea glabella*). Some of these plant species would have been considered ornamental and were probably introduced to the canal inadvertently. Notably, a protected species of plant in the state of Maryland, the halberd-leaved rose mallow (*Hibiscus laevis*), is thriving along the Potomac River shoreline upstream of Conococheague Aqueduct.

Historic Condition

During the period of significance, particularly 1828-1861, the cultural landscape was much less wooded than it is now so there would have been fewer native trees. In 1810, the Potomac Company cleared vegetation for fifteen miles along the Conococheague Creek to prepare for the coming of the canal. After 1828, the canal and towpath remained relatively free of undergrowth and large trees for about thirty years. The only area densely populated by mature deciduous and understory trees existed along both banks of Conococheague Creek. The rest of the floodplain, and the hillside where Rearview Cemetery is now located, were primarily dominated by grasses and ground covers.

Due to the flooding episodes between 1810 and 1889 and the effects of the Civil War, the vegetation of the project area began to change. From 1861-1889, vegetation along the canal,

towpath, and basin was slowly but surely increasing. Based on military sketches, bands of low growing vegetation and some deciduous canopies lined the canal, although the hillside and floodplain between the canal and river continued to be dominated by low grasses and groundcovers. The banks of Conococheague Creek remained populated with mature deciduous and understory trees while downstream of the Williamsport Basin there were indications of new low growing plants, although very sparse. It is likely that previous floods contributed to the placement of new, possibly invasive, vegetation by picking up small uprooted plants, silt, and seeds from upstream. Another contributing source could have been the high level of circulation occurring along the canal during this time period, both terrestrial and aquatic. The people, animals, and objects traveling the canal had the capacity to carry and unwittingly spread native or invasive vegetation.

During the period of 1889 and 1924, the project area saw a substantial increase in vegetation. Harvey Brant, lockkeeper during the 1900s, gives a description of the surrounding landscape in the area around Lock 44. As was traditional with siting practices, deciduous trees and ornamentals were planted near and around residences. The lockhouse was encircled by a garden area, shed, corn crib, and hog pen, giving some clue as to the use and function of this particular lot of land. In one report, Brant recalls that there was “this closed-in back porch where they sugar cured the hams. One year it got real hot and all those hams spoiled. Of course the power plant wasn’t built then. We took them over in that field back of the house and buried them” (Historic Furnishings Report-Lockhouse 44, 2010: 41).

In 1922, a very displeased Brant gives an account of the impact Potomac Edison’s construction of the industrial building had on his property. In doing so he specified the type of vegetation present behind the lockhouse during that time, including fruit trees and grape vines. The larger canopy trees surrounding the lockkeeper’s house may have been silver maples, as they were a common species in the area. When the National Park Service began to rehabilitate Lock 44 and the bypass flume in 1993, they removed four or five maple and spruce trees located on the island between the flume and lock. The area around the Williamsport Basin also saw a new establishment of trees along the towpath side of the canal which blocked views to the Potomac. Yet pockets of open grass areas remained in the floodplain between the canal and the river, especially the area overlooking the confluence of the Potomac River and Conococheague Creek, just above the Bollman Bridge.

After the 1924 flood, the canal ceased operations and the canal company no longer kept the prism and its surroundings free of vegetation. This lack of vegetation is evident in photographs taken shortly after the flood. Around 1984, the Potomac Edison Company, recommended that a hedge of arborvitae be planted just past Bollman Bridge along the towpath side. The intent was to screen their industrial building from the towpath.

Current Condition

The vegetation along the Potomac River and Conococheague Creek continues to resemble that which existed towards the end of the period of significance. Along the banks of

Conococheague Creek, the deciduous and understory trees have remained intact. On the towpath side of the aqueduct, the creek empties into the Potomac River and the upstream portion of the confluence is overgrown with trees. As a forested wetland, the predominant trees are box elders (*Acer negundo*), silver maples (*Acer saccharinum*), red maples (*Acer rubrum*), and red elms (*Ulmus rubra*). A 1971 NPS segment map shows some tree growth in this area, but not as dense as it is currently. The southern portion of the delta, above the Bollman Bridge and intersected by Route 11, remains relatively open and clear of any large canopy trees, except for some located along the towpath across from the Williamsport Basin. They include box elders, sycamores (*Platanus occidentalis*), honey locust (*Gleditsia triacanthos*), or red mulberry (*Morus spp.*). Low grasses also line the canal prism at the basin.

South of the Bollman Bridge, there is a sense of enclosure. A hedge of eastern arborvitae bordering the towpath and the sloping hillside across the canal obstructs distant views. On the berm side, the slope is overgrown with deciduous trees and the undergrowth backs up to Rearview Cemetery. This continues until the ruins of the Steffey & Findlay wharf are reached on the berm side; herbaceous materials are visible growing up through the cracks in the stone work of the canal walls there. Then, a clearing on the berm and towpath side occurs. This clearing allows for a clear view of the homes and parking lot located just beyond the wharf ruins. On the towpath side, the clearing reveals a few of Potomac Edison's transmission towers.

The landscape around Lock 44 opens up significantly, especially on the island at the center of the lock and its immediate borders. The open area on the towpath side still contains a few scattered trees, but visibility of the industrial building, maintenance roads, and surrounding property is very clear. Upstream of the Lockhouse there are three approximately 4-5 foot tall tree saplings planted in a linear fashion on the riverside of the towpath. A small artificial wetland located upstream of Lock 44 is located within the prism and is dominated by broadleaved cattail (*Typha latifolia*), a plant that requires wet soils to thrive. The wetland provides an aesthetic view to park visitors and habitat for resident and migrating species. The existing shade trees behind the Lockkeeper's House resemble the type of landscape that was common around lockhouses during the period of significance. Two dykes occur in this wooded area behind the house. Both allow access to the towpath, but the one leading towards Williamsport Basin veers onto one of Potomac Edison's maintenance roads. The berm side of the canal and lock give way to a clearing containing the historic creosote vat, park signage, and a grassy area. Downstream of the Lockhouse, a couple of trees on the towpath side scarcely conceal a small outbuilding most likely owned by the Potomac Edison Company. They appear to be eastern white pine (*Pinus strobus*).

Immediately upstream of Lockwood Road and within the prism, another artificial wetland exists. The plant life dominating this wetland area is canary-grass (*phalaris arundinacea*), a species which prefers but does not require wet soils to thrive. Like its upstream counterpart, the wetland provides an aesthetic view for park visitors and habitat for resident and migratory species.

Downstream of Lock 44, Lockwood Road crosses the canal and a strong change in vegetation is apparent. The degree of canopy coverage becomes extensive and conditions in the area mirror those upstream of the aqueduct. Within this environment, trees such as box elders, silver maples, red maples, red elms, as well as sparse shrub and herbaceous layers line the sides of the towpath and prism. Some of the trees have begun to take over the canal prism in this section of the project area.

It is evident that the project area no longer resembles the clear open area that existed almost two centuries ago. The arborvitae hedge, as well as secondary vegetative succession, has altered the character of this formerly industrial corridor by blocking views from the canal to other points of interest. Also, the wetlands currently found within the canal prism would not have existed during the historic period. The vegetation in the project area has limited integrity.

Character-defining Features:

Feature: Towpath side overgrowth at Basin

Feature Identification Number: 163139

Type of Feature Contribution: Non contributing – compatible

Feature: Wetlands vegetation

Feature Identification Number: 163137

Type of Feature Contribution: Non contributing – compatible

Feature: Native vegetation along the river&creek

Feature Identification Number: 163141

Type of Feature Contribution: Contributing

Topography

The topography around the project area remains largely intact, with virtually no change since the period of significance. The majority of the information presented comes from the 1994 Williamsport Cultural Landscape Report and a 2012 NPS Topographic map of the project area, unless otherwise noted.

The canal was sited between thirty and eighty feet from the shore of the Potomac River. The town, laid out prior to canal development, was already located outside the Potomac floodplain therefore construction of the canal had little to no physical impact on its layout. Most residential establishments, with the exception of the Lockkeeper's House, occurred predominantly within the town of Williamsport. All of the historic and modern industrial and commercial activity of the project area was located on the land found between the town and the river.

The topography of the cultural landscape consists of a relatively level floodplain. This is true for all land found at the confluence of the Potomac River and Conococheague Creek, including the

basin, and that which lies in between the river and canal. The elevation in this area is mostly between 330 and 350 feet above sea level. There are few higher points which occur within the boundaries of the cultural landscape, but none which exceed 420 feet. This change in elevation begins to occur just downstream of Route 11 on the berm side of the canal. The first notable hillside is that of Rearview Cemetery. Downstream of Lock 44, the next set of hillsides occurs on the berm side as well.

All historic buildings within the cultural landscape were constructed on relatively level plots of land. The placement of these structures on a floodplain offered little protection from the destructive floods that swept through the community. The Cushwa Warehouse, Williamsport Power Generating Station, and Lockkeeper's House are the only historic buildings from the period of significance still extant in the floodplain. The total amount of rise in topography from the wastewear at mile 98.90 to the aqueduct is about ten feet. Although not a significant rise for a one-mile stretch of land, canal boats made this elevation change at the lock.

Spatial Organization

Historic Condition

Although influenced by topography and natural systems, the primary organizing feature of the cultural landscape during the period of significance was the location of the C&O Canal. The spatial organization of the cultural landscape was linear and parallel to the canal, with buildings and structures generally concentrated around the commercial and transportation nodes (i.e. Lock 44 and Williamsport Basin).

As a major epicenter and significant source for water power, Lock 44 and its neighboring bypass flume had a large influence on the location of buildings and structures along the canal. Within this area, buildings such as the lockhouse, a grain mill, and carpenter's shop were erected. The Western Maryland Railroad also became part of the canal's transportation scene, and in 1873, placed tracks parallel to the canal, from Williamsport Basin to Lock 44 on the berm side. This circulatory layout aided in the transfer of goods from canal boat to rail cart and in the speedy shipment of cargo to outside communities.

While most structures faced the canal, the inclusion of Williamsport Basin changed that particular orientation. After its construction, buildings in this area were erected to face the basin as opposed to the canal. Curiously enough however, Williamsport Basin was first laid out in order to fit the configuration of existing features such as Cushwa Warehouse and the town of Williamsport. The warehouse, built prior to canal construction, c.1810, greatly influenced the degree to which the basin's boundaries extended inland. Accessibility also prompted the location of the basin. As the town's most direct route to and from the confluence of the river and creek, Potomac Street was an ideal circulation route. Eventually, buildings erected within the area included Miller Brother's Plaster Grinding Mill, Williamsport Power Generating Station, and a couple of outbuildings near Cushwa Warehouse. The location of Williamsport Power Generating Station was actually more influenced by Conococheague Creek than the canal. The creek supplied the generating station with the water power it needed to charge the trolley and its close proximity to the town meant ease of access to the railroad tracks and other main city circulation routes.

As with the more general spatial organization of the area, circulation features were also affected by the placement of the canal. The towpath, later joined by the Western Maryland's railroad tracks, were the only routes running parallel to the canal during the period of significance. All other circulation features within the project area were later built to run perpendicular to the canal and across it, in order to reach the river. When the canal was constructed, it impacted access to the ferry landing located along the banks of 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. The still extant Bollman Bridge was constructed in 1879 as an extension of West Salisbury Street. In 1909, the Washington-Berkeley Bridge was built, connecting Maryland to West Virginia by road which rendered the ferry obsolete. Lastly, in 1923, the Western Maryland Railroad partnered up with Potomac Edison Company and constructed a railroad lift bridge, centrally located between the two previously mentioned bridges. The lift bridge helped transfer construction material across the canal and during the construction of the Potomac Edison Company's industrial building.

Current Condition

Some aspects of the cultural landscape's spatial organization have been altered since the end of the period of significance. The loss of building clusters around the canal's central hubs, Lock 44 and Williamsport Basin, has dramatically changed the landscape's historic appearance and feeling. The most noticeable change in building density is around Lock 44. Those structures no longer extant include various outbuildings associated with the lockhouse, a small shed downstream of the lockhouse, the carpenter's shop over the bypass flume, the Steffey & Findlay Coal and Lumber Firm and the Darby Grain Mill. Near the basin, the missing historic structures include the Miller Brother's Plaster Grinding Mill, a large wooden building across from the mill, a toll house near the Washington-Berkeley Bridge, and a small outbuilding downstream of the warehouse.

The towpath and railroad tracks continue to be the only circulatory routes running parallel to the canal, although the towpath is the only one of the two in current use. A few other circulation routes, constructed after the period of significance, run across the canal prism. These include Lockwood Road and three earthen dykes.

Despite some changes in spatial organization, this cultural landscape characteristic retains its integrity. The project area is primarily owned and managed by the National Park Service and the spatial organization remains predominantly linear and oriented to the canal.

Constructed Water Features

The cultural landscape at Williamsport contains numerous constructed water features, all associated with the development of the C&O Canal. These features include Conococheague Creek Aqueduct, approximately a mile of canal prism, Williamsport Basin, Lock 44, Lock 44-Bypass Flume, Culvert #128, and wasteweirs.

Currently, the canal prism is watered in only a portion of the project area therefore, the aqueduct, lock, bypass flume, wasteweer at mile 98.90, and culvert no longer function as they did historically. However, all constructed water features remain in their original locations, retain their integrity, and contribute greatly to the significance of the landscape.

A comparison of historic and current conditions for each individual constructed water feature follows. The majority of the information presented comes from the 2011 Environmental Assessment of Williamsport, the 1994 Williamsport Cultural Landscape Report, List of Classified Structures, and the 1979 National Register Nomination File, unless otherwise noted.

Canal Prism

Historic Condition

Construction of the canal prism within the project area began in 1832 and was not fully completed until 1834. The prism was built to carry water to a depth of 6 feet, and was an average of 60 feet wide at the top level and 42 feet wide at the base. However, in the area between Lock 44 and Conococheague Creek Aqueduct, the prism was enlarged to accommodate the industries that were concentrated near Williamsport Basin. The sides of the prism were on a slope of 1 inch vertical to 1.5 inch horizontal (Unrau 1974:75). The sloping sides were to rise two feet above water level, and the entire prism bed was waterproofed with a clay liner. Much of the canal prism had earthen sides and bottom, but dry laid stone wall sides were used on curves, areas subject to floods, and places where unusual strain was likely to be exerted on the canal walls (Unrau 1974:9-19). The canal prism within the project area stretches for approximately one mile, from the wasteweer at mile 98.90 to Conococheague Aqueduct at mile 99.80.

Several delays to the construction of the canal prism occurred between 1832 and 1834. Two epidemics of Asiatic cholera befell canal laborers during the years of 1832 and 1833, causing many deaths and slowing progress of canal construction. Labor strikes in the year 1834 were responsible for a halt in canal building. Confrontations took place between two Irish labor groups surrounding Williamsport, causing violent fights and temporarily suspending canal construction for about a month.

Current Condition

There are three modern earthen dykes and a road that cross the canal within the project area, dividing the prism, establishing separate spaces, and creating circulation where historically there was none. The first partition occurs at Lockwood Road. Downstream of the road, the canal prism stretches ahead, its floor lightly inundated and invaded by Maple-Ash Swamp Forest. Upstream, between the road and the lower end of Lock 44, a temporary wetland habitat is located. The next section of the prism includes the lock, bypass flume, and a second wetland habitat. The area is sodden, but not watered and extends to the second dyke located on the upper end of the wetland habitat. Between the second and third dyke (located immediately downstream of the aqueduct) the prism is watered. This portion of the prism has the most

historic appearance.

The physical location and boundaries of the canal prism have not changed, but the absence of water, the road crossing, and earthen dykes change its historic appearance and function. Although the prism's historic appearance has been impacted, the structure retains integrity. It is listed as being in Fair condition on the List of Classified Structures (LCS).

Williamsport Basin (Cushwa Loading Basin) at Mile 99.73

Historic Condition

The Williamsport Basin is located immediately downstream of Conococheague Creek Aqueduct. It was the largest boat basin constructed between Cumberland and Georgetown. Completed in 1835, the basin is confined by three walls; a 180 foot long wall on its upstream side, a 115 foot wall on its downstream side, and a 150 foot wall joining the two on the berm side. Original construction materials for the walls were stone and earth; however, the National Park Service rebuilt the stone walls in 1993 using concrete. The basin's floor elevation remains at 350 feet, the same as that of the canal prism.

The site for this basin may have been influenced by the existing topography as well as the close proximity of Potomac Street, the main access point into town. The Cushwa Warehouse, which was built prior to the construction of the canal, may have also had an influence on the location. Having this large area available was an advantage for the businesses surrounding the basin because it provided easy maneuvering of barges and a convenient docking area for loading and unloading goods.

Current Condition

The Williamsport Basin was filled in by the National Park Service in 1978, but was then desilted, rebuilt, and rewatered in 1993. While the original intent for water inflow for the basin was to pump it in from Conococheague Creek, the park soon found that the pump was inadequate and problems with silt accumulation in the creek made pumping water nearly impossible. The pump remains located along the creek in close proximity to the aqueducts berm side wall. The outlet is located across from the concrete structure on the stone wall upstream of the basin. The top portion of the stone walls are visible a foot above the water level. Currently, most of the water that fills the basin is through rain and run off from the town. The basin retains integrity to the period of significance. It is listed as being in Good condition on the LCS.

Conococheague Creek Aqueduct at mile 99.80

Historic Condition

Construction of the aqueduct began shortly after the prism was built. In early 1832, the engineering firm, Michael Byrns and Company, took on the project and completed the structure in 1834. The aqueduct, constructed of blue limestone, carries the towpath 210 feet across the creek. The header and cap stones were set at a depth of over five feet and the piers fixed on a bed rock approximately five feet eight inches. Three arches, each 60 feet long and

approximately 14 feet high, supported the span of the aqueduct. The infill used in the walls was composed of rubble stone. The canal prism was adjusted to 18 feet 6 inches wide by 7 feet 6 inches high in order to fit within the aqueduct. The measurement for the berm side of the aqueduct was about 6 feet and the towpath narrowed down to about 7 feet. An iron railing was added to the towpath side a year later.

A couple of damaging events occurred around the aqueduct within the period of significance. During the Civil War, the aqueduct became a major point of interest. In 1862, Union armies attempted to destroy the aqueduct in order to stop retreating Confederate troops. On July 4, 1863, Confederate General Robert E. Lee was successful in tearing down the aqueducts four corners, all copings, and railings and throwing the remains into Conococheague Creek. Years of freezing, thawing, and battle damage caused the weakening of the aqueducts upstream segment, which fell into the creek in 1865 and later repaired. In 1920, a canal boat accidentally bumped into the berm side wall, destroying the entire wall; it was quickly repaired with wooden and concrete supports. However, during the flood of 1936, the wooden beams supporting the berm side wall of the aqueduct were destroyed once again and the wall was never repaired (www.whilbr.org).

Current Condition

While the wooden sections of the 1920 repairs have rotted away, the location of the wood beams used to repair the aqueduct's berm side wall are still visible. The aqueduct's dry interior, along with the towpath above it, is used by pedestrians as a circulation path to cross over the creek. A few of the historic iron railings continue to display their elegance along the aqueducts towpath, although a modern railing, made of metal poles and measuring about four feet in height, is situated parallel to them. The outer facing towpath wall shows signs of the repairs made after the Civil War.

Note: There are a series of cut stone blocks from the aqueduct's collapsed berm side wall, scattered in the prism, starting just a few feet upstream of Conococheague Creek Aqueduct and continuing upstream for about 300 feet.

While the damage to the berm side wall of the aqueduct is severe, the structure still retains integrity to the historic period. It is listed as being in Fair condition on the LCS.

Lock 44 at mile 99.32

Historic Condition

Lock 44, built between 1832 and 1834, was another project taken on by Michael Byrnes and Company. Constructed of gray and white limestone, the material was gathered from quarries within three miles of Williamsport. The lock dimensions were taken from general specifications outlined by the canal company, however, it was extended at a later date to 133 feet by fieldstone filled wood cribbage. The components of the lock consist of: a balance beam that opened or closed the main gate; the sluice gate and its control which permitted water to flow slowly into or out of a lock so a boat could be raised or lowered to the level of the water outside

the exit gate; and the miter sill against which the gate was locked and sealed. The wooden gates were fabricated of oak timber, a material prone to deterioration but readily replaceable, and measured 12 feet x 8 feet. They stood connected with the main walls by a radius of four feet. The hardware keeping the gates together and connecting them to the walls were made of iron. The lock served to lift or lower boats traveling the canal through the ten foot elevation change.

In 1838, Michael Byrnes and Company added a pivot bridge to the lock for a cost of \$622. Further research regarding the pivot bridge at Lock 44 is needed; however, it can be assumed that its construction followed general specifications for pivot bridges being built along the canal at the time. Lock 44 also suffered some minor damage during the Civil War. In the years 1862-1863, the lock gates were burned and the pivot bridge destroyed. However repairs were made quickly and canal operations resumed within a month.

Current Condition

After the canal's abandonment in 1924, the condition of the lock deteriorated. Reconstruction of the lock was initiated by the National Park Service in 1993. The forms, features, and detailing of the lock were incorporated in this new construction for the purpose of replicating its historic appearance.

Currently, the lock is not watered and its physical structure is sound. The stone-filled wood cribbage extension exists now as a ruin. The wooden cribbage is gone, but a clear line of stones along the bottom of the lock indicates where the extension once was. The Pivot Bridge is gone and a modern wooden bridge connects the inner islet with the towpath. Lock 44 has integrity within the aspects of location, setting, feeling, and association. It is listed as being in Good condition on the LCS.

Bypass Flume - Lock 44 at mile 99.30

Historic Condition

In 1835, Joseph Hollman requested permission from the canal company to construct a flume around Lock 44. The flume was constructed of limestone and built parallel to the lock on the berm side. The lock and flume were separated by a 25 foot islet. Its dimensions mirrored those of the lock except in width, which was reduced to about nine feet.

During its active years, the bypass flume always maintained a constant flow of water, preventing any stagnant pools of water from developing along the canal. As with other areas along the waterway, this running water offered local industries the opportunity to supply their business with a source of generating power. In 1848, Charles Embrey requested permission to establish a hay press over the bypass flume and it remained there until 1936.

Current Condition

The bypass flume was reconstructed along with Lock 44 in 1993. It is not watered but its reconstructed walls remain intact with no signs of deterioration. There is a modern wooden

bridge connecting the plot of land on the flume's berm side with the islet centered between the lock and flume. Its reconstructed wooden gate on the upstream end is also stable.

The bypass flume has integrity of location, setting, feeling, and association. It is listed as being in Good condition on the LCS.

Circular stone feature, within mile 99.00 and mile 99.30

Historic/Current Condition

Within the canal prism, downstream of Lock 44 and abutting the berm side wall of the canal, is a circular stone feature. Although there is no documentation to verify its period of construction, use, or function, the building materials of stone, cement mortar, and workmanship suggest that it dates to the period of significance. Further research is needed.

Wasteweir at approximate mile 99.00

Current Condition

During the reconstruction of the canal prism in the 1990s, the National Park Service constructed a wasteweir on the towpath side immediately upstream of Lockwood Road. A gabion box culvert serves as the outlet for the weir and is located adjacent to the wasteweir on the river side of the towpath.

Culvert #128 at mile 99.12

Historic Condition

Built in 1835, Culvert #128 is constructed of gray limestone. The culvert was designed to have 4-foot wide openings with a 2-foot radius on both the inlet and outlet sides. Like many culverts along the canal, Culvert #128 was meant to carry a small stream under the canal.

Current Condition

After the closure of the canal in 1924, the Potomac Edison Company constructed a maintenance road across the canal (Lockwood Road). As a result, the inlet side of the culvert was destroyed. Along the berm side of Culvert #128 there is a corrugated metal pipe which carries water under Lockwood Road. The outlet side of the culvert remains on the towpath side, although there has been heavy silting, leaving only about an inch or two of the cavity open. It is listed as being in Poor condition on the List of Classified Structures.

Wasteweir at mile 98.90

Historic Condition

The original construction date for the wasteweir at mile 98.90 is undetermined, although it could be assumed that it was built within the same time frame as the canal in this area, 1832-1835. Located underneath the towpath, the wasteweir's substructure is made of stone. It has three openings, each about 30 inches wide with a height of about 8 feet - 6 inches. A wooden wicket gate or stop planks were placed within the weir's berm side opening to control the canals outflow.

Around 1900, the stone weir was replaced. A concrete superstructure was built over the original stone weir and a 14 foot concrete slab replaced part of the original earthen towpath that crossed above it. A sloping bottom pad on the outflow side was built to continue out for about another 12 feet.

Current Condition

There is minor deterioration of the concrete slab along the towpath. Portions of the wooden planks, closest to the saturated floor, are also deteriorated. On the outflow side, there is a section of the wall on the downstream side where the concrete superstructure has been damaged and the original stone foundation can be seen. Overall, the structural foundations of the wastew weir remain intact and the water feature has integrity of location, setting, feeling, and association. It is listed as being in Poor condition on the LCS.

Character-defining Features:

Feature: Conococheague Creek Aqueduct

Feature Identification Number: 163143

Type of Feature Contribution: Contributing

IDLCS Number: 164

LCS Structure Name: Conococheague Creek Aqueduct

LCS Structure Number: 099.80

Feature: Williamsport Basin, Cushwa Loading Basin

Feature Identification Number: 163145

Type of Feature Contribution: Contributing

IDLCS Number: 11711

LCS Structure Name: Williamsport Basin

LCS Structure Number: 099.73

Feature: Canal Prism Mile 99-100

Feature Identification Number: 163147

Type of Feature Contribution: Contributing

IDLCS Number: 45949

LCS Structure Name: Mile 99-100, Canal Prism

LCS Structure Number: 099.01

Feature: Canal Prism Mile 98-99

Feature Identification Number: 163149

Type of Feature Contribution:	Contributing
IDLCS Number:	45947
LCS Structure Name:	Mile 98-99, Canal Prism
LCS Structure Number:	098.01
Feature: Lock 44	
Feature Identification Number:	163151
Type of Feature Contribution:	Contributing
IDLCS Number:	11708
LCS Structure Name:	Lock #44
LCS Structure Number:	099.32
Feature: Bypass Flume-Lock 44	
Feature Identification Number:	163153
Type of Feature Contribution:	Contributing
IDLCS Number:	11805
LCS Structure Name:	Bypass Flume, Lock #44
LCS Structure Number:	099.30B
Feature: Circular Stone Feature	
Feature Identification Number:	163155
Type of Feature Contribution:	Contributing
Feature: Culvert #128	
Feature Identification Number:	163157
Type of Feature Contribution:	Contributing
IDLCS Number:	11841
LCS Structure Name:	Culvert #128
LCS Structure Number:	099.12
Feature: Wastew weir at Mile 98.90	
Feature Identification Number:	163159
Type of Feature Contribution:	Contributing
IDLCS Number:	11840

LCS Structure Name: Wasteweir

LCS Structure Number: 098.90

Feature: Wasteweir at Mile 99.00

Feature Identification Number: 163161

Type of Feature Contribution: Non contributing – compatible

Feature: Concrete water intake upstream of Willia

Feature Identification Number: 163163

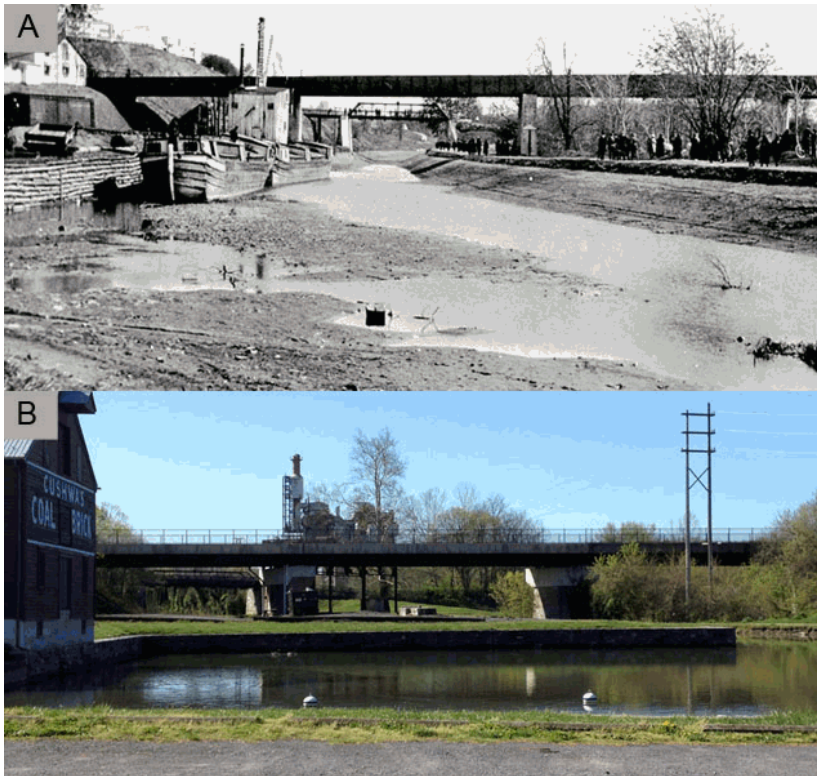
Type of Feature Contribution: Non contributing – compatible

Landscape Characteristic Graphics:



A: 2012. Berm side of aqueduct looking upstream (NPS/NCR)

B: 2012. Towpath side of aqueduct looking downstream (NCR/NPS)



A: 1920. Downstream view of Williamsport Basin; empty prism after boat accident on aqueduct (CHOH Historic Photo Collection)

B: 2012. Downstream View (NPS/NCR)



A: c.1919. Upstream view of Lock 44, bypass flume, lockhouse, and the carpenter's shop (CHOH Historic Photo Collection)

B: 2012. Same view (NPS/NCR)



2012. Compatible stone feature downstream of Lock 44 on berm side (NPS/NCR)



A: 2012. View of wastew weir (mile 98.90) looking toward Potomac River (NPS/NCR)

B: 2012. Original stone used to construct wastew weir being exposed on towpath side (NPS/NCR)

Archeological Sites

The project area and the surrounding lands have a long history prior to the construction of the Chesapeake & Ohio Canal. Several archeological studies have been carried out in and around the Williamsport cultural landscape. The majority of the information presented comes directly from the 2011 Environmental Assessment of Williamsport, unless otherwise noted.

No prehistoric sites have been identified within the Williamsport cultural landscape, although some have been located just outside the project area. In 1956, in cooperation with the Smithsonian Institution, an excavation was carried out on the upstream portion of the Potomac and Conococheague Creek confluence. This prehistoric site was partially excavated, exposing numerous bone pins, pottery, arrowheads, bones of buffalo and deer, and a quarry for clay used for red and yellow war paints (Hahn 1997:151). The majority of these prehistoric artifacts were found eroding from the upstream bank of the Potomac River about 200 feet from the creek. A single auger boring made by the project geomorphologist showed about 6.7 feet of Holocene sediment over a Pleistocene terrace. Indian tribes that roamed and lived in this area were Algonquins, Kruskaraw, Wassawomenkes, Iroquois, Delawares, and Catawbias (Sanderlin 1967:1-11).

Archeological overviews and assessments have been completed for various historic buildings,

structures, and features located within the project area. Sites that were found eligible for listing on the National Register of Historic Places (NRHP) within the area included deposits associated with the Lock Keeper's House at Lock 44, the Cushwa Warehouse, and the Darby Mill. There are other archaeological resources, not eligible for NRHP listing, which have been identified. The sites include the Miller Brother's Plaster Grinding Mill ruins, located upstream of Williamsport Basin, and the Steffey & Findlay Wharf, located just upstream of Lock 44 on the berm side.

Identification of contributing and non-contributing archeological resources is beyond the scope of this report, but the historic nature of the project area, its involvement with Civil War troop movements and the presence of features such as building ruins suggest that further contributing features may exist.

Buildings and Structures

Within the project area there are many buildings and structures associated with the C&O Canal. In addition to those still present from the period of significance, there are also those which are no longer extant, such as: a hay press/carpenter's shop, once located over the bypass flume at Lock 44; the Steffey & Findlay Coal and Lumber Firm; and the Miller Brother's Plaster Grinding Mill, which was located upstream of Cushwa Warehouse. These last two now remain as ruins. In spite of the loss of some buildings, the remaining structures are in their original locations and contribute to the overall integrity of the cultural landscape.

The majority of the information presented in historic condition comes directly from the 2011 Environmental Assessment of Williamsport, the 1994 Williamsport Cultural Landscape Report, List of Classified Structures, and the 1979 National Register Nomination File, unless otherwise noted.

Williamsport Power Generating Station at mile 99.74

Historic Condition

The Williamsport Power Generating Station, located upstream of the Cushwa Warehouse along the Conococheague Creek, was built in 1896. The building was constructed along the floodplain on uneven terrain. A retaining wall and berm, running perpendicular to the stations downstream wall, were installed and visibly divided the building into two sections. The portion of the structure closest to the canal is a one-story with gable roof, while its seven foot elevated counterpart is a one-story gable-on-hip roof. Both roofs were shielded by slate tiles. The station's foundation is made of concrete.

Construction of the Williamsport Power Generating Station took less than four months. Its walls are made of brick and measure 80 feet for the upstream and downstream walls, while the connecting walls measure 40 feet respectively. All windows and doors include decorative roundheaded arches. The location provided several advantages: the creek provided water to generate power for the town's trolley, 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.

Current Condition

The building is structurally sound and continues to exhibit its historic appearance. It was rehabilitated by the National Park Service during the 1980s and a new metal roof was set in place in 1983. Alterations to the historic roof material have not changed the building's overall historic appearance. The Williamsport Power Generating Station is evidence of the various industries that operated along-side the canal, making it a contributing feature of the cultural landscape and it has integrity to the period of significance. It is listed as being in Good condition on the List of Classified Structures (LCS).

Comfort Station near mile 99.74

Current Condition

During 2007-2008, the National Park Service installed a Comfort Station. The building is located upstream of Cushwa Warehouse, just a few feet from the Williamsport Power Generating Station's river side wall. It has double vaulted toilets; 4 inch thick reinforced concrete walls with barn wood texture; a 5 inch thick steel reinforced concrete roof; and a 5 inch steel reinforced concrete floor. There are also two individual portable toilets located near the berm side wall of the Comfort Station.

Cushwa Warehouse at mile 99.72

Historic Condition

Sited just off of Potomac Street and along the approximate 150 foot berm wall of the loading basin, the earliest brick portion of this structure dates to c.1800. The building may have initially functioned as the town's market house around 1810. The original foundation is made of limestone and partially laid out on bedrock. It was not until the 1830s, when trade along the canal began, that the enlargement of the building began. Proprietorship of the warehouse changed several times during the late 1800s. Owners included Charles Embrey and Victor Cushwa; the latter eventually becoming sole holder of the building.

The foundation additions after 1830 consisted mainly of concrete and rubble. This enlargement led to the building's current rectangular, two-story, brick and frame structure with gable roof. The upper and lower stream walls measure 102 feet respectively, while the adjoining walls measure at a smaller 36 feet. Since the warehouse had two distinct construction periods, the building is comprised of two distinct parts. The segment closest to the basin is primarily frame-sheathed with three types of clapboard and the original façade, that closest to Potomac Street, is of a salmon colored brick masonry. The buildings four façades were designed with an array of windows and doors. The two most important openings were those closest to the basin, which allowed a segment of Western Maryland's Railroad track to lead into the building's interior. In 1981 the National Park Service rehabilitated the warehouse, but it was not until 1995 that it was repurposed as a visitor center.

Current Condition

Cushwa Warehouse is the oldest building on the Williamsport basin and, according to the 2007 LCS assessment of the building, remains in Good condition. The warehouse maintains its

historic appearance and retains integrity.

Miller Brother's Plaster Grinding Mill Ruins at mile 99.60

Historic Condition

The Miller Brothers Plaster Grinding Mill was built in 1879 by brothers John A. and George A. Miller. The mill's location was just upstream of the Cushwa Warehouse. During its lifetime, it underwent a series of changes, in both a physical and functional aspect, but always remained in the same location. By the 1900s the grinding mill was converted into a lumber mill and in 1917 the lumber mill was turned into an ice house, which was destroyed by a fire in 1921. Seven years later, a building used as a slaughter house, was erected on the foundations of the ice house. This structure was then destroyed by the 1936 flood that swept through Williamsport.

Current Condition

Soon after the 1936 flood, a storage shed was built on the foundations of the slaughterhouse. The NPS demolished this structure in 1976. Then in 1994, the NPS filled the cellar hole of the former mill with earth, leaving only the structural footprint of the building visible. This structure retains integrity as a ruin. It is listed on the LCS in Poor condition.

Masonry Control Station for Lift Bridge at mile 99.69

Historic Condition

Little is known about this small building located near Lift Bridge. It is thought to have constructed in conjunction with the bridge during 1922-1923. Functioning primarily as a control station for the Lift Bridge, the building is located on the southwest corner of the tracks on the towpath side.

Constructed of hollow-terra-cotta-block walls faced with stucco and a slightly sloped concrete slab roof, it has an opening on the upstream wall which was a personnel door at one time, but there is no other evidence of doors or windows. Located within the building is a mechanism that resembles a streetcar controller and a relay cabinet. Only the frame, operating lever, vertical camshaft, and twelve porcelain cams of the controller remain. All of its electrical components are no longer extant. Similarly, the relay cabinet no longer contains any of its relays or other electrical components. Only disconnected portions of the conduits carrying power, control, and light wiring between the control house and bridge remain. No electrical drawings have been located, so little is known for certain about the electrical design (HAER 2008:8). This structure went out of use with the closing of the canal after the flood of 1924.

Current Condition

The Masonry Control Station is no longer covered in stucco and there is evidence of some deterioration due primarily to natural forces. The building is a contributing feature to the landscape and has integrity of location, design, setting, feeling, and association. Note: At the time of this inventory it was not listed on the LCS.

Lockhouse at Lock 44 at mile 99.32

Historic Condition

(Much of the information in this section is from the 2010 Historic Furnishing Report for Lock 44 by Mary Grassick)

There is some doubt as to the construction date of the Lockhouse at Lock 44. Although the building of a lockkeeper's house generally accompanied construction of a canal lock, records indicate that this was not the case at Lock 44. It is assumed that a house was in place by the early 1850's, but no definitive construction documentation has been found.

In the spring of 1835, the canal company awarded Joseph Hollman a business contract whose prime conditions were threefold; to act as lockkeeper for Lock 44 for twenty-one years, construct a flume around Lock 44, and to build a suitable lockhouse of either brick or stone. The two former conditions appear to have been met; however, Hollman never built the lockhouse. In February 1837 the canal company president and directors ordered Hollman to erect the lockkeeper's house, but two weeks later received a letter from Hollman explaining why he could not construct the house. By the beginning of the canal season in 1842, the lockhouse had still not been built. On December 8, 1848, the canal company's board of directors ordered the construction of a lockhouse at Lock 44, but it is not known if the board's 1848 order was satisfied.

During the Civil War several structures located at Lock 44 were burned, but no mention is made of the lockhouse. This could either because it was not damaged or that it still had not been constructed. After the war, in 1867, the canal company once more ordered that a suitable lockhouse be built at Lock 44. By this point, the canal company's board of directors had modified its 1828 specifications for lockhouse's (2010 NPS Historic Furnishings Report of lockhouse 44:13). While it is not certain, the existing lockhouse was probably built by this time and was definitely in place by the flood of 1899.

The earliest photograph of the Lockhouse is dated c. 1901, and shows only the front porch of the house, surrounded by a section of white picket fence.

Construction of the Potomac Edison Power Plant in 1922 had a major impact on the Lockkeeper's House. 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. The Lockhouse was damaged by severe floods in the 20th century, but survived the high waters.

The lockhouse has a 16 foot x 30 foot wood frame and is a full two stories with a simple gabled roof with brick chimneys at each end. Its stone foundation is about 12 inches high on the towpath face. A small porch with a shed floor is at the entrance door, and a one-story addition, 12 feet in length, is attached to the downstream wall of the house, which also has a brick chimney protruding through its gable roof. It had a wood shingle roof.

Current Condition

Portions of the lockhouse were stabilized in 1981 by the Historic Preservation Training Center (HPTC) and the maintenance personnel of the C&O Canal. The exterior of the house was completely painted in July 1988 and a copper spouting was stolen from the exterior, though it was replaced in 1995. The lockhouse chimneys were repaired in 1998. (2010NPS Historic Furnishings Report of Lockhouse 44:15-18). The present rolled roof is a modern replacement of the former wood shingles.

The lockhouse is a contributing feature of the cultural landscape and retains all aspects of integrity. It is listed on the LCS in Good condition.

Steffey & Findlay Wharf at mile 99.38

Historic Condition

The Steffey & Findlay wharf was constructed along with the firm's actual building in 1873. As mentioned, the firm traded and operated around coal and lumber, with the majority of the cargo being brought in from Cumberland, Maryland. Typical operations included the loading of material from canal boats, stationed along the wharf, onto trains bound for Baltimore.

Current Condition

Just upstream of Lock 44, on the berm side, an unnamed stream breaks the continuity of the prism wall. Within this split, on the upstream portion of the bank, the Steffey & Findlay wharf ruins are located. The wharf parallels the edge of the canal prism for about fifty feet upstream, while the rest of it hugs the bend and follows the unnamed stream for about ten or fifteen feet. The ruins consist of a retaining wall, approximately 120 yards long. The lower half, reconstructed by the NPS, is laid with mortar and the original upper half is dry laid.

The wharf is a contributing feature within the cultural landscape and retains integrity as a ruin. It is listed as being in Good condition on the List of Classified Structures.

Character-defining Features:

Feature: Williamsport Power Generating Station

Feature Identification Number: 163165

Type of Feature Contribution: Contributing

IDLCS Number: 12915

LCS Structure Name: Williamsport Power Generating Station

LCS Structure Number: 099.74

Feature: Cushwa Warehouse

Feature Identification Number: 163167

Type of Feature Contribution: Contributing

IDLCS Number: 12916

LCS Structure Name: Cushwa Warehouse

LCS Structure Number: 099.72

Feature: Miller Bros Plaster Grinding Mill Ruins

Feature Identification Number: 163169

Type of Feature Contribution: Contributing

IDLCS Number: 47507

LCS Structure Name: Miller Brothers Plaster Grinding Mill, Ruins

LCS Structure Number: 099.72

Feature: Masonry Control Station near Lift Bridge

Feature Identification Number: 163171

Type of Feature Contribution: Contributing

Feature: Lockhouse 44

Feature Identification Number: 163173

Type of Feature Contribution: Contributing

IDLCS Number: 17230

LCS Structure Name: Lockhouse - Lock #44

LCS Structure Number: 099.32A

Feature: Steffey & Findlay Wharf Ruins

Feature Identification Number: 163175

Type of Feature Contribution: Contributing

IDLCS Number: 46611

LCS Structure Name: Stone Bridge Abutment - 30th Street Bridge/Lock 3

LCS Structure Number: 000.49B

Feature: Comfort Station

Feature Identification Number: 163177

Type of Feature Contribution: Non contributing – compatible

Landscape Characteristic Graphics:



A: Post 1924. Cushwa Warehouse from Potomac Street looking toward canal (CHOH Historic Photo Collection)

B: 2012. Same view (NPS/NCR)



*A: Post 1924. View of power generating station from Potomac Street looking upstream
(CHOH Historic Photo Collection)*

B: 2012. Same view (NPS/NCR)



A: Post 1924. View of Bollman Bridge from towpath looking upstream (CHOH Historic Photo Collection)

B: 2012. Same view (NPS/NCR)



2012. Railroad lift bridge in its closed/lowered position. View looking upstream from Bollman Bridge (NPS/NCR)



2012. Lockkeeper's house at Lock 44. View of front façade from berm side. Note bypass flume in foreground and lock in the center (NPS/NCR)

Views and Vistas

Historic Condition

During the early years of the period of significance, the views in the project area up and down the canal were very open. There were very few trees that intruded into the view and if it weren't for the curve in the canal upstream of Lock 44, one could probably have easily seen all the way up to the Bollman Bridge and beyond. The Potomac River could be seen from not only the highest point in the area, atop Rearview Cemetery, but also from anywhere along the canal. In addition, an 1860 photograph indicates that the canal, Rearview Cemetery, the aqueduct, and several other canal features were quite visible from the Potomac River on the West Virginia shore. The open field nestled between the Potomac River and the canal was also part of the area's view.

Another key element in the historic view would have been that of flowing water. The water flowing through the canal prism was as large a part of the views as the wide, slow moving waters of the Potomac River. After the Civil War, however vegetation increased along both sides of the canal, blocking views of the Potomac River and Rearview Cemetery. Vegetation along the towpath and basin increased as well. Based on military sketches, bands of low growing vegetation and some deciduous canopies lined the canal, although the hillside and floodplain between the canal and Potomac River continued to be dominated by low grasses and groundcovers. The construction of the Potomac Edison Company's building also changed views within the project area.

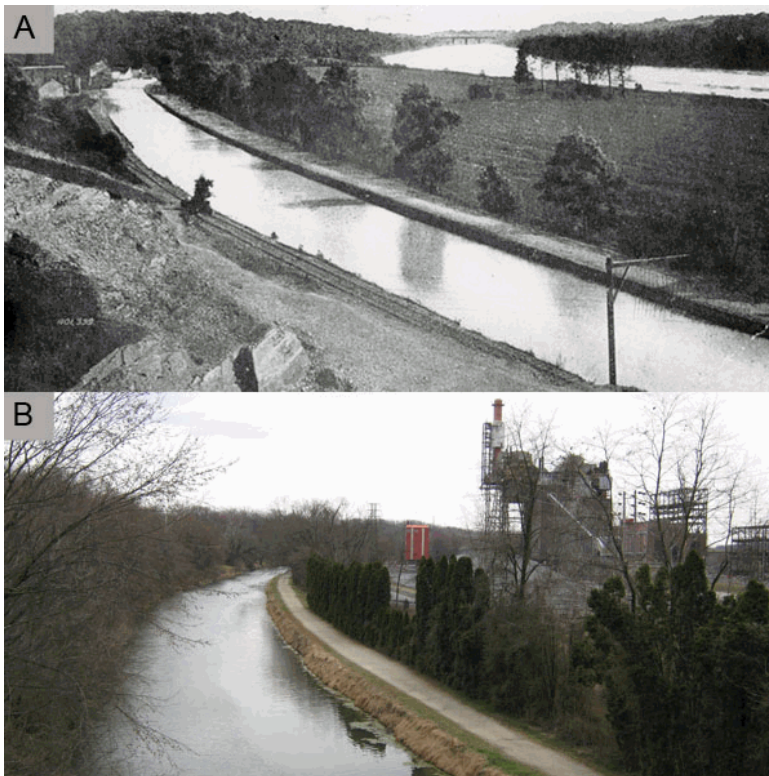
Current Condition

Currently the views up and down the canal and across the river are much less open than during the historic period. At times it is barely possible to catch a clear unimpeded view of the Potomac River from the canal, except around Conococheague Creek Aqueduct and a small area between the Washington-Berkeley Bridge and Bollman Bridge.

From the wastew weir at mile 98.90 upstream to the Bollman Bridge, there is not a stretch on either side of the canal that is not obscured by trees, buildings, fences, or transmission towers. However, the landscape around Lock 44 does open up significantly, especially on the island at the center of the lock and its immediate borders.

The views up and down the canal are now limited to a corridor lined with vegetation on either side of the canal. The historic views could be restored by reducing the heavier tree growth surrounding the lockhouse, removing the arborvitae screen near the industrial building, and decreasing the mass of trees along Rearview Cemetery's hillside. As the views and vistas currently stand, they have limited integrity.

Landscape Characteristic Graphics:



A: c.1900. Downstream view overlooking canal and Potomac River from atop Rearview Cemetery (CHOH Historic Photo Collection)
B. 2012. Same view (NPS/NCR)

Land Use

The project area's most active and noteworthy time of use was during the period of significance. Prior to that time, the activity near the project site included the establishment of Williamsport and the local ferry. Located at the confluence of the Potomac River and Conococheague Creek, the project area was used as a transportation corridor for mixed industry, trade, and commerce. Canal and railroad development during the period of significance continued to support the industrial and commercial uses that took advantage of the area's accessibility to transportation.

The majority of the information presented in historic condition comes from the 1994 Williamsport Cultural Landscape Report, unless otherwise noted.

Historic Condition

Before the canal and town of Williamsport came into existence, the project area and its surrounding landscape was unaltered and natural. The area's rich soils, abundant water supply, diverse native animal and plant life, and temperate climate were very seductive elements that led many of the first Native Americans to settle in the area. The Potomac River and Conococheague Creek confluence was especially welcoming to early Native Americans, who

depended on the area's river corridors for transportation and food. Once European settlement occurred in America, western exploration brought with it new ways to make use of the land.

European settlement around the vicinity of the project area did not begin until after 1732. The region was owned by Lord Baltimore and appropriately named Conococheague settlement. Between 1739 and 1749, Conococheague settlement had become part of Frederick County and eventually contained a population large enough to justify the creation of smaller counties. In 1776, the future town of Williamsport would be located in the new Washington County. A year later, the county appointed Edward Wyatt to keep a ferry across the Potomac River. The existence of this easily fordable area near the mouth of Conococheague Creek helped establish the primary river access route around the cultural landscape. The town of Williamsport was founded in 1786 by General Otho Williams. Although prone to flooding, the town was in an area within the Potomac River basin which allowed for permanent establishment. This location ensured easy access to the Potomac River and Conococheague Creek, both ideal for fishing and river transportation; the former ultimately leading to the rise and fall of the canal era in the United States.

By the early 1800s, navigation of the Potomac River to the west became a major objective for some of the states who were influenced by its many benefits. The cultural landscape was first affected by canal development in 1810, when canal workers from The Potomac Company (which later became the C&O Canal Company) were ordered to widen and deepen a fifteen mile stretch at the mouth of Conococheague Creek to allow for larger boat operations. Even prior to the coming of the canal, the town of Williamsport had already established itself as a main center for trade, especially in wheat and flour. The town had grown to include many diverse businesses including taverns, wood suppliers, tanners, and coal suppliers. The oldest building constructed within the project area, sometime between 1790 and 1810, is the present day Cushwa Warehouse.

When the C&O Canal Company finally began to build the canal near Williamsport, during the years 1832-1835, it brought another industrial and commercial aspect to the land use of the area. Tons of earth was moved to construct the prism and towpath and stone was brought in from local quarries to build the lock, flume, aqueduct, culverts and other stone structures. For those four years the cultural landscape would have been a busy construction site. Construction of Lock 44 began in September of 1832; its accompanying bypass flume was not built until 1835 by Joseph Hollman. In February 1833, construction of Conococheague Creek Aqueduct began and was completed in 1835. West Salisbury Street Bridge (Bollman Bridge) was constructed in 1835 to cross the canal prism and provide a direct route from the town to the ferry. Potomac Street had originally provided the most convenient access point to the river and ferry, but was now blocked by the busy canal industries and Williamsport Basin. For the most part, the commercial and industrial activities within the project area were concentrated either in the vicinity of Williamsport Basin or Lock 44. Land use on properties adjacent to the project area included a cemetery on the hillside downstream of West Salisbury Street Bridge and horse racing on the floodplain between the Potomac River and C&O Canal.

The Civil War reached the town of Williamsport in 1861. During the next four years, intermittent military occupation, use, and destruction enveloped the cultural landscape. Around 1870, the Western Maryland Railroad established a series of tracks along the Cushwa Loading Basin and canal. The introduction of a new commercial transportation industry within the project area led to some of the canal's most productive years.

After the enormously destructive flood of 1889, the C&O Canal Company could not recover financially and the B&O Railroad took over as the primary stockholder. The canal never regained the productivity of the previous two decades and was barely profitable for the next 25 years. With the exception of Cottrill's Slaughterhouse, built in 1928 over the ruins of Miller's Ice House upstream of the basin, and the carpenter's shop at Lock 44, most of the commercial use within the project area ended with the closing of the canal in 1924. Other informal types of land use developed; people began to live in canal boats along the canal, for example. Some industrial activity continued on adjacent land in the form of the Potomac Edison Company, but the overall historic function of the cultural landscape ceased. Another severe flood in 1936 finally washed away the slaughterhouse and also damaged the abandoned canal prism and its related structures, further reducing the industrial and commercial activities within the project area.

Current Condition

After the closing of the Canal, in 1924, land use shifted from primarily commercial and industrial to mostly recreational. This shift was intensified when the NPS took ownership of the C&O Canal in 1938. By the late-1950s, the NPS had repaired the full 184.5 mile towpath, allowing recreationalists to finally travel the entire canal distance. It is now used by hikers and bikers of the C&O Canal, fishers and boaters on the Potomac River, and picnickers who use the tables set up by the park just upstream of Cushwa Warehouse.

Although the ruins and extant buildings and features within the project area suggest the commercial and industrial aspect of land use, there is little evidence left of the bustling industrial canal community that existed during the period of significance.

Circulation

A variety of circulation types and structures were constructed to serve the historic commercial and industrial trade that developed within the Williamsport cultural landscape. All of the following circulation routes date back to the period of significance. Water-based circulation was the most employed, especially during the early years of the canal era. The canal prism, described in the Constructed Water Features section, was the most important of these. However, the ferry, located outside the project area and a contributing feature to the cultural landscape, also played an important role in water-based circulation until 1909. Other historic circulation features include the towpath, Bollman Bridge, and the non-extant pivot bridge at Lock 44. The rail lines, spurs, and Lift Bridge formed the rail-based circulation within the project area.

Non-contributing circulation features include the Washington-Berkeley Bridge (Route 11),

Lockwood Road, three earthen dykes, and two parking lots.

The majority of the information presented in historic condition comes from the 1994 Williamsport Cultural Landscape Report, unless otherwise noted.

Towpath – mile 99-100

Historic Condition

The approximately two miles of towpath that runs through the project area were probably constructed at the same time as the locks and other canal structures (1836-1839). An 8-foot wide constructed berm or one carved from the hillside, located on the river side of the canal and sloped to drain toward the river; the towpath consists of stone rubble and is about two feet above the prism water level. It was used as a path for the mules that pulled canal boats along the prism.

Current Condition

Today the towpath is an earthen path and remains in its historic location. The towpath material is harder-packed on the sides than in the center; as a result, a grassy median strip exists today. It is generally coarse dirt with some loose gravel.

The towpath is distinguished as its own space based on several factors: topography, material, and color. It remains a relatively flat linear path, whose function is now entirely recreational. The compacted dirt and crushed stone which make up the towpath along the cultural landscape can also be found in multiple areas along the Chesapeake & Ohio Canal NHP. The material gives off a distinct gray and tan hue which makes its linearity even more conspicuous as it contrasts greatly with the adjacent hedge and grass edges. The arrangement of this element retains its historic integrity.

It is documented as being in Good condition on the List of Classified Structures (LCS).

Pivot Bridge

Historic Condition

In 1838, Michael Byrnes and Company added a pivot bridge to Lock 44 for a cost of \$622. In order to stop retreating Confederate troops in 1862, the pivot bridge was destroyed by a Union army under the command of Captain Charles H. Russell. Historic photographs dating c.1900 show that a pivot bridge was in place over the lock so it must have been rebuilt after the war. Further research regarding the pivot bridge at Lock 44 is needed; however, it can be assumed that its construction followed general specifications for pivot bridges being built along the canal at the time.

Current Condition

The Pivot Bridge is no longer extant. It is not known when it was dismantled or destroyed. There are currently two modern wooden bridges connecting the plot of land on the bypass flume's berm side with the towpath on the riverside of Lock 44. Both bridges connect to the

islet centered between the lock and flume and were constructed by the NPS.

Bollman Bridge

Historic Condition

By 1838 a bridge over the canal was constructed that allowed for access to the river and ferry. In 1879, this early bridge was replaced when Wendell Bollman constructed a new bridge in about the same place, just downstream of Williamsport Basin and upstream of Lock 44. The bridge was an extension of West Salisbury Street and improved the important transportation route from the town to the Potomac River ferry crossing. The single-lane, vehicular bridge featured rubble-stone abutments, an iron truss system, and a wooden deck. After the floods of 1936 and 1937, complaints about the bridge's safety had been raised by citizens of Williamsport. Apparently the bridge was beginning to wash out and the wooden deck was deteriorating in some areas. In June 1937 the bridge was stabilized.

Current Condition

The NPS has undertaken several projects to improve the condition of the Bollman Bridge in recent years. In 1986 the stone piers were repointed, and in 1991 new wooden decking was installed and the metal parts of the bridge were painted. A new structural lower deck was added to the bridge in 2005, in order to strengthen the road bed and enable the bridge to carry the weight of modern vehicles. The bridge is used with frequency, mostly by vehicular traffic, and retains its historic appearance. The structure is a contributing feature of the cultural landscape and listed on the LCS in Good condition.

Western Maryland Railroad Track Trace

Historic Condition

The Western Maryland Railroad laid tracks within the project area in 1873. Via a spur that branched off the main railroad track at Conococheague Street, the railroad followed the creek downstream toward the Potomac River and eventually veered toward the canal, running adjacent to the prism, on the berm side, all the way to Lock 44.

Downstream of the Cushwa Warehouse, this main spur branched off in two other directions. One led toward the wharf at Williamsport Basin and the other directly into Cushwa Warehouse, making it an ideal locale for loading/unloading cargo. In 1923, a third connection was made near the two original spurs of 1873. This new track-line led across the canal via a lift bridge to Potomac Edison's construction site across the canal.

Current Condition

The portion of track trace running along the berm side of the canal, between Lock 44 and the Bollman Bridge, is heavily covered with overgrowth and barely noticeable from the towpath side, except for a few clearings where intermittent shadows indicate the location of the rails wooden sleepers. Underneath the Bollman Bridge, the track trace is completely covered by dirt, grass, and leaf litter. Upstream of the Bollman Bridge, the main track trace resurfaces and begins to bend toward Potomac Street, but breaks off and disappears right before reaching the

street intersection.

The original two-way split deviates toward the wharf and warehouse, but is now covered by grass and compacted dirt, where the only real distinction between the rail and ground is the tracks metallic glare. The track across the lift bridge remains in its historic location, On the towpath side, the track trace is free of any large vegetation and clearly visible, although areas of lawn have invaded parts of the rail bed. Note: At the time of this inventory the railroad track trace is not listed on the LCS.

Railroad Lift Bridge at mile 99.69

Historic Condition

In 1922, the Potomac Edison Company began construction on the plot of land between the Potomac River and C&O Canal. In order to transport construction material over to the site, the company decided to build a temporary railroad bridge across the canal, linking it to the original Western Maryland Railroad spur of 1873. It was located between the Bollman and Washington-Berkeley Bridges. An agreement was reached between Potomac Edison and the C&O Canal Company on January 8, 1923 to transform this into a permanent lift bridge.

While the bridge was to be owned by the Potomac Edison Company, it was built by the Western Maryland Railway, which had considerably more experience in such matters. Construction proceeded rapidly, and the new bridge was officially completed on June 11, 1923. The bridge itself is a single, riveted, plate-girder span that rests on concrete abutments. Two primary plate girders, 4 feet and one-half inch high and 41 feet and four inches long, transmit the bridge's dead and live loads to the two abutments. The bridge has a minimum width clearance of 16 feet and 4 inches and crosses the canal at an angle of 37 degrees from perpendicular. However, the bridge itself is not skewed, rather the abutments are skewed to the canal.

Once across the bridge to the towpath side, the Potomac Edison company's track ran almost one-half mile southwest to the plant's multi-track coal yard, where hopper cars discharged their loads. In the 1924 flood the river rose to 28 feet above normal at Williamsport, closing the power station and severely damaging the canal. To avoid its being washed away, the lift bridge was opened (raised) to its maximum. With a solid foundation and an open truss structure, the fixed portion of the bridge remained firmly in place. The Potomac Edison Company continued to use the lift bridge for coal deliveries until c.1970. All subsequent coal was then delivered by truck via Lockwood Road.

At some point, the bridge's electrical wiring and equipment was removed. Again, no record of when this was done, or by whom, has been located. A likely scenario is its removal for a World War II scrap drive. (2007-2008 Addendum to Potomac Edison Company: HAER No.MD-23).

Current Condition

Currently, the lift bridge is non-functional, but its metal truss system and masonry control station

(see Buildings and Structures), located near its southwest corner on the towpath side, remain intact. The open deck of the bridge has been partially covered with sheets of plywood nailed through wooden spacers and into the tops of the ties. It is unknown when this was done, but it is not original to the bridge. (2007-2008 Addendum to Potomac Edison Company: HAER No.MD-23).

The only one of its kind along the canal, the lift bridge at mile 99.69 is a significant feature within the project area. It is listed on the LCS in Fair condition.

Vehicular Bridge

Current Condition

Leading into the NPS parking lot on the berm side at Lock 44, a small vehicular bridge crosses the unnamed stream located a just upstream of the lock. The bridge is paved and there is a low wooden fence on either side of it. The bridge's supporting walls are made of stone (type unknown) and have three evenly spaced culverts going through them.

All of the circulation routes dating back to the period of significance remain in their historic locations and retain their integrity. In recent years, Interstates 81 and 70 have become major circulation features within the project area, but they are not owned or managed by the NPS.

Character-defining Features:

Feature: Mile 99-100 Towpath

Feature Identification Number: 163179

Type of Feature Contribution: Contributing

IDLCS Number: 45950

LCS Structure Name: Mile 99-100, Towpath

LCS Structure Number: 099.00

Feature: Mile 100-101 Towpath

Feature Identification Number: 163181

Type of Feature Contribution: Contributing

IDLCS Number: 45952

LCS Structure Name: Mile 100-101, Towpath

LCS Structure Number: 100.00

Feature: Bollman Bridge

Feature Identification Number: 163183

Type of Feature Contribution: Contributing

IDLCS Number: 11709

LCS Structure Name: Bollman Bridge - West Salisbury St.

LCS Structure Number: 099.65

Feature: Western Maryland Railroad Track Trace

Feature Identification Number: 163185

Type of Feature Contribution: Contributing

Feature: Railroad Lift Bridge

Feature Identification Number: 163187

Type of Feature Contribution: Contributing

IDLCS Number: 11710

LCS Structure Name: Railroad Lift Bridge

LCS Structure Number: 099.69

Feature: Parking Lot near Cushwa Warehouse

Feature Identification Number: 163191

Type of Feature Contribution: Non contributing – compatible

Feature: Pking Lot upstream of Lock 44-berm side

Feature Identification Number: 163193

Type of Feature Contribution: Non contributing – compatible

Feature: Vehicular bridge upstream of Lock 44

Feature Identification Number: 163201

Type of Feature Contribution: Non contributing – compatible

Small Scale Features

The project area contains a variety of small-scale features, some which are contributing to the project area and others which are non-contributing. These elements are functional features that provide detail and diversity to the project site, but which can sometimes create aesthetic concerns for the cultural landscape.

Creosote vat at mile 99.30

Historic Condition

When the hay press over the bypass flume at Lock 44 was converted into a carpenter's shop around 1850, there was also construction of a vat a few feet upstream of the shop. The vat contained creosote which was used as a preservative for the wood the carpenter's shop produced. The vat is a multi-sided structure with a concrete foundation. This foundation helped

support the cast-iron pipe which projected a few feet above it.

Current Condition

The creosote vat remains in its historic location. There is some indication of natural wear to the concrete foundation, but the structure is listed on the LCS in Good condition, and retains all aspects of integrity.

Park signage

Current Condition

The National Park Service has various elements of wayfinding placed throughout the project area. Located outdoors, close to the features they interpret, wayside exhibits are a series of visual, editorial, and environmental cues to help visitors navigate and experience the park without confusion and conflict. The majority of the signage within the cultural landscape is found around the Visitor Center (Cushwa Warehouse), along the towpath, and a few others near the Lockhouse and Lock 44.

Fence near Williamsport Power Generating Station at mile 99.74

Current Condition

There is a small fence located near the Williamsport Power Generating Station. The fence is situated perpendicularly from the elevated portion of the downstream wall. It is made up of wooden posts and a single metal chain linking them together. The fence was most likely added in the early 1980s when the NPS was rehabilitating the building. The fence is a non-contributing feature of the landscape.

Manhole near Williamsport Power Generating Station at mile 99.74

Current Condition

There is a manhole situated just downstream of the Generating Station, underneath a small deciduous tree. It is about two or three feet in diameter and covered by a metal lid.

Bike racks near Visitor Center (Cushwa Warehouse) at mile 99.72

Current Condition

Bike racks are situated along the upstream wall of the Visitor Center (Cushwa Warehouse) near the entrance door.

Picnic Benches near Comfort Station

Current Condition

There are seven wooden picnic benches located upstream of the Comfort Station's river side wall.

Fence near Potomac Edison outbuilding

Current Condition

A few feet downstream of the lockhouse, on the river side of the towpath and outside of the project area, a chain linked fence owned by the Potomac Edison Company surrounds their

small outbuilding.

Mile 99 post

Current Condition

Found just a few feet upstream of Lockwood Road, the NPS installed a small red wooden milepost indicating the approximate location of Mile 99 of the C&O Canal.

Railroad Tell-Tales

Historic/Current Condition

When the Western Maryland Railroad established its rail lines along the canal in 1873, they also installed various tell-tale poles. Although there is no documentation to verify the period of construction for the tell-tales, the materials and workmanship suggest that they date to the period of significance and should be considered contributing features.

The tell-tales were composed of a series of metal chains suspended over the tracks above the height of a boxcar. The chains were intended to give warning to a brakeman on the roof of the train that the train is approaching a low-clearance obstacle, such as a tunnel or a bridge (<http://en.wikipedia.org/wiki/Tell-tale>).

Currently, the tell-tales lined against the tracks on the berm side of the canal are still standing in their historic locations. There are two on site; one on either side of the Bollman Bridge.

Character-defining Features:

Feature: Creosote Vat

Feature Identification Number: 163203

Type of Feature Contribution: Contributing

IDLCS Number: 47508

LCS Structure Name: Creosote Vat

LCS Structure Number: 099.30C

Feature: Park Signage

Feature Identification Number: 163205

Type of Feature Contribution: Non contributing – compatible

Feature: Fence&manhole near Power Station

Feature Identification Number: 163207

Type of Feature Contribution: Non contributing – compatible

Feature: Bike Racks

Feature Identification Number: 163209

Type of Feature Contribution: Non contributing – compatible

Feature: Picnic benches

Feature Identification Number: 163211

Type of Feature Contribution: Non contributing – compatible

Feature: Mile Marker 99 concrete post

Feature Identification Number: 163213

Type of Feature Contribution: Non contributing – compatible

Landscape Characteristic Graphics:



A: 2012. View of creosote vat facing Lock 44 (NPS/NCR))

B. 2012. NPS mile marker (NPS/NCR)



*2012. Upstream view of tell-tale post above Western Maryland Railroad track remnants
(NPS/NCR)*

Condition

Condition Assessment and Impacts

Condition Assessment: Good

Assessment Date: 07/20/2012

Condition Assessment Explanatory Narrative:

The Condition Assessment Date refers to the date the park superintendent concurred with the findings of this CLI. This determination takes into account both the landscape and the buildings situated therein.

Impacts

Type of Impact:	Flooding
External or Internal:	External
Impact Description:	The project area has been severely impacted by flooding of the Potomac River and Conococheague Creek in the past. A natural occurrence, the towpath, canal, culvert, lockhouse, warehouse, and other buildings and structures within this component landscape will continue to be affected in the future.
Type of Impact:	Visitation
External or Internal:	External
Impact Description:	Some efforts to accommodate visitors, parking and comfort stations for example, threaten the historic integrity of the site.
Type of Impact:	Vegetation/Invasive Plants
External or Internal:	Both Internal and External
Impact Description:	Dense vegetation along the canal's towpath and berm side has negatively impacted its integrity. Most noticeable is the arborvitae hedge located on the Potomac Edison Company's land on the riverside of the towpath, downstream of Bollman Bridge, and the overgrowth of trees along the hillside of what is Rearview Cemetery. Vegetation found within the canal prism is atypical and should be removed if possible.
Type of Impact:	Erosion
External or Internal:	Internal

Impact Description:	Erosion is a minor problem along the watered areas of canal prism, especially along the towpath and berm side edges upstream and downstream of Lock 44.
Type of Impact:	Structural Deterioration
External or Internal:	Both Internal and External
Impact Description:	Conococheague Creek Aqueduct has been significantly impacted by several human and natural disasters, during and post period of significance. The aqueduct is in need of stabilization. As of 2007, the LCS determined the condition of the aqueduct to be fair.
Type of Impact:	Deferred Maintenance
External or Internal:	Internal
Impact Description:	Some of the structures are in need of stabilization, rehabilitation, and repair. As per 2007 LCS records, structures in fair condition include the Railroad Lift Bridge and Mile 99-100 of the canal prism. Those in poor condition include the wastew weir at Mile 98.90, Culvert #128, and the Miller Brothers Plaster Grinding Mill Ruins.

Treatment

Treatment

Approved Treatment: Undetermined

Bibliography and Supplemental Information

Bibliography

Citation Author: Bearss, Edwin C.
Citation Title: The Composite Locks: Chesapeake and Ohio Canal National Monument Historic Structures Report
Year of Publication: 1968
Citation Publisher: DOI/NPS NCR

Citation Author: Bearss, Edwin C.
Citation Title: Chesapeake & Ohio Canal: The Bridges
Year of Publication: 1968
Citation Publisher: DOI/NPS NCR

Citation Author: Bureau of Public Roads and the National Park Service
Citation Title: Report on Joint Reconnaissance Survey and Study
Year of Publication: 1950
Citation Publisher: Bureau of Public Roads and the National Park Service

Citation Author: Clark, Ella E. and Thomas F. Hahn
Citation Title: Life on The Chesapeake and Ohio Canal 1859 [Digital Copy]
Year of Publication: 1975

Citation Author: Department of Natural Resources for the State of Maryland
Citation Title: Native Trees and Shrubs in Maryland
Year of Publication: 2008
Citation Publisher: Department of Natural Resources/State of Maryland
Citation Type:
Citation Location: <http://www.dnr.state.md.us/criticalarea/trees.html>

Citation Author: Grassick, Mary
Citation Title: Historic Furnishings Report: Lockhouse 44
Year of Publication: 2010
Citation Publisher: Planning and Research Media Services/Harpers Ferry Center/NPS

Citation Author: HAER

Citation Title: Appendum to Potomac Edison Company, Chesapeake & Ohio Canal Lift Bridge; HAER No. MD-23

Year of Publication: 2007

Citation Type:

Citation Location: S:\CHOH_CLI\Williamsport CLI\Research\A & E Research\Buildings and Structures

Citation Author: HABS/HAER/HALS
HAER

Citation Title: Salisbury Street Bridge, Spanning C&O Canal (Milepost 99.65) & WM Railroad, Williamsport, Washington County

Year of Publication: 1987

Citation Number: MD-HAER MD-24; HAER MD, 22- WILPO,2

Citation Location: <http://www.loc.gov/pictures/item/md0584.sheet.00001a/> ;
<http://www.loc.gov/pictures/item/md0584/>

Citation Author: HABS/HAER/HALS
HAER

Citation Title: HAER MD, 22-WILPO,3 - Chesapeake and Ohio Canal: Conococheague Creek Aqueduct, Milepost 99.80

Year of Publication: 1987

Citation Number: HAER MD, 22- WILPO,3

Citation Location: <http://www.loc.gov/pictures/item/md1492.sheet>.

Citation Author: Hahn, Thomas S.

Citation Title: Chesapeake and Ohio Canal: Old Picture Album

Year of Publication: 1976

Citation Publisher: The American Canal & Transportation Center, Shepherdstown, W. Va.

Citation Author: Hahn, Thomas S.
Citation Title: The Chesapeake & Ohio Canal Lock-Houses & Lock-Keepers
Year of Publication: 1996
Citation Publisher: Institute for the History of Technology and Industrial Archeology,
West Virginia

Citation Author: Hahn, Thomas S.
Citation Title: Towpath Guide to the C& O Canal
Year of Publication: 1997
Citation Publisher: Harpers Ferry Association

Citation Author: Hansrote, Hazel Groves
Citation Title: National Register of Historic Places Inventory - Nomination Form
for the Chesapeake & Ohio Canal
Year of Publication: 1971
Citation Publisher: US DOI/NPS/Maryland Historical Trust
Citation Number: CHOH 66000036
Citation Type:
Citation Location: S:\CHOH_CLI\Williamsport CLI\National Register Nominations

Citation Author: Kytle, Elizabeth
Citation Title: Home on the Canal - An informal history of the C& O Canal, and
recollections of eleven men and women who lived and worked it
Year of Publication: 1983
Citation Publisher: Seven Locks Press, Cabin John, MD/Washington, DC.

Citation Author: Lake, Griffin, and Stevenson
Citation Title: An Illustrated Atlas of Washington County, Maryland [Compiled,
Drawn and Published from Actual Surveys by Lake, Griffin, and
Stevenson]
Year of Publication: 1877
Citation Publisher: Philadelphia
Citation Location: Restoration of Canal Operations at Williamsport Environmental
Assessment (2011)

Citation Author:	Mackintosh, Barry
Citation Title:	C&O Canal the Making of a Park
Year of Publication:	1991
Citation Publisher:	US DOI/NPS NCR
Citation Author:	Maryland Department of Natural Resources/Wildlife and Heritage Service
Citation Title:	Current and Historical Rare, Threatened, and Endangered Species Of Washington County, Maryland
Year of Publication:	2010
Citation Publisher:	Maryland Department of Natural Resources
Citation Author:	National Park Service
Citation Title:	Williamsport Cultural Landscape Report
Year of Publication:	1994
Citation Publisher:	US DOI/NPS NCR
Citation Author:	National Park Service
Citation Title:	Chesapeake and Ohio Canal National Historical Park Archives, Park Headquarters, Park Archives, Historic Photograph Files
Year of Publication:	1994
Citation Publisher:	US DOI/NPS NCR
Citation Author:	National Park Service
Citation Title:	Chesapeake and Ohio Canal National Historical Park Archives, Park Headquarters, Park Archives, Historic Resource Files
Year of Publication:	2012
Citation Publisher:	DOI/NPS NCR
Citation Author:	National Park Service
Citation Title:	Chesapeake and Ohio Canal National Historical Park Archives, Park Headquarters, Park Archives, Historic Structure Files
Year of Publication:	2007
Citation Publisher:	US DOI/NPS NCR

- Citation Author:** National Park Service
Citation Title: List of Classified Structures Database
Year of Publication: 2012
Citation Number: LCS ID: 047507;011805;047508;047509;000164;012915;
Citation Type:
Citation Location: www.hscl.cr.nps.gov
- Citation Author:** National Park Service
Citation Title: Restoration of Canal Operations at Williamsport: Chesapeake and Ohio Canal National Historical Park Environmental Assessment
Year of Publication: 2011
Citation Publisher: US DOI/NPS NCR
- Citation Author:** National Park Service
Citation Title: National Register Nomination for the Chesapeake & Ohio Canal.
Year of Publication: 1979
Citation Publisher: National Park Service
- Citation Author:** National Park Service: National Capital Team/Denver Service Center
Citation Title: Development Concept Plan for the Williamsport Area
Year of Publication: 1983
Citation Publisher: US DOI/NPS
- Citation Author:** National Park Service: Temkin, Martha, Bart Bickel, Barbara Stafford, and Jennifer Hanna
Citation Title: National Park Service Cultural Landscapes Inventory: Great Falls Tavern, Chesapeake and Ohio Canal National Historical Park
Year of Publication: 2004
Citation Publisher: US DOI/NPS NCR

Citation Author: National Park Service: Division of Interpretive Planning
Citation Title: A Plan for the Interpretation of Williamsport Chesapeake and Ohio Canal National Historical Park
Year of Publication: 1996
Citation Publisher: US DOI/NPS NCR: Harpers Ferry Center; Harpers Ferry, West Virginia

Citation Author: National Park Service
Citation Title: Aerial Photographs
Year of Publication: 1984
Citation Publisher: NPS
Citation Type:
Citation Location: NCR

Citation Author: Osmond, Tiffany
Citation Title: A Sketch of the Life and Services of Otho Holland Williams [Read Before the Maryland Historical Society, on Thursday Evening, March 6, 1851]
Year of Publication: 2008
Citation Publisher: John Murphy & Co., Baltimore, Maryland
Citation Number: EBook #27293
Citation Type:
Citation Location: <http://www.gutenberg.org/files/27293/27293-h/27293-h.htm>

Citation Author: Parsons, John G.
Citation Title: Chesapeake & Ohio Canal National Historical Park, District of Columbia/Maryland, General Plan
Year of Publication: 1981
Citation Publisher: US DOI/NPS NCR

Citation Author: Petrichick, Gary M.
Citation Title: Pocket Guide to the Chesapeake and Ohio Canal National Historical Park.
Year of Publication: 2006
Citation Publisher: Published by author (digital copy)

Citation Author: Reed, Paula Stoner and Douglass C.
Citation Title: Maryland Historical Trust Determination of Elegibility Form: Williamsport Historic District
Year of Publication: 1980
Citation Publisher: Maryland Historical Trust, Annapolis, Maryland
Citation Number: Inventory Number WA-I-481

Citation Author: Rubin, Mary H.
Citation Title: Images of America: The Chesapeake and Ohio Canal
Year of Publication: 2003
Citation Publisher: Arcadia Publishing, Charleston SC, Chicago IL, Portsmouth NH, San Francisco CA
Citation Number: Library of Congress Catalog Card Number: 200311192

Citation Author: Rubin, Mary H.
Citation Title: Images of America: Williamsport
Year of Publication: 2005
Citation Publisher: Arcadia Publishing, Charleston, South Carolina
Citation Number: Library of Congress Catalog Card Number: 200592675

Citation Author: Sanderlin, Walter S.
Citation Title: A Study of the History of the Potomac River Valley
Year of Publication: 1967
Citation Publisher: US DOI/NPS NCR

Citation Author: Shaffer, Donald R
Citation Title: We Are Again in the Midst of Trouble': Flooding on the Potomac River and the Struggle for Sustainability of the Chesapeake and Ohio Canal, 1828-1996
Year of Publication: 1997
Citation Publisher: US DOI/NPS NCR

Citation Author: Smith, Edward D.
Citation Title: Historic Resource Study of Williamsport, Maryland; Historical Data Chesapeake and Ohio Canal National Historical Park MD-DC-W.VA.
Year of Publication: 1979
Citation Publisher: Denver Service Center/National Capital Team - US DOI/NPS
Citation Number: CHOH #18012/CRBIB 019061

Citation Author: Southworth, C. Scott, David K. Brezinski, Randall C. Orndorff, Peter G. Chirico and Kerry M. Lagueux
Citation Title: Geology of the Chesapeake and Ohio Canal National Historical Park and Potomac River Corridor, District of Columbia, Maryland, West Virginia, and Virginia
Year of Publication: 2001
Citation Publisher: US Geological Survey/NPS/Maryland Geological Survey, West Virginia Geological an
Citation Type:
Citation Location: S:\CHOH_CLI\Williamsport CLI\Research\A & E Research\Natural Systems and Features\Geology

Citation Author: Tiner, Ralph W.
Citation Title: The Primary Indicators Method - A Practical Approach to Wetland Recognition and Delineation in the United States
Year of Publication: 1993
Citation Publisher: The Society of Wetlands Scientists
Citation Type:
Citation Location: Wetlands, Vol. 13, No.1, March 1993, pp. 50-64

- Citation Author:** Unknown
- Citation Title:** A National Register of Historic Places Travel Itinerary,
Chesapeake & Ohio Canal National Historical Park
- Citation Type:**
- Citation Location:** <http://www.nps.gov/history/nr/travel/wash/dc6.htm>
-
- Citation Author:** Unknown
- Citation Title:** Native Plants for Wildlife Habitat and Conservation Landscaping
for the Maryland Mountain Region
- Year of Publication:** 2011
- Citation Publisher:** US DOI/U.S. Fish and Wildlife Service
- Citation Type:**
- Citation Location:** <http://www.nps.gov/plants/pubs/nativesMD/pdf/MD-Mountain.pdf>
-
- Citation Author:** Unknown
- Citation Title:** Invasive Plant Atlas of the United States
- Year of Publication:** 2008
- Citation Publisher:** National Park Service/University of Georgia - Center for Invasive
Species and E
-
- Citation Author:** Unknown
- Citation Title:** Wikipedia; Locks on the C& O Canal, Wendell Bollman; Otho
Holland Williams; Potomac River
- Year of Publication:** 2012
- Citation Type:**
- Citation Location:** <http://en.wikipedia.org/>

Citation Author: Unknown
Citation Title: Recognizing Wetlands: An Informational Pamphlet
Year of Publication: 2012
Citation Publisher: United States Army Corps of Engineers
Citation Type:
Citation Location: http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/techbio/rw_bro.pdf

Citation Author: Unknown
Citation Title: National Register of Historic Places Registration Form for Williamsport Historic District
Year of Publication: 2001
Citation Publisher: US DOI/NPS
Citation Number: WA-I-845
Citation Type:
Citation Location: <http://mht.maryland.gov/>

Citation Author: Unknown
Citation Title: Wikipedia - French and Indian War
Year of Publication: 2012
Citation Location: http://en.wikipedia.org/wiki/French_and_Indian_War

Citation Author: Unrau, Harlan D.
Citation Title: Historic Structures Report: The Culverts
Year of Publication: 1976
Citation Publisher: US DOI/NPS/ Denver Service Center

Citation Author: Unrau, Harlan D.
Citation Title: Historic Structures Report: The Canal Prism Including Towpath with Canal Berm and River Revetments
Year of Publication: 1974
Citation Publisher: US DOI/NPS/ Denver Service Center

Citation Author: Unrau, Harlan D.
Citation Title: Historic Resource Study: Chesapeake & Ohio Canal
Year of Publication: 2007
Citation Publisher: US DOI/NPS /Hagerstown, Maryland

Citation Author: US Government
Citation Title: Sketch of the position of C.S. Forces Around Williamsport, Md., under Com. Of Maj. Gen. J.E.B. Stuart, Sep. 19th, 62. By Wm. W. Blackford, Capt., Corps Engrs. [Confederate]
Year of Publication: 1862
Citation Type:
Citation Location: National Archives

Citation Author: Wanschura, Cynthia
Citation Title: Maps: WilliamsportCLI_Large_20150319, WilliamsportCLI_Letter_20120319
Year of Publication: 2012
Citation Publisher: NPS NCRO

Citation Author: Wheelock, Perry
Citation Title: Farming Along the C& O Canal 1828-1971, A Study of Agricultural Sites in the C& O Canal National Historical Park
Year of Publication: 1997
Citation Publisher: US DOI/NPS C& O NHP, Hagerstown, MD