
National Park Service
Cultural Landscapes Inventory

2015

Revised: 9/2025



Cowen Farm

Upper Delaware Scenic And Recreational River

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Introduction

The Cultural Landscape Inventory (CLI)

The Cultural Landscape Inventory (CLI) is a comprehensive inventory of all cultural landscapes in the National Park System. Landscapes that are listed, or eligible for listing, on the National Register of Historic Places, or are otherwise managed as cultural resources and in which the National Park Service has, or plans to acquire, legal interest are included in the inventory. The CLI identifies and documents each landscape's location, size, physical development, landscape characteristics, character-defining features, and condition. Cultural landscapes have approved CLIs when concurrence with the findings is obtained from the park superintendent and all required data fields are entered into the Cultural Resources Information System (CRIS-CL) database. In addition, for landscapes not currently listed on the National Register and/or without adequate documentation, concurrence is required from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or the Keeper of the National Register.

Scope of the CLI

The information contained within the CLI is compiled from primary and secondary sources and through on-site surveys of the landscape. The level of investigation is dependent upon scoping the need for information.

The baseline information collected provides a comprehensive look at the historical development and significance of the landscape. Documentation and analysis of the existing landscape identifies character-defining characteristics and features and allows for an evaluation of the landscape's integrity and an assessment of the landscape's condition. The CLI also includes historic maps, drawings, and images; photographs of existing conditions; and a site plan that indicates major features. The CLI documents the existing condition of park landscape resources and identifies impacts, threats, and measures to stabilize condition. This information can be used to develop strategies for improved stewardship. Unlike a Cultural Landscape Report (CLR), the CLI does not provide management recommendations or treatment guidelines for the cultural landscape, but it may identify stabilization measures.

The Cultural Resources Information System (CRIS)

CRIS is the National Park Service's database of cultural resources on its lands, consisting of archeological sites, historic structures, ethnographic resources, and cultural landscapes. Cultural Resources Inventory System (CRIS) replaces three legacy inventory systems: ASMIS (archeology), CLI (cultural landscapes), and LCS (historic structures); and it reinstates the former ERI (ethnographic resources). This Cultural Landscape Inventory document reflects the information in a corresponding CRIS Cultural Landscape record.

Statutory and Regulatory Foundation

The legislative, regulatory, and policy directives for conducting and maintaining the CLI within CRIS are:

- National Historic Preservation Act (NHPA) of 1966 (16 USC 470h-2(a)(1)) Sec. 110
- Executive Order 13287: Preserve America, 2003. Sec. 3 (a and c)
- Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs
- Pursuant to the National Historic Preservation Act, 1998. Std. 2
- Cultural Resource Management Guideline, 1997, Release No. 5, page 22; issued pursuant to Director's Order #28 (DO-28)

The NHPA requires the identification, evaluation, and nomination of historic properties to the National Register of Historic Places and the maintenance and expansion of an inventory of cultural resources. DO-28 requires a cyclic assessment of the current condition of cultural landscapes based on an assessment interval, with a default of six years.

Use

Beyond fulfilling legal and policy requirements, park staff can use the Cultural Landscape Inventory in the following ways:

- To learn about park cultural landscapes (all staff)
- To inform management decisions (park managers)
- To inform project planning and development (park managers, facility managers, project managers, compliance specialists)
- To monitor the condition of the cultural landscape and take measures to protect its significance and integrity (cultural resource managers, facility managers)
- To recognize the stabilization and treatment needs of landscape features and plan work within cultural landscapes to address the needs (facility managers, cultural resource managers)
- To understand the cultural value of natural systems in a cultural landscape (natural resource managers)
- To create programming and educational materials based on site history (interpretation and education specialists)
- To recognize impacts within cultural landscapes and enforce protection measures (visitor and resources protection staff)

General Information

Property Level and CLI Numbers

Inventory Unit Name:	Cowen Farm
Resource Classification:	Cultural Landscape
CLI Identification Number:	300157
Parent Landscape:	300157
Inventory Status:	Complete

Park Information

Park Name:	Upper Delaware Scenic And Recreational River
Alpha Code:	UPDE
Park Organization Code:	4870
Park District:	UPDE
Region:	Northeast
Restricted:	Yes

Landscape Description:

The Corwin Farm property is located in southwestern New York state in the Town of Lumberland, a rural community situated along the Delaware River. The 4.24-acre site preserves an intact portion of the Delaware & Hudson Canal and a complex of buildings associated with an adjacent lock, including a locktender's house, barn, and outbuildings set within a landscape of mature trees, orchards, and lawns. Although it no longer holds water, the canal's stone retaining walls, earthen/gravel towpath, and bridge/causeway crossing still convey its nineteenth century design and use. The property is part of the Upper Delaware Scenic and Recreational River, a unit of the National Park Service established in 1978 to conserve, protect, and interpret 73.4 miles of the river and its outstanding natural and cultural resources. Corwin Farm currently serves as the park's Barryville ranger station.

The 171-mile-long Delaware & Hudson Canal operated from 1828 to 1898, and included 16 miles of gravity railway, 108 locks over 108 miles, and four cable-suspension aqueducts to connect the coal fields of Pennsylvania with the Hudson River and New York City markets. The aqueduct that carried the canal across the Delaware between Lackawaxen, Pennsylvania, and Minisink Ford, New York, approximately 5.5 miles upstream from the Corwin property, remains today. Designed by John Roebling, it was acquired by the National Park Service and underwent adaptive reuse restoration as a one-lane bridge. The structure is North America's oldest existing wire suspension bridge, and has been designated a National Historic Landmark and National Historic Civil Engineering Landmark.

HISTORICAL OVERVIEW

The beginnings of European settlement of the upper Delaware River valley began in the 1600s when the area was occupied by the Lenape people, later known as the "Delaware" or "Minsi." The landscape at that time would have looked similar in appearance as it does today, densely wooded and teeming with wildlife, though with a somewhat different composition of species. Initial contact may have occurred with Dutch traders in 1614 and Swedish immigrants in the late 1630s, but throughout much of the seventeenth century, white occupation of the valley was limited to occasional hunters and trappers.

European Settlement, 1750-1783:

It was not until the 1750s that the Delaware Company from Connecticut established the first permanent settlement along the Delaware River, between present day Narrowsburg and Callicoon. Named Cushetunk, its early residents built cabins and mills along a ten mile stretch of river, but subsequent growth was hindered by disputes between and amongst European and Native groups over land rights, and conflicts related to the French and Indian War. The Lenape population declined because of exposure to European diseases and migrations west to flee constant conflict. At the time of the American Revolution, a few hundred Lenape remained in the region, along with some Iroquois. A modicum of settlers and most of the Native people sided with the British during the Revolutionary War. In the summer of 1779 when tension was still rife, the Battle of Minisink took place on a hill above the town of Minisink Ford and was a decisive loss for the colonial militia.

Post-War Resettlement, 1783-1828:

The timber industry had begun to flourish in the valley before the Revolution, and when peace returned timber rafting became central to the local economy. With a seemingly endless supply of hemlocks and pines, timber was lashed together and floated as rafts downstream, fueling construction of buildings in the fast-growing cities and providing raw materials for ships' masts and the thriving shipbuilding industry. The valley economy also benefitted from the construction of several road turnpikes in the first decades of the 1800s, which were a great improvement over the old Indian trails and logging roads. The new travel routes prompted relocation of people to new population centers (hamlets), while boundary disputes between New York, New Jersey, Pennsylvania, and Connecticut and subdivision of townships resulted in occasional shifts in "municipal" boundaries. One such division occurred in the Town of Lumberland, New York, established in 1798 and decreased in size to form other towns in 1807 and 1809, and again in 1814 to form the Town of Highland. The Corwin Farm area is in the Town of Lumberland, adjacent to the Lumberland-Highland town line.

The Delaware & Hudson Canal, 1828-1898:

In the 1820s, attention to reliable transportation in the valley shifted from roads to canals because of the extraction of anthracite coal in the hills of Northeastern Pennsylvania. This type of coal was found to burn cleaner and more efficiently than the bituminous coal that was commonly used, and was already being shipped to markets in Philadelphia and Baltimore via canals. There was, however, no modern transportation system to deliver the coal to New York City, an opportunity that prompted merchants Maurice and William Wurts of Philadelphia to eventually establish the Delaware & Hudson Canal Company.

With the backing of the New York and Pennsylvania legislatures and other private investors, the Wurts Brothers surveyed potential routes from the coal fields to the Hudson River, using a series of canals and gravity railroads. The final route began as a gravity railroad to transport the coal down from the mines to the start of the canal in Honesdale, Pennsylvania. From there, the canal traveled along the Lackawaxen River to its confluence with the Delaware River at Lackawaxen, tracked along the Delaware River to Port Jervis, New York, and followed the Neversink River and Rondout Creek from Port Jervis to Eddyville, New York. Construction of the canal began in 1825 and was completed in 1828, overcoming a grade of 1,075 feet in 108 miles through a system of locks.

In addition to the canal itself, there was a great deal of infrastructure that contributed to its operation. Each of the locks along the way was manually operated by a locktender, who controlled the amount of water in the locks. Nearby were dwellings for the locktender and barns for the mules that pulled the boats. Some locks also had stores for supplies, and there were often gardens and orchards nearby for the locktender's family and canal boat crews.

Immediately south of Lock #67, soil excavated from the canal prism was piled in an area between the canal and the river, creating a raised terrace. The towpath ran along the west side of the canal, between this terrace and the canal. In c.1840, the Canal Company constructed a locktender's house at the north end of the terrace, and in c.1850 a barn and shed at the south end. The basement levels of both structures were at the same grade as the towpath, which along with stone retaining walls extending from the corners of the buildings provided direct access to and from the towpath. There was also a bridge crossing over the canal just south of the barn and a privy north of the house. Historic maps, and local tradition, indicate that J. Corwin served as the locktender from 1856-65. In the 1870s, the house was enlarged with an addition and in 1898 a small garden house was built.

The development of Corwin Farm coincided with a series of canal improvements. On three occasions during the 1840s, the canal and locks were enlarged in depth and width, and buttressed with stone retaining walls to prevent leakage. The new dimensions accommodated larger boats with greater capacity, from 20-30 ton-capacity boats that initially plied the waters to 140 ton-capacity boats. The Canal Company also improved the crossing at the Delaware River that had become a major bottleneck in the journey and the frequent site of collisions between canal boat and

timber raftsmen. The solution was to traverse the river with aqueducts: one across the Lackawaxen and one across the Delaware. Designed by engineer John Roebling (who would later design the Brooklyn Bridge), the aqueducts were completed in 1848, marking the peak of the canal's performance and technology. The canal's two aqueducts and new alignment saved an entire day on the trip from Honesdale to Kingston, an immense cost savings. The sum of these improvements made the Delaware & Hudson Canal the preeminent route for carrying Northeastern Pennsylvania's coal to tidewater, claiming 1,000,000 tons of coal transported annually in the 1850s.

Canal improvements also coincided with the emergence of other industries in the valley besides timber and coal. Tanneries made use of local hemlock stands, a necessary component in the tanning process before synthetic tannic acids were developed, while bluestone was quarried for use in paving and curbing to growing urban centers. Transportation options also evolved, and became more competitive with the arrival of the New York and Erie Railway into the valley in 1847. Initially the Delaware & Hudson Canal remained profitable, but in time it would struggle to match the constant innovations in efficiency that the railroad was achieving. More powerful locomotives, higher-capacity cars, and longer train sets were rendering canal transport less and less competitive. Winter weather conditions, droughts, and floods also had less impact on the railroad than the canal. The Canal Company itself had begun to enter the railroad business, and by the 1890s decided that the upkeep of the canal was not worth the cost. The final transport of coal occurred in 1898, after which it was dewatered. The canal prisms were filled in or left to ruin, while infrastructure was removed or repurposed. The buildings at Corwin Farm were saved and used by private landowners.

Post-Canal Development, 1898-1978:

The New York & Erie Railway was the first manmade north-south transportation route that extended the entire length of the upper Delaware River valley. The railroad connected the Hudson River to the Great Lakes, and with 12 stations along the 73 miles of its Delaware division, it very quickly improved the movement of goods and services to and from the valley. The railroad also introduced tourism into the valley economy. With New York City growing and industrializing at a tremendous pace, the railroad company promoted the upper Delaware River valley's fresh mountain air, scenic beauty, and cooler climate as a respite from the city's stifling summers. Hotels and boarding house style lodgings sprang up around the valley and served hundreds of thousands of visitors annually. Small farmhouses rented out the few spare rooms they had available, and many added on until they were transformed from simple farmhouses to full-fledged hotels. Local farmers also benefitted, producing flavorful apples that gained popularity as more visitors came into the valley.

The beautiful scenery and clean water that attracted tourists from New York City and elsewhere had begun to change by the turn of the twentieth century. Many of the area's forested areas had been cleared of pine and hemlock trees, while a new industry, acid factories, harvested the hardwood trees left behind by the tanneries to produce charcoal, wood, alcohol, and acetate of lime until petroleum-based synthetics were developed in the 1920s. These processes left behind a landscape that was much more open than wooded.

The popularity of the upper Delaware River valley as a summer destination remained high with the introduction of motorized vehicles, renewing an interest in road construction that had waned since the arrival of the canal and railroad. In the years after the canal ceased operations, some sections of the canal towpaths were repurposed as unimproved local roads, including the Corwin Farm and Lock #67 area. Road improvements on the Pennsylvania side and new construction on the New York side also improved connections and spurred the development of several towns, but the railroad remained the only continuous north-south route through the valley.

As the availability and use of automobiles increased, valley residents began to lobby for a new highway that would link the riverside towns together. Such a road was planned on the New York side as early as 1914, but it was not until 1934-39 that the road, designated New York State Route 97, was constructed from Port Jervis to Hancock. The alignment of Route 97 generally paralleled the river, and as a result destroyed much of the abandoned Delaware & Hudson Canal between Lackawaxen and Port Jervis. In some areas, the steep bluffs rising from the river pushed the highway route inland and thus preserved some canal sections, such as at Corwin Farm where the road was built between the canal and the ridge to the east. However, Lock #67 just to the north was filled in by the new highway. At the farm, a short driveway was developed from the highway to the Corwin bridge, while the section of towpath running north of the bridge was retained to provide access to the house and barn.

State Route 97 was also envisioned as a scenic route that would enhance the valley's tourist industry, which had experienced a decline during the Depression. With tourists increasingly favoring the automobile as their means of travel over passenger trains, lodgings in local farmhouses gained popularity. Corwin Farm, despite its scenic riverfront

location, remained a private family residence and was not used for tourist accommodations. The properties abutting the farm, however, were developed for such uses. In 1948 the former location of Lock 67 and land to the north was developed as Camp Tel Yehudah, a national leadership camp for Jewish teenagers. Land to the south of the farm was developed as private fishing camp by 1963, with a main building and multiple structures built near the canal. Within the farm itself, the Corwin bridge was removed and replaced with a causeway. The farm's landscape at this time featured mostly open conditions, except for scattered trees along the canal, on the bluff rising from the river, and between the house and towpath. There were around six orchard trees in the open fields on either side of the entrance drive.

National Park Service Management, 1978 to Present:

The decline of timber, tanning, bluestone, and acid factory ventures in the upper Delaware River valley allowed the landscape to return to a forested canopy that characterized the region before European settlement. Beginning in the 1970s, the valley became a tourist destination focused on what the land itself had to offer: hunting, fishing, hiking, camping, and recreational boating along the relatively pristine river.

In 1968, President Lyndon Johnson signed into law the Wild and Scenic Rivers Act, which aimed to protect selected wild rivers and scenic rivers from development that would substantially change their wild or scenic nature. Eight rivers were initially included in the system "that with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish, and wildlife, historic, cultural, or other similar values..." The Upper Delaware River was one of 27 other rivers identified for further study to determine if they qualified for inclusion in the system. That same year, five sites connected with Delaware & Hudson Canal were designated as a National Historic Landmark, including Roebling's Delaware Aqueduct.

In 1978, Congress designated 73.4 miles of the Upper Delaware River as part of the National Wild and Scenic Rivers System and as a unit of the national park system. The designation covered the river segment beginning at the confluence of the east and west branches of the Delaware River at Hancock, New York, and extended downstream to Railroad Bridge No.2, in the vicinity of Mill Rift, Pennsylvania. It also established an interim ridge to ridge boundary that could be modified as part of an interagency planning effort. The federal government acquired the Delaware Aqueduct in 1980, but most of the land in the park, including Corwin Farm, remained privately owned. A 1981 survey of canal remnants within the park boundaries noted that the intact canal section at Corwin Farm, together with the house, barn, and bridge, provided a sense of how the canal appeared historically when many residences were located just off the towpath.

A "Final River Management Plan for the Upper Delaware Scenic and Recreational River" was completed in 1986, and established a final boundary encompassing 55,574 acres. Regarding cultural resources, the Plan identified key cultural features in the designated river corridor for protection and enhancement, but acknowledged that most would not be acquired by the federal government. Instead, voluntary agreements would be used by the National Park Service, local governments, private groups, and private property owners to protect resources. Specifically, it proposed exploring the use of voluntary agreements with property owners who had intact features of the Delaware & Hudson Canal. The Plan also identified facilities that would be needed to manage the park, among them a ranger station in the Highland-Lumberland area of the park's south district.

In 1994, the National Park Service purchased the Corwin Farm site for development as the South District Ranger Station. According to park information, the site's convenient location off of State Route 97 would serve as the first National Park Service facility contacted by the great majority of visitors. The park rehabilitated the house, barn, shed, privy, and garden house, constructed a gravel boat access road/ramp from the towpath to the river for park use, and created parking spaces on either side of the entrance drive. Other additions at the farm have included new utility services and installation of a flagpole. In the fields east of the canal, the park has pruned existing orchard trees, propagated new orchard trees from the historic trees at the site, and installed new trees. Most recently, the park has removed non-native invasive plant species around the canal remnants and a hazardous tree near the house.

Archeological investigations at Corwin Farm have revealed a small collection of redeposited artifacts that indicate the presence of a nearby prehistoric and Native American site as well as a few canal era artifacts, but to date no significant archeological resources have been found. The investigations also revealed that the terrace upon which the Corwin house and Corwin barn were built is composed of redeposited soils from construction of the canal.

SIGNIFICANCE SUMMARY

Corwin Farm is a cohesive nineteenth-century historic district containing intact remnants of the Delaware & Hudson Canal, a locktender's house (Corwin house), a barn, and several other outbuildings and retaining walls. The property is locally significant under Criterion A in the area of transportation for its direct association with the operation of the Delaware & Hudson Canal. It is also locally significant under Criterion C in the area of architecture for its intact and representative buildings as examples of mid-nineteenth century vernacular architecture and construction. The period of significance for Corwin Farm is 1828 to 1898, the period that the canal was in operation.

Other components of the Delaware & Hudson Canal, including the Delaware Aqueduct designed by John Roebling, have been designated as National Historic Landmarks. As one of the few canal sections with intact remnants, the Corwin Farm property may be significant at the national level, but full context studies or National Register documentation will be needed to make such a determination.

ANALYSIS AND EVALUATION SUMMARY AND CONDITION

The physical integrity of the Corwin Farm property is evaluated by comparing landscape characteristics and features present during the period of significance—1828 to 1898—with the existing conditions as assessed in 2014. Many of the historic characteristics and features remain today. The influence of the upper Delaware River valley's natural features on the construction of the Delaware & Hudson Canal are still evident at Corwin Farm, where excavated material from the canal helped form a raised terrace between the river and the canal. The canal bed no longer holds water, but its U-shaped cross-section, stone retaining walls, stone culvert outlet, and towpath continue to illustrate the canal's design, especially when viewed from the location of the former bridge that is now a causeway. Visitors can walk across the causeway and along the towpath to the c.1840 Corwin house and c.1850 Corwin barn and shed, and understand the important roles these buildings had in canal operations. The park has rehabilitated the buildings, as well a historic privy and garden house, for use as a ranger station and other park operations. Stone retaining walls associated with the house and barn still support the grass-covered terrace, as do extant walls along the bluff. Visitors can also experience views of the canal and the river from the terrace, much as the locktender and his family did. The park has also planted and propagated orchards in the fields east of the canal, which are not-historic but add to the setting of this nineteenth-century vernacular landscape.

The most significant change to the Corwin Farm landscape since 1898 is the abandonment and dewatering of the canal. Non-historic vegetation now fills the canal bed and has begun to cover and damage some of the stone walls, while several large trees grow between the canal and the towpath, an area that historically would have been kept clear. The abandonment of the canal along with the construction of State Route 97 just to the east in the 1930s changed circulation patterns at the farm, shifting the site's entrance to the east side of the canal and formalizing a driveway from the highway to the canal crossing. The crossing itself, originally a bridge, was rebuilt as a stone causeway by the early 1960s. Another significant change related to the highway construction was the loss of Lock #67 just to the north of the Corwin Farm, and subsequent development of that property. Other additions at Corwin Farm – including regulatory signs, picnic tables, generator unit, radio antennae, wood deck, and a boat ramp – are generally inconspicuous in the overall landscape.

Overall, the Corwin Farm landscape is in "fair" condition. The park conducts preventative and cyclic maintenance on the buildings and their associated retaining walls at Corwin Farm. Lawns and orchard trees have been maintained or replanted, and lawn areas are in good condition. However, a significant number of non-historic trees are growing adjacent to and within the canal's stone retaining walls and along the retaining walls on the bluff overlooking the river, which are causing several wall sections to slump, bulge, and/or collapse. Other wall sections have been overtopped by soil and other material, rendering them partially or completely obscured. Woody vegetation is also taking hold within the canal itself and will eventually spread if unchecked. The surface of the entrance drive exhibits signs of erosion, especially at the causeway, and the split rail fence at the causeway is in need of repair.

A "fair" condition assessment indicates the property 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 property to degrade to a poor condition.

Landscape Hierarchy Description:

The National Park Service owns three landscapes within the Upper Delaware Scenic and Recreational River: Zane Grey House, Roebling Bridge, and Corwin Farm.

Landscape Type:

Historic Vernacular Landscape

Other Names:

Other Name:	Corwin Farm	Other Name Type:	Both Current And Historic
Other Name:	Lock 67 Locktender's Complex	Other Name Type:	Historic
Other Name:	Corwin Farm Ranger Office	Other Name Type:	Current

Concurrence Information

Concurrence Status:

Park Superintendent Concurrence: Yes

Park Superintendent Date of Concurrence: 09/18/2015

Completion Status Explanatory Narrative:

A draft (Level 1) Cultural Landscape Inventory was completed for the Corwin Farm property in 2001 by Historical Landscape Architects Nancy J. Brown and Cheryl Sams of the National Park Service Northeast Region Office in Philadelphia.

To complete this CLI, site visits were accomplished in December 2013 and June 2014. Conservation Associate/Landscape Architect Jaime Young prepared the site map, and Conservation Associate/Landscape Architect Ashley Braquet prepared narrative sections of the inventory. Senior Project Managers/Historical Landscape Architects Margie Coffin Brown and Eliot Foulds, and Cultural Landscapes Inventory Coordinator Jeff Killion, provided project oversight. The park contact for cultural resources is Carla Hauser Hahn, Management Assistant. She can be reached at 570-729-8251 or at carla_hahn@nps.gov.

Concurrence Graphic Information:

Attachment File Path

CULTURAL LANDSCAPES INVENTORY
CONCURRENCE FORM

Corwin Farm
Upper Delaware Scenic and Recreational River

Upper Delaware Scenic and Recreational River concurs with the findings of the Cultural Landscape Inventory (CLI) for Corwin Farm, including the following specific components:

MANAGEMENT CATEGORY: Must Be Preserved and Maintained

CONDITION ASSESSMENT: Fair

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 Landscape Inventory for Corwin Farm is hereby approved and accepted.



Superintendent, Upper Delaware Scenic and Recreational River



Date

Park concurrence form, September 18, 2015.

**Cultural Landscapes Inventory
CLI Updates Certification Form
2025**

Upper Delaware Scenic and Recreational River

Cowen Farm, Roebling's Delaware Aqueduct Site, Zane Grey House

Upper Delaware Scenic and Recreational River concurs with the updates for the following CLIs, including:

CONDITION ASSESSMENT: Fair – Cowen Farm
 Fair – Roebling's Delaware Aqueduct Site
 Fair – Zane Grey House

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 CLI Updates at Upper Delaware Scenic and Recreational River are hereby approved and accepted.

JESSICA WEINMAN

Digitally signed by JESSICA
WEINMAN
Date: 2025.09.29 07:52:46 -04'00'

9/29/2025

Acting Superintendent, Upper Delaware Scenic and Recreational River Date

Park concurrence form, September 29, 2025.

Revision:

Revised By	Type of Revision	Revision Date	Revision Narrative
Jeff Killion	CLI Update	09/29/2025	Three levels of effort have been developed for CLI Updates: A, B, and C. Level C is limited to a condition reassessment of the landscape; Level B includes C and is a targeted update of select data fields; Level A includes C and is a comprehensive update of all data fields. This 2025 update to the Cowen Farm CLI has been conducted at a Level C effort. See Landscape Documents in CRIS-CL for correspondences with park.

Geographic Information

State and County:

State

New York

Pennsylvania

County

Sullivan County

Potter County

Size (Acres): 4.24

Land Tract Number(s)

104-03

Boundary Description:

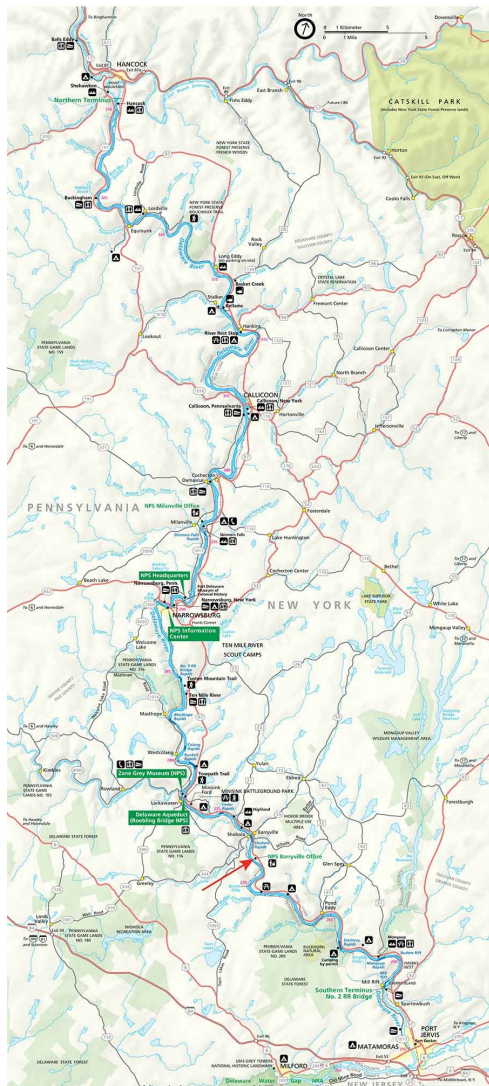
The Corwin Farm property encompasses 4.24 acres. The northernmost corner of the property is located 415 feet northwest from the entrance drive, running along the New York State Route 97 boundary. From this starting point, the boundary heads southeast along the highway for 648.33 feet. At this point, the boundary turns southwest and continues 248.14 feet to the edge of the Delaware River, where it turns northwest and follows the river's edge for 641.27 feet. Finally, the boundary heads back to the starting point by heading 329.99 feet in a northeastern direction.

Boundary Coordinates

Source	Type of Point	Latitude	Longitude	Narrative
	Area	41.459512	-74.893726	
	Area	41.458327	-74.891872	
	Area	41.457758	-74.892478	
	Area	41.44577	-74.894516	

Cowen Farm Upper Delaware Scenic And Recreational River

Location Map:



Map of the Upper Delaware Scenic and Recreational River. A red arrow indicates the Corwin Farm property. (NPS Park Map)



General location of Upper Delaware Scenic and Recreational River within the Northeast United States
(Map Source: <http://clients.mapquest.com/infoseek/mqcustomconnect?screen>).

Regional Landscape Contexts:

Type of Context: Physiographic

Description:

Corwin Farm is located within the southern edge of the Appalachian Plateau province. The province is characterized by mild relief, except for the steep escarpments cut by the Delaware and Lackawaxen Rivers. The elevation ranges from 595 feet above sea level at the river, to over 1000 feet above sea level at the ridgelines on either side of the river.

Type of Context: Cultural

Description:

The farm is located in the upper Delaware River valley, which is largely rural. The area is a popular seasonal tourist destination for people who wish to take advantage of the natural resources afforded by the river: rafting and canoeing, fishing, camping, and eagle watching. Many of the permanent residents of the Upper Delaware make their living accommodating the tourists. There are no major industries in the region, so the area does not currently face the intense development pressure that is threatening many other rural areas.

Type of Context: Political

Description:

The Corwin Farm unit of the Upper Delaware Scenic and Recreational River is located in town of Lumberland, Sullivan County, New York at the border of Pennsylvania. The state line between New York and Pennsylvania runs in the middle of the Delaware River.

Management Information

General Management Information

Management Category: Must be Preserved and Maintained

Management Category Date: 09/18/2015

Management Category Explanatory Narrative:

The Corwin Farm property meets the criteria for the “Must be Preserved and Maintained” management category because the site is related to the park’s legislated significance. The purpose of the Upper Delaware Scenic and Recreational River park unit is to conserve, protect, and interpret the river, its surrounding landscape, and other values that in 1978 qualified the Upper Delaware River for inclusion in the National System of Wild and Scenic Rivers and as a unit of the national park system. The values are described in “Delaware River Basin National Wild and Scenic River Values.”

The extant locktender’s house and barn, and intact canal remnants, at Corwin Farm prompted the National Park Service to acquire the property in 1994 for development as a ranger station. The following year, the New York State Historic Preservation Office (SHPO) determined that the property, under the name “South District Ranger Station, Lock 67 Locktender’s Complex,” was eligible for listing in the National Register of Historic Places for its direct association with the canal’s operation for its buildings as intact and representative examples of mid-nineteenth century vernacular architecture and construction.

Management Agreements:

Legal Interests:

Type of Interest: Fee Simple

Narrative:

Located in managed wilderness?: Unknown

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Narrative:

Adjacent lands are lands outside of the boundaries of the cultural landscape. The park owns the 4.24-acre Corwin property but does not own adjacent parcels. The parcel to the north was the location of Lock #67 and numerous buildings, but these features are gone and historic integrity has been lost. The parcel to the south, however, still contains intact canal remnants.

National Register Information

National Register of Historic Places

Documentation Status: SHPO/THPO - Documented

Documentation Narrative Description:

Corwin Farm lies within the boundaries of the Upper Delaware Scenic and Recreational River, which was authorized on November 10, 1978, as part of the National Wild and Scenic Rivers System and as a unit of the national park system. The Upper Delaware Scenic & Recreational River (SRR) includes resources associated with the Delaware & Hudson Canal, which have been documented in the National Historic Landmark Program and the National Register for Historic Places.

The Delaware & Hudson Canal was designated a National Historic Landmark (NHL) on November 24, 1968 (#68000051). The documentation, completed in 1968 (edited 2009), identified significance under NHL Criteria I and IV, and Themes V (Developing the American Economy) and VI (Expanding Science and Technology). Commerce, transportation, and engineering were listed as the areas of significance for the period beginning in 1825 when construction of the canal began, to 1898 when use of the waterway was suspended. The documentation noted there were many remaining traces of the former 108-mile long canal, and described five well-preserved sections. However, the canal segment at Corwin Farm was not one of them.

On September 12, 1995, the New York State Historic Preservation Office (SHPO) prepared a Determination of Eligibility (DOE) for the 4.24-acre property, under the name "South District Ranger Station, Lock 67 Locktender's Complex." The property was described as a cohesive nineteenth-century historic district that included intact canal remains, a locktender's house (Corwin house), a barn, several outbuildings, and retaining walls. The DOE identified significance under Criterion A in the area of transportation for direct association with the canal's operation and Criterion C in the area of architecture for the significance of its buildings as intact and representative examples of mid-nineteenth century vernacular architecture and construction. The DOE also noted the buried remains of Lock 67 in the adjacent parcel north of the property.

Based on the findings of the DOE, the National Park Service entered the following resources as contributing features on the List of Classified Structures: Corwin House, Corwin Barn, Corwin Shed, Corwin House Privy, Corwin Garden House, Corwin House-River Side Retaining Walls, Corwin House Retaining Walls, Corwin Barn Retaining Walls, Corwin Entrance Drive, Delaware & Hudson Canal Prism, Delaware & Hudson Canal Lock 67 Holding Area, Delaware & Hudson Canal Towpath, Delaware & Hudson Canal Towpath Retaining Walls, and Delaware & Hudson Canal Culvert.

According to research conducted for this CLI and the categories of National Register documentation outlined in the "CLI Professional Procedures Guide," the area and period of significance for the Corwin Farm property is adequately documented in consultations with the New York SHPO. The existing documentation adequately describes the site's historic resources that contribute to its significance. Therefore, for purposes of the CLI, the Corwin Farm property is considered "SHPO-Documented."

Eligibility: Eligible - SHPO/THPO Consensus Determination

Concurrence Eligibility Date: 09/12/1995

Concurrence Narrative:

Significance Level: Local

Contributing: Individual

Classification: District

Statement of Significance for National Register of Historic Places:

Corwin Farm is a cohesive nineteenth-century historic district containing intact remnants of the Delaware & Hudson Canal, a locktender's house (Corwin house), a barn, and several other outbuildings and retaining walls. The property is locally significant under Criterion A in the area of transportation for its direct association with the operation of the Delaware & Hudson Canal. It is also locally significant under Criterion C in the area of architecture for its intact and representative buildings as examples of mid-nineteenth century vernacular architecture and construction. The period of significance for Corwin Farm is 1828 to 1898, the period that the canal was in operation.

Other components of the Delaware & Hudson Canal, including the Delaware Aqueduct designed by John Roebling, have been designated as National Historic Landmarks. As one of the few canal sections with intact remnants, the Corwin Farm property is likely significant at the national level, but full context studies or National Register documentation will be needed to make such a determination.

CRITERION A

Transportation:

Corwin Farm is locally significant for its direct association with the operation of the Delaware & Hudson Canal. As stated in the park's 2014 Foundation Document:

"The first business in the United States to be capitalized for a million dollars, the Delaware & Hudson Canal operated from 1828 to 1898. The 171-mile-long engineering feat included 16 miles of gravity railway, 108 locks over 108 miles, and four cable-suspension aqueducts to connect the coal fields of Pennsylvania with the Hudson River and New York City markets. Roebling's Delaware Aqueduct carried the canal across the Delaware between Lackawaxen, Pennsylvania, and Minisink Ford, New York. The canal traversed the southern river corridor, paralleling the river for 25 miles between Lackawaxen, Pennsylvania, and Port Jervis, New York, before veering to the northeast. The stone remnants can easily be seen by both boaters on the river and tourists along the Upper Delaware Scenic Byway (State Route 97). (Foundation Document 2014: 66)

The Corwin Farm property contains features that were used in canal operations when it was active during the nineteenth century, including canal remnants, a house, barn, several outbuildings, and retaining walls. The farm, considered a small historic district by the New York State Historic Preservation Office, retains a high level of integrity as a canal residence and barn from the canal's period of operation. The house, while subjected to several additions, remains located adjacent to the towpath and retains many of its original features. The barn, which according to local tradition once housed the mules that pulled the canal boats, survives and retains many of its historic features. The canal prism and towpath also remain largely intact throughout the site.

CRITERION C

Architecture:

Corwin Farm is locally significant for its buildings as intact and representative examples of mid-nineteenth century vernacular architecture and construction. The house, built c.1840, illustrates a vernacular interpretation of the Greek Revival style. A compatible addition was built at the rear of the house in the 1870s, and a variety of early twentieth century alterations, including a stone fireplace and a side porch have been incorporated into the house. The house retains substantial integrity from the era of the canal's operations and includes original exterior siding and trim, window sash, basement shutters, floors, interior casings and original doors and hardware. One of the domestic outbuildings associated with the house is a rare, mid-nineteenth century board and batten privy. (DOE, 1995)

The barn, built in c.1850, is a wood-frame building located immediately adjacent to the towpath and according to local tradition served as the stable for Lock 67. The mortise and tenon barn frame is unaltered, and the vertical board exterior is substantially intact. The barn is situated between two retaining walls that permit direct access from the towpath to the basement. A small nineteenth century shed with a semi-finished twentieth-century interior is attached to the south side of the barn. The historic use of the shed is unknown. (DOE, 1995)

National Register Significance Criteria:

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

Area of Significance:

Area of Significance Category: Transportation

Area of Significance Subcategory:

Explanatory Narrative:

Area of Significance Category: Architecture

Area of Significance Subcategory:

Explanatory Narrative:

National Register Criteria Consideration:

National Register Periods of Significance (with Historic Context Themes):

Time Period: CE 1828 - CE 1898

Historic Context Theme	Subtheme	Facet	Other Facet
Developing the American Economy	Shipping and Transportation by Water	Canals	

Time Period: CE 1828 - CE 1898

Historic Context Theme	Subtheme	Facet	Other Facet
Expressing Cultural Values	Architecture	Greek Revival (1820-1840)	

NRIS Information:

State Register Documentation:

National Historic Landmarks:

National Historic Landmark? No

Theme:

Contributing:

NHL ID:

NHL URL:

Date:

Statement of Significance for National Historic Landmark:

World Heritage Site:

World Heritage Site? No

Category:

WHS ID:

WHS URL:

Date:

Is Resource within a designated National Natural Landscape: No

Chronology and Physical History

Chronology:

Year	Event	Major Event Narrative
CE 1614 - 1639	Inhabited	The Lenape Indians may have encountered Dutch traders as early as 1614 and Swedish settlers in the 1630s, but for much of the seventeenth century the valley's geographic isolation limits contact to the occasional hunter, trapper, and explorer.
CE 1704	Planned	Colonial New York Governor Edward Hyde grants vast areas of land on the western side of the Hudson River, including the Minisink Patent, a 200,000-acre area on the east side of the Delaware River in what is now portions of Sullivan and Orange counties. The future Corwin Farm property is located within this patent, in Lot 27.
CE 1750 - 1759	Inhabited	The first substantial European settlement, named Cushetunk, is established along the Delaware River between present day Narrowsburg and Callicoon.
CE 1798	Established	The town of Lumberland is established.
CE 1814	Established	The Town of Highland is established.
CE 1825	Established	The Delaware & Hudson Canal Company is formed to ship timber and anthracite coal to the eastern seaboard via a connection to the Delaware and Hudson Rivers between Honesdale, Pennsylvania and Kingston, New York.
CE 1825 - 1828	Built	The 108-mile long Delaware & Hudson Canal is constructed from Honesdale, PA to Eddyville, NY. The canal overcomes a grade of 1,075 feet through 108 locks and 22 aqueducts. Lock #67 is constructed during this period.
CE 1825 - 1828	Built	Soil excavated from the canal creates a terrace upon which the Corwin house and Corwin barn will later be built.
CE 1840	Built	The Corwin house and privy are constructed at the north end of a terrace between the canal and the river, just downstream from Lock #67. A bridge spanning the canal is built at the south end of the terrace, and a series of retaining walls are built on the west (river) side of the terrace and at the northeast and southeast corners of the house.
CE 1840 - 1850	Built	To improve efficiency, the canal and locks are enlarged in depth and width on three occasions in the 1840s, allowing for larger boats with greater capacity each time.
CE 1847 - 1848	Built	Construction of the New York & Erie Railroad reaches Port Jervis, NY and Lackawaxen, PA, introducing direct competition to the Canal Company. The railroad provides the first north-south means of transportation through the upper Delaware River valley. The railroad also introduces tourism into the local economy.

Year	Event	Major Event Narrative
CE 1848	Built	To eliminate what had become a bottleneck at the rope ferry at the confluence of the Delaware and Lackawaxen rivers, the Canal Company hires John Roebling to design an aqueduct over the Delaware River to carry canal traffic. The new structure requires a second aqueduct, the abandonment of three locks, and the construction of three new locks.
CE 1850	Built	The Corwin barn and Corwin shed are built at the south end of the terrace, as well as stone retaining walls extending from the northeast corner of the barn and southeast corner of the shed.
CE 1856 - 1865	Established	Various sources report that J. Corwin occupies the house from 1856-1865, and serves as the keeper of Lock 67 during that period.
CE 1856	Built	An 1856 map by Gates & Sons shows a north-south road from the lock area to a road on the ridge heading to Barryville.
CE 1870	Built	An addition is added to the west (river) side of the house around c.1870.
CE 1875	Built	A county atlas from 1875 identifies an east-west road from the lock area toward a schoolhouse and other roads on the ridge.
CE 1875	Established	The Corwin house is labeled with the name "A. Stage" on an 1875 atlas.
CE 1898	Built	A garden house is built just north of the Corwin house.
CE 1898	Abandoned	The Delaware & Hudson Canal is closed for business, primarily due to competition from the railroad.
CE 1920 - 1930	Built	According to the Determination of Eligibility, a side porch is added to the south side of the house addition in the early 1900s. The List of Classified Structures lists the dates as 1920-1930.
CE 1920 - 1930	Built	According to the List of Classified Structures, stone retaining walls are constructed along the bluff for terraced planting beds and at the corner of the barn.
CE 1923	Altered	By this time, some sections of the old towpath are repurposed as unimproved local roads, including the Corwin Farm area.
CE 1923 - 1939	Built	By this time, a short unimproved road provides access to the Corwin Farm, entering the site from the earlier east-west road.
CE 1934 - 1939	Built	State Route 97 is constructed along the east side of the river. In some areas, the steep bluffs rising from the river push the highway route inland, such as at Corwin Farm where the highway was built between the canal and the ridge to the east. However, adjacent Lock 67, which itself swung inland from the river, is destroyed and filled in by the new highway.
CE 1934 - 1939	Built	The route heading east from the Corwin bridge is likely formalized during this time as a driveway to the highway, and becomes the primary access to the Corwin Farm.
CE 1939 - 1940	Altered	The shed is converted to temporary living quarters.

Cowen Farm
Upper Delaware Scenic And Recreational River

Year	Event	Major Event Narrative
CE 1945 - 1948	Built	According to the List of Classified Structures, additional stone retaining walls are constructed along the bluff for terraced planting beds.
CE 1948 - 1963	Land Transfer	North of Corwin Farm, the former Lock 67 area and land to the north is developed as Camp Tel Yehudah, while to the south a fishing camp is built.
CE 1963	Altered	The Corwin bridge is replaced by a stone causeway that includes culvert pipe.
CE 1963	Planted	A 1963 aerial shows orchard trees in the fields on either side of the entrance drive.
CE 1978	Established	Congress designates 73.4 miles of the Upper Delaware River as part of the National Wild and Scenic Rivers System and as a unit of the national park system.
CE 1981	Planned	A 1981 survey of canal remnants within the park boundaries notes the canal section and buildings at Corwin Farm provide a sense of how the canal appeared historically when many residences were located just off the towpath.
CE 1986	Planned	The park-wide Final River Management Plan for the Upper Delaware Scenic and Recreational River (River Management Plan) is completed, and proposes relocating the south district ranger station to the Highland-Lumberland area.
CE 1994	Built	An outdoor stone fireplace and wood deck overlooking the river are constructed by this time west of the house, on the edge of the river bluff.
CE 1994	Purchased/Sold	The National Park Service acquires the 4.64-acre Corwin Farm for development as the South District Ranger Station.
CE 1995	Rehabilitated	The park rehabilitates the Corwin house.
CE 1996 - 2000	Built	A new underground utility corridor (electrical service and seasonal water line) and flagpole are installed between the house and barn, the septic tank north of the house is replaced, and drainage between Route 97 and the canal is channelized.
CE 1998	Built	The park develops a gravel boat access road/ramp from the towpath to the river for park use.
CE 1999 - 2000	Rehabilitated	The park rehabilitates the Corwin barn and Corwin shed.
CE 1999	Built	The park widens a portion of the entrance drive to accommodate parking spaces and installs an informational kiosk at the northwest corner of the lot.
CE 2001	Maintained	Trees at the Corwin orchard are pruned.
CE 2004	Rehabilitated	The park rehabilitates the privy and garden house.
CE 2006	Rehabilitated	The Dry Stone Conservancy rehabilitates the foundation and retaining walls at Corwin barn.
CE 2011	Maintained	Non-native invasive plant species around the canal are treated and removed.
CE 2011	Removed	A large hazardous tree next to the historic Corwin house is removed due to storm damage.

Physical History:

The following section documents the physical development and evolution of the Corwin Farm property. The information is extracted from several secondary sources, including: "Cultural Resource Survey, Volumes 1-6," by Albert Dekin and others (1983); "Final River Management Plan," by the Conference of Upper Delaware Townships (1986); "Final Environmental Impact Statement" by the National Park Service (1987); "Archeological Investigations for Miscellaneous Site Development Projects, South District Ranger Station," by Allen Cooper (1998); "Archeological Overview and Assessment," by Stuart Fiedel and Charles Lee Decker (2008); National Park Service Upper Delaware website; and review of historic photographs, maps, and plans.

PRE-HISTORY TO 1750

The upper Delaware River valley was a glaciated landscape in the last ice age, and exhibits physical features that are a result of these glacial events. As the ice retreated, the thawed land was able to support life and human habitation. Long before European settlement in the seventeenth century, the Lenape Indians and their ancestors lived off the area's abundant plant and animal life.

Paleo-Indian Period:

Archeologists have evidence that the Lenape Indians were preceded by a nomadic people now referred to as Paleo-Indians (12,000 - 10,000 years ago) who migrated to the North American continent via the Bering land bridge that connected Alaska and Russia. The Paleo-Indians encountered an environment very different than it is today. Winters were much colder and longer, and the land was covered with tundra grass, marshlands, and scattered forests of spruce and fir. To survive they lived a hunter-gatherer lifestyle, following game animals, fishing in rivers and lakes, and gathering wild plants. The Paleo-Indian's best known artifact is the fluted point, such as the Clovis point. Artifacts from this period are very rare but have been located in the upper Delaware River valley. (UPDE website, accessed 14 March 2015)

Archaic Period:

During the Archaic period (10,000 - 4,000 years ago), the climate began to resemble that of today. The Archaic Indians were still mobile, like their Paleo ancestors, but they did not travel as far because the rivers and forest provided what they needed. Wild plants, acorns, and other nuts were abundant, as were animals such as fish, shellfish, deer, elk, raccoon, and turkey. They hunted with spears, which could be thrown by hand or used with an atlatl, or spear thrower, that enabled the hunter to throw spears much harder and faster. Archaic Indians lived in caves, rock shelters, and wooden longhouses. Artifacts from the Archaic period found in the upper Delaware River valley include grooved axe heads, bannerstones, net-sinkers (small stones that were sewn into fishing nets), and several types of projectile points. (UPDE website, accessed 14 March 2015)

Woodland Period:

Hunting, fishing, trapping, and gathering wild foods continued to occupy men and women in the early and middle Woodland period (4,000 - 400 years ago). Bow and arrows allowed hunters to kill even more effectively and from a greater distance. Deer, elk, bear, turkey, and waterfowl were hunted, while smaller game animals such as squirrels and rabbits were trapped or snared. Archeological tests performed in 1996 discovered prehistoric artifacts from the late Woodland period on the Corwin Farm site, including a Levanna projectile point. These discoveries might indicate a prehistoric site lies near or beneath the existing terrace. (Cooper 1998: 1; Review Comments-Harmon, 10 August 2015)

Fish, especially shad, were also an important food source that were caught in huge fishnets upwards of 300 to 400 feet long. Fish were also speared or harpooned, or caught with fishhooks made of bone or dried bird claws. Many artifacts from the Woodland period have been found in the Upper Delaware valley, including large quantities of net-sinkers. (UPDE website, accessed 14 March 2015)

With the abundance of resources close at hand, Woodland Indians stayed within their lands and built sturdier homes with saplings and bark. They also engaged in agriculture, planting corn, beans, and squash that were eaten fresh or dried for storage. During the Late Woodland period, pottery vessels were made of clay from the riverbanks and used for cooking and storage. (UPDE Website, accessed 14 March 2015)

The Lenape and European Exploration:

The Lenape people, also called "Delaware" or "Minsi," lived in the Upper Delaware region at the time of European contact and had been permanently settled there since about 400 BCE. Historians differ in defining the territory of the Lenape, but it is generally thought they controlled the lands downstream from the mouth of the Lackawaxen River while the Iroquois people lived in upstream areas. The Lenape may have encountered Dutch traders as early as 1614 and Swedish settlers in the 1630s, but for much of the seventeenth century the valley's geographic isolation limited contact to the occasional

hunter, trapper, and explorer. (History of the Upper Delaware, 8; EIS 1987: 98)

At this time, the valley landscape was predominantly wooded with dense forests of oak, hickory, maple, ash, and hemlock teaming with wildlife. Early European survey records also reported beech, sugar maple, pine, and buttonwood. Large wildlife species such as cougar, bear, wolf, and moose roamed the wooded wilderness and provided ample food supply for the Lenape. Smaller mammals, birds, waterfowl, fish, mollusks and crustaceans were also abundant in the river valley. By the river's edge, the vegetation was described as "low and scrubby" with mostly oak, maple, and pine. (Dekin 1983: 2-46-48,59)

Around the turn of the eighteenth century, boundary disputes were also hindering European settlement of the upper Delaware River valley. The colonies of Connecticut, Pennsylvania, New York, and New Jersey each claimed portions of the valley, leaving boundary lines between the four colonies ill-defined and a source of long-standing dispute. To solidify New York's claim to the disputed area, several colonial governors engaged in the practice of awarding large land patents to speculators. In the first decade of the 1700s, Colonial Governor Edward Hyde granted vast areas of land on the western side of the Hudson River, among them the 1704 Minisink Patent, a 200,000-acre area on the east side of the Delaware River in Ulster and Orange counties. The future Corwin Farm property is located within this patent, in Lot 27 (Figure 1). (Dekin 1983: 3-43)

Land patents were granted with the approval of Queen Anne, with actual sale of the land conditional upon obtaining deed from the Indians in possession of the land. As a result, deep conflicts often arose because the Indians believed the land was for the use and enjoyment by all people and animals, while the colonists favored private ownership. With such uncertainty, the downstream sections of the Upper Delaware River south of present-day Port Jervis were settled in the 1690s, earlier than the upstream sections of the river that were settled in the 1750s and 1760s. (Dekin 1983: 3-44; Route 97 Report 2001: n.p.)

The arrival of the colonists would result in drastic changes in Indian lifestyle. The Indians traded with the colonists, exchanging animal pelts for brass kettles, iron axe heads, and cloth. In time, contact with Europeans proved so devastating to the Indians that their numbers rapidly dwindled. Many were killed by diseases, such as measles and smallpox, for which they had no immunity. The Lenape and the neighboring Iroquois became enemies, with the Iroquois Confederacy becoming the stronger of the two groups. By the mid- to late-1700s many Lenape had left the upper Delaware River valley. (UPDE website, accessed 14 March 2015)

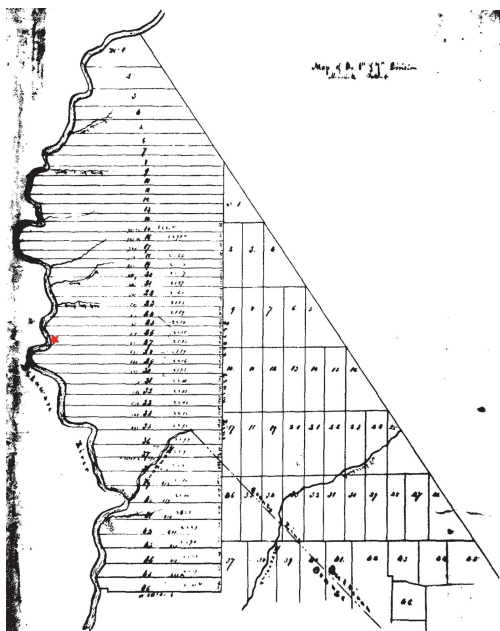


Figure 1. Lots in the First and Seventh Divisions of the Minisink Patent, Sullivan and Orange Counties. The Corwin Farm area is noted with a red star. (Dekin, Cultural Resources Survey 1983: 7-68)

EUROPEAN SETTLEMENT, 1750-1783

More substantial European settlement in the upper Delaware River valley began when frontiersmen from Connecticut arrived in the 1750s. Organized as the Delaware Company, they based their land claim on the contention that Connecticut had been granted lands west of the Delaware River in the seventeenth century. These lands were also claimed by William Penn, as well as the Indian nations. Land claim problems also existed on the east side of the river, where New York and New Jersey claimed overlapping segments. The disputes were only resolved by litigation after the American Revolution. (EIS 1987: 98)

The settlement, called Cushetunk, was located along the river flood plains between present day Narrowsburg and Callicoon. Small communities of log cabins grew up on both sides of the river, often near the mouths of tributaries suitable for saw and gristmill sites, including Cochection, Damascus, and Milanville. By 1760, the Cushetunk settlement stretched almost ten miles in length along the river and eight miles in width, and included 30 cabins, 17 farms, and two mills. It was around this time that the lumber rafting industry began, as the area's tall and straight trees were found to be ideal for ship masts. Raftsmen floated the white pines and later hemlocks to shipyards in Philadelphia (Figure 2). (Curtis 1992, Sec.E: 2-3; Dekin 1983:3-46,49,67-68,71,74)

In response to the French and Indian War, Colonial settlers built a stockade for protection from occasional Indian raids. The worst violence came in 1763, following the assassination of the Teedyuscung, King of the Lenape, by a party of Iroquois warriors. His murder was blamed on the Colonial settlers, and a raiding party of Lenape Indians headed for Cushetunk and destroyed the settlement at Ten Mile Creek. The same raiding party attacked the blockhouse, but the settlers there survived. (Dekin 1983: 3-50; Curtis 1992, Sec.E: 3)

The outbreak of the Revolutionary War in 1775 brought a number of significant changes to the settlements in the valley. Many settlers initially tried to stay neutral, but in time most favored the patriot (Whig) side. The early years of the war saw little activity in the valley, but by 1777 many of the Iroquois nations had broken neutrality to side with the British (Tories). Thereafter, the upper Delaware River valley became an avenue of invasion for Indian and Tory units, prompting many settlers to leave the valley. One of the bloodiest battles of the Revolution took place on a hill just east of Minisink Ford in 1779, pitting militiamen and local volunteers against a party of Tory and Indian raiders, who won a decisive victory. Indian raids continued sporadically until the end of the Revolution in 1783, after which the Indian population quickly declined and settlers returned to the valley. (Dekin 1983: 3-51-52; EIS 1987: 99; Curtis 1992, Sec.E: 4)

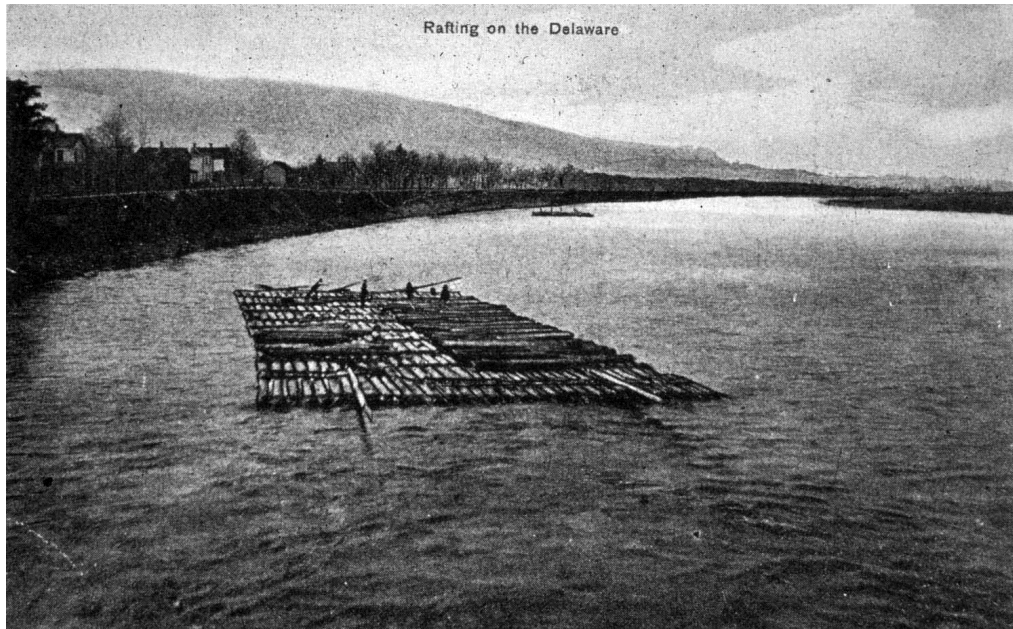


Figure 2. Log rafting on the Delaware River, date unknown. (UPDE, 24DHSS LOG RAFT)

POST-WAR RESETTLEMENT, 1783-1828

Settlement after the Revolutionary War occurred slowly, in part because of ongoing boundary disputes and confusing land claims between New York, New Jersey, Pennsylvania, and Connecticut. Following a Congressional decision in 1782, the only states with claims to land north of Port Jervis were New York and Pennsylvania, with the Delaware River itself serving as the boundary between the two. In the future Corwin Farm area, sources indicate there was at least one occupant by 1789. By 1798 the Corwin site was part of the town of Lumberland, which by 1800 reported a population of 733. Lumberland was one of twenty-two villages in the valley, where early occupations included lumbering, quarrying, and farming. (Dekin 1983: 3-53,63-64; Route 97 Report 2001: n.p.)

Another reason for the slow rate of growth was the valley's continued isolation and inaccessibility. The Delaware River was for the most part considered unnavigable. Conditions improved in 1792 when Pennsylvania improved the river channel by removing large boulders, which helped eliminate some of the worst dangers for small craft. However, the river's rough and shallow waters discouraged large scale attempts to transport possessions or supplies by water. Throughout much of the year, navigation was largely by rafts, canoes, and other crafts of low draft, all of which were extremely limited in the amount and the nature of supplies they could carry into the valley. In winter months, goods were hauled from New Jersey to as far as Narrowsburg using the iced-over river as a road. (Dekin 1983: 3-65-66)

Various logging roads were in existence on both sides of the river by the turn of the nineteenth century, and while they were often in better condition than the old Indian trails, they were difficult to maintain and often impassable due to the damp climate. More significant changes came when New York began building roads to connect remote areas like the upper Delaware River valley with New York City. One of the first road projects was the Sackett Road, constructed in 1795 between Cohecton and what would later become Wurtsboro, followed by the Newburgh and Cohecton Pike, built between 1804 and 1810. The turnpike established Cohecton as the major village in the Upper Delaware valley. Inns and taverns grew in the community, and the village became a major terminus for mail deliveries and stage coaches. Another turnpike to the valley was envisioned by the Mount Hope and Lumberland Turnpike Company, chartered by the New York legislature in 1812. Work on the road began in 1815, and was eventually completed as far as Narrowsburg. (Dekin 1983: 3-73-74,78-80; EIS 1987: 100)

According to Albert Dekin, communication between the New York and Pennsylvania sides of the upper Delaware River valley was not imperative to the local economy at this time. Connections that did exist were often at points in the valley where villages developed across from one another, such as Pond Eddy. Aside from natural fords such as the Minisink at the mouth of the Lackawaxen River, the first step in the development of cross-river communication was the rope ferry, which existed at various times in a number of locations, including one at Lackawaxen. The rope ferries were considered dangerous and were eventually replaced by bridges, the earliest of which were located at Narrowsburg and Cohecton in the 1810s. (Dekin 1983: 3-82-83)

Political boundaries also changed around this time. The town of Lumberland was decreased in size to form other towns in 1807 and 1809, and again in 1814 to form the Town of Highland. Sullivan County was formed out of the western half of Ulster County in 1809. The Corwin Farm area is in Sullivan County in the Town of Lumberland, adjacent to the Lumberland-Highland town line. (Dekin 1983: 3-54; Wikipedia: Lumberland NY)

THE DELAWARE & HUDSON CANAL, 1828-1898

During the early years of the nineteenth century, interest in roads and bridges in the upper Delaware River valley ran high, as recent construction offered some improvement over the uncertainties of navigation on the river itself. In the 1820s, however, attention to reliable transportation shifted to the Delaware & Hudson Canal Company, a new step in the attempt to solve the problem of accessibility that remained the valley's biggest challenge. (Dekin 1983: 3-83)

The Delaware & Hudson Canal was the consequence of a plan envisioned by Maurice and William Wurts, Philadelphia merchants who owned considerable land holdings in the coal-rich fields of northeastern Pennsylvania. In their mines was anthracite coal, which was found to burn cleaner and more efficiently than the bituminous coal that was commonly used. While the Delaware River provided efficient access to Philadelphia and Baltimore, those markets were already saturated. Instead, the Wurts brothers decided to send their coal to fuel the industrial foundries and homes in the untapped New York City area. The distance and terrain was formidable, but as the recently completed Erie Canal was proving, water was the most feasible way to transport the coal. An initial survey of a canal route to the Hudson River was completed by John B. Mills, while a more intensive survey was undertaken by John L. Sullivan in 1823. Acting on these surveys, and with the support of private investors and enabling acts by both the New York and Pennsylvania legislatures, the Wurts brothers formed the Delaware & Hudson Canal Company in 1825. (Dekin 1983: 3-83-84)

Construction of the canal began in 1825 and finished in 1828, overcoming a grade of 1,075 feet in 108 miles through locks and aqueducts. The start of the canal began in Honesdale, Pennsylvania, at the terminus of a gravity railroad that transported the coal down from the mines in the mountains. From Honesdale, the canal followed the Lackawaxen River to Lackawaxen, paralleled the Delaware River from Lackawaxen to Port Jervis, New York, and then followed the Neversink River and Rondout Creek from Port Jervis to Eddyville, New York (Figure 3). Originally, the planners had envisioned using the Delaware River itself between Lackawaxen and Port Jervis as a portion of the canal, but it was determined to be more feasible to build the canal along the New York (eastern) bank, parallel to and separate from the river. To safely allow passage of boats from the north bank of the Lackawaxen to the continuation of the canal on the east bank of the Delaware, a slackwater dam was built on the Delaware, just below the mouth of the Lackawaxen, to create an artificial eddy. (Dekin 1983: 3-84)

The natural waterways of the rivers, as well as tributaries, creeks, and natural drainage, supplied the necessary water for the canal. The canal itself was simply an engineered ditch with a flat bottom and sloping sides, typically lined with clay "puddling" to prevent the loss of water. In its original configuration the canal prism was 4 feet deep, with an average water line of 28-30 feet and a bottom width of 20 feet, with some variations based on local topographic conditions. The canal featured 108 locks and 22 aqueducts, and on the Delaware section there were thirteen locks that raised or lowered boats a total of 130 feet in a distance of twenty-four miles (Figures 4 and 5). The locks were nine feet-four inches wide and seventy-six feet long, and designed to accommodate boats carrying up to 40 tons, although portions of the canal could not allow passage of boats above 30 tons. Boats were pulled through the canal by mules on earthen towpaths located on one or both sides of the canal. (Dekin 1983: 3-84-85, citing Wakefield 1965: 93-122)

In addition to the canal itself, there was a great deal of ancillary infrastructure that contributed to its operation. Each of the locks along the way was manually operated by a locktender, who would have lived in close proximity to the lock. A locktender's complex also included a barn to provide shelter and hay for the mules. Some had an associated general store or even a warehouse to supply boat operators with provisions for their onward journey.

The locktender's job was to operate the lock mechanism, ensuring the correct working of the locks, maintaining proper water level, and managing the clear passage of the boats. The changing of the water level could be a slow transition, and boats passed from the early morning until late at night. The boatmen typically began grooming and harnessing their mule team around 4am, and were in motion until the locktender closed for the night, typically around 10pm. The locktender might have worked a sixteen-hour day or longer, and the boats would only stop their travel because they could

not proceed when the locks were closed. A typical boat and its mule team could travel about 30 miles in a day.

The locktender and his family were self-sufficient, as locks were placed where the grade change necessitated them, not necessarily near a village where it was convenient to purchase goods at will. Orchards, vegetable gardens, flowers, herbs, and field crops were usually important aspects of the adjacent landscape. Products grown and produced at the home could be sold and bartered with passing boats on their journey of ten or more days.

Canal Improvements:

Although not initially a financial success, the Delaware & Hudson Canal Company prospered as the demand for anthracite coal increased. To improve efficiency, the canal and locks were enlarged in depth and width on three occasions in the 1840s, allowing for larger boats with greater capacity each time. Boats with 140 ton-capacity ultimately replaced the 20-30 ton boats that initially plied the waters. The canal prism was deepened from 4 to 6 feet, widened from 20 to 30 feet at the bottom and 28 to 48 feet at water level. As the canal sides were cut back, dry-laid stone walls were built to decrease leakage from the clay beds and prevent failure of the banks. Locks were increased in length from 75 to 90 feet, and in width from 9.5 to 15 feet. Most locks had a 10-foot lift, and all were constructed with stone and lined with wood. (Scott 1981: 3; Dekin 1983: 3-86)

Not long after the canal opened, conflicts developed between canal men and raftsmen, stemming largely from the navigational dangers posed by the slackwater dam and the slow passage of canal boats across the Delaware. This led to frequent arguments between the two groups as well as damage to boats and cargo. The solution came in 1847 when the Canal Company commissioned John A. Roebling to build an aqueduct that would carry the canal boats over the Delaware (Figure 6). Located just downstream from the dam, the alignment of the structure required construction of a second suspension aqueduct across the Lackawaxen River, the abandonment of three locks on the north side of the Lackawaxen, and the addition of three locks on the east side of the Delaware (Figure 7). In addition to these aqueducts, Roebling also rebuilt two of the larger aqueducts along the system as suspension bridges. Roebling's Delaware Aqueduct, in particular, marked several important developments in suspension engineering that would later be incorporated into his design of the Brooklyn Bridge in 1883. (Dekin 1983: 3-86-88; Wakefield 1965: 84-92; Scott 1981: 5)

The Delaware River section had long been considered one of the chief obstructions in the entire canal route, and the Canal Company had hoped that Roebling's aqueducts would improve overall speed and navigation. Although it did help, the nature of the Delaware section was such that speeds exceeding three miles an hour were never achieved. The Delaware Aqueduct alleviated the problem of collisions between canal boats and lumber rafts, but the slackwater dam was retained to guarantee a stable eddy for the aqueduct abutments. Although the dam was modified to allow passage of rafts, it continued to cause navigation problems (Figure 8). (Whitford 1906: 750; Dekin 1983: 3-86-88)

Corwin Farm:

The area now known as Corwin Farm was located along the Delaware & Hudson Canal between miles 76.65 and 76.86 (as measured from Eddyville to Honesdale), and next to Lock #67 situated just upstream at miles 76.90 to 76.92. Little is known about the property at the time the canal was completed in 1828, except that the towpath paralleled the west side of the canal, between the canal and the river, and excavations from the canal were piled to form a terrace between the towpath and river. At the adjacent lock, there was presumably a lock house and a barn, while a stream descending from the ridge to the north likely fed into the canal in the vicinity of the lock. (Dekin 1983: 5-122; Stuart and Decker 2008: 62,65,74; Cooper 1998: 1)

The buildings now known as the Corwin house and Corwin barn were built by the Delaware & Hudson Canal Company on the terrace between the canal and river. A small bridge was probably constructed over the canal at the south end of the terrace at this time, if not earlier, to provide access to the terrace. The Canal Company constructed the 1.5-story frame house in c.1840 on a raised stone foundation at the north end of the terrace next to the towpath, and a privy to the northwest of the house (Figure 9). Stone retaining walls extending from the northeast and southeast corners of the house paralleled the towpath, which made the basement of the house accessible from the

towpath. Stone retaining walls were also likely built at this time to stabilize the west (river) side of the terrace. (Stuart and Decker 2008: 62,65,74; LCS accessed 30 June 2015)

In c.1850, a 1.5-story frame barn was built at the south end of the terrace, and like the house, was built into the terrace alongside the towpath (Figure 10). A small one-story shed on a stone foundation was added to the south side of the barn around this time. The two foundation walls, along with retaining walls extending from the northeast corner of the barn and southeast corner of the shed provided direct access between the barn basement and the towpath. The construction dates of the barn and shed correspond to the period when the canal and locks were widened and deepened and the canal walls were stabilized with stone retaining walls. (Stuart and Decker 2008: 62,65,74; LCS accessed 30 June 2015)

Various sources report that J. Corwin occupied the house from 1856-1865, and served as the keeper of Lock 67 during that period. There is also speculation that the house may have been used as a shop and resting point for canal boatmen. Association of the Corwin name with the property appeared in 1856 in detailed maps of the canal and its environs by John Torrey (Figures 11 and 12). In addition to the canal and towpath, the Torrey map labeled the J. Corwin house, barn, and Corwin's bridge, a waste weir, and showed a conspicuous bulge in the width of the canal opposite the barn, which functioned as a holding area for canal boats. Between 1860 and 1870, according to the park's List of Classified Structures, the Canal Company constructed a one-and-a-half-story addition on the west (river) side of the house. (Dekin 1983: 5-122,125, 6-201; LCS, accessed 30 June 2015; DOE, 1995)

Just upstream at Lock 67, the Torrey map identified a house belonging to Mrs. Susan McPhilorney, her barn, a lock house, grocery, a Canal Company barn, and a bridge crossing north of the lock. Another map from 1856, prepared by Gates & Sons, identified the McPhilorney house as "Mrs. McFelamy," and showed it next to a north-south road beginning near the bridge north of Lock 67 and heading up the ridge to meet a road leading to Barryville (Figure 13). A county atlas from 1875 identifies her house as "Mrs. McFellamy" and an east-west road from the lock area toward a schoolhouse on the ridge where it connects with other local roads (Figures 14 and 15).

The Corwin house is also shown on the 1875 map, but the Corwin name has been replaced by "A. Stage," possibly a reference to Albert Stage, who was a supervisor for the Town of Lumberland from 1872-1874. Stage may have been the keeper of Lock 67 around this time. (Stuart and Decker 2008: 68; Quinlan 1873: Chapter XII;; LCS, accessed 30 June 2015)

New Industries and the Railroad:

Canal improvements in the 1840s coincided with improvements in the rafting industry, as advances in technology and the proliferation of saw mills in the upper Delaware River valley spawned new and diverse types of rafts. Other industries also made use of the valley's natural resources in the last half of the nineteenth century. Tanneries used bark from the many hemlock groves until the 1880s when the tree supply was depleted. Acid factories harvested the trees left behind by the tanneries – mostly hardwoods such as cherry, ash, maple, beech, birch – to produce charcoal, wood, alcohol, and acetate of lime until hardwood stands were depleted and petroleum-based synthetics were developed. Quarrying of bluestone and other building materials also emerged as an important industry. There were two bluestone quarries in the hills just east of Barryville, and some of this product may have been shipped on the canal. The bluestone was headed to New York City and elsewhere as paving blocks, curbs, and decorative stonework until the 1920s and 1930s when cement and southern granite largely replaced bluestone as a building material. (Dekin 1983: 3-70,5-108; EIS 1987: 100-101; Carrol et.al.1987: 10)

During the 1850s, the Delaware & Hudson Canal transported as much as a million tons of cargo a year, but the construction of the New York & Erie Railway introduced a new means of transportation and a source of competition for the Canal Company. The railroad reached Port Jervis in 1847 and headed north up the upper Delaware River valley on the New York side. Upstream of Port Jervis, the railroad was forced to cross over to the Pennsylvania side because the Canal Company obtained a permanent injunction that preempted all rights to the east river bank upon which the canal was built. The railroad entered Lackawaxen in 1848 and then crossed back to the New York side north of the

Lackawaxen River. (Route 97 Report, 2001)

The New York & Erie Railway was the first manmade north-south transportation route that extended the entire length of the upper Delaware River valley. The railroad connected the Hudson River to the Great Lakes, and with 12 stations along the 73 miles of its Delaware division, it very quickly became an integral part of the valley's economy. Lumber, stone, and various agricultural products were shipped to markets, and previously scarce commodities such as rope became more generally available. Raftsmen also made use of passenger train service in making their return trips from the Lower Delaware River valley. (EIS 1987: 100; Dekin 1983: 3-95)

The railroad also introduced tourism into the area's economy. Encouraged by the 1851 "Harpers Guide to the New York and Erie Railway," residents of New York City, Philadelphia, and elsewhere began boarding passenger trains to enjoy the valley's scenery, recreation, and cooler climate. Places such as Pond Eddy, Lackawaxen, Parker's Glen, Narrowsburg, and Shohola became the primary recipients of the tourist boom, as entrepreneurs began renting rooms and building boarding houses and hotels. One such development was the Shohola Hotel in 1854, located across the river and just upstream from the Corwin Farm. New bridge crossings between Barryville and Shohola in the 1850s and between the Pond Eddys around 1870 also facilitated the tourist economy. (EIS 1987: 101; Dekin 1983: 3-100-101,108; Carrol et.al.1982: 11)

The influx of summer visitors arriving by train helped another industry develop in the late 1800s, that of orchards. Local orchards produced apples of unmatched flavor, and as more visitors came to the area, the apples' popularity grew. The apple harvest of Sullivan County complemented the tourism industry, and local apples were found on tables around the region, as well as shipped internationally. Given its gently sloping terrain and southern exposure, it is possible that the area east of the canal at Corwin Farm may have been planted with apple trees. However, there is no historic documentation of orchards in this area. (Gold 1994: 10)

Decline of the Canal:

The Delaware & Hudson Canal Company's infrastructure improvements in the 1840s allowed it to maintain competitive coal transportation rates with the railroads. In 1872 the canal carried its peak load of 3 million tons, but by this time the Erie Railway (formerly the New York & Erie Railway) had become more efficient, in part by adding a second line of track along the entire length of the valley. After this point, the canal system lost its competitive ground to the railroad, as its inherent disadvantages could not be overcome: movement along the route was slow, its operation was seasonal, and it was directed to a single market in New York. The Canal Company itself had already diversified into the railroad business, and ultimately decided that the canal's expensive upkeep was unworthy of the cost (see Figure 7). The canal was used for the transport of coal for the last time in 1898 and in the following years the Canal Company petitioned the Pennsylvania Assembly to remove "Canal" from its official chartered name. After the canal was sold, the Delaware section of the canal was never again employed in navigation. (Dekin 1983: 3-86,88,95; Whitford 1906: 751)

Several towns benefitted from the Delaware & Hudson Canal, including Lackawaxen in Pennsylvania, and Barryville, Pond Eddy, Mongaup Village, Bolton Basin, Sparrow Bush, and Port Jervis in New York. However, except for Port Jervis, which became one of the canal's major ports, none grew to any substantial size nor did they attract new industry as a result of the canal's presence. Highland and Lumberland, for example, remained some of the poorest and least populated areas in the valley. (Dekin 1983: 3-86-87)

In the wake of its closure, some of the villages that had grown up along the Delaware & Hudson Canal began to decline, as did waterways and locks that gradually became overgrown and fell into ruin. Several canal features were repurposed, such as John Roebling's Delaware Aqueduct that was converted into a toll bridge in 1899. By 1902, leftover water standing in some canal sections had become a public health hazard, a situation aggravated by the local practice of throwing garbage in the water. Ultimately, most canal sections were drained by employees of the Erie Railroad. The Corwin complex, which had been actively used by the Canal Company since at least c.1840, was transferred into private hands. Around this time, a small garden house was constructed north of the Corwin house. (Wakefield 1965: 171; Dekin 1983: 3-88,101; Stuart and Decker 2008: 66; LCS,

accessed 30 June 2015)

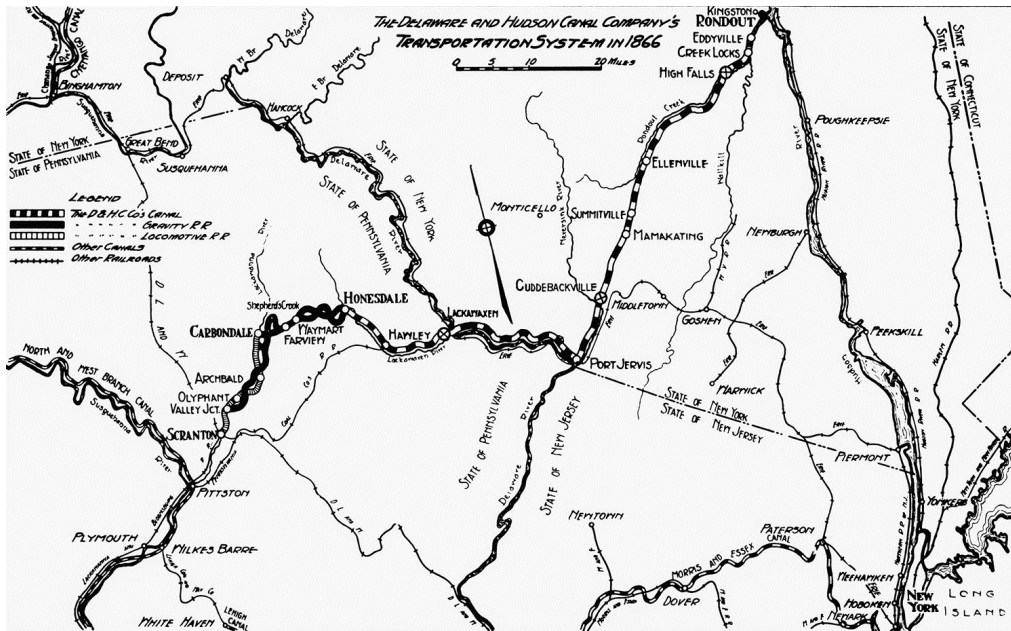


Figure 3. Map of the Delaware & Hudson Canal route from Honesdale to Eddyville. Corwin Farm is located between Lackawaxen and Port Jervis. (UPDE, Scan 412)

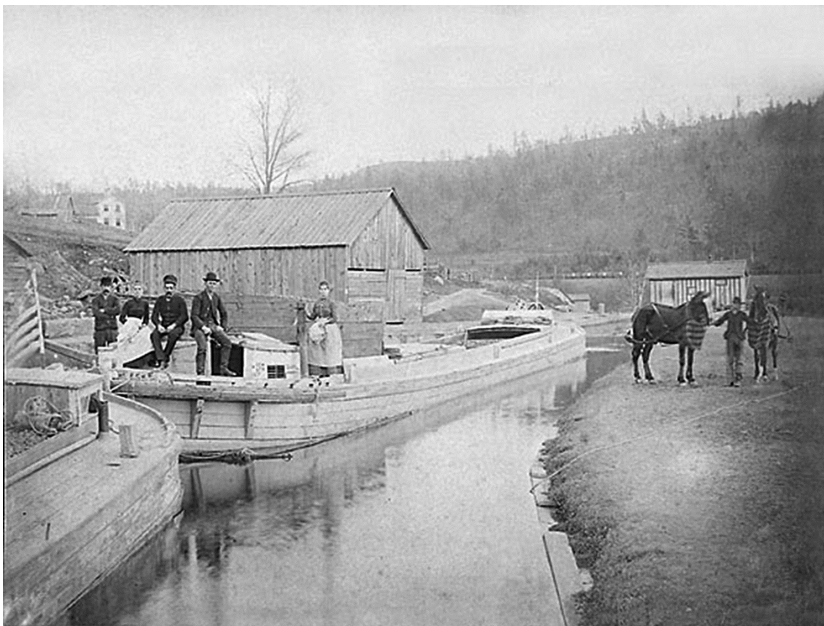


Figure 4. Canal boats were pulled by horses or donkeys along the towpath, date unknown. (UPDE, 55DHSS BOAT)

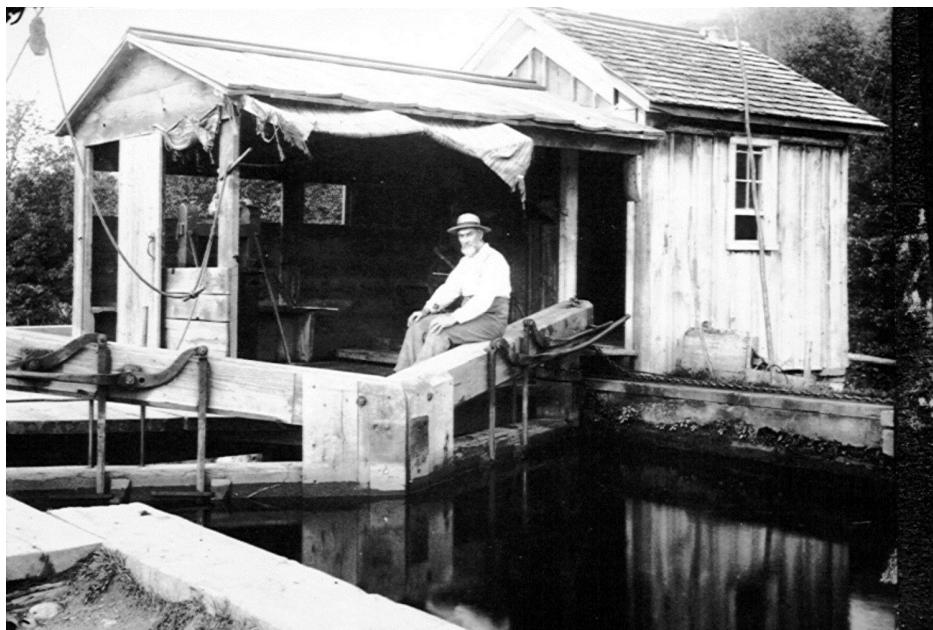


Figure 5. A locktender along the Delaware & Hudson Canal, date unknown. (UPDE, p-82-8-40)

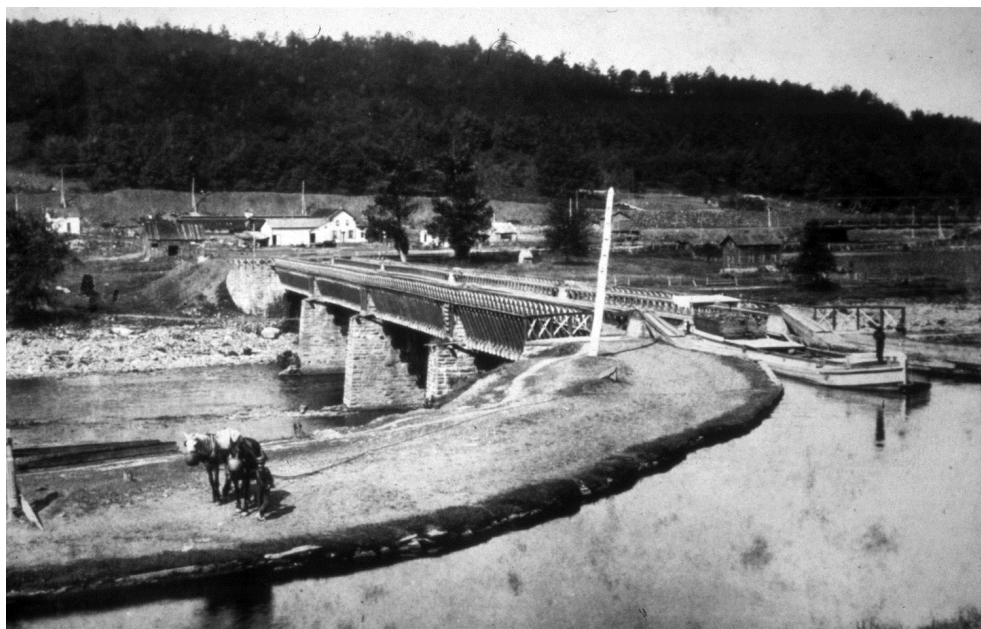


Figure 6. The Delaware Aqueduct, view looking toward the Pennsylvania side. (UPDE, Historic Roebling Bridge)

Cowen Farm
Upper Delaware Scenic And Recreational River

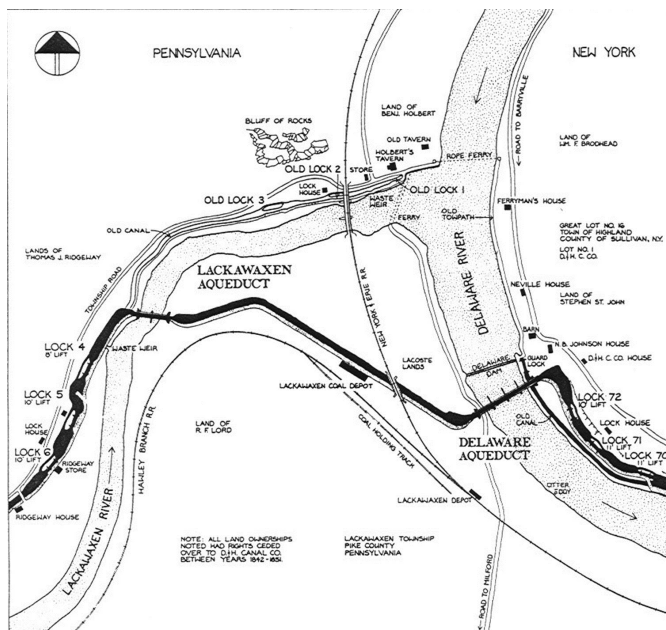


Figure 7. Map of the Delaware & Hudson Canal showing conditions in 1849 in the vicinity of the Delaware and Lackawaxen aqueducts. (UPDE, lackmap3)



Figure 8. View of the opening in the slackwater dam upstream from the Delaware Aqueduct. Note the two men at the right side of the breach. (UPDE, I8_Scan211-MVHS-P98-8-18)



Figure 9. View of the east side of the Corwin House in c.1980. (Dekin, Cultural Resources Survey 1983: 6-201)

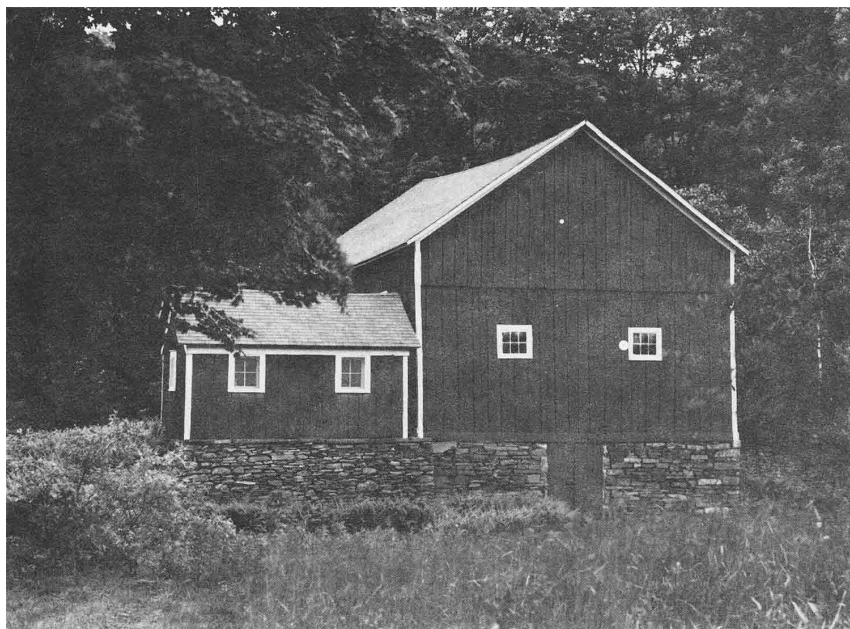


Figure 10. View of the east side of the Corwin Barn and Shed in c.1980. (Dekin, Cultural Resources Survey 1983: 6-202)

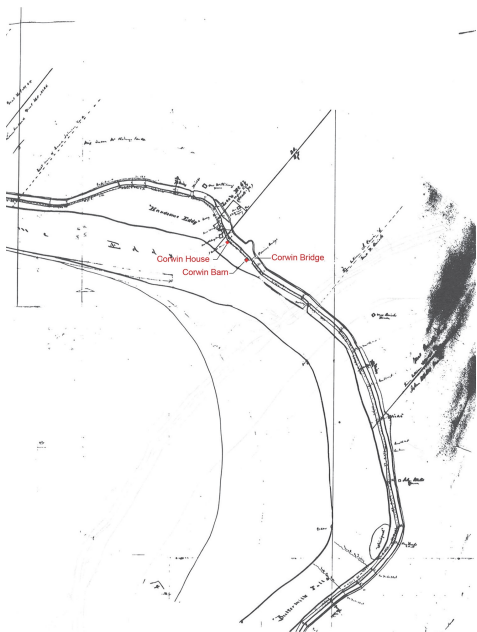


Figure 11. The Corwin Farm area is shown on the 1856-1865 canal maps by John Torrey. The house, barn, and bridge are indicated in red. (Dekin, Cultural Resources Survey 1983: 5-145)

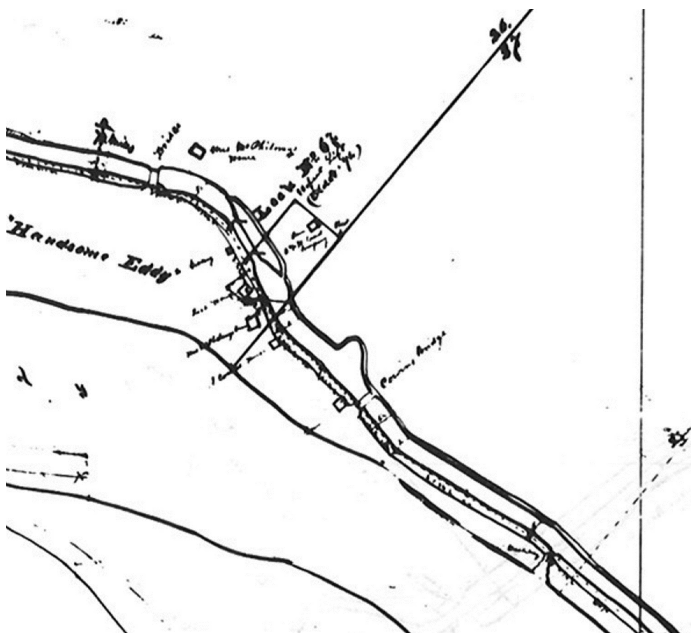


Figure 12. Enlargement of the Corwin Farm area from the 1856-1865 canal maps by John Torrey. (Dekin, Cultural Resources Survey 1983: 5-145)



Figure 13. Portion of the Gates & Son map of Sullivan County from 1856. (C. Gates & Son, "Map of Sullivan County, New York: From Actual Surveys," from Library of Congress, <http://www.loc.gov/item/2006627677>)

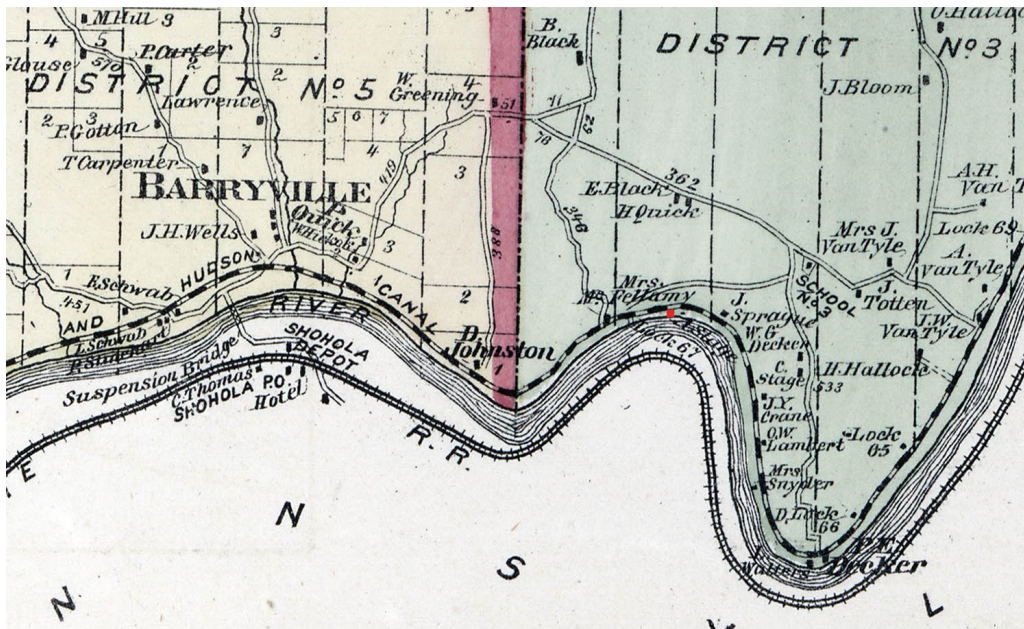


Figure 14. Portion of a 1875 Beers map of Highland and Lumberland. The Corwin House is shown in red. (Frederick W. Beers, "County Atlas of Sullivan, New York," from Library of Congress, <http://www.loc.gov/item/2013593063>)



Figure 15. Enlargement of the 1875 Beers map of Highland and Lumberland showing the Corwin Farm area. (Frederick W. Beers, "County Atlas of Sullivan, New York," from Library of Congress, <http://www.loc.gov/item/2013593063>)

POST-CANAL DEVELOPMENT, 1898-1978

The next evolution in the country's transportation system began with the appearance of automobiles at the turn of the twentieth century. In the upper Delaware River valley, cars brought a renewed interest in road construction that had waned since the introduction of the canal and railroad. In Pennsylvania, road improvement in the valley largely amounted to resurfacing the narrow winding roads already in existence. In New York, legislation was passed in 1907 for road construction, and the first road to be improved was the old Newburg-Cochecton Turnpike. A new road named the Liberty Highway, constructed around the same time, had its western terminus in Narrowsburg, which contributed significantly to that town's development. However, both of these roads illustrated the nature of many of the roads on the New York side of the Delaware; they ran from the river inland. Although some towns had short road segments along the Delaware, many were not connected to each other. Rail remained the typical means of travel through the valley because there was no through road that ran parallel to the river for its entire length. (Dekin 1983: 3-118,119; Route 97 Report, 2001)

In the years after the canal ceased operations, some sections of the canal towpaths became unimproved local roads. A 1923 USGS map indicates this was the case in the Corwin Farm/Lock 67 area (Figure 16). In addition to the towpath and the earlier north-south and east-west roads shown on maps, another short unimproved road provided access to the Corwin Farm at this time, entering the site from the east-west road (see Figure 15). The USGS map also indicated three structures in the vicinity of the lock, one of which may have been the Corwin house. Between 1920 and 1930, a porch was added on the south side of the house addition and additional retaining walls were constructed on the bluff to create planting areas. (LCS, accessed 30 June 2015; DOE, 1995)

State Route 97:

As the availability and use of automobiles increased, valley residents began to lobby for a new highway that would link the riverside towns in the valley together. Although a road along the New York side of the Delaware River had been proposed as early as 1914, it was not until the early 1930s that plans came to fruition for the new road, named State Route 97, from Port Jervis to Hancock. Construction of the 70.53-mile highway in 1934-39, aided by President Roosevelt's New Deal funding, overcame several engineering challenges including deep ravines at Narrowsburg,

Cochecton, Callicoon, and Basket Creek, and a sheer drop to the river at the Hawks Nest, just north of Port Jervis. (Route 97 Report, 2001; Dekin 1983: 3-119)

The alignment and construction of Route 97 destroyed much of the abandoned Delaware & Hudson Canal between Lackawaxen and Port Jervis. The highway paralleled the river, tracking along the river's edge and filling and overlaying the canal bed (Figure 17). In some areas, the steep bluffs rising from the river pushed the route inland and thus preserved some canal sections, such as Corwin Farm where the road was built between the canal and the ridge to the east. However, Lock 67, which itself swung even farther inland from the river, was destroyed and filled in by the new highway, as was the short unimproved road accessing the farm from the east-west road. Now lacking convenient access, the route heading east from the Corwin bridge was likely formalized at this time as a short driveway to connect to the new highway. The section of towpath running north of the bridge was retained to provide access to the house and barn. (Stuart and Decker 2008: 69; Scott 1981: n.p.)

State Route 97 was envisioned not only as a means of local transportation but more importantly as a scenic route that would enhance the valley's tourist industry. While some towns offered recreation pursuits into the 1900s, the majority of the upper Delaware River valley had remained largely rural and oriented toward agriculture and natural resource extraction. Hotels and boardinghouses throughout the region lost much of their popularity during the Depression of the 1930s, although some tourists continued to visit the area to hunt, fish, canoe, and enjoy the scenery. Completion of Route 97 also coincided with the decline in passenger railroad service, as visitors increasingly favored the automobile as their means of travel. (De Vries 2007: II-4; EIS 1987: 101)

Corwin Farm:

In 1948 the former location of Lock 67 and land to the north was developed as Camp Tel Yehudah, a national leadership camp for Jewish teenagers. Various camp buildings were constructed in subsequent years and the old towpath was utilized as an interior road. Land to the south of the farm was developed as fishing camp by 1963, with a main building and multiple structures built near the canal. The fish camp (now an apartment building) was accessed by a narrow road beginning at the entrance drive and paralleling Route 97. (Scott 1981: n.p.)

Within the farm itself, a 1961 USGS map showed the house and barn, and indicated the canal as an intermittent stream connected to the stream that once drained into Lock 67. A 1963 aerial photograph suggests that the Corwin bridge was removed and replaced with a causeway by this time.

A culvert pipe was installed within the causeway to convey water from one side of the canal to another. The 1963 aerial also indicated the property featured mostly open conditions, except for scattered trees along the east side of the canal, throughout the bluff rising from the river, and between the house and towpath (Figure 18). There were around six orchard trees in the open fields on either side of the entrance drive at this time. (NETR Historic Aerials, accessed 12 June 2015)



Figure 16. USGS Milford Quadrangle map from 1923 showing the Corwin Farm area in red. (Stuart and Decker, *Archeological Overview and Assessment, Upper Delaware Scenic and Recreational River*, 2008: 69)

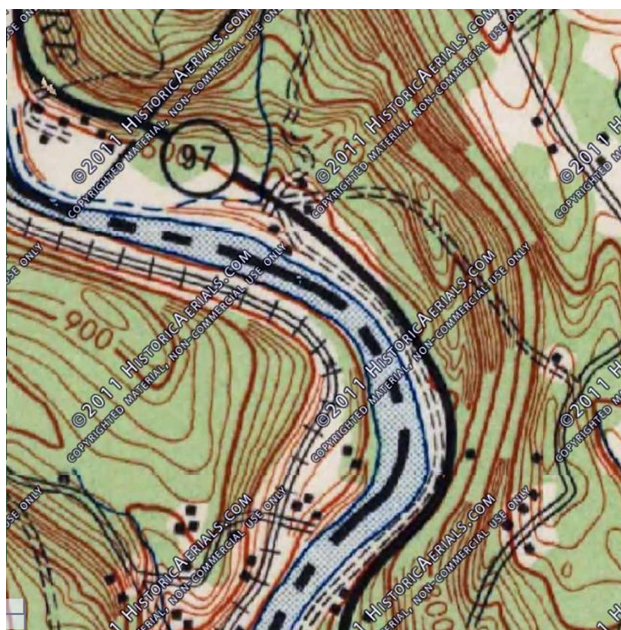


Figure 17. A USGS map from 1944 showing the alignment of State Route 97. (NETR, accessed 6 June 2015)



Figure 18. An aerial from 1963 showing the Corwin Farm area. (NETR, accessed 6 June 2015)

NATIONAL PARK SERVICE MANAGEMENT, 1978 TO PRESENT

In 1968, President Lyndon Johnson signed into law the Wild and Scenic Rivers Act, which aimed to protect selected wild rivers and scenic rivers from development that would substantially change their wild or scenic nature. Eight rivers were included in the system as rivers “that with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values...” The act named 27 other rivers, including the Upper Delaware River, for further study to determine if they qualified for inclusion in the system. That same year, five sites connected with Delaware & Hudson Canal were designated as a National Historic Landmark, including Roebling’s Delaware Aqueduct.

The river study was timely, as canoeing and camping were developing into sizeable commercial operations in the upper Delaware River valley. The appearance of canoe liveries and campgrounds along the river, and the increasingly heavy river use in the spring and summer, had caused concern among some local officials and citizens that the river’s clean water and the valley’s scenery could be permanently damaged. Others, however, worried about government intrusion and regulation in the valley, and the effects on property rights. (EIS 1987: 101)

In 1978, after ten years of study and multiple attempts at legislation, Congress designated 73.4 miles of the Upper Delaware River as part of the National Wild and Scenic Rivers System and as a unit of the national park system. The designation covered the river segment beginning at the confluence of the east and west branches of the Delaware River at Hancock, New York, and extended downstream to Railroad Bridge No.2, in the vicinity of Mill Rift, Pennsylvania. It also established an interim ridge to ridge landward boundary of around 68,000 acres, with a stipulation that the boundary could be modified as part of an interagency planning effort. The new park was based on the authority of the 1968 Act, which stated that the river must be protected in its free-flowing condition and that it must be managed for the benefit and enjoyment of present and future generations. Consistent with the Act, the river was classified as part “scenic” (areas with minimal development or other intrusions) and part “recreational” (areas having more concentrated development and/or roadways). (Scott 1981: n.p.; Foundation Document 2014: 3; Resource Management Plan 1994 draft: 1)

Among the first acquisitions by the federal government was the Delaware Aqueduct in 1980, but a vast majority of the land in the river corridor, including Corwin Farm, remained privately owned. A

1981 survey of canal remnants within the park boundaries noted that the intact canal section at Corwin Farm, together with the house, barn, and bridge, provided a sense of how the canal appeared historically when many residences were located just off the towpath. (Scott 1981: n.p.; Foundation Document 2014: 3)

River Management Plan:

The Final River Management Plan for the Upper Delaware Scenic and Recreational River was completed in 1986, and established a final boundary encompassing 55,574 acres. The River Management Plan described ways that existing local and state laws and authorities would be used to safeguard the river's resources. The Plan identified key cultural resource features in the designated river corridor for protection and enhancement, but acknowledged that most would not be acquired by the federal government. Instead, voluntary agreements would be used by the National Park Service, local governments, private groups, and private property owners to protect resources. Specifically, the Plan proposed exploring the use of voluntary agreements with property owners who had intact features of the Delaware & Hudson Canal. (Resource Management Plan 1994 draft: 1; Foundation Document 2014: 3; River Management Plan 1986: 77,81,83)

The River Management Plan also identified facilities that would be needed to manage the park, including interpretive sites for the valley's major cultural and natural features, visitor contact sites, river access sites, river rest stops, and administrative offices. At this time, the park had established its headquarters in the Damascus Township and operated two ranger stations: a north district station in Cocheton and a south district station in Shohola. The plan noted that these ranger stations were located in rental properties away from heavier use areas where they were most needed, and recommended acquiring tracts from willing sellers if better rental properties could not be found. The Plan recommended the Callicoon area for the north district ranger station and the Highland-Lumberland area for the south district. In addition, the Plan proposed the development of a river rest stop at the future site of the south district ranger station. (River Management Plan 1986: 85,87-89)

Federal Acquisition of Corwin Farm:

In the early 1980s, David Cates was the owner of the Corwin property. Photographs of the house and barn from the time period show that vegetation in the vicinity of the terrace had matured and shaded the areas around the buildings (see Figures 9 and 10). The canal itself was filled with tall grasses and scrub vegetation. By the late 1980s the Corwin property was owned by Wayne Smith, and an aerial photograph from 1992 confirms the growth of vegetation in other areas of the site, especially in previously open areas east of the canal and alongside Route 97. At this time, orchard trees were still present in fields bordering the entrance drive. In addition, a wood deck had been constructed on the west edge of the terrace overlooking the river and an outdoor stone fireplace was built west of the house on the edge of the river bluff. (Dekin 1983: 6-201; NETR Historic Aerials, accessed 12 June 2015; Review Comments-Park, 3 September 2015)

The presence of the locktender's house and barn, and intact canal remnants, at Corwin Farm prompted the National Park Service to purchase the site in 1994 for development as the South District Ranger Station. According to park information, the site would serve as the first National Park Service facility station for 87% of visitors. The park rehabilitated several structures for park uses, beginning with the house and followed by the barn and shed in 1997-2000 and the privy and garden house in 2004. Circulation changes included the development of a gravel boat access road/ramp from the towpath to the river in 1998 and the addition of parking spaces on either side of the entrance drive by 1999. An accessible roofed multi-paneled information/orientation kiosk was installed on a concrete pad at the parking area in 1999. (PMIS #29573, accessed 24 May 2015; LCS, accessed 30 June 2015; NETR Historic Aerials, accessed 12 June 2015; Comprehensive Interpretive Plan 1999: 44)

Other projects in the 1990s included a new underground utility corridor (electrical service and seasonal water line) and flagpole between the house and barn, replacement of a failed septic tank north of the house, and channelization of drainage from Route 97 to the canal prism to stop erosion in the east field. In May and August 1996 archeological investigations were conducted to determine the effect on potential historic resources in these areas (Figure 19). Although no significant archeological resources were discovered, a small collection of redeposited artifacts indicating the

presence of a nearby prehistoric and Native American site were found between the house and barn and north of the house, while a few canal era artifacts were located between the canal and Route 97. The investigations also revealed that the terrace upon which the Corwin house and Corwin barn were built was composed of redeposited soils from construction the canal. (Cooper 1998: 1,4-5,11; DOE, 1995)

In 2001 the Olmsted Center for Landscape Preservation and park staff pruned the Corwin orchard. Clippings were harvested and grafted to maintain the historic species of apples in the orchards. In 2011, the Northeast Region Exotic Plant Management Team treated and assisted with removal of non-native invasive plant species around the canal remnants. Plant species included Japanese knotweed, Japanese barberry, multiflora rose, and mugwort. That same year, a tree next to the Corwin house was removed after it was damaged in a storm. (SOTP 2001: 1; SOTP 2011: 18; PMIS #181784, accessed 24 May 2015)

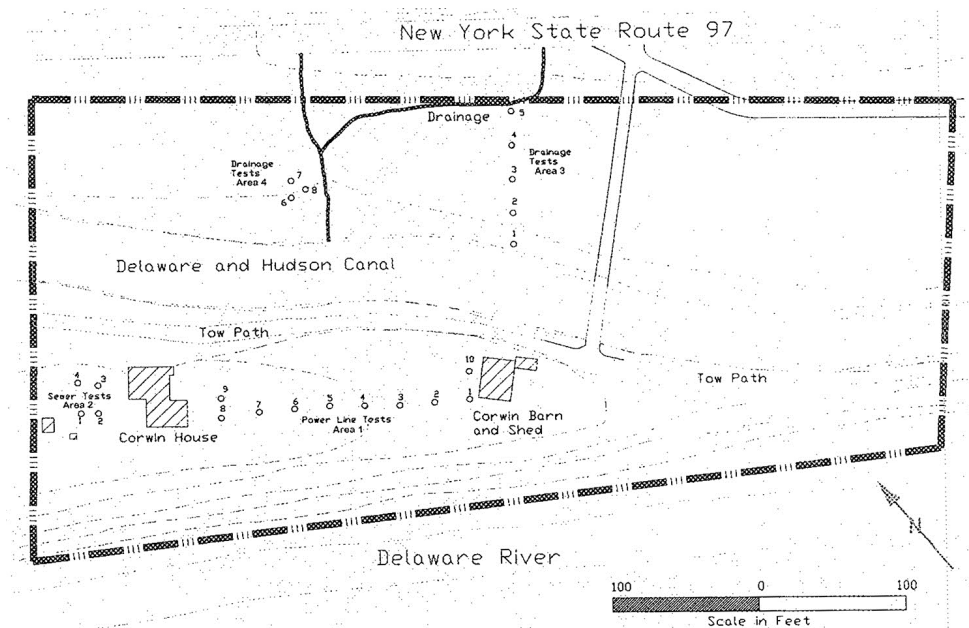


Figure 19. Plan of proposed improvements and archeological testing. (Cooper, *Archeological Investigations for Miscellaneous Site Development Projects*, 1998: 3)

Uses

Functions and Uses:

Major Category	Category	Use/Function	Historic	Current	Primary
Agriculture/Subsistence	Agricultural Outbuilding	Barn	Yes	No	No
Domestic (Residential)	Single Family Dwelling	Single Family House	Yes	No	No
Government	Government Office	Ranger Station	No	Yes	Yes
Transportation	Water-Related	Canal	Yes	No	Yes

Public Access:

Public Access: Other Restrictions

Public Access Narrative:

Upper Delaware Scenic and Recreational River has no park entrance, amenity, or interpretive program fees. River use is permitted 24 hours a day, year-round, unless closed due to flooding, ice floes, or other hazardous conditions, but it is not accessible for boaters from the Corwin Farm property. The Corwin house is used primarily as a three-season law enforcement ranger station. A private road paralleling State Route 97 is a right-of-way that provides access to the former fish camp (now an apartment building) to the south.

Associated Ethnographic Group

Ethnographic Study Status: No Survey Conducted

Ethnographic Narrative:

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

Landscape characteristics identified for the Corwin Farm property include natural systems, spatial organization and topography, land use, vegetation, constructed water features, circulation, buildings and structures, views and vistas, and small-scale features. Many of these characteristics have associated features that contribute to the site's overall historic significance and character. The features that contribute were either present during the period of significance or are in-kind replacements of historic features.

The physical integrity of the Corwin Farm property is evaluated by comparing landscape characteristics and features present during the period of significance-1828 to 1898—with the existing conditions as assessed in 2014. Many of the historic characteristics and features remain today. The influence of the upper Delaware River valley's natural features on the construction of the Delaware & Hudson Canal are still evident at Corwin Farm, where excavated material from the canal helped form a raised terrace between the river and the canal. The canal bed no longer holds water, but its U-shaped cross-section, stone retaining walls, stone culvert outlet, and towpath continue to illustrate the canal's design, especially when viewed from the location of the former bridge that is now a causeway. Visitors can walk across the causeway and along the towpath to the c.1840 Corwin house and c.1850 Corwin barn and shed, and understand the important roles these buildings had in canal operations. The park has rehabilitated the buildings, as well a historic privy and garden house, for use as a ranger station and other park operations. Stone retaining walls associated with the house and barn still support the grass-covered terrace, as do extant walls along the bluff. Visitors can also experience views of the canal and the river from the terrace, much as the locktender and his family did. The park has also planted and propagated orchards in the fields east of the canal, which are not-historic but add to the setting of this nineteenth-century vernacular landscape.

The most significant change to the Corwin Farm landscape since 1898 is the abandonment and dewatering of the canal. Non-historic vegetation now fills the canal bed and has begun to cover and damage some of the stone walls, while several large trees grow between the canal and the towpath, an area that historically would have been kept clear. The abandonment of the canal along with the construction of State Route 97 just to the east in the 1930s changed circulation patterns at the farm, shifting the site's entrance to the east side of the canal and formalizing a driveway from the highway to the canal crossing. The crossing itself, originally a bridge, was rebuilt as a stone causeway by the early 1960s. Another significant change related to the highway construction was the loss of Lock #67 just the north of the Corwin Farm, and subsequent development of that property. Other additions at Corwin Farm – including regulatory signs, picnic tables, generator unit, radio antennae, wood deck, and a boat ramp – are generally inconspicuous in the overall landscape.

INTEGRITY

According to the National Register of Historic Places, integrity is the ability of a property to convey its significance through physical resources. The National Register program identifies seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Retention of these qualities is necessary for a property to convey its significance; however, not all seven aspects must be present for a property to retain integrity. A basic test of integrity is to judge whether a participant in the historic period would recognize the property and its features as they exist today. That is to say, if Mr. Corwin were to return today, would he easily recognize the property as his home?

Location:

Location is defined by the National Register as the place where the historic property was constructed or the place where the historic event occurred. Situated on the east bank of the Delaware River, features associated with the Delaware & Hudson Canal – the canal prism, Corwin house, Corwin barn, and other outbuildings – remain in their original locations. The terrace created by excavation of the canal and the location of the buildings also remains intact. The canal crossing, though now a constructed causeway, is also in its original location.

Design:

Design is the combination of elements that create the form, plan, space, structure, and style of a property. The

Corwin Farm landscape retains the characteristics and features of a historic vernacular landscape. Although it is dewatered and filled with mostly low- to moderate-height vegetation, the canal's U-shaped cross-section, stone retaining walls, and towpath still convey its use and function, especially from the canal crossing that historically was a bridge but is now a causeway. The portion of the canal used as a holding area is still intact, but its function as part of Lock #67 is no longer evident as the lock has been lost and its former location is privately owned. An extant culvert outlet in the canal wall reveals how natural runoff was collected and diverted to fill the canal. The terrace, comprised of spoils from the canal itself, still protects the canal from the waters of the river and serves as a raised platform for the site's buildings and structures. The design and orientation of the Corwin house and Corwin barn, and attached retaining walls, convey their close relationship with the towpath and canal. The c.1840 house's Greek Revival style elements are still intact in the original portion of the house, while the c.1870 addition and post-historic screened porch reflect its long-time use as a residence. The historic barn, shed, privy, and garden house also retain their original designs, and like the house, have been rehabilitated. Other stone retaining walls on the bluff provide additional protection from the river, although there have been some additions and modifications to them. The design of the entrance drive is more formal than it was historically, but it nonetheless maintains the important relationship between the canal area and nearby roads.

Setting:

Setting is the physical environment of a property and the general character of the place. The setting of the Corwin property – that of a locktender's house, barn, and outbuildings alongside a canal – is intact. The abandoned canal no longer holds water, and the buildings serve other purposes, but the historic uses can still be perceived because of the relationship between the remnant historic features, namely the canal and its retaining walls, the canal crossing, towpath, house, barn, and other outbuildings. Historic views up and down the canal, and views of the Delaware River, also add to the historic setting. A mix of trees and open areas bordering the canal, mature trees shading the house and the bluff, and grass growing on the terrace and in the adjacent orchards also add to the scene of a nineteenth-century vernacular landscape.

Materials:

Materials are the physical features that were combined or deposited during the period of significance in a particular pattern or configuration to give form to the property. Archeological testing revealed that the terrace includes materials excavated from the canal. Most of the historic materials used in construction of the Corwin house and other buildings are intact, and the foundation and retaining walls constructed with local stone still exist along the canal prism and bluff and at the house and barn. The canal bridge has been replaced by a causeway, but its stone walls are similar in design to the property's historic retaining walls. Enough material from the historic period remains for the property to retain integrity to the period of significance.

Workmanship:

Workmanship is the physical evidence of the crafts and methods of construction used during the specified historic period of significance. The canal's U-shape cross-section, supported by stone retaining walls and the towpath, still reflect nineteenth-century canal technology and craftsmanship. The batter of the remnant walls is still evident, although some have collapsed or are severely compromised. Careful workmanship is also evident on the headwall of the culvert outlet within the canal wall, and other retaining and foundation walls on site. Enough workmanship from the historic period remains for the property to retain integrity to the period of significance.

Feeling:

Feeling is the expression of the aesthetic or historic sense of a particular time resulting from the presence of physical features that, taken together, convey a property's historic character. During the historic period, the Corwin Farm residence stood alongside the canal and next to Lock #67. The property was a working landscape animated with loaded canal boats and mules pulling the boats, and a domestic landscape with a house, outbuildings, and possibly gardens and fields. The working landscape has since been lost, but enough physical features remain to evoke this historic feeling. Similarly, although the house is no longer a residence, the feeling of a domestic landscape also remains.

Association:

Association is the direct link between an important event or person and the property. The Corwin Farm site retains its physical appearance and association as the former home and workplace of a nineteenth-century locktender. Although the home is no longer a residence, its connection to the canal is still evident. The property

's association with Lock #67, however, is gone, as the lock has been filled in by highway construction and the development of Camp Tel Yehudah.

Landscape Characteristic:

This section presents an analysis of landscape characteristics and their associated features and corresponding List of Classified Structures names and numbers, if applicable. It also includes an evaluation of whether the feature contributes to the property's National Register eligibility for the historic period (1828-1898), contributes to the property's historic character, or if it is noncontributing, undetermined, or managed as a cultural resource.

Landscape Characteristic: Natural Systems and Features

Natural systems are the natural aspects that influence the development and physical form of the landscape including, physiography, geology, and hydrology. These processes were vital to the construction and operation of the Delaware & Hudson Canal.

Historic and Existing Conditions:

Corwin Farm is located on the west bank of the Upper Delaware River. The river lies between the Appalachian Plateau physiographic province and the Catskill physiographic section. The portion of the river within the park's boundaries is an exceptional example of a deep, narrow river valley cutting across the Small Lakes section of the glaciated portion of the Appalachian Plateau. The overall landscape is a stream-cut landscape modified by stream derangements from glacial deposits burying portions of pre-glacial valleys. Examples of significant geologic features include sandstone cliffs, barbed tributaries, glacial deposits, glacial outwash terraces, diverse channel morphologies, exposed ancient bedrock, bedrock knobs, cutoff incised meanders, island complexes, gorges, and fossils. (UPDE website, accessed 11 March 2015; Foundation Document 2014: 9)

Geologic processes left many economically valuable deposits in the valley, including bluestone, sand and gravel, shale, and peat. The parent materials of most of the soils within the river corridor have been accumulated largely through glacial action and deposited as till or outwash from receding glaciers. Red and gray sandstone, siltstone, and shale are primary contributors to the soils. (UPDE website, accessed 11 March 2015)

The area's rolling hills vary in elevation from 800 to 2,000 feet and are characterized as a series of indistinct and irregular escarpments. Relief is generally between 300 and 500 feet, although it ranges to 700 feet in a few locations. Point Mountain, defining the northernmost extent of the wild and scenic river designation, is an isolated bedrock knob formed by glacial meltwater that eroded through a ridgeline between the east and west branches of the Delaware River. Sandstone cliffs, clearly evident at places like the Hawks Nest, show ancient river channel deposits that have a wide variety of bedding features, including three types of crossbedding, ripple marks, current lineation, tool marks, mud cracks, and conglomerates. Fossilized plant and animal remains are found here, such as bony plates from the armored fish of Devonian times, brachiopods and mollusks, a few types of coral, bryozoans, cephalopods, and rare trilobites. (UPDE website, accessed 11 March 2015)

The drainage for the Upper Delaware Basin, approximately 3,422 square miles, begins in the hemlock forested Catskill Mountains of New York. The east and west branches of the river meet at Hancock, New York, and from there it meanders 74 miles in a southwesterly direction as a free-flowing river through the Upper Delaware Scenic and Recreation River to Port Jervis, New York, and eventually to the Atlantic Ocean, a total distance of 331 miles. Within the river corridor, the river varies in width between 150 and 1,500 feet, with most of the river between 300 and 500 feet wide (Figure 20). (Resource Management Plan 1994 draft: 1; EIS 1987: 63)

Landscape Characteristic Graphics:



*Figure 20. View looking south and downstream at the Delaware River, from the bottom of the boat ramp.
(OCLP 2014, DSC_0493)*

Landscape Characteristic: Spatial Organization - Topography

Spatial organization refers to the three-dimensional organization of physical forms and visual associations in a landscape, including the articulation of ground, vertical, and overhead planes that define and create spaces. Topography is the three-dimensional configuration of the landscape surface characterized by slope and orientation. Both landscape characteristics were affected by the construction of the canal, which formed the man-made terrace on which the Corwin house and Corwin barn were built.

Historic Condition (to 1898):

The organization of spaces within the Corwin Farm landscape was influenced by the previous glacial period, the Delaware River's winding course, and the construction of the Delaware & Hudson Canal in 1825-1828. In response to the topography in this area, workers building the canal bed tossed the excavated material to the west side of the canal to help support the canal prism and towpath and protect the canal from the Delaware River. The accumulation of this material helped create the gently sloped terrace on which the Corwin house and Corwin barn were constructed between 1840 and 1850. The terrace itself was stabilized with a series of retaining walls associated with the house, barn, and shed, and along the bluff facing the river.

The Corwin house was built as the residence for the locktender of Lock #67, located just upstream. Its location at the north end of the terrace and alongside the towpath provided convenient access to the lock via the towpath. Outbuildings that included a privy and later a shed were constructed near the house, at the edge of the bluff. The Corwin barn and Corwin shed were also built in close proximity to the locktender's residence, at the south end of the terrace and alongside the towpath. The barn and shed were also sited next to the canal holding area and a small bridge over the canal that lead to local roads on the east side of the canal. The gently sloping and south-facing landform on the east side of the canal would have been ideal for gardens and orchards, although no documentation has been found if they existed.

Post-Historic and Existing Conditions:

The farm's spatial organization and topographic characteristics from the historic period remain mostly intact (Figure 21, also see Cover). In the 1930s, grading associated with State Route 97 altered the topography of the field on the east side of the canal. The park has planted grids of orchard trees in this area, on either side of the entrance drive. There is also a low berm on the north side of the parking lot, but its purpose and date of installation are unknown.

By 1963, the bridge crossing over the canal was replaced by an earthen and stone causeway, and in 1998 the park cut into a small portion of the riverbank south of the barn to create a boat ramp that extended from the towpath to the river. Previous property owners also built additional retaining walls along the bluff to accommodate planting areas.

Landscape Features:

Feature Name	CLI Feature ID	Feature Contribution	CRIS-HS Resource ID	Associated CRIS-AR ID	FMSS Record Type	FMSS Record Number	FMSS Exact Match
Terrace	174496	Contributing					No
Berm	174498	Noncontributing – Incompatible					No

Landscape Characteristic Graphics:



Figure 21. View looking north from the towpath toward the causeway and the Corwin Barn and Shed. (OCLP 2014, DSC_0508)

Landscape Characteristic: Land Use

Land use describes the principal activities in a landscape that form, shape, and organize the landscape as a result of human interaction. During the historic period, the Delaware & Hudson Canal Company built and operated the canal to transport anthracite coal to markets in New York City. The Corwin Farm area was used to support the operation of nearby Lock #67.

Historic Condition (to 1898):

Land uses associated with the Delaware & Hudson Canal began in 1825 with construction of the canal. Once in operation, canal boats loaded with coal plied the waterways, with the help of mules, locktenders, and other canal workers. The Corwin Farm portion of the canal also included a holding area where boats travelling upstream would wait their turn to enter the lock, or stop to get supplies, fresh mules, or simply to rest. The location of the Corwin Farm property next to Lock #67 prompted the Canal Company to develop additional facilities from 1840-50 in support of the lock, including a residence for the locktender (Corwin house) and a barn and shed to shelter and service the mules. The house was enlarged in the 1870s, and the area around it evolved into a small domestic area, which included a yard, privy, and later a garden house. Canal-related land uses continued until the canal was abandoned in 1898. Other land uses at the farm may have included orchard plantings, especially as apples gained popularity in the area in the late 1800s.

Post-Historic and Existing Conditions:

At the end of the historic period, the Corwin property was sold to private landowners who continued to use it as a residence. In 1994, the National Park Service acquired the property for development as the South District Ranger Station, and today the house is primarily used as a three-season law enforcement ranger station. Some visitors make use of several picnic tables in the orchard. The farm is also used to store the park's watercraft and includes a boat ramp.

Landscape Characteristic: Vegetation

Vegetation includes managed individual specimens and masses of deciduous and evergreen trees, shrubs, vines, groundcovers, and herbaceous material, both indigenous and introduced. Extant contributing and non-contributing vegetation features are described below.

Historic Condition (to 1898):

Little is known about the vegetation at Corwin Farm during the historic period. Like other areas along the canal, vegetation was removed to accommodate the canal prism, towpath, and the associated engineered embankments. It is not known if the Delaware & Hudson Canal Company made any attempt to replant the bare slopes, but in a short time they were presumably revegetated with trees, shrubs, and grasses, which would have helped slow erosion into the canal prism. No information has been found to date about possible plantings around the house and barn, or along the terrace, but as this was a working landscape it may have generally been kept free of extensive vegetation. Undisturbed areas proximate to the canal supported trees and shrubs, or were cleared for gardens and orchards.

Post-Historic and Existing Conditions:

The majority of the river corridor (73%) in the park is heavily forested with a mixture of evergreen and deciduous trees. A wide variety of vegetative communities exist within the nearly 42,000 acres of woodland. These range from the dominant oak species through sugar maple, hemlock and mixed hardwoods to the understory species of dogwood, sassafras, and hornbeam. Shrubs include viburnum and spicebush. Past human actions – fire, timbering practices, quarrying, settlement, and agriculture – have all had a marked influence on the present vegetation of the area, favoring certain species over others. (EIS 1987: 75)

The plant material at Corwin Farm today is a mix of volunteer and successional growth and a few designed plantings. Most of the volunteer vegetation is in the former canal prism, which is overgrown with successional trees, dense underbrush in some places, and wetland plants (Figure 22). Successional overstory and understory vegetation dominates the riverbank, mainly comprised of sycamore (*Platanus* sp.) and other hardwoods (Figure 23). Several stumps of particularly large trees can still be found along the bluff. Some of the planting beds installed prior to park ownership remain along the bluff near the house, but they are overgrown and unmaintained.

The areas around the Corwin house and Corwin barn feature ground covers such as pachysandra (*Pachysandra terminalis*) and ivy (*Hedera helix*); shrubs such as forsythia (*Forsythia x intermedia*), lilac (*Syringa vulgaris*), rhododendron (*Rhododendron* sp.), and shrub honeysuckle (*Lonicera* sp.); and trees such as white pine (*Pinus strobus*), maple (*Acer* sp.), oak (*Quercus* sp.), birch (*Betula* sp.), and hemlock (*Tsuga canadensis*), some of which are quite large. The back yard of the house and the terrace are maintained as mown lawn (Figure 24).

On the east side of the canal and on either side of the entrance drive are orchard trees that include apples (*Malus* sp.) and pear (*Pyrus* sp.), set within maintained lawn. The orchard to the south of the drive has recently been replanted with young saplings on a 30-foot grid aligned with the drive (Figure 25). The orchard to the north is a mix of mature and young trees in a similar grid spacing pattern, but generally aligned with the highway. With the assistance of the Olmsted Center for Landscape Preservation, new orchard trees were propagated from the historic trees at the site. Just north of this orchard is a small lawn area framed by deciduous and evergreen trees that help screen the canal and terrace from the highway and the Camp Tel Yehudah. White pines have been planted along the north boundary fence, and along the boundary line south of the orchard to screen the apartment building.

Landscape Features:

Feature Name	CLI Feature ID	Feature Contribution	CRIS-HS Resource ID	Associated CRIS-AR ID	FMSS Record Type	FMSS Record Number	FMSS Exact Match
Canal Prism Vegetation	174500	Noncontributing – Incompatible					No
Riverside Successional Vegetation	174502	Contributing					No
Bluff Planting Beds	174504	Noncontributing – Incompatible					No
Plantings Around House and Barn	174506	Noncontributing – Compatible					No
Orchards	174508	Noncontributing – Compatible					No
Screen Plantings	174510	Noncontributing – Compatible					No

Landscape Characteristic Graphics:



Figure 22. View looking north from the causeway to the canal prism now filled with vegetation. (OCLP 2014, DSC_0475)



Figure 23. View looking northwest at successional vegetation and stone retaining walls along the bluff. (OCLP 2013, DSC_0704)



Figure 24. View looking north from the causeway to the canal prism now filled with vegetation. (OCLP 2014, DSC_0536)



Figure 25. View looking northwest at the orchard on the north side of the entrance driveway. (OCLP 2014, DSC_0480)

Landscape Characteristic: Constructed Water Features

Constructed water features are built features and elements that utilize water for aesthetic or utilitarian functions, such as the Delaware & Hudson Canal. Extant contributing and non-contributing features related to the canal itself are described below.

Historic Condition (to 1898):

The Delaware & Hudson Canal was constructed from 1825 to 1828 to transport coal from deposits in Pennsylvania to the New York City area. Boats were pulled through the canal by mules on earthen towpaths located on one or both sides of the canal. The 108-mile long canal included 108 locks and 22 aqueducts, and on the Delaware section (between Lackawaxen and Port Jervis) there were thirteen locks that raised or lowered boats a total of 130 feet in a distance of 24 miles. Lock #67 was located immediately north of the Corwin Farm property.

The rivers, streams, and natural drainage supplied the necessary water for the canal. The canal itself was designed with a flat bottom and sloping sides, typically lined with clay to prevent the loss of water. The original canal prism was 4 feet deep, with an average water line of 28-30 feet and a bottom width of 20 feet. On three occasions in the 1840s, the canal and locks were enlarged to accommodate boats with up to a 140-ton capacity. During this period, the canal prism was deepened from 4 to 6 feet, and widened from 20 to 30 feet at the bottom and 28 to 48 feet at water level. As the canal sides were cut back, dry-laid stone walls were built to decrease leakage from the clay beds and prevent failure of the banks. At Corwin Farm, part of the canal was wide enough to accommodate a holding area for boats.

The infrastructure improvements in the 1840s allowed the Delaware & Hudson Canal Company to remain competitive with the New York & Erie Railway, but in time the canal could not match the railroad's speed and efficiency, or overcome its own seasonal operating schedule and limited market. The canal transported coal for the last time in 1898, after which most canal sections were dewatered. Waterways and locks eventually became overgrown or fell into ruin, while other sections were filled in by road construction or other development.

Post-Historic and Existing Conditions:

The presence of intact remnants of the Delaware & Hudson Canal at Corwin Farm is the primary reason the National Park Service acquired the property in 1994. The U-shaped channel features tapered stone retaining walls of dry-laid random cut ashlar set in sand (Figure 26). Some wall sections have been overtopped by the surrounding grade and others have slumped or collapsed because of adjacent tree growth. Other wall sections are not readily visible but are likely still intact underneath layers of soil and vegetation. An intermittent stream winds through the channel, which is overgrown with wetland plants and volunteer vegetation (Figure 27). The stone causeway, which replaced an earlier bridge crossing, separates the canal remnants into two areas (Figure 28). To the north is the former holding area for Lock 67, measuring approximately 50 feet wide and 390 feet long. The section to the south measures around 40 feet wide and 230 feet long. The LCS evaluated the condition of both canal sections as "poor" in 2011.

Another original component of the canal is a culvert built into the east wall of the holding area, which directed natural drainage into the canal to help maintain the water level. The culvert outlet features stacked dry-laid stone construction with a 4-foot-long lintel supported by two side piers, each 14-16 inches high. The length of the culvert and the location of its inlet (probably under State Route 97) are unknown at this time. The LCS evaluated the condition of the culvert as "fair" in 2011, but recent field investigation for this report suggests its condition has worsened.

Landscape Features:

Feature Name	CLI Feature ID	Feature Contribution	CRIS-HS Resource ID	Associated CRIS-AR ID	FMSS Record Type	FMSS Record Number	FMSS Exact Match
Delaware & Hudson Canal Lock 67 Holding Area	174512	Contributing	082163		Location	60710	Yes
Delaware & Hudson Canal Prism	174514	Contributing	082948		Location	60712	Yes
Delaware & Hudson Canal Culvert	174516	Contributing	082161		Location	60711	Yes

Landscape Characteristic Graphics:



Figure 26. View looking north from at some of the retaining walls, from the canal prism. (OCLP 2013, DSC_0724)



Figure 27. View looking southeast at the intermittent stream, from the canal prism (OCLP 2013, DSC_0480)



Figure 28. View looking north from within the canal prism at some of the retaining walls. (OCLP 2014, DSC_0489)

Landscape Characteristic: Buildings and Structures

Buildings are elements constructed primarily for sheltering any form of human activity in the

landscape, such as the Corwin house, while structures are elements constructed for functional purposes other than sheltering human activity, such as stone retaining walls. Extant contributing and non-contributing buildings and structures are described below.

Historic Condition (to 1898):

One of the first structures built at Corwin Farm may have been a small bridge across the canal, at the south end of the terrace, during the canal's initial construction in the late 1820s. The design of the bridge is unknown, but in c.1840 the Delaware & Hudson Canal Company probably hauled materials across it to construct the Corwin house for the locktender of Lock #67. The 1.5-story wood frame house was built alongside the towpath on a stone foundation set into the north end of the earthen terrace, with the first floor at grade with the terrace and the basement at grade with the towpath. These elevations, along with stone retaining walls extending from the northeast and southeast corners of the house, allowed direct access between the basement and the towpath. A privy was constructed northwest of the house around the same time.

In c.1850, the Canal Company constructed a 1.5-story wood frame barn at the south end of the terrace, presumably to house mules and hay. Like the house, the barn was set into the terrace on a stone foundation, with a retaining wall extending along the towpath from its northeast corner to accommodate access from the towpath into structure's basement. The barn's first floor was accessed from a ramp on the south side of the building. A smaller one-story shed was built on the south side of the barn around the same time, also on a stone foundation, although its original purpose is not known. It was accessed on the west side, at an elevation similar to the first floor of the barn.

Stone retaining walls were also constructed for stabilization along the steep west (river) side of the terrace and along the west (river) side of the towpath south of the terrace. Between 1860 and 1870, the Canal Company constructed a one-story addition on the west (river) side of the house, and in 1898 a garden house or playhouse was constructed near the privy.

Post-Historic and Existing Conditions:

The Corwin house is a 1.5 story, L-plan house with white wooden siding (Figure 29). The original house measures 32 x 22 feet, has a northwest-southeast orientation, and rests on a full-story stone foundation. The eyebrow windows, corner boards, window hoods, and rake boards are examples of the house's vernacular Greek Revival style. The addition measures 22 x 16.5 feet and lies in a northeast-southwest orientation southwest of the original. The addition features a c.1920s screened-in, bracketed porch on the south side with a second story deck above it with bungalow dormers. The building was rehabilitated in the 1990s for use as the South District Ranger Station. The LCS evaluated the condition of the house as "good" in 2011, but the 2014 Foundation Document gave it a "fair" rating.

Behind the house is the privy, a wooden structure measuring 5 x 4 feet (Figure 30). The privy has a dry-laid foundation, board and batten siding, and a roof of wood shingles. Single-paned windows are located on the northeast and southwest façades, and the door is located on the southeast elevation. The privy, rehabilitated in 2004, is a typical example of a vernacular, utilitarian, nineteenth-century structure. The LCS evaluated the condition of the privy as "good" in 2011.

The Corwin garden house, also called the playhouse, is a single-story structure located behind the privy (see Figure 30). It measures approximately 7 x 5 feet, and features wooden clapboard siding and a gabled roof. The southwest façade has 2 four-paned windows framed with wooden shutters. The playhouse is indicative of the Corwin property's evolution in land use, shifting from association with the canal to family/residential use. It was rehabilitated by the park in 2004. The LCS evaluated the condition of the garden house as "good" in 2011.

The Corwin barn measures 20 by 37 feet and has a timber frame construction with vertical board siding (Figure 31). There is a ramp leading to the large sliding door on the southeast side of the barn. The northeast side of the barn has two windows on the main level and a hinged set of doors on the foundation level to provide access from the house terrace. There is a large, 12-paned window on the southwest façade, and two smaller 2-paned windows on the northwest façade. The

park rehabilitated the barn in 1997-99 and uses it to store equipment. The LCS evaluated the condition of the barn as “good” in 2011.

The Corwin shed is immediately adjacent to the barn’s southeast façade (see Figure 31). The shed measures 16.5 by 10.5 feet and has a gable roof with asphalt shingles. Its frame construction and vertical board siding matches the style of the barn construction. A door on the southwest elevation provides access from the barn ramp. The List of Classified Structures reports that the shed was converted to temporary living quarters in 1939-40, and rehabilitated by the park in 1997-2000. It is currently used for storage, and according to the LCS was in “good” condition in 2011.

The terrace is supported and stabilized on both its west (river) and east (towpath) sides by a series of dry-laid retaining walls constructed with flat, irregular-shaped stones of varying heights and lengths. The retaining walls on the west (river) side of the terrace slope to the river’s edge (see Figure 23). The original wall from the canal era is 380 feet long, 20-30 feet high, with a horizontal length of approximately 6 feet. Since the canal era, the original wall opposite the barn has been increased in height to provide additional stabilization for the terrace and the adjacent work yard. According to the List of Classified Structures, several dry-laid stone walls were constructed in the 1920s and late 1940s for planting beds at the corner of the barn and terraced beds along parts of the bluff overlooking the river. At the Corwin house, the wall extending from the northeast corner of the house, which supports the back yard, measures approximately 8 feet high and 60 feet long (Figure 32). A lower wall, approximately 2-3 feet high defines planting beds along the length of the house. The wall extending from the southeast corner of the house is 8 feet high and 40 feet long and supports stairs leading to the original entrance to the house. At the Corwin barn, the wall extending from the northeast corner of the barn measures 12 feet high and 100 feet in length (see Figure 31). The wall extending from the southeast corner of the shed tapers down to the elevation of the entrance road/causeway crossing. It is approximately 25 feet long and 12 feet high. The LCS evaluated the condition of the walls in 2011 as follows: riverside walls-poor, house walls-fair, barn walls-good.

Remnant stone retaining walls also support the west (river) side of the towpath, south of the terrace. They measure approximately 221 feet in length and range from 5-10 feet high. Most sections are extremely overgrown, but some are still visible. The LCS evaluated the condition of the towpath walls as “fair” in 2011.

The entrance drive is supported by a stone causeway as it crosses over the canal remnants (see Figure 28). The causeway was installed by 1963 to replace the small bridge at this location. The 4-5-foot-high structure is made of dry-laid stones in the same style as the other retaining walls on the site. The causeway includes a culvert with stone headwalls and a clay pipe that directs water under the causeway. Another culvert pipe directs canal water under the towpath to an outlet on the bluff above the river. The outlet is supported by a large structure of concrete cribbing. The date of its installation is not known.

A wood deck is located southeast of the house on the bluff overlooking the river. The asymmetric deck measures approximately 12 x 15 feet, and features benches built into the perimeter railings. The deck was constructed sometime before 1995.

Landscape Features:

Feature Name	CLI Feature ID	Feature Contribution	CRIS-HS Resource ID	Associated CRIS-AR ID	FMSS Record Type	FMSS Record Number	FMSS Exact Match
Corwin House	174518	Contributing	082156		Location	45571	Yes
Corwin House Privy	174520	Contributing	082159		Location	45573	Yes
Corwin Garden House	174522	Contributing	082160		Location	45574	Yes
Corwin Barn	174524	Contributing	082157		Location	45572	Yes
Corwin Shed	174526	Contributing	082158		Location	45578	Yes
Corwin House River-Side Retaining Walls	174528	Contributing	082165		Location	45576	Yes
Corwin House Retaining Walls	174530	Contributing	082947		Location	45575	Yes
Corwin Barn Retaining Walls	174532	Contributing	082164		Location	83601	Yes
Delaware & Hudson Canal Towpath Retaining Walls	174534	Contributing	082167		Location	60714	Yes
Stone Causeway	174536	Noncontributing – Incompatible					No
Towpath Culvert and Crib Outlet	174538	Noncontributing – Compatible					No
Wood Deck	174540	Noncontributing – Compatible					No

Landscape Characteristic Graphics:



Figure 29. View looking northwest at the Corwin House. The c.1840 section of the building is on the right and c.1870 addition is on the left. The porch dates to the 1920s. (OCLP 2014, DSC_0534)



Figure 30. View looking northwest at the Corwin House Privy (left, behind shrub) and the Corwin Garden House (right). (OCLP 2013, DSC_0672)



Figure 31. View looking south at the Corwin Shed (left) and Corwin Barn (right). (OCLP 2013, DSC_0695)



Figure 32. View looking northwest at the retaining walls on the east side of the Corwin House. (OCLP 2014, DSC_0600)

Landscape Characteristic: Circulation

Circulation is comprised of the spaces, features, and materials that make up the network of pedestrian and vehicular movement, such as the towpath and entrance drive. Extant contributing and non-contributing circulation features are described below.

Historic Condition (to 1898):

The most significant circulation feature at the Corwin Farm during the historic period was the canal towpath, which by 1828 paralleled the west side of the canal. A primitive road also connected to the towpath via a bridge at the south end of the terrace, but its route is unknown. When the Corwin house was constructed in c.1840, the towpath was widened in that area to provide access to the basement and the steps leading up to the house's front door and the terrace. When the barn and shed were constructed in c.1850, the towpath was widened in those areas also, which gave access to the barn's basement and the barn's work yard and ramp that accessed the barn's first floor. The existence of pedestrian circulation features during the historic period is unknown.

Post-Historic and Existing Conditions:

The construction of New York State Route 97 in 1934-39 altered access into the Corwin property. At that time, the crossing at the Corwin Bridge became part of an entrance drive that extended from the highway to the towpath. Today, the gravel drive is approximately 15 feet wide and 260 feet long (Figure 33). At the highway, the entrance drive intersects with private road right-of-way built by 1963 that provides access to the former fish camp (now apartment building) property immediately south of the farm. The drive widens to accommodate head-on parking spaces on either side of the drive, and then narrows again as it crosses the canal to meet the towpath. Historically, the canal crossing was a bridge, but it was replaced by a stone causeway in the 1960s. The LCS evaluated the condition of the entrance drive as "good" in 2011, but there is currently a significant erosion problem at the causeway.

Towpaths throughout much of the Delaware & Hudson Canal were used as local roads after the historic period. At Corwin Farm today, the former canal towpath serves both vehicles and pedestrians. Heading north from the canal causeway, the towpath is maintained as a 15-20-foot wide gravel road as it tracks to the east side of the Corwin house where it widens into a small parking area (see Figures 31 and 32). The towpath ends here, as a fence separates the Corwin property from the adjacent religious camp property. Heading south from the causeway, the towpath is maintained as a 10-15-foot wide earthen trail as it passes a boat ramp installed in 1998 and on to the south property line (see Figure 21). The towpath continues south beyond park property as a grass trail. At the causeway, the towpath transitions to a gravel work yard and ramp that provides access to the upper level of the barn. A short two-track trace on the west side of the barn provides access from the work yard to the terrace.

The farm also includes pedestrian circulation features, but their exact construction dates are uncertain. At the Corwin house, a set of recently-built wood steps connects the towpath/parking area east of the house to the terrace, where a walk comprised of rectangular-shaped bluestones leads to the front door of the original portion of the house. The bluestone walk continues to a patio next to the side porch, which provides a transition to the grass-covered terrace (see Figure 29). The design of the L-shaped patio changes from rectangular slabs to a random arrangement of smaller bluestones, suggesting the portion of the patio with larger pieces may be older. From the patio, a narrow bluestone walk heads north to access the house's bulkhead and back porch, the fireplace, and the privy and garden house. Portions of the walk are uneven and some sections are not visible. An earthen path extends from the patio to the bluff, heading southeast down the bluff approximately 30 feet to 3 dry-laid stone steps, and then to a boat winch located near the water.

Landscape Features:

Feature Name	CLI Feature ID	Feature Contribution	CRIS-HS Resource ID	Associated CRIS-AR ID	FMSS Record Type	FMSS Record Number	FMSS Exact Match
Corwin Entrance Drive	174542	Contributing	082166		Location	45584	Yes
Delaware & Hudson Canal Towpath	174544	Contributing	082162		Location	60713	Yes
Wood Steps	174546	Noncontributing – Compatible					No
Flagstone Walks	174548	Noncontributing – Compatible					No
Flagstone Patio	174550	Noncontributing – Compatible					No
River Path to Boat Winch	174552	Noncontributing – Compatible					No
Boat Ramp	174554	Noncontributing – Compatible					No
Visitor Parking Area	174556	Noncontributing – Compatible					No
Private Road to Property to South	174558	Noncontributing – Compatible					No

Landscape Characteristic Graphics:



Figure 33. View looking east at the entrance drive and parking areas, which connect to State Route 97 and canal crossing. (OCLP 2014, DSC_0465)

Landscape Characteristic: Views and Vistas

Views are the panoramic or expansive prospect of a broad range of vision, which may be naturally occurring or deliberately contrived. Vistas are controlled aspects of a discrete, linear range of vision, which is deliberately contrived. Extant contributing and non-contributing views are described below.

Historic Condition (to 1898):

The Delaware & Hudson Canal was a business venture built around the efficient and profitable transportation of coal, so views and vistas were not a consideration in its design. However, as the alignment of the canal was in response to the course of the rivers and local topographic conditions, scenic views were nonetheless created. During the canal's operation, there was always an open and unobstructed view between the waterway and the towpaths because this area would have been clear to prevent any tangling of ropes between the boats and the mules. The canal corridor itself provided open upstream and downstream views that included the surrounding landscape, which in the early years of the canal was still scarred from construction but then became a mix of dense vegetation and open fields.

There were also frequent views from the canal to the river. For boats heading downstream (south) through the Corwin property, the view of the river would have been blocked by the house, barn, and the terrace on which they were built, but past the Corwin bridge there would have been a view down to the river. Due to its elevation, there also would have been good views of the river from the terrace and the Corwin house.

Post-Historic and Existing Conditions:

Aerial photographs from the 1940s show the landscape at Corwin Farm was primarily open except for trees around the Corwin house, along the old canal banks, and along the bluff overlooking the river. Subsequent aerials indicate a spread of vegetation into some of the previously open areas.

Today, the Corwin Farm has several contributing views from various locations. The views from the towpath to the canal are open except for a few places where trees have become established in the canal bed or next to the walls. There are also views up and down the canal, primarily from the causeway looking north and south, with the south view of the towpath extending beyond park property. Views from the towpath to the river are still extant in the canal section south of the causeway. There are also views of the river from the terrace and house, and especially from the wood deck along the bluff. Although it is not historic, visitors also have a view of the farm –the fruit orchards with the barn and house in the background – from State Route 97.

Landscape Features:

Feature Name	CLI Feature ID	Feature Contribution	CRIS-HS Resource ID	Associated CRIS-AR ID	FMSS Record Type	FMSS Record Number	FMSS Exact Match
View between Canal and Towpath	174560	Contributing					No
Views Up and Down Canal	174562	Contributing					No
View of River from Towpath	174564	Contributing					No
View of River from Terrace and House	174566	Contributing					No
View of Corwin Farm from State Route 97	174568	Noncontributing – Compatible					No

Landscape Characteristic: Small Scale Features

Small-scale features include minor built elements that provide aesthetic detail and function, such as signs, benches, and other outdoor furnishings. Extant non-contributing small-scale features are described below.

Historic Condition (to 1898):

There is no record of small-scale features from the historic period.

Post-Historic and Existing Conditions:

There are several non-historic small-scale features at Corwin Farm. National Park Service signage along State Route 97 identifies the site, while park regulatory signs at the causeway direct visitors arriving by car to park in the parking area and not drive on the towpath. In 2001, there was an informational kiosk and a bear-proof trash next to the parking lot, but they have since been removed. In the orchard north of the entrance drive, picnic tables are located under two of the older apple trees.

At the Corwin house, a flag pole stands south of the house within the terrace lawn. A mortared stone fireplace is located west of the house at the edge of the bluff, but is in hazardous condition and is beginning to slip off the bluff. Power units and a propane tank are located along the edges of the back yard, and a radio antenna for ranger communication has been erected on the rear façade of the original portion of the house. Vertical board fencing and chain link fencing mark the north property line, while split rail fencing is located on the north side of the causeway. The split rail fence is in hazardous condition and in need of repair.

Landscape Features:

Feature Name	CLI Feature ID	Feature Contribution	CRIS-HS Resource ID	Associated CRIS-AR ID	FMSS Record Type	FMSS Record Number	FMSS Exact Match
NPS Entrance Signs	174570	Noncontributing – Compatible					No
NPS Regulatory Signs	174572	Noncontributing – Compatible					No
Picnic Tables	174574	Noncontributing – Compatible					No
Flag Pole	174576	Noncontributing – Compatible					No
Fireplace	174578	Noncontributing – Compatible					No
Power Unit	174580	Noncontributing – Compatible					No
Propane Tank	174582	Noncontributing – Compatible					No
Radio Antennae	174584	Noncontributing – Compatible					No
Board Fences	174586	Noncontributing – Compatible					No
Chain Link Fences	174588	Noncontributing – Compatible					No
Split Rail Fences	174590	Noncontributing – Compatible					No

Condition

Assessment Interval (Years): 1

Next Assessment Due Date: 09/29/2026

Condition Assessment and Impacts

Condition Assessment: Fair

Assessment Date: 09/29/2025

Condition Assessment Explanatory Narrative:

Noncontributing vegetation in and around the canal walls and canal prism threatens the integrity of the canal.

Condition Assessment: Fair

Assessment Date: 09/18/2015

Condition Assessment Explanatory Narrative:

Overall, the Corwin Farm landscape is in "fair" condition. The park conducts preventative and cyclic maintenance on the buildings and their associated retaining walls at Corwin Farm. Lawns and orchard trees have been maintained or replanted, and lawn areas are in good condition. However, a significant number of non-historic trees are growing adjacent to and within the canal's stone retaining walls and along the retaining walls on the bluff overlooking the river, which are causing several wall sections to slump, bulge, and/or collapse. Other wall sections have been overtopped by soil and other material, rendering them partially or completely obscured. Woody vegetation is also taking hold within the canal itself and will eventually spread if unchecked. The surface of the entrance drive exhibits signs of erosion, especially at the causeway, and the split rail fence at the causeway is in need of repair.

A "fair" condition assessment indicates the property 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 property to degrade to a poor condition.

Condition Assessment: Good

Assessment Date: 11/25/2003

Condition Assessment Explanatory Narrative:

Impacts

Type of Impact: Erosion

Other Impact: n/a

External or Internal: Internal

Impact Narrative: The entrance driveway is showing signs of erosion, particularly at the causeway.

Date Identified: 09/21/2015

Type of Impact: Structural Deterioration

Other Impact: n/a

External or Internal: Internal

Impact Narrative: Stone retaining walls are failing within the canal prism and along the bluff due to the growth of adjacent non-historic vegetation and the overtopping of the walls by soil.

Date Identified: 09/21/2015

Type of Impact: Vegetation/Invasive Plants

Other Impact: n/a

External or Internal: Internal

Impact Narrative: Woody vegetation has become established within the floor of the canal.

Date Identified: 09/21/2015

Type of Impact: Inundation/Flooding

Other Impact:

External or Internal: External

Impact Narrative: Flood events from the adjacent Delaware River are a constant threat to the cultural landscape.

Date Identified: 09/29/2025

Type of Impact: Operations On Site

Other Impact:

External or Internal: Internal

Impact Narrative: Erosion and ponding on the driveway right-of-way that heads south has forced users to drive around these obstacles, thus encroaching on the historic landscape. The park had proposed installation of a fence.

Date Identified: 09/29/2025

Treatment

Stabilization Measures

Treatment Documents

Treatment Type: Undetermined

Treatment Completed: No

Title:

IRMA Link:

Narrative:

The "Final River Management Plan for the Upper Delaware Scenic and Recreational River" was completed in 1986, before the National Park Service acquired the Corwin Farm property. The most recent planning document that addressed the farm is the "Foundation Document, Upper Delaware Scenic and Recreational River, New York and Pennsylvania," completed in 2014. The foundation document did not articulate a treatment strategy for the Corwin Farm landscape, but proposed several studies that relate to the landscape. (Foundation Document 2014: 15-17,19,26)

- An adaptive visitor use management study and design concept plan.
- A traffic study to inform future site improvements.
- Exhibit plan to provide overarching guidance for museum exhibit displays at a future visitor contact area at the Corwin Farm.
- Tiered from the long-range interpretive plan, an interpretive plan for Corwin Farm would identify interpretive exhibits and programming specific to that site.
- Accessibility plan to ensure that visitor facilities at the site comply with the Americans with Disabilities Act and Architectural Barriers Act.
- Research and preparation of a nomination for the property to the National Register of Historic Places to assure the site is recognized for its place in interpreting the history of the Delaware & Hudson Canal.
- A landscape treatment plan to identify period-appropriate landscape treatments and compatible visitor facilities on the site.

The Foundation Document also identified potential opportunities and uses at Corwin Farm. (Foundation Document 2014: 27,34)

- Convert Corwin Farm to a visitor use area.
- Improve the site to establish a carry-in visitor access point.

Funding requests for some of the projects above have been entered in the National Park Service's Project Management Information System (PMIS):

"Prepare a Landscape Plan for the Corwin Farm Site" (PMIS 197645), Funding of \$93,363.71 requested for FY 2016:

The project will create a Cultural Landscape Report and a Landscape Plan for the Corwin Farm unit of Upper Delaware Scenic and Recreational River. The tract of land is approximately 4.5 acres, located in Sullivan County, New York along the Delaware River and contains remnants of the Delaware and Hudson Canal and buildings that date to the canal era. Based upon the findings of the Landscape Report, a Landscape Plan will be created for the site for the long-range planning, landscape rehabilitation, management, and stewardship of the cultural landscape and structures, including canal remnants. Also of particular importance will be recommendations for opening the site to the general public, both for immediate short-term access and also permanent access solutions, all of which will be sensitive to the cultural resources associated with the property. All treatment alternatives will follow the Secretary of the Interior Standards, and be based upon park management review. The Landscape Plan will consist of fully developed narratives and graphic components, and will serve as the basis for park planning, design, compliance and implementation.

"Prepare a Historic Resource Study for Seven Park Owned Properties" (PMIS 210620), Funding of \$94,898.93 requested for FY 2017:

Prepare Historic Resource Study (HRS) which will provide for research on and assessment of newly acquired properties. The study will develop and recover data, determine eligibility for inclusion on the National Register, and will include preparation of nominations for qualifying structures. A total of 7 properties and 12 structures will be considered. Buildings and properties include: the Roebling Bridge Toll House; the Corwin farm house, barn and outbuildings; the Alice Grey house, barn and outbuilding, Hurley house and outbuilding; Margold house and outbuildings.

"Prepare Historic Structure Report for Corwin Farm Structures" (PMIS 186871) Funding of \$105,996.80 requested for FY 2015:

Prepare historic Structure Report (HSR) for the Corwin site, including the locktender's house, barn, shed, playhouse, and outhouse. This site was part of the historic Delaware and Hudson canal and includes canal features as well as original structures.

Approved Treatment Costs

Cost Narrative:

Bibliography and Supplemental Information

Bibliography:

Citation Author	Citation Title	Year of Publication	Citation Publisher	Citation Type	Citation Location	Citation Number
Whitford, Noble E.	History of the Canal System of the State of New York	1906	Albany, NY: Brandon Printing Company			
Wakefield, Manville	Coal Boats to Tidewater	1965	South Fallsburgh, NY: Steingart Associates			
n/a	State of the Park Report, Upper Delaware Scenic and Recreational River	2011	U.S. Department of the Interior, National Park Service			
n/a	State of the Park Report, Upper Delaware Scenic and Recreational River	2001	U.S. Department of the Interior, National Park Service			
Scott, Jane and Sandra Hauptman	Remains of Delaware and Hudson Canal Within the Boundaries of the Upper Delaware National Scenic and Recreational River, New York and Pennsylvania, Report of a Survey Conducted April-May 1981	1981	n/a			
Quinlan, James Eldridge	History of Sullivan County	1873	http://genealogytrails.com/ny/sullivan/history_lumberland.html			
National Park Service	Resource Management Plan, Upper Delaware Scenic and Recreational River, Draft	1994	U.S. Department of the Interior, National Park Service			

Cowen Farm
Upper Delaware Scenic And Recreational River

National Park Service	Foundation Document, Upper Delaware Scenic and Recreational River, New York and Pennsylvania	2014	U.S. Department of the Interior, National Park Service			
National Park Service	Final Environmental Impact Statement, Upper Delaware Scenic and Recreational River, New York and Pennsylvania	1987	U.S. Department of the Interior, National Park Service			
Koch, Alison L. and Vincent L. Santucci	Paleontological Resource Inventory and Monitoring, Eastern Rivers and Mountains Network	2004	U.S. Department of the Interior, National Park Service			
HRG Consultants	Route 97 Intrinsic Quality Report	2001	Bethesda, MD			
Hopkins, Bruce	Wayside Exhibit Proposal, Upper Delaware Scenic and Recreational River	1999	Kirilloff Design			
Gold, David M., editor	The River and the Mountains, Readings in Sullivan County History	1994	S. Fallsburg NY: Marielle Press			
Fiedel, Stuart and Charles Lee Decker	Archeological Overview and Assessment, Upper Delaware Scenic and Recreational River	2008	The Louis Berger Group, Inc.			
De Vries, Gregory	Mongaup Interpretive Center Cultural Landscape Assessment, Upper Delaware Scenic and Recreational River	2007	Heritage Landscapes Preservation Landscape Architects & Planners			

Cowen Farm
Upper Delaware Scenic And Recreational River

Dekin, Albert, et al.	Cultural Resource Survey, Upper Delaware National Scenic and Recreational River, Pennsylvania and New York, Volumes 1-6	1983	Binghamton, NY: State University of New York, Public Archaeology Facility			
Cooper, Allen H.	Archeological Investigations for Miscellaneous Site Development Projects, South District Ranger Station, Upper Delaware Scenic and Recreational River, Sullivan County, New York	1998	U.S. Department of the Interior, National Park Service, Philadelphia Support Off			
Conference of Upper Delaware Townships	Final River Management Plan, Upper Delaware Scenic and Recreational River, New York and Pennsylvania	1986	U.S. Department of the Interior, National Park Service			
n/a	Comprehensive Interpretive Plan, Upper Delaware Scenic and Recreational River	1999	U.S. Department of the Interior, National Park Service			
Carrol, Matthew S., Ben W. Twight, Marsha McCabe	Appropriate River Recreation Use Study: An Analysis of Community Response to Federal Presence in the Upper Delaware River Valley	1987	Penn State University, School of Forest Resources			
Beers, Frederick W.	County Atlas of Sullivan, New York	1875	Walker & Jewett			

Supplemental Information:

Supplemental Information Title: Upper Delaware Scenic and Recreational River

Supplemental Information Narrative:

Website, accessed 11 and 14 March 2015.

Supplemental Information:

Supplemental Information Title: List of Classified Structures

Supplemental Information Narrative:

Website, accessed 30 June 2015.

Supplemental Information:

Supplemental Information Title: NETR Historic Aerials

Supplemental Information Narrative:

Website, accessed 12 June 2015.

Supplemental Information:

Supplemental Information Title: Denver Service Center, eTIC

Supplemental Information Narrative:

Drawing #647-80027, "Boat Access Ramp, Site Plan & Profile, South District Ranger Station, Upper Delaware Scenic & Recreational River," April 1998.

Supplemental Information:

Supplemental Information Title: Project Management Information System

Supplemental Information Narrative:

Website, accessed 24 May 2015.

Supplemental Information:

Supplemental Information Title: Review Comments-Park

Supplemental Information Narrative:

Comments on CLI review draft from UPDE staff, received 10 August 2015.

Supplemental Information:

Supplemental Information Title: Review Comments-Harmon

Supplemental Information Narrative:

Comments on CLI review draft from Jim Harmon, NPS archeologist, received 3 September 2015.

Landscape Documents:

File Name	Date	Attachment Type
UPDE_Cowen Farm-Roeblings Bridge-Zane Grey_CLI Updates Notes_2025.pdf		

Source