

American Canal Society Canal Index

CANAL	STATUS			ACS		
				HAER		
STATE/PROVINCE	ENLARGEMENTS	DATES IN USE	CANAL	LENGTH SLACKWATER	TOTAL	LIFT LOCKS No./SIZE
COUNTIES:		1				
LOCATION (Endpoints of Canal):		2				
TOPOGRAPHIC MAPS:		3				
		4				
HISTORICAL SIGNIFICANCE:						
PHYSICAL DESCRIPTION:						
NAMES & ADDRESSES OF GROUPS CONCERNED WITH CANAL'S PRESERVATION/RESTORATION:						
BIBLIOGRAPHICAL SUMMARY:						
UNPUBLISHED RECORDS, PHOTOS, DRAWINGS (CEHR, HAER, HABS. Local or Regional Historical Societies, Libraries, etc.):						
EXISTING OR RECOMMENDED LANDMARK STATUS (CEHR, National Register, ETC.):						
Investigation made by:					Date:	
Address:						

Use additional pages for added information

Lehigh Canals, Historical Significance (continued)

Josiah White's final achievement, to tie his entire navigation and transportation system together from east to west, was the "Lehigh and Susquehanna Railroad" completed in 1841, which carried freight over the mountains 25 miles from White Haven on the Lehigh to Wilkes-Barre on the Susquehanna. To lift the loaded cars out of the Wyoming Valley at the north end of the route, he used a series of three inclined planes, known as the "Ashley Planes," run by powerful stationary engines similar in design to those on the Allegheny Portage Railroad. These planes were said to have the highest lift of any in the world. The rail line also included a 1,800-foot tunnel north of White Haven.

Disaster struck Josiah White's enterprises in 1841 when a tremendous flood rolled down the Lehigh Valley, with great loss of life, destroying most of the Lehigh Navigation System, portions of his coal and iron works, and virtually all of the beautifully constructed locks of the Lehigh Valley Canal. Such a catastrophe would have ruined a lesser man, but Josiah White, with fierce determination, within four months rebuilt enough of his navigation system to get back into operation, at least to Philadelphia, and shortly thereafter, restored most of his canal system to its original condition. In 1862, another flood destroyed the upper division between Mauch Chunk and White Haven and it was then replaced by an extension of the Lehigh & Susquehanna Railroad.

But, the transportation medium for which White became most famous was the so-called "Switch Back Railroad." Originally, coal was transported from the mines at Summit Hill to the loading docks on the river at Mauch Chunk by a gravity railroad that ran nine miles, all down hill from the mines to the river. Cuts of loaded cars ran from the mine to the docks by gravity. Empty cars were returned by mules on the same track. In 1848, a second "back track" was constructed between the two terminals. This track had an inclined plane at Mauch Chunk to draw the empty cars to the top of Mount Pisgah, a down hill sloping track going west from the summit and a second incline plane to draw the cars up Mount Jefferson into Summit Hill. Except for the two inclined planes, powered by stationary engines, 17 miles of the 18 mile railroad was operated by gravity. After this railroad ceased to be used for coal, it was operated as a tourist attraction until the 1930's. It is said to be the inspiration for roller coasters and is the subject of restoration studies.

The Delaware Division of the Pennsylvania Canal System was sold by the State to the Erie and Sunbury Railroad in 1858. The Lehigh Coal and Navigation Company acquired control of this canal line on a 99 year lease basis, several years later. The old Delaware Division then continued to operate as part of the Lehigh Coal and Navigation Company system until 1931, when it was reacquired in part by the Commonwealth of Pennsylvania. In 1940, the balance of the Delaware Division was conveyed to the commonwealth as part of an historic park system, known as Roosevelt State Park. It has since been renamed the Delaware Canal State Park. Thus, the Delaware Division Canal went "full cycle" from state ownership, to private operation, and finally back to the state again.

Lehigh Canal Structures

From Jim Thorpe

Revised: 2/26/09

Notes: 1) Locks are numbered each way from Maunch Chunk (Jim Thorpe)

Lower Division (Jim Thorpe to Easton)

Miles from Jim Thorpe	Lock Number	Name/Location	Lift	Condition	Notes	GPS Coordinates
0.00	1	Below Jim Thorpe / Guard Lock	0 - 1.4 ft.	Intact without gates		40E51'39.72"N 75E44'12.70"W
0.51	2		8.3 feet	Intact without gates	Paralled by weigh lock	40E51'44.85"N 75E43'45.00"W
0.76	3		8.3 feet	Intact without gates		40E51'51.26"N 75E43'30.75"W
1.18	4		9.0 feet	Intact without gates		40E51'48.03"N 75E43'03.92"W
1.60	5		7.2 feet	Intact without gates		40E51'29.45"N 75E42'48.88"W
1.81	6		7.7 feet	Intact without gates		40E51'20.09"N 75E42'41.78"W
2.77	7		9.1 feet	Intact without gates		40E50'32.86"N 75E42'21.38"W
3.48	8	Weissport	7.8 feet	Intact without gates		40E49'59.60"N 75E42'03.30"W
3.83	9	Weissport	8.1 feet	Intact without gates		40E49'38.20"N 75E41'53.60"W
4.27	10		7.4 feet	Intact without gates		40E49'24.66"N 75E41'38.27"W
4.83	11		7.2 feet	Intact without gates		40E49'10.83"N 75E41'04.98"W
5.50	13	Parryville / Outlet for Section 1	12.5 feet	Intact without gates		40E49'10.83"N 75E40'22.83"W
6.32	GL 2	Guard Lock 2 / Dam 2	0 feet	Buried	Remains of west end of dam	40E48'15.51"N 75E40'11.34"W
7.04	15		16.2 feet	Buried		
7.89	16		8.2 feet	Buried		
8.71	17		7.5 feet	Buried		
9.84	18	Palmerton	7.5 feet	Intact without gates		40E47'42.92"N 75E37'01.29"W
10.16		Aquashicola Creek Aqueduct		Piers & abutments remain		40E47'32.54"N 75E36'45.34"W
10.18	19		4.5 feet	Intact without gates		40E47'31.76"N 75E36'43.94"W
10.31	20	Outlet for Section 2	9.1 feet	Intact without gates		40E47'26.87"N 75E36'37.71"W
11.28	GL 3	Guard Lock 3 / Dam 3	0 feet	Eroded by flooding	Lehigh Gap Dam	40E46'42.44"N 75E36'13.87"W
11.91	22		7.9 feet	Intact without gates		40E46'09.37"N 75E36'13.46"W
13.19	23	Walnutport	9.1 feet	Intact without gates	Lock house restored	40E45'04.90"N 75E36'00.13"W
13.66	24		7.4 feet	Intact without gates		40E44'43.04"N 75E35'46.56"W
14.52	25		6.0 feet	Intact without gates		40E44'04.74"N 75E35'19.49"W
15.15		Bertsch Creek Aqueduct		Pier & abutments remain		40E44'08.37"N 75E34'38.47"W
15.16	26	Lockport	6.6 feet	Intact without gates		40E44'08.36"N 75E34'37.35"W
15.26	27	Lockport / Outlet for Section 3	7.7 feet	Intact without gates		40E44'07.28"N 75E34'30.00"W
17.52	GL4	Guard Lock 4 / Dam 4	1.0 feet	Intact without gates	Three Mile Dam	40E43'36.31"N 75E32'38.24"W
18.09	28	Treichlers	7.7 feet	Intact without gates		40E44'04.38"N 75E32'29.63"W

Miles from Jim Thorpe	Lock Number	Name/Location	Lift	Condition	Notes	GPS Coordinates
18.30	30	Outlet for Section 4	?	Intact without gates		40E44'13.31"N 75E32'22.73"W
20.08	GL5	Guard Lock 5 / Dam 5	9.9 feet	Intact without gates	Two side by side chambers	40E43'13.45"N 75E31'27.54"W
20.88	32		7.5 feet	Intact without gates		40E42'34.16"N 75E31'07.92"W
22.21	33		9.5 feet	Intact without gates		40E41'34.92"N 75E30'21.26"W
23.48	34	Northampton	6.4 feet	Mostly filled in, but towpath wall is on edge of parking		40E40'42.56"N 75E29'36.31"W
23.71		Hokendauqua Creek Aqueduct		Abutments & pier footers remain, footbridge at site		40E40'36.99"N 75E29'23.67"W
23.97	35	Outlet for Section 5	7.0 feet	Deteriorated	Downstream of railroad bridge	40E40'28.09"N 75E29'11.88"W
24.90	GL6	Guard Lock 6 / Dam 6	0.8 feet			40E39'39.10"N 75E28'58.40"W
25.71	36	Catasauqua	7.4 feet			40E39'05.78"N 75E28'28.36"W
27.00	37		7.4 feet			40E38'12.26"N 75E27'46.86"W
27.92	39	Kimmetts Lock / Outlet for Section 6	11.2 feet			40E37'27.87"N 75E27'30.96"W
29.21	GL7	Guard Lock 7 / Dam 7	1.4 feet	Original dam replaced by concrete		40E36'24.80"N 75E27'12.61"W
29.80	40		7.3 feet	Intact without gates, watered		40E35'58.17"N 75E26'57.05"W
32.73	41		7.2 feet	Intact without gates, watered		40E36'47.26"N 75E24'22.97"W
34.11		Monocacy Creek Aqueduct		Replaced by steel flume carrying water		40E36'59.29"N 75E22'50.15"W
34.13	42		8.2 feet	Intact without lower gates, watered		40E36'59.46"N 75E22'48.90"W
35.59	43		7.9 feet			40E37'11.56"N 75E21'12.46"W
37.47	44	Freemansburg	8.6 feet	Intact without gates, lock house & mule barn		40E37'59.84"N 75E19'57.12"W
39.44	45	Republic	5.7 feet	Intact without gates, watered		40E38'16.22"N 75E17'58.41"W
40.33	46	Hope Lock / Outlet for Section 7	?	Badly silted in		40E38'30.74"N 75E17'04.31"W
40.98		Causeway		Gone		40E38'49.84"N 75E16'00.49"W
42.43		Mule Bridge		Cables, pier, & abutments only		40E39'13.52"N 75E14'54.64"W
42.78	GL8	Guard Lock 8 / Dam 8 "Chain Dam"	1.0 feet	Original dam replaced by concrete, lock intact		40E39'27.68"N 75E14'38.96"W
45.08	47		8.6 feet	Restored and operable.		40E40'58.29"N 75E13'12.47"W
45.21	Outlet		13.8 feet	Restored with upper gates		40E41'01.61"N 75E13'04.04"W
46.01		Dam 9		Original dam replaced by concrete, end of canal		40E41'19.86"N 75E12'18.19"W