In the 1928-1929 Passaic County Park Commission Report, the agency had developed a concept for the future of the abandoned Morris Canal right-of-way (ROW). The idea was simple: to create an unbroken route for walking, hiking, and horseback riding, as well as a link between the existing county parks. After the canal was decommissioned, however, the State gave rights to the ROW to municipalities, thus making it difficult for the Park Commission to accomplish its vision. The townships of Wayne and Little Falls permitted the North Jersey District Water Supply Commission (NJDWSC) to lay the Wanaque Aqueduct along the ROW of the Pompton Feeder between Pompton Lakes and Mountain View, and in the abandoned canal bed between Mountain View and Little Falls. Other municipalities, such as Paterson, allowed their portion to be used by entities such as the Erie Lackawanna Railroad.

Fast forward to October 2015, some 90 years since the Morris Canal was decommissioned. The Passaic County Board of Chosen Freeholders and the NJDWSC executed a Memorandum of Agreement, which grants the county permission to analyze and investigate the feasibility of a proposed expansion of the Morris Canal Greenway by utilizing the water commission’s existing 5.9-mile ROW over the Wanaque Aqueduct, from Pompton Aquatic Park in Wayne, to Union Boulevard in Totowa. Based on the findings, the county may also...
prepare preliminary design work for the proposed expansion.

Striking this agreement signifies a major milestone toward creating public access along the most scenic portions of the Morris Canal in Passaic County. It is expected that the county will have completed the study and preliminary design by early 2017.

Other efforts to finalize the Morris Canal Greenway in Passaic County have been a huge success. The county is nearing the completion of a 6.2-mile segment that will traverse the cities of Paterson and Clifton and will include the creation of the Morris Canal Park along Barnes Street in Paterson. This Greenway project includes substantial safety improvements for pedestrians and cyclists, way-finding, and interpretive signage. “By offering an enjoyable and convenient alternative to automobile use, Passaic County residents will have a cost-efficient and environmentally friendly option to navigate different locations,” stated Freeholder Pat Lepore. The improvements will provide safer access and more efficient links to approximately 114 bus stops along 18 NJ Transit routes, including the Allwood Road Park & Ride facility in Clifton. “These improvements will make the Morris Canal Greenway a more attractive travel option in the most densely populated area of the

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MEETINGS

(Continued from page 1)

many museums, historic villages, British pubs, and over 100 locks. Come, enjoy this ride through the beautiful English Midlands.

In addition to the presentation, CSNJ member Deb Wefferling will prepare and serve a light supper of beef stew and one of her fine desserts. Deb’s culinary skills are renowned, so please come early to enjoy food and friendly conversation before the meeting.

Bob Barth is a past president of the Canal Society of New Jersey and past vice-chairman of the Friends of Waterloo Village. In 1982, Bob caught “canal pox” from James Lee, Sr. This terminal ailment has set Bob on a lifelong quest to study and explore canals, both locally and worldwide. He serves as a director of the American Canal Society and holds memberships in over twenty canal organizations.

Bob is a graduate of Montclair State College, with a B.A. in speech, and worked for 10 years as a professional stage manager and technical director. He was instrumental in the successful effort to create the Paulinskill Valley Trail, on the former right-of-way of the New York, Susquehanna, and Western Railroad in Warren and Sussex counties.

Friday – March 18, 2016 at 7:30 p.m. – Refreshments at 7:00

PENNSYLVANIA COAL MINING
EXPLORING HISTORIC COAL MINE SITES
MIKE & GREG HETMAN
Throughout the 19th century the anthracite canals of New Jersey and Pennsylvania transported millions of tons of coal from mines to developing markets, turning

(Continued on page 6)
Boonton
Morris County
Open Space Trust Fund
Grant Approved

In November 2015 the CSNJ was awarded a Morris County Open Space Trust Fund grant to acquire the Boonton Boardwalk. CSNJ will be working with the town and the local Boardwalk Committee to bring the property into public ownership as a Morris Canal Greenway Trail Head. Although this will be a complicated undertaking, we look forward to working on a project that will highlight Boonton’s unique canal and industrial history.

In more news, Passaic County was recently awarded a grant from the Transportation Alternatives Program (TAP) that will afford the county the opportunity to complete the Morris Canal route between the two already completed, but disconnected, Greenway sections in Little Falls and Woodland Park. This project will include the creation of the Passaic County Morris Canal Park near the site of Bold’s Mill and mill pond, which also serves a critical transportation corridor. Sidewalks will be installed at locations where there currently are gaps, and transit stops will be enhanced along with way-finding and interpretive signage. Construction is planned to begin in 2016. Without the continuing support of the Passaic County Freeholders, these major infrastructure projects could not proceed.

Other projects include a one-mile portion along the Ramapo River, funded by a $99,000 grant awarded to Pompton Lakes by the Passaic County Open Space Trust Fund in 2015. This project will tie into other newly created and marked trails at the county’s Pompton Aquatic Park.

Join us for our first annual New Jersey Canals & Local History Symposium. Topics will include talks and videos focusing on basic canal history and the impact of canals on our history and culture.

- “Famous Tiller Sharks,” film featuring Jim Lee, Sr.
- How Canals & Anthracite Coal Changed Everything, Joe Macasek
- “The D&R Canal,” narrated by Jean Shepherd
- Along the D&R Canal, Bill McKelvey
- Plans for Plane 9 West, Jim Lee, Jr., & Jim Lee III
- Restoring Wharton’s Lock 2 West, John Manna
- The Future Brightens at Waterloo, Andrea Proctor

This full-day event will start with coffee, tea and pastries, and include a box lunch. All participants will receive a packet of useful information for history buffs, study resources for students, and lesson plans for teachers. On display will be the Canal Society’s traveling exhibit, canal artifacts, a sales table, and a video of an functioning inclined plane.

Register now. Attendance is limited to 100 participants.

The symposium fee is $15.00. Make your check payable to CSNJ and mail to:
CSNJ Symposium, c/o Robert Barth, 214 North Bridge Street, Somerville, NJ 08876

Please include your e-mail address, phone number, affiliation and special food choice: vegetarian or vegan. For information contact: 201-401-3121 or bbarth@att.net
**By Joe Macasek**

This article is the second in a series dedicated to a careful examination of a group of historic photos of the Morris Canal at Waterloo taken by photographer William Henry Jackson. These pictures are so clear and contain so much detail that each could be a story in itself. To take the two pictures of Lock 3 West shown here, the photographer carefully positioned himself on the overhead mule bridge, giving him a view from above. The lock fills the right foreground; beyond, the canal and its towpath stretch into the distance along the edge of the lush Musconetcong River Valley bordered by open fields. The scene is very different from the view we see today. From this vantage point, we can see that this lock is a bit different from others shown in historic photos.

Two things made this lock distinct and more complex. First, it is a guard lock that passed boats from the Musconetcong River back into the canal with no significant change in elevation. Guard locks used the traditional balance beam miter gates rather than the more efficient crank-open gates used elsewhere. Because there was little change in elevation, boats could not pass under the cross-lock platforms upon which that equipment was mounted. Second, to get from the river to the canal, the lock would have to cross the tailrace from Smith's grist and saw mills. To accomplish this, the far end of the lock was built of heavy timbers much like the wooden trough of an aqueduct. This construction allowed the tail race to flow beneath, but left no room at that end of the lock to swing the usual balance beam miter gates. A troublesome situation.

To solve this problem, the elaborate wooden framework, seen in the photos below, was built over the end of the lock, high enough to allow high-riding empty boats to pass underneath. The platform where we see the lock tender standing supported a rack and pinion that cranked the lock gates open and closed. The miter gates end posts reached high enough to

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**Waterloo in the Early 1900s**

Historic photographs often show details of everyday life that no one ever considered important enough to document. These two photos taken just a few minutes apart in the 1890s show Guard Lock 3 West at Waterloo in great detail. They depict the boat crew and lock tender going about their work and give a glimpse into everyday life on the canal.
reach the level of the machinery. A boardwalk and stairs enabled the lock tender access to that end of the lock. Older photos show that a small shed once sheltered the equipment.

The photos also show many modifications to aid in the day-to-day working of the lock that were made more difficult by its eccentricities. Among them is the narrow walkway on the left side of the lock extending from the stonework to the far end. The photos show that this was used by the mule tender. To get the boat underway, he needed to walk the tow rope down the lock, passing it around the vertical timbers before he could attach it to the towing post on the boat. To keep the towline from snagging as the mules took up the slack, old lengths of inclined plane cable were fixed along the top of the fence and over the tailrace bridge truss on the right side of the picture. An overhead bridge, seen in the diagram below, allowed the lock tender to operate both sides of the lock and mule tenders, and boat men to cross into the village.

Despite all the ingenuity, tending this lock had its mixed blessings. Although its close proximity to the village must have provided comforts and convenience, its location close to the bottom of the inclined plane must have made coordinating the passing of boats a challenge. If a boat couldn’t be passed directly from lock to plane car, there wasn’t much room to maneuver. In 1863 the canal chief engineer William Talcott, reflected on the problem in his report to the Stockholders. He reported that the location of Guard Lock 3 West so close the foot of Plane 4 West caused frequent delays. Although he recommended that the lock be moved farther from the plane, that work was never done.

A careful look at the canal boat seen in the center of the photos shows some interesting detail of life on the canal. The boat is traveling empty, deadheading west with an assortment of equipment scattered about the deck. At the hinge, between the feed boxes, a brazier is set up for cooking. A tea kettle sits on deck near by. Just behind, boards covering the hold provide space for pails, a water barrel and extra towline. A hand pump sticks up from between the planks and a tarp hangs over one of the cross beams. This boat has seen travel (Continued on page 8)

Guard Lock 3 West was a complex structure. The diagram below shows its stone chamber on the right and its wooden trunk on the left, built to carry the lock over the grist and saw mill tailrace. The lock is surrounded by buildings, bridges, and pathways that are part of its operation.
2016 Industrial Heritage Walks

March through July

26 March – **Oreland** Explore Morris County’s Only Ghost Town  
9 April – **Split Rock Furnace**  
14 May – **Bethlehem Steel** NEW  
11 June – **Morris Aqueduct**  
10 July – **Ledgewood’s Inclined Planes 2&3 East**

Industrial Heritage Walks are sponsored by the Morris County Park Commission
For information & reservations, please e-mail macgraphics1@verizon.net or call 973-292-2755

MEETINGS

(Continued from page 2)

coastal cities into manufacturing centers. For many years, coal was king, and factories needed a constant supply to keep their wheels turning. Mining coal became a major industry: places like Scranton and Hazleton, PA grew from patch towns into thriving cities. Although coal mining is no longer an important part of the local economy, abandoned mine sites are found wherever this industry once flourished. These sites are often ignored and almost never adequately researched and recorded. The speakers are avid explorers of historic mines and their program will be an all-new presentation centered on coal mining and mining artifacts. Come join us and share their adventures.

In addition to this evening presentation, CSNJ member Deb Wefferling will prepare a light supper. Deb’s culinary skills are renowned, so please come early and enjoy food and friendly conversation before the meeting.

**Mike & Greg Hetman** are serious mine explorers and experts on all aspects of coal and iron mining. They have investigated and photographed numerous historic mines in northern New Jersey, southern New York State, and northeastern Pennsylvania. Mike is a web site designer and musician; Greg is a computer network administrator.

Canal Society Book Store

The Canal Society Book Store now has a wide range of topics available, including canals, local and industrial history. Visit our sales table before and after membership meetings. We are sure to have that book you’ve been looking for.

Canal Society Jackets

We will be ordering hooded, fleece-lined, nylon jackets with CSNJ graphics. Available in six adult sizes, jackets are weather-resistant with plenty of pocket space, featuring hood and waist drawstrings with bell tips. Color: forest green with gold lettering.

Jackets are priced as follows:

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<th>Size</th>
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<td>S, M, L, XL</td>
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All jackets will be custom ordered on a pre-paid basis. If interested, contact Bierce Riley at Bierce.Riley@gmail.com or phone 973-455-0491. Please provide your name, phone number, e-mail address, and size. Include ‘CSNJ’ in your subject line. The minimum order is 12 jackets, with nine members indicating interest so far. Let us know if you’d like to be included in this one-time offer.

On The Level

The Canal Society of New Jersey  
PO Box 737, Morristown, New Jersey 07963-0737

On The Level is published three times a year by the Canal Society of New Jersey.

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<td>Rick Giles</td>
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<td>Judy Keith</td>
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<td>Recording Secretary</td>
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<td>Corresponding Secretary</td>
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<td>Bierce Riley</td>
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CONTACT INFORMATION

Financial Administrator: Lew Wefferling – 973-768-4268  
Membership Chairman: Judy Keith – 973-347-9199 – jakeith23@verizon.net  
Museum Director: Rich Richter – 973-728-0316 – FIERO87@Verizon.net  
OTL Editor: Bierce Riley – 973-455-0491 – Bierce.Riley@gmail.com

These walks and events are sponsored by the D&R Canal Watch. The walks are free, but donations are welcome and appreciated. For additional information contact tour leaders:

Bob Barth at 201-401-3121 or bbarth@att.net
Pamela V’Combe at 609-635-2783 or pjvcombe@gmail.com

**Sunday, January 31 – 2:00 p.m.**
Two-Canal Walk. Meet outside of the Lambertville Station restaurant, near the caboose. We will begin on the D&R Feeder on the New Jersey side and cross the Delaware River to walk along the Delaware Canal in New Hope. Cookies and hot chocolate await at the locktender’s house. Leader: Bob Barth.

**Saturday, February 6 – 10:00 a.m.**
A Walk through History, 3.2 miles on the D&R Canal towpath from Demott Lane to Lock 11 in South Bound Brook (the meeting place), across from the post office on Canal Road at Madison Street. 2-3 hours. Leader: Bob Barth.

**Saturday, March 5 - 10:00 a.m.**
Hike 5.7 miles on the D&R Canal towpath from Bulls Island to Holcombe-Jimison Farmstead Museum (the meeting place; parking lot at the canal) or choose the 3-mile walk to Prallsville Mill. Leader: Bob Barth.

**Saturday, March 19 – 10:00 a.m.**
Hike 5.3 miles on the D&R Canal towpath from Fireman’s Eddy to Prallsville Mill (the meeting place) or choose the 2.6-mile walk to the Holcombe-Jimison Farm. The tour will include the historic remnants of the feeder canal outlet lock to the river, other historic canal structures and expansive views across river. Leader: Pamela V’Combe.

**Saturday, April 2 - 10:00 a.m.**
A Walk Through History. 3.1 miles on the D&R Canal towpath from Zarephath to Lock 11 in South Bound Brook (the meeting place), across from the post office on Canal Road at Madison Street. 2-3 hours. Leader: Bob Barth.

**Saturday, April 16 – 10:00 a.m.**
Hike 5.3 miles on the D&R Canal towpath from Fireman’s Eddy to Washington Crossing (the meeting place) or choose the 4.1-mile walk to Church Road in Titusville. Leader: Pamela V’Combe.

**Saturday, April 30— 10:00 a.m.**
Hike 6.2 miles on the D&R Canal towpath from Washington Crossing to Elslarsie, the Trenton City Museum in Cadwalader Park (the meeting place) or choose the 2.4-mile walk to Scudder’s Falls. The tour will pass by Wilburtha and Upper Ferry Road and will include historic canal structures: several stop gates, a spillway, an aqueduct, and other historic features. Leader: Pamela V’Combe.

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**Bloomfield Greenway Hike**
**Saturday, April 30, 10:00 a.m. to 2:30 p.m.**

This three-mile hike conducted by Rich Rockwell and Ron Rice will follow the path of the Morris Canal through Bloomfield and include a bus ride to additional nearby canal sites. There will be a special stop to visit the newly reclaimed section of canal at Oak Tree Lane.

**Reservations are required.** A $5.00 donation is requested to cover the cost of the bus and 20-page handout with historic photos and color maps.

To reserve a space, email MorrisCanal@gmail.com

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**Bike Ride Event**
**Sponsored by the New Jersey Bike & Walk Coalition**
**Saturday, April 23**

Join tour leader Bob Barth for a Morris Canal bike ride from Wharton to Ledgewood. This will be a history tour with lots of museum and site-seeing stops along the way. The tour will be over roads and trails suitable for hybrid or mountain bikes.

Meet at 9:30 a.m. at Hugh Force Park in Wharton. This ride is a co-listed event with limited attendance. Sign up early to reserve a place.

To sign up, please contact Bob Barth at bbarth@att.net or 201-401-3121

Note: Riders must wear helmets. This event may be canceled in case of rain.
Greenway Trail Clearing

Since the fall, CSNJ member Jakob Franke and a group of dedicated volunteers have been working to reopen sections of the Morris Canal Greenway that had become impassable. It’s hard work. So far, they have made passable a section near the Rockport Pheasant Farm and more than a mile of the Waterloo Valley Trail from Bilby Road to Waterloo Road through an incredible tangle of underbrush and downed trees. The team hopes to get permission from State Parks to open a length of towpath that has remained uncleared. Join them this year when they start work on Plane 4 West.

Jakob Franke - jf31@columbia.edu

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Jakob Franke - jf31@columbia.edu

Waterloo Early 1900s

(Continued from page 6)

years of service and is looking the worse for wear. Midships, the captain strikes a stoop shouldered pose as the boat starts to clear the lock. Aft, a woman, maybe his wife, her face hidden by a broad sun bonnet takes in the scene from her perch in the cabin companionway.

For a better look you can download these picture from the CSNJ web site: www.CanalSocietyNJ.org.