

# AMERICAN CANALS

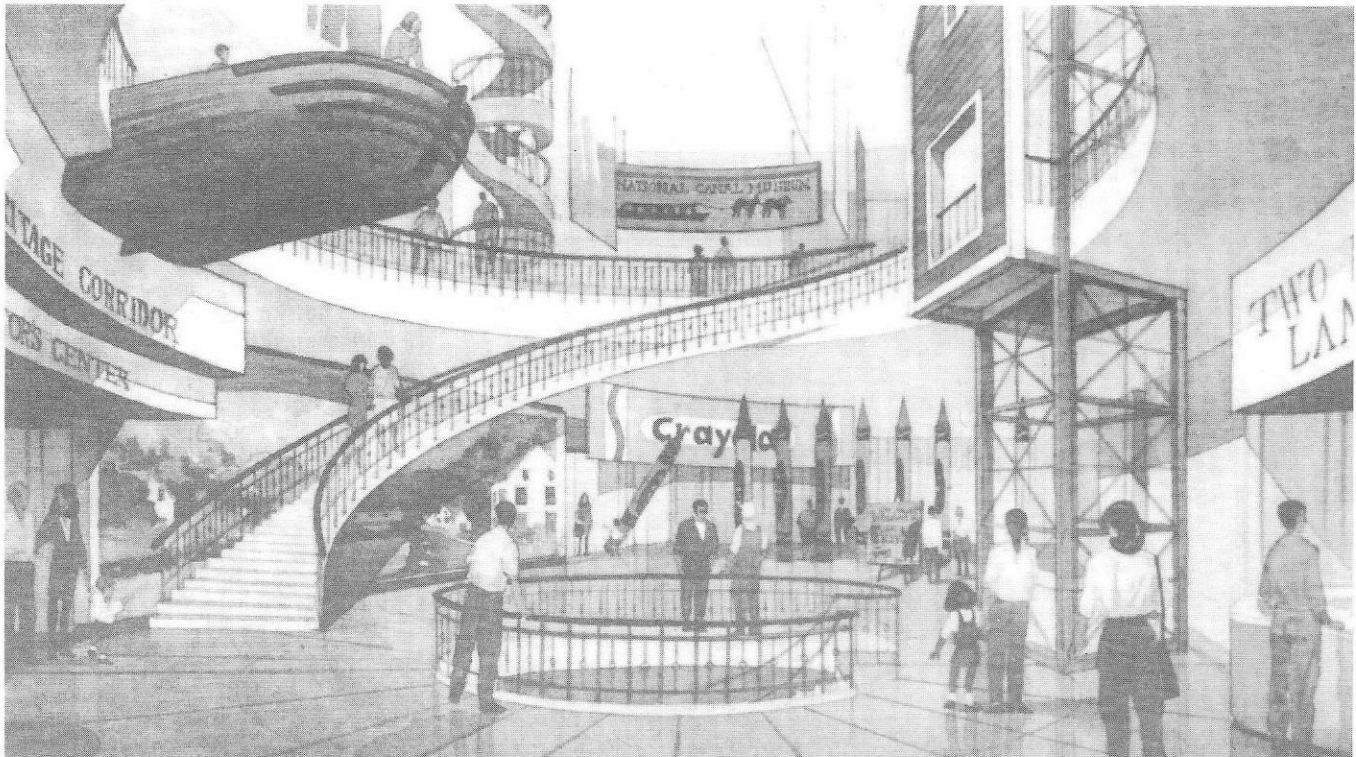
BULLETIN OF  
THE AMERICAN CANAL SOCIETY

BULLETIN NUMBER 97

Editorial Address—968 Chapel Road, Monaca, PA 15061

MAY 1996

## NEW NATIONAL CANAL MUSEUM OPENS JUNE 14



**Architectural concept of "Two Rivers Landing" showing the new National Canal Museum in downtown Easton, PA. In 1994 PA Gov. Robert Casey approved a \$2.85 million grant for the Two Rivers Project, which is estimated to cost \$7 and \$8 million. Work is now almost finished. Grants from state and federal agencies are expected. Grand opening June 14, 1996.**

## ACS NOW HAS WORLD-WIDE WEB SITE ON INTERNET

Following the wishes of President Bill Trout, the American Canal Society is now 'online' with its own World Wide Web site on the INTERNET.

This has been accomplished by the cooperation and good offices of George Pearson, Bill Davies and Peter Bowyer who created a UK interest group last year with its own Website. Peter Bowyer owns the computer hardware in England that is the 'host' for their Website. After being contacted by Bill Trout, he agreed to also host the American Canal Society pages.

The task of creating the pages fell to Mark Newell of the ACS archaeology committee. Newell, who recently left the University of South Carolina to organize the Georgia Archaeological Institute, had grant funding for a major computer system on which the web site was designed.

The web pages have been designed with a "Home Page" which leads the viewer to five other pages. A groups page lists ACS organizations, State Canal Societies and other related professionals and avocationalists, including Email addresses where available. The History Page provides a list of archaeologists and researchers with interests in canal history and technology and related topics. The Events page covers upcoming events such as meetings, conferences, special tours etc. A News page covers items 'digested' from the ACS newsletter and other sources. Finally a Member page will list all ACS members and related professionals who have Email addresses.

More than 32 million world wide visit the Internet monthly - and this is soon expected to reach 100 million or more as cheaper computers allow access to the Internet

through home television sets. The ACS web site will provide easy access for members to society information and news - more importantly, it will also let a much larger segment of the world know who we are and what we are doing. This will hopefully result in greater international interaction and an increase in our own membership. If you wish to be listed on the web site, as an individual or group, or if you have news items or events you would like to post, please contact Mark Newell at [hermes@groupz.net](mailto:hermes@groupz.net) or at the Georgia Archaeological Institute at Post Office Box 984, Augusta, Ga, 30901. You can send prints (not slides) to Newell to be scanned and inserted into the pages if you wish. If you want to create your own organization's web pages and link them to

*(Concluded on Page 11)*

# American Canals

BULLETIN OF THE AMERICAN CANAL SOCIETY

Publisher: **William H. Shank, P.E.**, 809 Rathton Road, York, PA 17403. 717 843 4035.

Editor: **Denver L. Walton**, 968 Chapel Road, Monaca, PA 15061. 412 774 8129.

Contributing Editor: **Bruce J. Russell**, 240 Mt. Vernon Pl. (11-E) Newark, NJ 07106.

AMERICAN CANALS is issued quarterly by the American Canal Society, Inc. Objectives of the society are to encourage the preservation, restoration, interpretation, and use of the historic navigational canals of the Americas; to save threatened canals; and to provide an exchange of canal information.

Annual subscription to AMERICAN CANALS is automatic with A.C.S. membership. Send dues payment (\$15 minimum) to Sec'y/Treas. Charles W. Derr, 117 Main St., Freemansburg, PA 18017. Single copies may be purchased at \$3.00 from the publisher.

Manuscripts on subjects consistent with the objectives of the A.C.S. are welcome. They should be sent to the editor.

## PRESIDENT'S MESSAGE

Don't miss the Grand Opening of the NATIONAL CANAL MUSEUM in Easton, Pennsylvania, on June 14! It's at "Two Rivers Landing" in Easton's Centre Square. Thanks to Steve Humphrey, Lance Metz, Charlie Derr and others at Hugh Moore Park, the United States has at long last a canal museum of national scope. Now it is up to all of us, especially each canal society, to interact with our new museum and to develop ways to work together on issues of common concern and on projects of national significance. And ask the museum's historian, Lance Metz, what he needs in the archives about your local canals — such as a complete set of your society's publications — so scholars will not neglect your canals when they do their research.

For the last 24 years the American Canal Society has done its best to promote the study and preservation of America's canals, through our quarterly and our volunteer committees. Now, at last, there is a National Canal Museum. Now we have a national canal center with which to work. We're looking forward to great things to come, but it will be impossible for the National Canal Museum to do all the work. It's still up to us to work with them. What is the best way for the National Canal Museum and the American Canal Society to work together to do these great things? What about a workshop on the subject in Easton in 1997 to commemorate the 25th anniversary of the American Canal Society and the first birthday of the National Canal Museum?

The Grand Opening of the National Canal

## 1996 QUIMBY'S CRUISING GUIDE NOW AVAILABLE

The new and revised 220-page *QUIMBY'S CRUISING GUIDE* for 1996 is now available. This is the 34th Edition of this useful publication, the only comprehensive guide to waterways in central and eastern USA. (Not included are waterways on the East and West coasts.) All Quimby's basic information is brought up to date each year by personal investigation of each marina, each lock telephone, each repair yard, each restaurant, by their water-traveling agents.

This year the waterways covered include: the Alabama, Allegheny, Arkansas, Black Warrior, Cumberland, Illinois, Kanawha, Kentucky, Mississippi, Missouri, Monongahela, Ohio, Muskingum, St. Croix, Tennessee, Tennessee-Tombigbee, Apalachicola-Chattahoochee-Flint. Numerous maps are included, with mileages from river's mouth. From the Publisher the price is \$17.95, shipping included. Write: Waterways Journal, 319 North Fourth Street, 6th Floor, Security Building, St. Louis, MO 63102. Phone: (314) 241-7354.

Museum will be proof, if you need any, of its national perspective. Representatives of America's canal societies have been invited to bring jugs of local canal water for a "Wedding of the Waters" based on the ceremony which opened the Erie Canal in 1825. The waters will be poured into an oaken keg and then ceremoniously emptied into the museum's working lock model. We're looking forward to being there at this great event, and then touring the museum.

From three to five o'clock, after the Grand Opening and a tour of the museum, the American Canal Society will have a board meeting there. Anyone interested is invited to attend. Our V-P Bill McKelvey thought this would be an ideal time for such a meeting while so many canal society representatives and canal buffs are together. Steve Humphrey has sent special invitations to our officers and committee chairmen and has found a room for our meeting. Bring your ideas about ACS and its work, or mail them to me. Stick around if you like for follow-up sessions into the night!

Lastly, I am delighted to announce that the American Canal Society is now on the World Wide Web — on the Internet, thanks to our Canal Archaeology Committee Chairman Mark Newell. Mark has worked hard to accomplish this for us and he is eager to work with you to see that your canal society, your canals, and your canal events are given the publicity which they deserve. This has to be a co-operative effort. If you don't provide him with information and the latest events calendar, it won't be on the Internet. If your canal

## AMERICAN CANAL SOCIETY

**President:** Dr. William E. Trout III, 35 Towana Rd., Richmond, VA 23226.  
804 288 1334.

**Vice Presidents:** William E. Gerber, 16 Princess Ave., N. Chelmsford, MA 01863. 508 251 4971.  
William J. McKelvey, Jr., 103 Dogwood Ln., Berkeley Hgts., NJ 07922.  
908 464 9335.

**Secretary/Treasurer:** Charles W. Derr, 117 Main St., Freemansburg, PA 18017.  
215 691 0956.

**Directors:** David G. Barber, 16 Ballou Rd. Hopedale, MA 01747.

Robert Barth, P.O. Box 2552, Branchville, NJ 07826.

John Burtniak, P.O. Box 304, Thorold, Ont. L2V 3Z3

Thomas F. Hahn, Box 310, Shepherdstown, WV 25443.

T. Gibson Hobbs, Jr., 3204 Landon St., Lynchburg, VA 24503.

David M. Johnson, 9211 Wadsworth Drive, Bethesda, MD 20817.

Frederica Kleist, 528 W. Cook St., Portage, WI 53901.

Keith W. Kroon, 2240 Ridgeway Ave., Rochester, NY 14626.

John M. Lamb, 1109 Garfield St., Lockport, IL 60441.

Roger W. Squires, 46 Elephant Lane, Rotherhithe, London SE16 4JD, England.

Arthur W. Sweeton, III, 6 Humphrey Rd., Canton Center, CT 06020.

Terry K. Woods, 6939 Eastham Cir., Canton, OH 44708.

### Committees:

A.C.S. Sales, Keith W. Kroon, chrmn., Canal Archaeology, Mark Newell, chrmn., USC-IAA, Georgia Archaeological Institute, P.O. Box 984, Augusta, GA 30901.

Canal Boat, William J. McKelvey, Jr., chrmn. Canal Engineering Design, Terry K. Woods, chrmn.

Canal Operations and Maintenance, Charles W. Derr, chrmn.

Canal Parks, Elizabeth L. Hahn, chrmn. - 1453 Grandview Road, Arnold, MD 21012.

Historic American Canals Survey, William Dzubak, chrmn., 621 Spring St., Latrobe, PA 15650.

Navigable Canals, David F. Ross, chrmn., Rt. 1, Box 87T, Savannah, TN 38372.

**Other publications:** *The Best from American Canals*, William H. Shank, editor and publisher.

*American Canal Guides*, William E. Trout III, editor and publisher.

society already has a Web page, ask Mark to link it with ACS. The ACS Web site address is:

<http://www.blacksheep.org/canals/ACS/acs.html>

To send material to Mark, e-mail it to [hermes@groupz.net](mailto:hermes@groupz.net) or write to the Georgia Archaeological Institute, P.O. Box 984, Augusta, GA 30901. The potential of the Internet for our kind of work — bringing people together with a common interest — is mind-boggling. It's up to us all to be sure that we're part of it.

Bill Trout

# GOWANUS CANAL TO BE CLEANED UP

ACS Member Charles Hruska recently sent us this interesting item, written by Annette Fuentes of the New York Daily News. The Gowanus Canal of Brooklyn is the only still operating canal in the New York Metropolitan area. It does not have locks, but it does have some interesting swing bridges. For further information see *BEST* from American Canals Number III, page 16, or write Hruska at 2074 Cropsey Ave., Brooklyn 11214.

There is light at the end of the tunnel for neighbors of the smelly, swampy Gowanus Canal.

The mile-long canal was once one of the most heavily used industrial waterways in the nation. Cutting a swath through Red Hook, Carroll Gardens, and Boerum Hill, it was most heavily used by manufacturers who used barges to ship their products into Buttermilk Channel.

That was before World War II. Since then, the demise of the once-bustling canal has mirrored the decline of industrial Brooklyn. Today, the Gowanus is more a source of jokes than pride for Brooklynites.

"We used to call it Lavender Lake or Perfume Creek because the stench was so horrible," said Buddy Scotto of the Carroll Gardens Association. "When the sewer treatment plant was completed in 1989, there was a distinct abatement of odor."

However, fixing the sewage overflow that used to collect there didn't solve the problem.

The main reason the Gowanus Canal is a murky, contaminated puddle is because the water has been stagnant so long. The original flushing mechanism that sucked clean bay water in and pumped out the sitting water broke—about 50 years ago.

The device — called the flushing tunnel and located in a pumphouse at the Butler St. end of the canal — will cost between \$5 million and \$6 million to repair, the city Department of Environmental Protection estimates.

Now there really is hope for improvement. The city DEP is about to contract for repair of the flushing mechanism, which looks like a giant propeller operating inside a long tunnel.

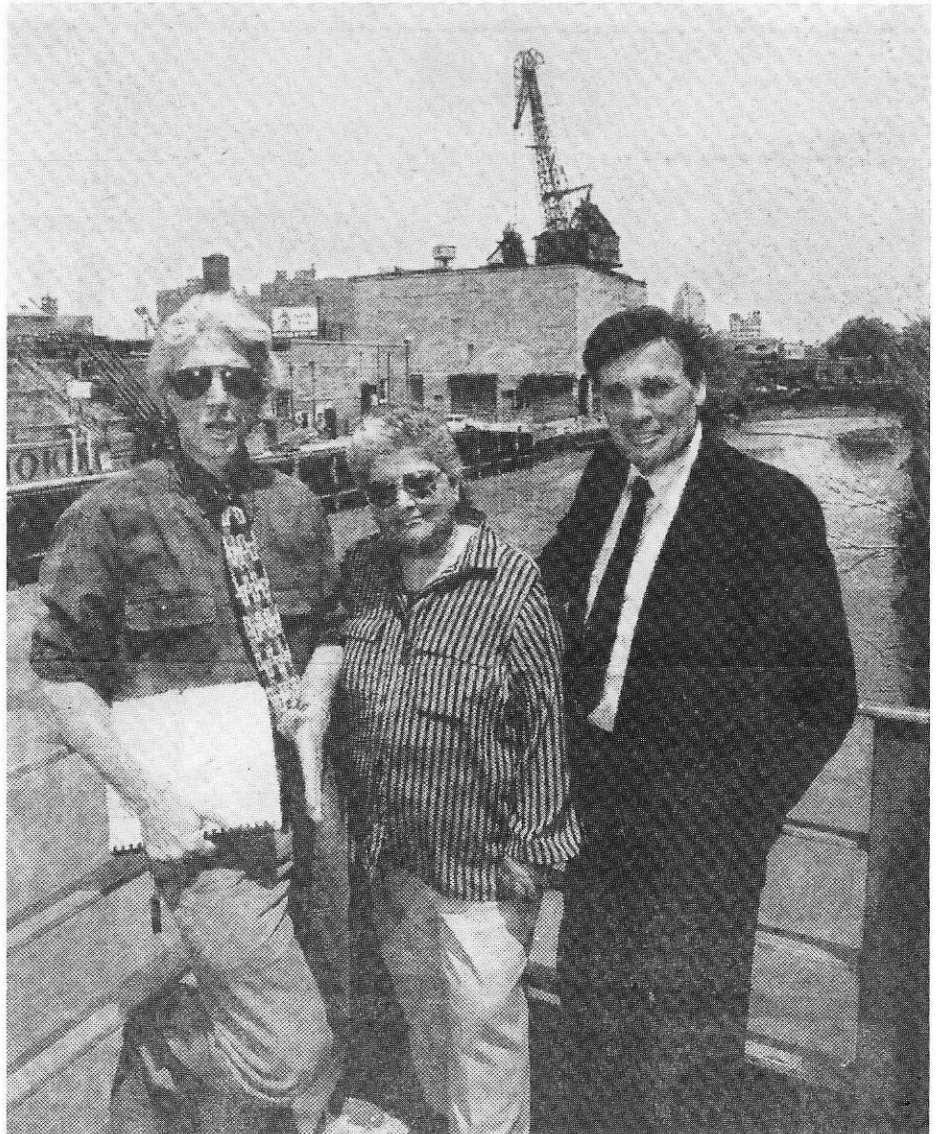
Dredging must be done, too, to remove silt and sludge. The canal was last dredged in 1975.

"We are still in discussions with the state on dredging," said DEP spokeswoman Bonnie Bellow. "The issue to be resolved is the dewatering of the material."

That means officials are trying to decide how the water will be removed from the dredged sludge. Reduced in bulk, the squeezed sludge can be dumped at a landfill, Bellow said.

So, when the flushing tunnel is working and the canal is dredged out, then can the renaissance begin?

That's the idea, says Jean Dilascio, executive director of the Gowanus Canal Community Development Corp.



**Trying to bring new life to the Gowanus Canal area are: Rex Curry (left), Jean Dilascio and Buddy Scotto. (Daily News photo)**

"We can make it a very special canal, bring back the history of it," said Dilascio.

Founded by Scotto, the GCCD has been pushing for a clean canal and revitalization of the area for 20 years.

The GCCD has been crafting a strategy with planners at the Pratt Center for Community and Environmental Development to draw business and residents to the Gowanus area.

Rex Curry, associate director of the Pratt Center, has an interest in the Gowanus dating back to 1987, when he did a study of the area. For all its muck and mire, the Gowanus is a waterway, and people like to be near water, Curry thought.

"I once came across a European tourist who had a map and he was trying to find the Gowanus Canal," said Curry. "He just assumed that a canal is a public space."

Curry's study pointed out sites along the canal that could be developed as housing and light manufacturing. Most would also accommodate a public esplanade.

He compiled a data bank of 466 businesses in the Gowanus Canal area, which is sandwiched between Bond St. and Third Ave., Butler St. and Hamilton Ave. Curry envisions a mixed-use development, home to artists and artisans who would live and work there.

Amtronics is one company already on the Gowanus, at Douglass St. Owner George Magnifico said he moved there three years ago because he believed the canal was about to be cleaned up.

"We were under the impression that six months ago, the canal pumping station was supposed to be on, making the canal a river," said Magnifico.

The canal's "perfume" and the area's many vacant buildings give the Gowanus area a bad reputation, Magnifico said.

*(Concluded on Page Nine)*

# LEHIGH NAVIGATION



By Evan Snyder

In the spring of 1818, Josiah White and Erskine Hazard surveyed the Lehigh River from Stoddartsville in the Poconos to Easton, at the junction of the Lehigh with Delaware River. Their ultimate goal was to establish a transportation system to carry primarily coal, but also lumber and other commodities, from the region to Philadelphia. To achieve their goal, together with George Hauto, they formed two companies: the Lehigh Navigation Co., to construct the navigation, and the Lehigh Coal Co., to operate the mines they leased in Summit Hill. In 1822 these separate companies were merged into the Lehigh Coal and Navigation Company.

Josiah White himself designed the wing dams and hydrostatically operated gates, dubbed "Bear Traps" by their workmen. By 1820 they had completed a system of descending navigation, between Mauch Chunk and Easton. That year 364 tons of coal were brought by wagon from the mines at Summit Hill to Mauch Chunk. There the coal was loaded onto "arks". The arks traveled down the Lehigh via the navigation, then down the Delaware to Philadelphia. Since the arks could not be brought back up, they were dismantled and sold as lumber. This proved to be an inefficient and expensive operation. Construction of a two-way system using canal sections and slackwater behind dams was undertaken in the summer of 1827. Two years later it was completed. Water was let into the canals on June 26, 1829; and on June 29, ten boat

**It was on the upper part of the Lehigh Canal, north of Mauch Chunk, where some of the most difficult problems of the entire Lehigh Coal and Navigation system were encountered by Josiah White in the early 1800's. He had permission from the State of Pennsylvania to control the entire course of the Lehigh River as far north as Stoddartsville (above White Haven) the first time in history that an entire river had been turned over to the control of one individual. Some of his early projects included the building of the highest dams and lift locks ever previously constructed, and some of the most amazing inclined-plane systems for carrying coal over the mountains into the Lehigh Valley. Some of these planes were built by connecting coal mines, but all had the approval of White himself. Two such systems are shown here—the Penn Haven Planes, built to bring coal from Beaver Meadows on the left (1851) and the Hazelton Coal Company, (later the same year), to bring its coal east to the Lehigh River to be loaded onto White's canal boats. After several disastrous floods on the upper Lehigh forced the closing of this navigation section, its place was taken by the Lehigh Valley Railroad.**

**Some of Josiah White's most important developments, such as the "Drop-Type" upper Lock gate, and the side-opening sluice gates were developed on the upper canal.**

W.H.S.

loads of anthracite arrived at Easton on their way to Philadelphia. The coal had been brought from the Company's mines at Summit Hill to the canal boats at Mauch Chunk via a gravity railroad built in the spring of 1827. It replaced the earlier wagon road. The Company had authorization from the state legislature to develop a navigation system from Easton to Stoddartsville, but so far it was developed only from Easton to Mauch Chunk.

The demand for coal grew slowly but steadily, and the transportation systems to bring the coal to population centers were improving. Under Josiah White's direction improvement of the Delaware Canal from Easton to Bristol in 1832 afforded better access to coal markets in Philadelphia. The Morris Canal from Phillipsburg, across the Delaware from Easton, to Newark was completed in 1831. This opened markets in New Jersey and ultimately New York City. Now there was demand for coal, and there were facilities for reaching the markets. New sources of coal were needed.

The mines at Summit Hill were part of the Southern Coal Fields. Other mines in these fields were opened. In 1836, the Buck Mountain Coal Company began operation at East Pismire Hill. Mines were also opened at Beaver Meadow and near Hazelton.

## UPPER GRAND DIVISION

To bring these sources to the markets, the LC&N Company decided to construct a two-way navigation along the Lehigh from Mauch Chunk to White Haven. Coal from the new mines could then be brought to ports on this "Upper Grand Division", as it became known, and then shipped on down to Easton and beyond. The hope was to someday extend it to Stoddartsville, the limit of their authorization from the legislature.

In his description of his surveying trip of 1818, Josiah White wrote "No House between Lausane & Stoddartsville (sic) we lay out in the woods 6 nights". Lausane was a mile or two above Mauch Chunk. The Lehigh River from Mauch Chunk to White Haven was a wild river flowing through a narrow gorge. It fell 600 feet in 25 miles, whereas the lower division between Mauch Chunk and Easton fell only 355 feet in 46 miles.

White and Hazard decided on a system of locks and slackwater dams similar to those on the lower division. The important difference, of course, was the height of the dams and locks. For their chief engineer they chose Edwin A. Douglas, who had worked with Canvass White on the Delaware and Raritan Canal.

There were 20 dams and 29 locks. The highest dam was 58 feet tall and the highest lock had a lift of 30 feet. On the lower division there were 8 dams and 52 locks. The highest dam was 15 feet tall and initially the highest lock had a lift of 9 feet.

*(Concluded on Page Nine)*

*From the Society for Historical Archaeology Newsletter, Oct. 1995*

**National Trust for Historic Preservation:** Individuals interested in preserving historic ships, lighthouses and other maritime artifacts have a new source of funding thanks to a bill signed into law by President Clinton in December, 1994. The National Maritime Heritage Act of 1994 (Public Law 103451) will use a percentage of proceeds derived from the scrapping of obsolete vessels of the Naval Defense Reserve Fleet to establish a competitive grants program for maritime preservation and education projects.

A special advisory committee comprising representatives from various sectors of the maritime community will review grant proposals and make funding recommendations to the Secretary of the Interior, who will administer the program. One half of the funding, to be disbursed by the National Park Service's Maritime Initiative, is available for subgrants for the preservation of historic maritime resources through the State Historic Preservation Offices. The remaining funds will be administered by the National Trust for educational programs and other efforts.

The National Trust will work closely with the National Maritime Alliance to help develop the maritime heritage grant program. Details of the program in terms of funding availability and administrative process will be announced at a later date; the first grant applications are expected to be available in the late Fall 1995.

For more information, or to include your name on the National Maritime Alliance's mailing list, please contact the National Maritime Alliance, 99 Commercial Street, Bath, Maine 04530, (207) 443-4550.

## "BUTTY" BOATS



**Power-boat and Butty in a standard English Lock.**

## DREADFUL ACCIDENT

*Toledo Blade, June 21, 1844*

A break in the Wabash and Erie Canal occurred last Saturday evening, near 8 o'clock, about three miles this side of Logansport. It was caused by the breaking away of a dam which was built on a creek, for the purpose of making slack water for a mill. The late rains had raised the water very much, and the culvert which passed under the canal would not admit the water, which overflowed the canal and broke through both embankments about sixty rods apart.

The Packet "Kentucky", with Capt. Hammond, was caught between the two breaks, but no efforts could save the boat. She was swept away by the power of the current, over an embankment and steep inclination of about twenty feet. When she left the canal she rolled over, broke into pieces, and became at once a total wreck. The crew, having left the boat at the discovery of her

perilous situation, for the purpose if possible of securing her by means of the bow and stern lines, were upon the tow-path and were all fortunately saved. But of the few passengers on board three met a watery grave. Our friend, Mr. B.P. Brown, of Brown's Hotel, Lafayette, was among the passengers, and was the only one saved. Mr. Brown's situation was very perilous. At the moment the boat was passing out of the canal, he had stepped to the stern for the purpose of casting a line to the men upon the shore. The boat rolled once over him and went to pieces, leaving him entirely uninjured. He then took a seat upon a log in the stream, which had become entangled among the trees, where he remained all night. The persons lost were Thomas Erenson, of Logansport, a young man by the name of Griffin, and an Irishman who had just got on board the boat and whose name was unknown.

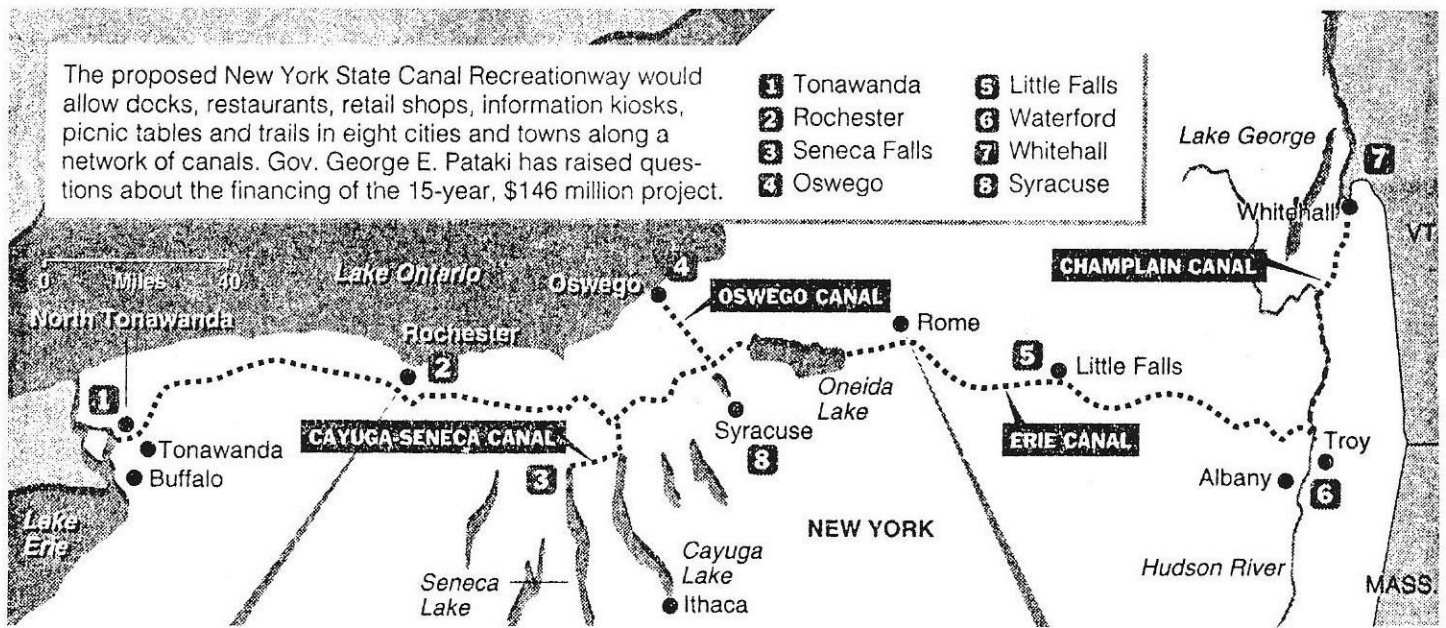
While not as common in England as they once were, American tourists in the U.K. for the first time, may have been startled to note two "Narrow Boats" tied together (as shown here) and going through the larger locks together. Possibly a break-down of one boat, and the other coming to its assistance? No way! One of the two boats has no motor, and is completely dependent on the other for its movement. Essentially it is a trailer or "butty", which doubles the facilities of the lead boat. The combination is usually referred to a "Hotel Boat", with complete staterooms for twelve passengers and crew: dining room, kitchen and lounge, not to mention W.C. and showers for all on board. If you are traveling the narrow canals of England, it is a good way to go, as they are the only such combination which will fit through the narrow locks of the smaller canals, one after the other. The accompanying photo was sent us by the Inland Cruising Co., Ltd., Braunston, Rugby, Warwickshire, England. If you want further information, please write them.

W.H.S.

# MAJOR RESTORATION IS PLANNED FOR ERIE CANAL

The proposed New York State Canal Recreationway would allow docks, restaurants, retail shops, information kiosks, picnic tables and trails in eight cities and towns along a network of canals. Gov. George E. Pataki has raised questions about the financing of the 15-year, \$146 million project.

- |                |                |
|----------------|----------------|
| 1 Tonawanda    | 5 Little Falls |
| 2 Rochester    | 6 Waterford    |
| 3 Seneca Falls | 7 Whitehall    |
| 4 Oswego       | 8 Syracuse     |



By Joseph Berger

The Erie Canal, whose mule-drawn barges opened the nation's heartland to the Atlantic 170 years ago, would be turned into a recreational waterway for boaters, hikers, cyclists and tourists under a plan by the New York State Thruway Authority.

The Erie and three linked canals stretch for 524 miles from Buffalo to Albany and up to Lake Champlain, but their commercial clamor has stilled to a whisper. Last year, the canal system carried less than 68,000 tons of cargo, a tiny fraction of the 5.2 million tons it handled in 1951.

To revive the canal, the authority drew its inspiration from the lively traffic of pleasure boats on sleepy canals in France and Britain and conceived of the Erie Canal as a serpentine playground, with charter boats plying its waters, and hikers and cyclists using its former towpaths.

While the authority is already spending \$60 million to dredge the canal and repair locks, and is negotiating contracts with private developers in Syracuse, it is not entirely clear where the \$146 million needed for the remainder of the project over the next 15 years will come from.

A spokeswoman for Gov. George E. Pataki, while endorsing the plan's goals, questioned the financing.

"We certainly support the concept and the plan," said the spokeswoman, Zenia Mucha, "but we need to review the funding mechanism to make sure it's real, and from our initial review there are many unanswered questions. We want to make sure it's not pie in the sky."

An internal memo circulated in the Governor's office calls the plan "an expensive cross-subsidy from thruway toll payers and taxpayers generally."

She said the state's Urban Development Corporation would be asked to review the

authority's plan, its financing and its economic impact.

More than half the financing — \$75.3 million — would come from thruway authority bonds that would be paid off by tolls on boats, revenue from retail leases and sales and a portion of the \$330 million in highway tolls the authority collects annually. But the project also counts on the financial participation of private developers and \$41.7 million in local, Federal and state contributions.

Technically, the authority can proceed with the canal's revival without approval by the Legislature and the Governor, but in practice, Mr. Pataki would have many ways to undermine the project if he chose to, like blocking Federal transportation funds that go to the state, not the authority.

Peter Tufo, the authority's chairman and chief executive officer, said that the proposed state contribution would be small — no more than \$1 million a year — and that local legislators might prevail on the State Legislature to provide it.

Mr. Tufo, an appointee of former Gov. Mario M. Cuomo whose term expires in January, said his two fellow board members are expected to endorse the plan when a formal vote is taken in September.

The project, which will be formally unveiled July 11, would provide piers, restaurants, retail shops, information kiosks, picnic tables and trail amenities whose absence is blamed for the limited recreational use of the canal.

In Syracuse, development rights have already been negotiated for a \$40 million aquarium as well as a marina and restaurant. In Rochester, an artists' rendering foresees a broad canalside promenade with gazebos and piers. In Waterford, a rendering depicts a cafe alongside a canal bridge.

It was, in part, the thruway authority's superhighway that led to the decline of the Erie Canal, which had been opened by Gov. Dewitt Clinton in 1825. In 1992, the State Legislature transferred the moribund canal

system from the Transportation Department to the authority.

"Ironically, we were in part responsible for the canal's decline and so there's a symmetry to our taking it over and revitalizing it," Mr. Tufo said.

Seven public hearings will be held in August, but so far there has been no groundswell of opposition. One reason is that Mr. Tufo has carefully avoided talk of condemning private property, even though private ownership clouds prospects for an uninterrupted hiking trail. Seeking to allay fears about overdevelopment of bucolic areas, he has restricted plans for major structures to eight canal cities and towns.

No environmental group has taken a position on the canal's development, though individual members express concerns about overdevelopment and dredging silt that may contain toxic materials. The reaction yesterday of Clara Sauer, executive director of Scenic Hudson, which has been overseeing the designation of the Hudson River Greenway, was typical.

"By connecting the Erie Canal with the Hudson River, it would be an absolute home run," she said. "It would extend the greenway from one end of the state to the other."

The New York State Canal Recreationway Plan, as the project is called, capitalizes on the canal's history, encouraging visitors to see discontinued canal segments and antique locks, aqueducts and bridges. Mr. Tufo grows animated when he describes the scenic vistas that appear, as through an opening curtain, when a lock lifts travelers to a new water level.

"It's like a Verdi opera," he said. But the plan seems aimed mostly at more active pursuits. The most important goal is to spur use of the canal by motorboats, charter boats and canoes, and Mr. Tufo has already spoken to French boat operators to enlist their bids. Mr. Tufo spoke of an ambitious canal trip taken by Robert M.

Morgenthau, the Manhattan District Attorney, and his wife that took them west across the canal, northeast up Lake Ontario and the St. Lawrence Seaway and down Lake Champlain and the Champlain Canal.

Last year, locks were opened for pleasure boats 116,000 times, a figure that suggested underuse to the consortium that studied the canal, which was headed by the Manhattan architectural firm of Beyer Blinder Belle.

Another project goal is the creation of an end-to-end trail stretching from Albany to Buffalo that would use old towpaths and roads for cyclists and hikers. Roughly 220 miles is open for such use now; another 150 miles is owned by the Canal Corporation, an authority subsidiary, and needs to be developed for trails, and Mr. Tufo believes he can buy easements across much private property.

In addition to Syracuse, tourist clusters are being planned for Tonawanda, Rochester, Oswego, Seneca Falls, Little Falls and Whitehall. Another 96 smaller areas are also contemplated.

The planners believe that increased tourism would pump \$230 million into the state's economy by attracting 1.3 million visitors and would create 2,700 jobs. That is why the plan calls for spending \$11.3 million on marketing the canal as an international attraction.

The plan does not surrender commercial hopes for the canal. Mr. Tufo believes his agency can lure back shippers for whom time is not of the essence or those moving extremely heavy materials.

Asked why he felt an agency that is expert at building highways can take over a waterway, Mr. Tufo mentioned the agency's engineering and financing expertise as well as its expertise at collecting tolls. The authority already charges tolls of \$2 to \$10 per lock.

*The accompanying article, written by Joseph Berger of the N.Y. Times 6/30/95 was sent to us by Bruce Russell.*

## MULES ARE LONG GONE, SO ARE THE BUSY BARGES

Not only are the mules gone on the Erie Canal, but so are the packet boats and most of the barges that connected the Great Lakes to the Atlantic and helped make New York the dominant commercial state it became. These days, fewer than 100 tugs and barges ply the canal from Albany to Buffalo.

The Erie Canal was conceived in the early 19th century as a commercial opening to the Midwest, which along most of the Eastern Seaboard was blocked off by the Appalachians. Disparaged as "Clinton's folly" but soon considered an engineering marvel, the canal was built between 1817 and 1825 as a 40-foot ditch with towpaths. Before the advent of steam power, the towpaths allowed mules to pull passenger-carrying packet boats and barges carrying lumber, pork, whiskey, cheese and wheat.

The trade that resulted—flowing from Detroit and Cleveland on Lake Erie across the canal to Albany and then down the Hudson—was credited with turning New York City into America's leading port. It also transformed pastoral villages into Rochester, Syracuse and Buffalo and provided a gateway for European immigrants to Michigan, Wisconsin and Illinois.

Battered by competition from railroads, the canal was expanded in the late 19th and early 20th centuries and replaced in stretches by existing rivers like the Mohawk, to accommodate steam-powered shipping. But the St. Lawrence Seaway opened the Atlantic to even larger ships and the developments of tanker trucks and superhighways began rendering the Erie Canal almost obsolete.

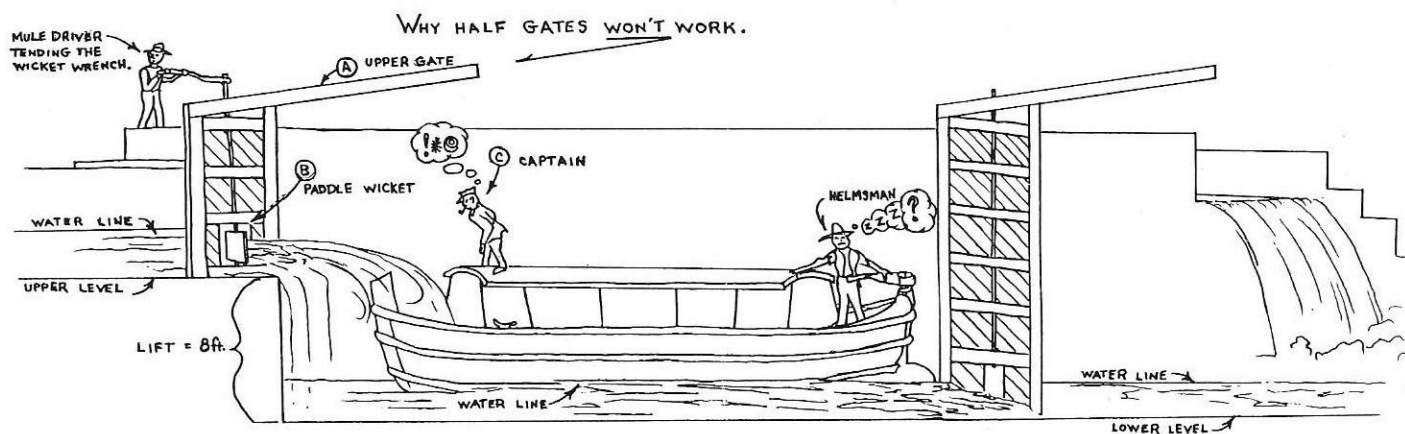
## New Stern-Wheeler

In our studies of the historic canals and inland waterways of eastern USA we frequently overlook important developments taking place on the waterways west of the Mississippi. Thanks to ACS Member "Red" Mimnick we have in front of us an account in "The Oregonian" (written by Sarah Thomas) of a new passenger vessel just introduced on the Columbia River, which is a scaled-down version of some of the most luxurious "Stern Wheelers" which currently travel the Mississippi and its tributaries further East.

The "Queen of the West" has been designed as a replica of the ornate stern-wheelers that plied the Columbia from 1855 to 1917. But today, with the help of eight U.S. Corps of Engineers Dams and Locks on the Columbia and Snake Rivers, the cruising range of this vessel has been extended all the way from the Pacific Ocean into the state of Idaho.

A four-deck boat with 73 outside staterooms and full modern conveniences including television, the "Queen of the West", operated by the American West Steamboat Company out of Seattle, conveys the same feeling when you step on board, as that provided by the Mississippi Sternwheelers. Its base of operation is Portland, Oregon, offering trips as far east as Lewiston, Idaho and back down the Snake and Columbia Rivers to Astoria, before winding up at Portland. The "Queen" offers voyages of two to seven nights, from March through December, with prices from \$279 to \$3945. Live night entertainment is provided on board at two separate lounges while day-time side tours include rides on the Hood River Railroad, jet boats up the Snake River into Hells Canyon, tribal dances by the Umatilla Indians, and tours of the new Interpretive Center in Stevenson, Washington and the Maritime Museum in Astoria, Oregon.

## "In a Pound Lock, Why Can't The Upper Gates Be Shorter?"

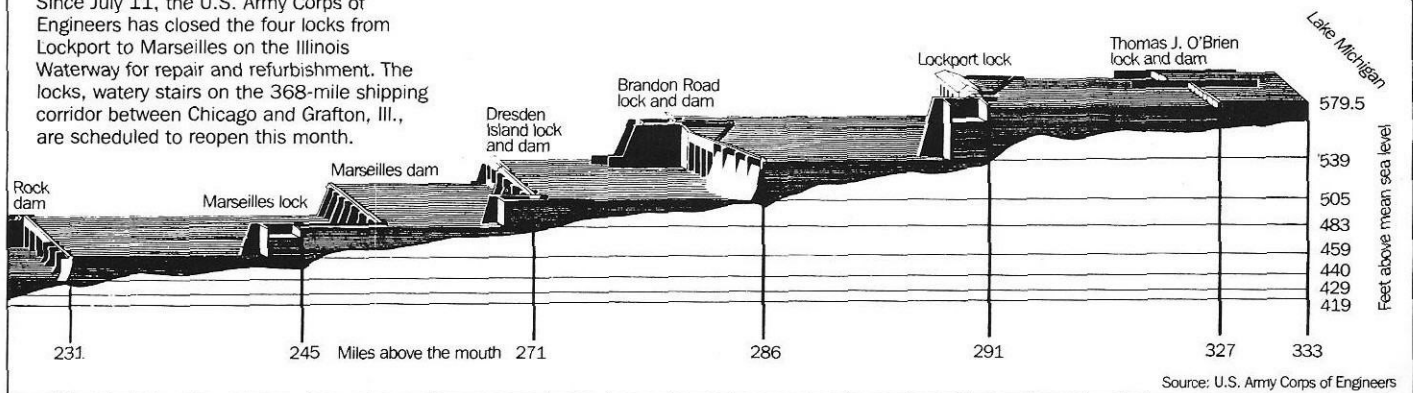


Paul Baudendistel of the Indiana Canal Society asks the question, "Why can't the upper gates of a pound-lock be shorter than the lower gates?" He answers his own question in this sketch. One small detail of which he was unaware: the wicket gates don't have to be in the upper gates. They can be in the side wall or bed of the upper lock. Or, the upper gate can be a drop-gate or a tainter gate instead of a mitre-gate. (Publisher)

# LOCKS REBUILT ON THE ILLINOIS WATERWAY

## Locks of the Illinois Waterway

Since July 11, the U.S. Army Corps of Engineers has closed the four locks from Lockport to Marseilles on the Illinois Waterway for repair and refurbishment. The locks, watery stairs on the 368-mile shipping corridor between Chicago and Grafton, Ill., are scheduled to reopen this month.



By David Young  
Tribune Staff Writer

From the *Chicago Tribune*, Sept. 10, 1995.  
Sent by Dick Guthery

When it's time to rehabilitate an expressway, railroad or airport, the agency in charge usually closes a lane, track or runway for repairs and routes traffic around it.

But to fix a river, the U.S. Army Corps of Engineers has to shut down the whole thing.

That is why the 368-mile navigable corridor known as the Illinois Waterway between Chicago and Downstate Grafton has been uncharacteristically quiet for the last two months.

On one stretch of the waterway, the Sanitary and Ship Canal, near Lockport, long strings of barges sit idle along the limestone banks, and towboats and tugs crawl with crews pulling maintenance on them to be ready for service when the river reopens this month.

Other than an occasional canoe or pleasure boat, the only activity on most of the waterway since the corps closed it July 11 has been the construction crews repairing the four-lock systems between Marseilles and Lockport.

To riverboats, the locks are watery stairs that enable them to move up and down the topography from 419 feet above sea level at Grafton to 580 feet at Lockport—a difference of 161 feet—and to bypass rapids in the river.

The Illinois Waterway is a shipping channel that includes the Chicago River, the Sanitary and Ship Canal, the Calumet-Sag Channel, the Des Plaines River and Illinois River. It connects the Mississippi River system with that of the St. Lawrence and Hudson Rivers.

The bulk of the 45.6 million tons of traffic that traveled the Illinois Waterway last year consisted, for the most part, of coal, chemicals and petroleum products moving upriver to Chicago, and grain headed the other way. The Atchison, Topeka & Santa Fe Railway, by comparison, carried 52 million tons of traffic last year on its line that parallels the waterway in the Chicago area.

The \$20 million Corps of Engineers project includes repair of the crumbling concrete walls at the Lockport Lock. At Brandon Road in Joliet, Dresden and Marseilles they are replacing the steel mitre gates that contain the water.

The work is painstakingly slow because each gate weighs 195 tons and must be so perfectly balanced that a single 30-horsepower electric motor can operate it, said Victor P. Gervais, the Corps engineer in charge of the project.

"These opened in 1933, so they have held up pretty well," Gervais added as he surveyed the fretwork of construction crane booms and new steel girders from the bottom of the dry Marseilles locks, which at 50 feet deep, 110 feet wide and 600 feet long are just about big enough to hold two football fields.

A mile to the north and almost a century earlier, crews of mostly immigrant labor dug an earlier waterway system largely by hand. The Illinois-Michigan Canal, so named because it connected the head of navigation of the Illinois River at LaSalle (the northernmost point that steamboats in those days could travel without encountering rapids) with Lake Michigan at a place the French explorers called Portage Chicagou and the newly independent Americans renamed Ft. Dearborn, for an outpost built there.

Though the French explorers Louis Jolliet and Pere Marquette, as early as 1674 suggested a canal could be dug at Chicago connecting the Great Lakes with the Mississippi River system, it wasn't until 1810 that the U.S. put the proposal in writing. Nothing was done until 1822, when Congress made a land grant to the project.

Illinois created a canal commission in 1829 and the following year it platted Chicago at one end of the 96-mile canal route. Though construction didn't start until 1836 and was interrupted for several years when the state ran out of money, Chicago began booming almost immediately. The \$6.5 million canal opened in 1848, only a few months before the city's first railroad, the Galena & Chicago Union, started service.

The railroads stole the canal's passenger traffic almost immediately, but the I-M Canal was able to exist profitably on freight traffic, which peaked at just over 1 million tons in 1880.

By then, the state was involved in a long-term project to improve the Illinois River.

By modern standards, the original I-M locks were tiny. The one at Lockport was only 16 feet deep, 18 feet wide and 134 feet long. (Eighty-five of them could be stacked in the existing Sanitary & Ship Canal lock at Lockport.)

The federal government got into the act in 1882, when it took over the I-M canal and state dams on the river and built ones at Downstate La Grange in 1889 and Kampsville in 1892. The eastern section of the I-M canal, which also carried untreated sewage downstream from Chicago, was replaced for sanitation reasons in 1900 by the newly formed Metropolitan Sanitary District, when it dug the existing Sanitary & Ship Canal between the Chicago and Des Plaines Rivers.

By 1900, the railroads had put most riverboat operators out of business so that in World War I, when the federal government was forced to nationalize the railroads to ease traffic snarls, it also decided to rebuild the river system.

It not only created an operator, named Federal Barge Lines, but also began a program to build new dams and bigger locks on the rivers to handle the bigger vessels. The voters of Illinois in 1908 approved a \$20 million bond to replace the western section of the I-M Canal by building locks and dams on the Des Plaines River, but the money ran out in 1930 and the federal government stepped in to complete the project.

The first towboat through the rebuilt system arrived in Chicago from Memphis March 5, 1934.

The current two-month shutdown, though not unusual (because the waterway routinely froze in winter), has been a problem for some users. Some companies stockpiled raw materials in anticipation of the shutdown and one major barge operator sent its equipment to other rivers, such as the Mississippi, said



Jeff Covinsky, manager of marine operations for ContiCarriers and Terminals Inc.

"The demand on the other rivers has been so great it has eaten up our surplus equipment," Covinsky said.

But local marine companies and dock operators were hard hit and had to lay off hundreds of employees, said Todd Hudson, president of the Illinois River Carriers Association and a vice president of Garvey Marine in Lemont.

Some companies used the lull to perform maintenance on equipment.

"We feel that when the river reopens business will be good through the end of the year, although a cold winter that causes the river to freeze could hurt us," Hudson said.

## Lehigh Navigation

(Concluded from Page Four)

The "Upper Grand Division" was completed in June of 1838. It was truly an heroic accomplishment and the locks and dams were truly heroic structures. Their remains today only hint at what their colossal appearance must have been in 1838.

Because of the depth of the locks and the resultant water pressure, they could not be filled and emptied through wickets in the miter gates. Instead, White and Douglas developed a system using a separate opening in the wall of the lock. With this arrangement, a lock of 30 feet lift could be emptied or filled in about 3 minutes.

Another innovation by Douglas was replacing the upper miter gates by a horizontally hinged drop gate. These gates shortened the time to lock through. They were so successful that drop gates were also installed in the lower division of the Lehigh Navigation as well as several other canals including the Morris, Delaware and Raritan, Delaware and Hudson, and on some locks of the Delaware Canal.

The Beaver Meadow Railroad brought coal from their mines along the Quakake Creek and then along the Lehigh to Mauch Chunk. After difficulties with flooding of the Quakake and the Lehigh, the railroad abandoned the creek valley for higher ground and constructed a plane with a stationary steam engine at its head to lower the full coal cars and raise the empties to and from docks built at a basin at Penn Haven on the Upper Division. The Hazelton railroad built a similar parallel plane to bring their coal to the docks. The location of these planes may still be seen today.

In January of 1841, a disastrous flood swept the Lehigh Valley severely damaging both the upper and lower divisions of the Lehigh Navigation. There had been ice on the river and snow in the mountains, and a warm rain brought torrents of water through the gorge. Josiah White, now 60 years old, was heartbroken when he saw the damage, but he determined it should not only be repaired but strengthened against another such onslaught. By July the lower division was repaired, but it was not until 1843 that the upper division was back in service.

## "The Comeback Canal"



Typical recent flood damage to the C. & O. Canal. (Washington Post photo)

If you think the C&O Canal is a mess now, you should have seen it in 1972 after Tropical Storm Agnes. Maybe you did, and recall that it was repaired and restored at a cost of millions to the federal Treasury. It was hit hard again in the mid-'80s by a November storm, and again restored at great expense. Then came the flood of January 1996, and here the canal is once more right about where it has been through most of its history: in considerable peril.

The C&O Canal was one of the grandest works projects of the new nation, built to carry freight between the port of Georgetown and the West. It was constructed at a time, early in 19th century, when the railroads were also coming into being and promising to do the same job more efficiently. And yet the canal survived as a going enterprise until well into the 20th century—a teeming thoroughfare sustained by the work of generations of men, women and mules.

It endured many floods, large and small, over the years, but it nearly succumbed in the 1950s to an ill-advised scheme to turn it into an auto parkway. Among the ill-advisers was this newspaper, whose editorial writers were finally invited by the late Supreme Court Justice William O. Douglas to please, just take a long hike with him on the canal towpath and get a look at the place they proposed to pave over. Two of them did, and we have been recanting that mistaken highway notion ever since.

The canal might seem to be a perfect foil for anti-government loose talk. It is an inherently high-maintenance, high-repair national park, located as it is near a volatile river whose floodings are as inevitable as they are unpredictable. There will never be an end to the expense. But in fact, the canal is a perfect example of the sort of thing government can and ought to sustain: a unique, sort of elongated lake and pathway passing through city, town and wilderness for more than 180 miles, and serving as a gateway to woods, water, wildlife and American

history for hundreds of thousands of people.

The canal's constituency is vast in this region; it will need to make itself heard in the months and years to come. It will also be called on to make itself felt, in the volunteer efforts that will be organized once the damage has been assessed and the conditions are right for reconstruction and repair.

"It is very beautiful. It is very accessible. It is a treasure such as they do not know in New York or London." The late Henry Mitchell wrote that description of the C&O Canal and towpath in *The Post* in April 1985, seven months before it was devastated by one of the Potomac's periodic risings. Keeping it true is one of the country's more worthwhile jobs.

(*Washington Post*, Jan. 26, 1996. Submitted by Sam Hopper)

## Gowanus Canal

(Concluded from Page Three)

"If the canal were more desirable, more businesses and homes would open and make it safer and easier," he said.

Alfred Allegretti has been waiting for the Gowanus revival a long time. His family owns Bayside Fuel Oil, one of just two businesses that still use the canal.

"We navigate vessels up and down twice a day, seven days a week," Allegretti said. "We go through five bridges to get to our terminals."

Bayside has had a Gowanus depot at Sackett St. for 30 years, and has bought another at Smith St. They buy 800,000 gallons of oil daily from New Jersey and ship it by barge to those terminals for sale to retail oil companies. It's cheaper than using trucks, Allegretti said.

But the canal needs dredging so that his barges, with 11-foot draws, don't run aground, he said.

"It's getting harder to navigate with all the silt and sludge," said Allegretti. "We can only bring a small vessel up the canal."

# SOUTH HADLEY CANAL EXHIBITION

*South Hadley, Massachusetts*—The Mount Holyoke College Art Museum has organized an exhibition focusing upon the nation's first successful navigational canal, built at South Hadley between 1792 and 1795. "Locks, Stocks, and Barrels," on view from 27 January through 15 March 1996, will coincide with the 200th anniversary of the inauguration of this innovative waterway, the first internal improvement undertaken by our fledgling nation. The exhibition has been coordinated by guest curators Jill Hodnicki and Kenneth Williamson, along with members of the museum staff and a community-based group, the South Hadley Canal Committee.

An engineering marvel of its day, the two-and-a-half-mile-long canal was created to circumvent the 60-foot fall of the river at South Hadley. Its construction had an enormous impact on the economy of western Massachusetts, opening the upper valley of the Connecticut River to navigation and trade. The Connecticut River — or "Great" Valley, as it was then known—extends 400 miles through a fertile valley which had early on become a highway of emigration and commerce. Towns in Massachusetts, New Hampshire, and Vermont were especially interested in its unobstructed navigation because of their dependence on the river for trade and transportation.

The canalling of the falls at South Hadley was touted as a project of such importance and necessity that it epitomized for inhabitants of the valley the progress of civilization. When the waterway opened for freight transportation in the spring of 1795, it immediately reduced the cost as well as the delay and risk of carting goods overland and paved the way for an explosion of trade and travel. Retailers below the falls could now ship fancy goods and provisions like rum and molasses upriver, and inhabitants above the falls could ship their produce and handicrafts to markets downriver.

The exhibition will demonstrate the impact of the South Hadley canal on the region and beyond through a selection of paintings, prints, maps, early photographs, engineering drawings and material artifacts. The Proprietors of the Locks and Canals—the financial backers of the project—will be represented by portraits and personal articles such as furniture which reflect the success of their commercial venture. Paintings and prints depicting flatboats and river craft will be included as well as images tracing the development of settlements along the length of the river and the natural beauty of the valley landscape.

Other objects in the show include artifacts transported through the canal—both manufactured and fancy goods, like cast iron stoves, tools, books, and textiles which traveled upriver, and cottage industry items like brooms, straw hats, and potash which were transported to markets downriver. The exhibition will also feature surveyors' tools and drawings, diagrams of the locks of the canal,

and the accounts of amazed visitors which attest to the canal's status as a marvel of early engineering.

Objects will be drawn from the collections of the Mount Holyoke College Art Museum and the Skinner Museum of Mount Holyoke College, as well as Historic Deerfield, the Hadley Farm Museum, the Metropolitan Museum of Art, the New York Historical Society, and other public and private collections. A series of lectures, gallery talks, and other educational programs will be offered during the run of the show.

*Contributed by Eleanor C. Klepachi, Canal Park Committee, Town of South Hadley, MA.*

## WORLD CONFERENCE

The Canal Meeting of the century is about to happen on June 26-28. There is still time to sign up. It's the first World Canals Conference, our 9th Annual International (originally National) Conference on Historic Canals gone intercontinental to Birmingham, England, which has more canal mileage than Venice. A Canal Society of New Jersey tour will be there, and the Canadian Canal Society, and so will you if you sign up quick with the International Convention Centre, Broad Street, Birmingham, B1 2EA, England.

## A STORY OF THE CONSTRUCTION DAYS OF THE WABASH AND ERIE CANAL

(Special to the Press)

Nov. 6, 1919 Talking with a "Press" man of the earlier days along the Wabash valley, James Cunningham, of this place recently brought up the subject of the old Wabash and Erie Canal, that forgotten bit of engineering of more than half a century ago, paralleling the Wabash river. That great artery of commercial traffic—and for years it was the only freight-carrying route to this fertile region—was constructed more than four score years ago. It was in use even after the Civil War. Today, sections of it may be seen in a succession of dips and pools beside which is a level pathway, once the towpath. That the canal has long been abandoned may be imagined when it is stated that large trees have in many places grown between the canal bed and the towpath.

Mr. Cunningham, who remembers boating days on the canal, had often heard some of the workmen tell of the days when the work was under way. The construction gangs were made up of native Hoosiers and Irishmen. Those Irishmen were nothing like the sons of the Emerald Isle of today. They were a homely, rough and tumble lot who would rather fight than eat. They were hard workers, however, and put the canal through in record time when it is considered that they had none of the modern dredging machinery with which to work.

A particularly interesting incident was often told by the Hoosier fireside, and Mr. Cunningham, then a boy, was impressed with it. It seemed that a gang of Hoosiers and a gang of Irishmen were stationed near each other on the canal work. The Irish were always quarreling and fighting among themselves and they held the more peaceable Hoosiers in contempt.

Time after time the Irish made excursions into the Hoosier territory and tried to inveigle them into a rough and tumble scrap. The Hoosiers, knowing that when it came to rough and ready fighting they would be no match for the Irish, held their peace. At last, however, the "monkey-faces", as the Indiana citizens called the immigrants, carried their encroachments a mite too far and the Hoosiers decided to give them a lesson.

The Hoosier foreman went to the Irish boss and told him that they had decided to put a stop to the trouble by fighting it out. By the light in the eyes of the boss it was evident that he relished the idea. It was decided that the fight should be carried out along the approved Irish shilalah stylke. The two gangs were sent into the woods along the river to cut their clubs. Following County Cork custom the Irish cut short clubs just long enough to protect their wrists and give a sharp, headcracking smash. That lost them the day, for the Hoosiers cut clubs at least three feet long. The wood was of the firmest and there wasn't a chance for it to break. It was like a man with a baseball bat, fighting a man with a billy. The Irish went into the battle with all the joy of the Celt in the noble pastime of headcracking. They never had a chance for before they could get within striking distance they were laid cold by the long shilalahs of the natives. It was a warm battle, but within a quarter of an hour the Celtic contingent was "hors de combat".

That was the end of the rivalry in that line. There was no ill feeling over it for the Irish are good losers.

If the days were wild on the old canal, the nights were even wilder, especially when the workmen were able to get a good supply of whiskey. When a man was killed, (either accidentally or with malice aforethought,) there was a celebration which would make one of the famous Norwegian drinking bouts seem like a Willing Worker quilting bee. Mr. Cunningham vividly remembers one of these. An Irishman, unable to swim, was paddling across a saw mill lake standing upon two great logs. He grew careless and permitted the logs to drift apart. In trying to get them back together he fell into the water. Mr. Cunningham, then a boy, saw him struggling in the water and ran for help. The man had disappeared when help arrived and several hours were spent dragging for his body. At last a seine being used, the body was brought up. Before the body had been found a man from the Irish camp up the river had been sent to Covington\*, for a four gallon jug of whiskey. The "wake" was one of the grandest ever held in the valley.

*From Canal Society of Indiana Newsletter, Aug. 1995*

# FARMINGTON CANAL EXHIBIT

Both ACS Member Donald Guyer, A.A.I., of Hamden, Connecticut and ACS Director Arthur Sweeton III of Canton Center, Connecticut have called our attention to the extensive exhibit recently in New Haven, Connecticut featuring the old Farmington Canal. The accompanying article (written by Alberta Eiseman) was published August 6, 1995 in the *New York Times*:

Just a few minutes' walk from the New Haven Colony Historical Society, where a blue banner heralds an exhibition on the once-famous Farmington Canal, evidence of the former waterway can still be spotted along city streets.

What remains today are some deep ditches overgrown with tall weeds and maple saplings, but once, the 86-mile canal enabled freight and passengers to travel from New Haven harbor to Northampton, Mass., bestowing prosperity on New Haven and many smaller towns along the route.

"The Story of the Farmington Canal" tells the bittersweet tale of an enterprise that was begun with fanfare and jubilation but only lasted for two decades before being replaced by a railroad.

"To me has been assigned the high honor of first applying the hand of labor to a work which is itself magnificent," proclaimed Gov. Oliver Wolcott on July 4, 1825, when he broke ground for the canal.

It had taken two years to raise the money, and three more years would pass before boats could glide over the water, but on that fine summer day spirits ran high. Several thousand spectators from all over Connecticut and Massachusetts watched with enthusiasm as the Governor stepped on the spade and accidentally broke the handle off.

An omen? No one took it as such. A prominent spectator picked up the two pieces, had them repaired and commissioned an artist to decorate the ceremonial tool with the likeness of James Hillhouse, a New Haven resident and former Senator who had been named president and superintendent of the venture.

The spade is prominently displayed in the exhibition along with artifacts, models, maps, documents, paintings and prints as well as a computer program containing hundreds of pieces of information on the canal.

Since the early days of the young nation, people had dreamed of linking port cities to interior agricultural communities. George Washington called canals "fundamental to nationhood," and envisioned a nation bound together by roads and waterways, promoting technology and progress.

By 1790, canal companies had been formed in 8 of the original 13 states, but construction was fraught with difficulties and

qualified engineers were hard to find in the fledgling United States. It was the building of the Erie Canal, which opened in 1825, that became the inspiration to entrepreneurs around the land. New Haven joined the many cities that asked: "Why not us?"

Other towns in Connecticut caught canal fever—a map shows proposed routes along the Quinebaug, the Saugatuck and the Housatonic Rivers—but the Farmington Canal, named for the river that supplied its water, was the only one actually built in the state.

The scope of its supporters' ambition can be seen in a map printed in 1828: not only would the proposed canal link New Haven with central Massachusetts, it would also continue through the state of Vermont and into Canada, to connect with the St. Lawrence River.

The vagaries of the construction process are made vivid in pictures and text. A profile of the canal indicates the many locks needed to accommodate the rise in land elevation: 28 in Connecticut and 32 in the Massachusetts section. Newspaper advertisements show that the waterway was built in sections by contractors who hired their friends and neighbors to supply wood and nails, to move dirt, dig the channel and mound the banks of earth—all by hand, of course.

Problems abounded in engineering, management and public relations with landowners who felt they had been unfairly recompensed. Snow and ice halted digging and hindered delivery of supplies; rainstorms created washouts of embankments. The show's curator, Amy L. Trout, related that the chief engineer, after retirement, still had nightmares about plugging the constant freshets, breaks in the canal banks.

Finally, in spring of 1828, the first excursion vessels started gliding along canal waters, with well-dressed men and women sitting on the roof of a packet boat, watching the countryside glide by at a speed of two-and-a-half miles an hour.

Two model ships — the DeWitt Clinton for passengers and the Pioneer of New Hampshire for freight that ranged from lumber and metals to cheese, cider, vegetables and fruit — were built especially for the exhibition. Packet boats had dining areas and sleeping compartments for long rides, like the one from New Haven to Northampton that took 24 hours and cost \$3.75.

Although new businesses were created and local economies benefited, the canal itself was never a success.

"A canal is a very fragile system," said Ms. Trout. "It's seasonal, as it cannot operate in ice and snow or in the spring if there is too

much rain. Freshets were expensive to repair and any stoppage in business meant less income from tolls."

Supporters constantly sought new ways to keep it solvent; the city of New Haven issued repeated loans, to the displeasure of residents like the one who, in a pamphlet published in 1839, wrote that "no man can touch it or have anything to do with it without being ruined."

Increasingly, investors looked to trains to provide the transportation that the canal could not make profitable. After the 1847 season the Farmington Canal never reopened; within a year all the water had been drained and tracks were being laid in the canal bed or along the towpath.

It took several generations before interest in the Farmington Canal revived, years during which boats rotted at unused wharves and stone embankments turned into ruins.

Two men helped bring the canal's history out of obscurity. One was Charles Rufus Harte, an engineer and amateur photographer who during the 1930's examined and documented every inch of the canal before it disappeared. The other is a contemporary canal buff, Carl Walter, a retired doctor, who walked the entire route and interviewed residents, then put all available information into a computer data base and designed a program that is on loan to the exhibition.

Today, some of the communities that once bordered the canal are seeking to convert sections of the old waterway and railroad route into recreational areas. Working with the town of Cheshire, the Farmington Rail to Trail Association created a linear park that follows the old canal trail for almost three miles, passing by Lock No. 12. Next to the restored lock is the original lock keeper's house and a small museum dedicated to preserving the brief history of the Farmington Canal.

## INTERNET

(Concluded from Page One)

the ACS pages, you can contact Newell for information and assistance.

The "URL" for the ACS Website is:  
<http://www.blacksheep.org/canals/ACS/acs.html>

If you would like to see the UK site that it is hosted by and linked to, type  
<http://www.blacksheep.org/canals/index.htm>

By clicking on the What's New section you will find the link to the ACS pages. Newell advises 'surfers' to view the site with Netscape Navigator browser if possible as others will not always show the site properly.

# FLORIDA LOCK & DAMS

Last month while visiting my cousin in Bokeelia, FL, he took me to several places of interest including the W.P. Franklin lock and dam on the Caloosahatchee River flowing from Lake Okeechobee to the Gulf of Mexico. In case you are not familiar with this waterway I'll give you a bit of information I collected and some pictures.

The lock and dam was built by the U.S. Army Corps of Engineers and dedicated in 1969. It was a cooperative project with the Central and Southern Florida Flood Control District. Lake Okeechobee is the largest Florida lake and the second largest fresh water lake in the U.S., being 730 sq. mi. in area. Lake Michigan, our largest, is 22,400 sq. mi. The other great lakes are shared with Canada. Great Salt Lake is 1,800 sq. mi. but is not a fresh water lake. Water flows from Lake Okeechobee through the Calousahatchee River to the Gulf of Mexico along which there are three locks and associated dams, Franklin being nearest to the mouth of the river. These dams control the flow of water in the river, release flood waters from the lake and maintain sufficient water in the waterway for commercial and recreational boat traffic. By 1937 the cross-state Okeechobee Waterway was completed, connecting Stuart on the east coast with Fort Myers on the west.

While we were at Franklin we watched the movement of pleasure craft through the lock. I took several pictures, copies of which are enclosed.

*Wm. J. Ellenberger, P.E., Ret.  
15234 Sky High Road  
Escondido, CA 92025-2401  
11 April 1995*



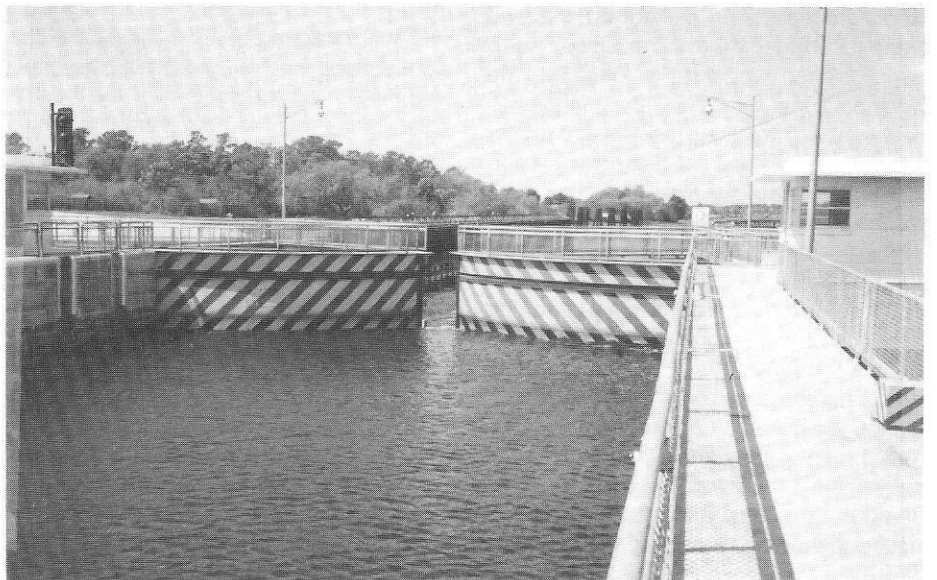
**The W.P. Franklin Dam, Okeechobee Waterway, Lee County Florida.**



**W.P. Franklin Lock, Upper Gate Closing, Okeechobee Waterway Florida.**



**Boat entering the W.P. Franklin Lock from the upper end.**



**W.P. Franklin Lock, Lower Gate Opening.**