



Building the Tennessee Gas “Muskrat Line” in South Louisiana

By Jason P. Theriot
University of Houston, Ph.D. Candidate

In post-World War II America, consumer demand for petroleum products, energy policies, and technological innovations spurred the movement of the oil industry from onshore to offshore in search of oil and gas reserves. Beginning in the late 1940s, south Louisiana became the epicenter for the expansion of the industry into this new marine environment. Through this new “energy corridor” passed billions of barrels of oil and trillions of cubic feet of natural gas found along Louisiana’s abundant prolific oil and gas fields from the coastal salt domes and marsh fields, to the open water of the Outer Continental Shelf (OCS), and eventually to the “deepwater” and “ultra deepwater” of the Gulf of Mexico. Coastal Louisiana experienced an unprecedented build-up of oil-related infrastructure, including platforms, pipelines, storage facilities, industrial parks, deepwater ports, and oil field canals. An enormous service sector and a skilled work force emerged to support this booming industry.

The Louisiana wetlands—the marshes, swamps, shallow bays, and barrier islands—presented enormous engineering and environmental challenges to the oil and gas industry, and consequently, shaped the industry’s development over time. Tennessee Gas Transmission Company (later Tenneco, Inc.) became one of the first companies to build a major gathering system designed to capture the abundant natural gas produced in southeast Louisiana and market it to consumers. In 1955-56, the company built the 355-mile “Muskrat Line,” one of the largest pipelines ever constructed in the Louisiana marshes. For more than fifty years, this system has served as the backbone for natural gas gathering operations for Tennessee Gas and later El Paso Corp., today one of the largest natural gas transmission companies in America.



businesses immediately after the war. By the 1950s large urban areas, such as Philadelphia, Boston, and New York City, in addition to major utility firms like Con Edison and Brooklyn Union Gas, began receiving natural gas from Texas and Louisiana. Moreover, as urbanization increased in the northeast and more residential communities and industries transitioned from manufactured gas to natural gas, the growing demand for cheaper, cleaner burning, abundant gas supplies from the Gulf Coast made expensive pipeline projects into the wetlands of southeast Louisiana, such as the “Muskrat Line,” both economically feasible and technologically challenging.

Beginning in the 1920s and 1930s, new technologies, new government policies, and new markets led to the growth of the interstate pipeline industry. By 1923 electric arc welding machines and gas-cutting torches became the preferred tools for pipeline construction. Other innovations included improved ditch-digging machines, better pipe, and increased horsepower at compressor stations for moving high volumes of natural gas a great distance. The National Gas Act of 1938 and the federally financed wartime pipelines built from the southwest to the northeast during the height of World War II provided major incentives for transmission companies like Texas Eastern, Transcontinental, and Tennessee Gas to expand their

In September 1955, the Federal Power Commission approved the construction of the \$56,000,000 southeast Louisiana expansion project designed to increase Tennessee Gas’ deliverability of natural gas to its customers from Mississippi to Massachusetts by 148,000 mcf daily. The feature of the project was the large diameter “Muskrat Line,” surveyed and built from the Bayou Sale field in St. Mary Parish, Louisiana, to the Mississippi River Delta. The 24-inch main trunk line ran nearly parallel to the coast and the additional 10-, 8-, and 6-inch feeder lines extended out into the marshes to gather natural gas from several fields along coastal Louisiana.

(continued on page 2)

In This Issue...

Building the Tennessee Gas “Muskrat Line” in South Louisiana

—Jason P. Theriot

Third International Construction History Congress, Cottbus, Germany

—Brian Bowen

Liquid Assets: The Story of Our Water Infrastructure

—Martin V. Melosi, Ph.D.

Black Waters: Responses to America’s First Oil Pollution Crisis

—Book Review by Jason P. Theriot

What You Missed at This Year’s Congress

Water and Sustainability: A Role for Historical Research

Call for Articles

Announcements

“Muskrat Line”

(continued from page 1) Small compressor stations built in key locations pushed the gas to the company’s large compressor station in Kinder, Louisiana (north of Lake Charles). The product then moved northeast through Tennessee Gas’ main interstate pipeline system to reach markets in New England. Tennessee Gas contracted with several oil companies, such as Shell Oil and Continental Oil, which leased the southeastern oil fields, but did not have sufficient market outlets for the gas produced.

The building of the Muskrat Line evolved in three major phases. In the first phase, land men and survey crews descended into the marshes, swamps, and bays to gather information in order to determine the exact route of the pipeline and prepare detailed maps of the area. Once these survey parties obtained the proper rights-of-way from land owners and reported back to the company’s district office in Houma, Louisiana, materials were then ordered through company headquarters in Houston, Texas. The coastal terrain provided real environmental challenges to the surveyors, particularly in transporting men and equipment into these boggy areas. In order to save time and to conduct these survey operations more efficiently, Tennessee Gas acquired the services of a local helicopter company. These “whirly birds” proved to be essential to the project. They not only carried the men

and equipment into the field, but also pulled the 1000-foot measurement chains from stake to stake through the marsh. Using helicopters, the survey crews were able to cover about five miles a day, as apposed to just one-half mile a day using boats and marsh buggies.

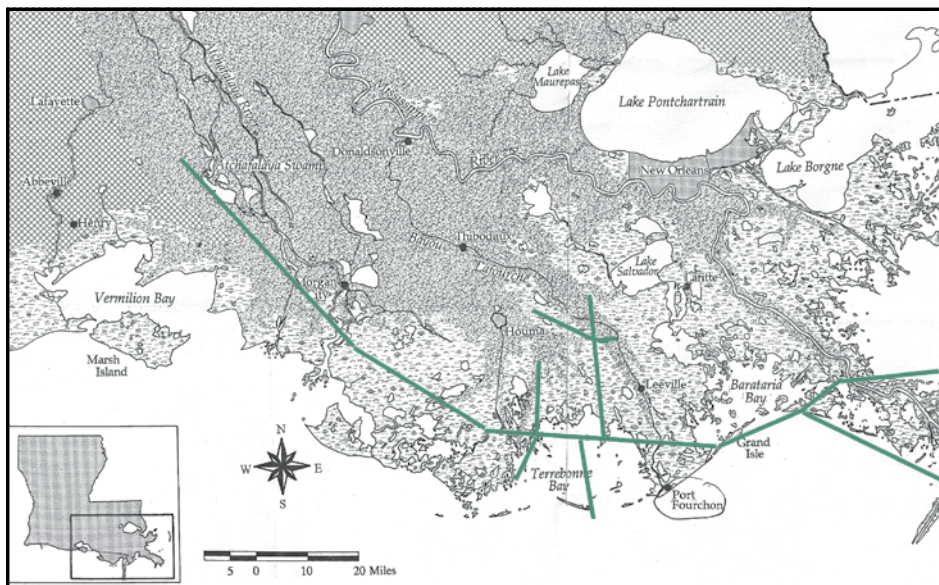
As the survey parties laid out the route, dredging machines moved in to begin the second major phase of the project: digging the special canals to lay the line. Without a solid base to support regular pipelining equipment in the wetlands, almost the entire length of the Muskrat Line was built using “floatation” and “push” canals. Barge-mounted draglines using large clamshell buckets dug the main canal 40 feet wide by eight feet deep, to allow the spud barges and specially constructed pipe-laying barges to move into the marsh areas and lay the pipe. The feeder lines with smaller diameter pipe required smaller canals built with draglines mounted on marsh buggies. Beginning in March 1956, three different contractors utilizing eighteen dredges advanced into the Louisiana lowlands ahead of the pipe-laying equipment to build the canals. As each dredge progressed about a thousand yards a day, piling the spoils along the banks of the newly built canal, additional dredges moved in behind to cut a narrow trench at the bottom of the canal three-feet by three-feet to hold the 24-inch main line in place. Engineers gave careful consideration to

nearby oyster beds and actually redirected the line in certain locations to avoid damaging these fisheries.

Lastly, the specially built pipe-laying barges with cranes and side booms entered the canals to begin welding the massive 40-foot sections of pipe together and lowering each section, piece by piece, into the pipe trench at the bottom of the floatation canal. Along with welding stations, each of these vessels had coating, wrapping, and cementing equipment onboard to lay the line. One of the many challenges with laying a pipeline in this type of environment was to apply enough concrete coating to keep the pipe sunk in the marshland and to protect it from corrosion and storm-related damages. Six pipe yards along the route using tugs and barges supplied the pipe-laying barges around the clock. A final dredge followed up to cover the actual pipe trench with gravel, shell, and spoil. Parish and federal permits required that Tennessee Gas bulkhead the canal at each intersecting bay and major waterway. In addition, engineers installed more than a hundred earth plugs through the watery right-of-way to prevent salt intrusion into the marshland.

Other components to the Muskrat Line project included several platforms built to facilitate the ties-in to existing pipelines in the various fields and to keep the feeder line valves elevated for monitoring and maintenance purposes. Tennessee Gas also increased horsepower to existing compressor stations and built new facilities along the route in Louisiana, Mississippi, and New York. The company added additional lines in Kentucky and Ohio as well.

The Tennessee Gas Muskrat Line crossed 130 navigable streams, rivers, lakes, bays, and canals, in addition to many smaller bayous, ponds, four main roads (including State Highway 90), and two railroads on its way to the abundant and yet untapped natural gas reserves along coastal Louisiana. By extending the gathering system into offshore fields at Bay Marchand, Pass A’Loutre, and Breton Sound, Tennessee



Gas helped pave the way for the progression of the industry into a new “deepwater” frontier.

As the industry gradually moved from the Louisiana coastal zone to the federal OCS waters from the 1950s to the early 1980s, Tennessee Gas expanded its main transmission system in multiple locations and extended its gathering lines further offshore. In the case of Louisiana’s coastal oil and gas development, the post-war demand throughout the nation, particularly in the Northeast, for Southwestern natural gas, was a determining factor in developing and expanding “America’s Energy Corridor,” as were the technological innovations, and the natural gas policies that encouraged consumer demand and precipitated growth in the natural gas industry. Fifty years later, this energy corridor has become a vital part to America’s economic prosperity and

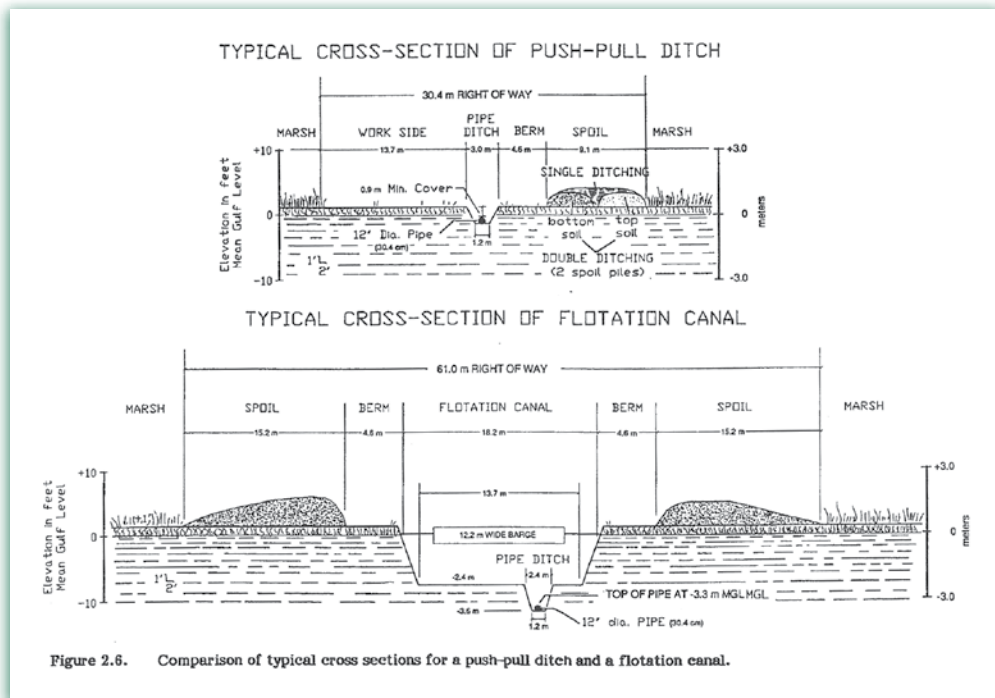


Figure 2.6. Comparison of typical cross sections for a push-pull ditch and a flotation canal.

urban growth. Today, a quarter of the energy resources used to fuel America’s

industrial society passes through these wetlands.

Third International Construction History Congress, Cottbus, Germany

By Brian Bowen, Chair, Construction History Society of America

Following two previous successful Congresses held in 2003 in Madrid and 2006 in Cambridge, UK, the Third Congress was held this year from May 20th–24th at the Brandenburger Technical University in Cottbus. This town of 100,000 is 100 km south-east of Berlin and was at one time a thriving textile center. For many generations up to WWI, the merchants of the town made uniforms for the Russian army!

Close to 300 delegates from 28 countries gathered over the four-day period to hear 194 papers being presented in six concurrent sessions, all of them given in English. Most delegates were affiliated with academia, and architects and engineers were about equally represented. One of the days was devoted to touring Berlin, Potsdam, Dresden, or the adjacent Spreewald, where visits were made to sites holding interest for construction historians. For example, in Dresden visits were made to the rebuilt Frauenkirche, destroyed

in WWII, to the “Blauen Wunder” bridge over the Elbe, and to the reconstructed central train station.

A small, but dedicated, U.S. delegation was present, most being members of the Construction History Society of America (CHSA), and they delivered fifteen papers. Overall the presentations covered subjects from early classical times to the twentieth century. Of interest to PWHS members were several papers on bridges, structural, civil and infrastructure issues.

The Congress website is still operational at www.ch2009.de, and a full roster of the papers can be found there. Copies of the *Proceedings* can be ordered at a cost of 70 € plus shipping.

Comparative societies of one kind or another exist in several countries, and there was discussion about bringing these closer together under either a single association or a federation. It was also decided that the next Congress will be held in Paris in 2012

and then in 2015 CHSA will be pleased to host it in Chicago. Even though that is six years away, CHSA is forming an organizing committee headed by Tom Leslie (Iowa State University - tleslie@iastate.edu). Anyone interested in assisting this effort is invited to contact Tom. Further information about CHSA can be found at www.constructionhistorysociety.org

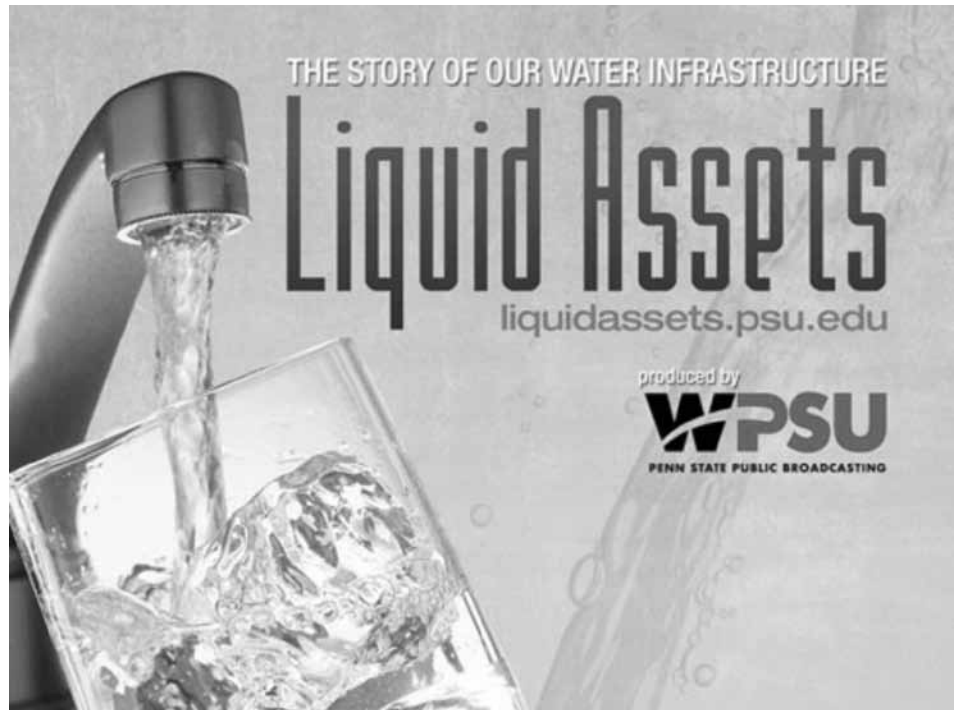
CHSA is planning a one-day session on construction history, December 2, 2009, at the National Building Museum in Washington, DC. This will gather together a wide range of interested parties from the federal government, professional and trade associations and historical societies, to discuss all aspects of the subject and explore ways of collaborating and raising the level of interest within the industry for the study and research of construction history. PWHS will be represented at the session. More information will be posted at CHSA’s website, or contact chs@coa.gatech.edu for further details.

Liquid Assets: The Story of Our Water Infrastructure

By Martin V. Melosi, Ph.D., University of Houston, Texas

Produced by WPSU Penn State Public Broadcasting, *Liquid Assets*—a 90 minute documentary—was aired on PBS stations across the country beginning in October 2008. Since January 2009 more than 80 percent of American public broadcasting stations elected to air the program. Its primary focus is on the current state of water supply, wastewater, and stormwater in the United States, with historical context setting added to the storyline for each of the topics. According to the promotion materials, “Water infrastructure plays a critical role in protecting public health, promoting economic prosperity, and ensuring quality of life across the United States. Thought largely out of sight and out of mind, many of these complex systems are aging, neglected, and in need of immediate national and local attention. *Liquid Assets* seeks to facilitate local discussions about the urgent challenges facing our water infrastructure, through the documentary and companion outreach education materials...” Setting the tone for the broadcast, Steve Allbee of the U.S. Environmental Protection Agency asserted, “We have about 2 million miles of pipe in this nation. If you look at what we’re spending now and the investment requirements over the next twenty years, there’s a \$540 billion difference.”

Tom Keiter, the executive producer, has been head of the department for the film and video program at Penn State for fifteen years. He received awards from the American Film Institute, International Film and Video Festival, the Council for Advancement and Support of Education, and the Academy of Television Arts and Sciences (Emmys). Stephanie Ayanian, producer/director, is a senior producer/director for Penn State Public Broadcasting and served as *Liquid Assets*’ lead producer. Mark Cooper, director/writer, has produced several projects for Penn State Public Broadcasting.



The Content Advisory Board—some of whom appeared on camera—included Steve Allbee, project director, U.S. Environmental Protection Agency; Linda Blankenship, P.E., DEE, principal consultant, EMA, Inc.; John Griffin, executive director of underground water utilities, Department of Watershed Management, City of Atlanta; Mark Kemp-Rye, interim communications manager, National Environmental Services Center; Karen Schuckman, instructor, Penn State, College of Earth and Mineral Sciences; Sunil Sinha, Associate Professor, Virginia Tech; Charles E. Via, Jr., Department of Civil and Environmental Engineering; and Public Works Historical Society’s own Martin Melosi. Also appearing in the documentary was another key society member, Jon C. Schladweiler, the historian of the Arizona Water & Pollution Control Association.

Liquid Assets explores the history, engineering issues, and political and economic challenges related to water use in urban and rural locations. Featured in the documentary were the cities of Atlanta, Boston, Herminie (Pennsylvania), Las Vegas, Los Angeles, Milwaukee, New York City, Philadelphia, Pittsburgh, and Washington, D.C. Basic themes that were empha-

sized included: water and the public health system, watershed protection, engineering achievements, and current challenges and solutions.

The documentary has been awarded the 2008 Engineering Journalism Award from the American Association of Engineering Societies. The citation recognized “outstanding reporting about aging water infrastructure in the United States, and for helping the American public understand the critical needs for engineering’s role ahead.”

Colcom Foundation was the primary donor for the project, and primary outreach partners include the American Society for Civil Engineers, the International City/County Management Association, the National Environmental Services Center, and Penn State’s Cooperative Extension. For more information about the documentary, to view the trailer, or to order a DVD, see <http://liquidassets.psu.edu/>.

Such an important topic requires widescale promotion. *Liquid Assets* is contributing to that need. It also has proved to be an opportunity for Public Works Historical Society members to share their knowledge and interest in water infrastructure with a large national audience.

Black Water: Responses to America's First Oil Pollution Crisis

Joseph A. Pratt
 Kansas City: American Public Works
 Association, 2008.

Review by Jason P. Theriot
 University of Houston, Ph.D. Candidate

The Santa Barbara oil spill in 1968 awoke the nation to the problems of oil pollution. Two decades later, America experienced its greatest oil spill disaster when the Exxon Valdez supertanker ran aground on Bligh Reef in Prince William Sound, Alaska, spilling nearly eleven million gallons of oil into one of the nation's most pristine coastal habitats. In the wake of the Valdez tragedy, Congress responded with its most stringent oil pollution legislation of the twentieth century, the Oil Pollution Act of 1990. These major environmental events highlighted the inadequacies, potential hazards, and external costs of the oil industry's self-regulated practices, which were allowed to metastasize over the decades as a result of the weakness of pre-existing oil pollution laws. Joseph A. Pratt's new monograph, *Black Waters: Responses to America's First Oil Pollution Crisis*, is a concise history (84 pages) of the government's earlier attempts at oil pollution control, the Oil Pollution Act of 1924 (OPA 24), which only limited oil discharges from tankers near shore, and the political bargaining that essentially sanctioned industry self-regulation that lasted for several decades. Pratt argues that the "attitudes and policies of the 1920s defined the nation's approach to oil pollution for at least the next half century" (p. 2).

Black Waters is Pratt's latest in a long series of books on the history of the petroleum industry and is, perhaps, his most significant work to date on the early environmental impacts of oil pollution. Pratt, a business and history professor at the University of Houston, has written extensively on energy history, including *Growth of a Refining Region* (1980), *Energy Metropolis* (co-edited volume, 2007), and he is currently working on a history of Exxon in the post-war era. *Black Waters* is essentially a culmination of decades of research on this very important, if

not least-covered, oil-related topic that played a role in shaping the industry's development over time.

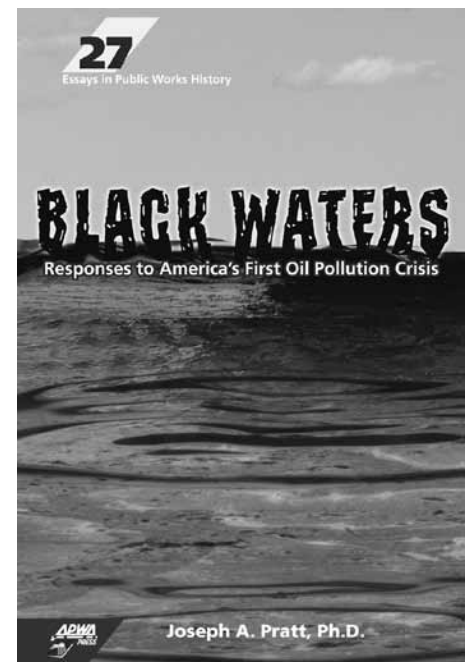
The debate over oil pollution first surfaced in the early 1920s when critics began speaking out against the potential environmental destructiveness and public health hazards of oil spillage from tankers, refineries, pipelines, and oil wells. These anti-pollution advocates, including beach resorts, fire insurance companies, state fishery industries, and government agencies, such as Boards of Health and Fish and Wildlife services, led the early charge for limiting oil waste. However, as Pratt argues, these groups lacked the resources and authority to effectively reduce or restrict oil spills in local waters. As pollution problems worsened, the advocates and agencies turned to the U.S. Congress for a solution. Hearings began in 1921, and two years later the American Petroleum Institute (API) and U.S. Bureau of Mines produced a final report, supported by Herbert Hoover, which led to the passage of the Oil Pollution Act of 1924 (OPA 24). The law placed the burden of pollution control onto the individual industries and only required that ships could not discharge their oily wastes within five miles of the coast.

Pratt analyzes the main reasons why Congress produced such an ineffective public policy. He argues that economic and political forces were able to limit pollution controls for three reasons: 1) pollution was seen as "externality" in an age of industry progress, which could not be easily assigned a cost; 2) America's democratic government was designed to be weak, and those who pushed for more federal and state control over industry fought an uphill battle; and 3) companies had political influence over government decisions and also had the benefit of API-controlled data that gave them an added edge in lobbying for a weak law. Given the historical context of the early 1920s, limiting oil pollution in the nation's coastal waterways may appear to have been a major stepping stone in environmental reform;

however, Pratt is careful to point out that the OPA 24 was significant "because of the questions it raised, not because of the problems it solved or the powers it gave the federal government" (p. 82). These questions would be raised again some decades later when oil consumption, production, transportation, and pollution reached astonishing new heights.

In the introduction, Pratt asks why a serious public response to oil pollution did not occur for several decades following the weak 1924 law. Part of the reason, Pratt explains, is because the industry followed the requirements done by the 1924 legislation and cleaned up its mess in the nation's ports and harbors, areas most visible to the public. How the industry came to be self-regulated is the story told well in Pratt's *Black Waters*. Unfortunately, the monograph ends too abruptly and does not extend the history beyond the 1940s.

Nevertheless, Pratt's *Black Waters* answers many questions about this earlier period and deserves a spot next to the other leading works on the history of oil pollution and the environment, most notably Brian Black's *Petrolia* (2000) and Hugh Gorman's *Redefining Efficiency* (2000).



What You Missed at This Year's Congress in Columbus, Ohio



PWHS Co-President Richard Ridings and Dr. Raymond A. Mohl

Congress week kicked off early for those interested in public works history. PWHS officers Charles Jacobson and Bill Kappel started Sunday off with a program that focused on both contemporary experiences and long-term trends in private, governmental, and mixed arrangements for the provision of public services and infrastructure. As a public works practitioner, Bill described some of what he has learned in making decisions on different arrangements. As a professional historian, Charles shared a long-term perspective to the issues.

Later that day chapter historians had an opportunity to discuss historical issues within their chapter, share information and exchange ideas for the collection of materials to ultimately record a chapter's history.

Once again, this year's Public Works Historical Society Luncheon featured honors, awards, recognition and a fantastic feature speaker. PWHS Co-President Richard Ridings announced the 2009 recipients of the PWHS Awards. The Abel Wolman Award was presented to Dr. Michael R. Fein for his book, *Paving the Way: New York Road Building and the American State, 1880-1956*. Dr. Fein is assistant professor of history at Johnson & Wales University in Providence, Rhode Island, where he teaches courses on history, government and critical thought. His continuing research

focuses on the relationship between transportation and American political development. *Paving the Way* also received the 2008 Annual Archives Award for Excellence in Research from the New York State Archives. Fein is currently at work on the study of Boston's "Big Dig."

The Michael Robinson Award was presented to Dr. Raymond A.

Mohl for his article "The Interstates and the Cities: The U.S. Department of Transportation and the Freeway Revolt, 1966-1973" published in the *Journal of Policy History* magazine. A distinguished professor of history at the University of Alabama at Birmingham, Dr. Mohl is a native New Yorker with a Ph.D. in history from New York University. His research and teaching focuses primarily on modern U.S. urban history. He has written or edited numerous books and is currently working on a new book on the impact of the interstate highway program on American cities, which to date has involved research in over 800 boxes of federal highway records at the U.S. National Archives. In addition to the prize-winning article in the *Journal of Policy History*, he has published other recent articles on the interstates.

Prior to introduction of the featured speaker, PWHS acknowledged the anniversaries of chapters by presenting representatives with a patch for their chapter banner. Celebrating their 50th anniversary was the Central

California Chapter, and the New Jersey Chapter celebrated their 20th anniversary. As many are aware, the Chicago Metro, Louisiana and the Southeastern Pennsylvania chapters celebrated their 75th anniversaries last year. A special diamond anniversary patch was produced for those three chapters and presented to representatives present.

With much anticipation, PWHS Co-President Charles Jacobson introduced Dr. Paul Morman, Dean Emeritus and Professor of History at the University of Dayton. Guiding attendees through his visual presentation, Dr. Morman provided background on the March 1913 super flood of the Miami Valley of southwestern Ohio and the ensuing flood control and recovery actions which led to the development of the still privately funded and administered Miami Conservancy District. Today, the Miami Conservancy District is considered a remarkable success, not only having prevented serious flooding in the region, but also creating a system of parks for recreation and conservation. The story demonstrates the complexity of achieving a regional approach to public works projects and the complexities of collaboration between the public and private sectors.



PWHS Co-President Richard Ridings and Dr. Michael R. Fein

Water and Sustainability: A Role for Historical Research

Earlier this year, the Roundtable on Environmental Health Sciences, Research, and Medicine of the Institute of Medicine of the National Academies in Washington, D.C., published *Global Environmental Health: Research Gaps and Barriers for Providing Sustainable Water, Sanitation, and Hygiene Services: A Workshop Summary*. This publication grew out of a meeting held in October 2007 meant to focus on “how to provide people with access to drinking water in the context of sanitation and hygiene” taking into account the United Nations’ Millennium Development Goals as they relate to water. Essentially, speakers at the workshop—from medicine, government, and academia—were asked to think about “the interdependence of environmental health and human health as connected through water.”

The workshop and the new publication are examples of the widespread efforts of many groups from a variety of disciplines and professions to explore water and sustainability as a crucial worldwide issue in the twenty-first century. Historians and historical perspective played a key role in the project. Another project, this one based in New York City, also has sought to blend the work of scientists, practitioners, and historians. The CUNY Environmental Cross-Roads Initiative is interested in the relation-

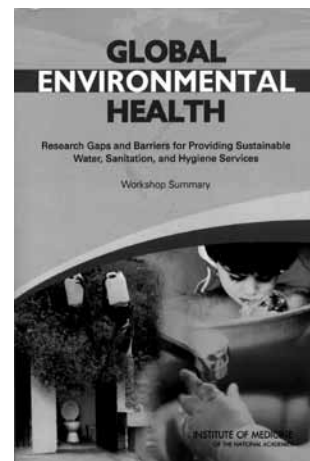
ship between humans and water. Using the Northeast Corridor as its geographic focus, the project—funded by the National Science Foundation—is conducting a broad historical study to trace “the evolution of human-water relationships in the northeast United States from 1600 to 2100 A.D.” Aside from several brainstorming sessions with representatives from different disciplines, the team of hydrologists spearheading the project (directed by CCNY’s Dr. Charles Vorosmarty) also sponsors an annual Summer Institute for graduate students (over a five-year period), who are given the task of producing research to address a variety of issues related to water use in the corridor over the 500 year period.

At the University of Florida, the newly formed National Academy of Environmental Design also sponsored a workshop in 2009 focusing on water and sustainability, especially as it related to watershed issues in the Southeast—particularly Georgia and Florida. This is one of several such workshops sponsored by the NAED across the country, and includes historians along with architects, landscape designers, and engineers.

In recent years, numerous observers have come to believe that fresh water will be the most contested commodity of the twenty-first century like oil had

been in the twentieth. Such dialogues as exemplified by *Global Environmental Health* and other projects mentioned might help us to under-

stand the difficult decisions we face in the future with this precious commodity of fresh water. That the projects mentioned are interdisciplinary in nature and all involve historians speaks well for the goals that the Public Works Historical Society has sought to nurture throughout its existence.



Call for Articles

Contributions to the newsletter are welcome from our members and other readers. The society is looking for articles which focus on topics of interest to both historians and practitioners. These would include:

- Historical/preservation activities articles from government agencies, private-sector companies, associations, and individuals with a shared interest in public works history
- Feature articles on public works events, and people of historical interest
- Reports on projects to preserve historical public works structures and infrastructure

Feature articles should be 500 to 1,000 words and written in newspaper style (Associated Press Style Book). New briefs should be limited to 100 words or less. All material should be typewritten with a preference of electronic format (Microsoft Word). Authors receive byline recognition for published articles; however, the Society does not generally provide financial compensation for published material. If you are interested in contributing, potential authors can submit articles to: Martin V. Melosi, University of Houston, Department of History, Houston, Tx 77024-0111 (mmelosi@uh.edu), or contact the Assistant Editor, Carla Curtis at cmcwien@aol.com.

2009–10 Board of Trustees

Richard Ridings, P.E., RPLS

PWHS Co-President, HNTB Corporation, Austin, TX

Charles Jacobson, Ph.D.

PWHS Co-President, Morgan Angel & Associates, Washington, D.C.

Bill Kappel

PWHS President-Elect, City of Wauwatosa, WI

Louise Nelson Dyble, Ph.D.

Trustee (2012), Michigan Technological University, Houghton, MI

Robert W. “Bob” Moorhead, P.E.

Trustee (2012), Washington State County Road Administration Board, Olympia, WA

Janet R. Bednarek, Ph.D.

Trustee (2011), University of Dayton, OH

William A. Sterling, P.E.

Trustee (2011), Greeley, CO

Ann Durkin Keating, Ph.D.

Trustee (2010), North Central College, Naperville, IL

Lawrence E. “Larry” Lux

Trustee (2010), Lux Advisors, Ltd, Plainfield, IL

Noel Thompson

APWA Board Liaison, Thompson Resources, Louisville, KY

Teresa Hon

Staff Liaison, American Public Works Association, Kansas City, MO



Announcements

- ATTENTION ALL MEMBERS: Is there a museum exhibit or something similar that is oriented to public works and located in your area? If so, the Public Works Historical Society leadership requests that you conduct an exhibit evaluation and share your findings with members of PWHS through our newsletter, *Public Works History*. Thank you.
- October 15–18, 2009: The Society for the History of Technology will hold its annual meeting in Pittsburgh, Pennsylvania. For further information please visit the website, www.historyoftechnology.org.
- March 10–14, 2010: The National Council on Public History will hold its annual meeting in Portland, Oregon. For further information please contact www.ncph.org.



Public Works Historical Society

PWHS PUBLIC WORKS HISTORY

ISSN 1525-7002

© PWHS, October, 2009

Public Works History, the newsletter of the Public Works Historical Society, is published by the American Public Works Association with support from the Center for Public History at the University of Houston, Texas. Copy and queries should be addressed to the editor:

Dr. Martin V. Melosi
Distinguished University Professor
University of Houston
Department of History
Houston, TX 77204-3003
ph 713-743-3090; fax 713-743-3216
mmelosi@uh.edu

Portions of this newsletter may be reprinted for the purpose of public education without specific authorization from PWHS or APWA, provided proper attribution accompanies the material.

Public Works Historical Society
American Public Works Association
2345 Grand Blvd, Suite 700
Kansas City, MO 64108-2625
ph 816-595-5224; fax 816-595-5324
e-mail pwhs@apwa.net www.pwhs.net

Editor

Martin Melosi
Department of History
University of Houston, TX

Associate Editor

Carla Curtis
Department of History
University of Houston, TX

Staff Liaison

Teresa Hon
Technical Services Program
Manager, APWA

Layout & Design

Cami Travis-Groves
Graphic Designer, APWA

Production Assistance

Connie Hartline
Publications Manager, APWA

Public Works Historical Society
American Public Works Association
2345 Grand Blvd, Suite 700
Kansas City, MO 64108-2625



Non-Profit Org.
U.S. Postage
PAID
Kansas City, MO
Permit No. 6999