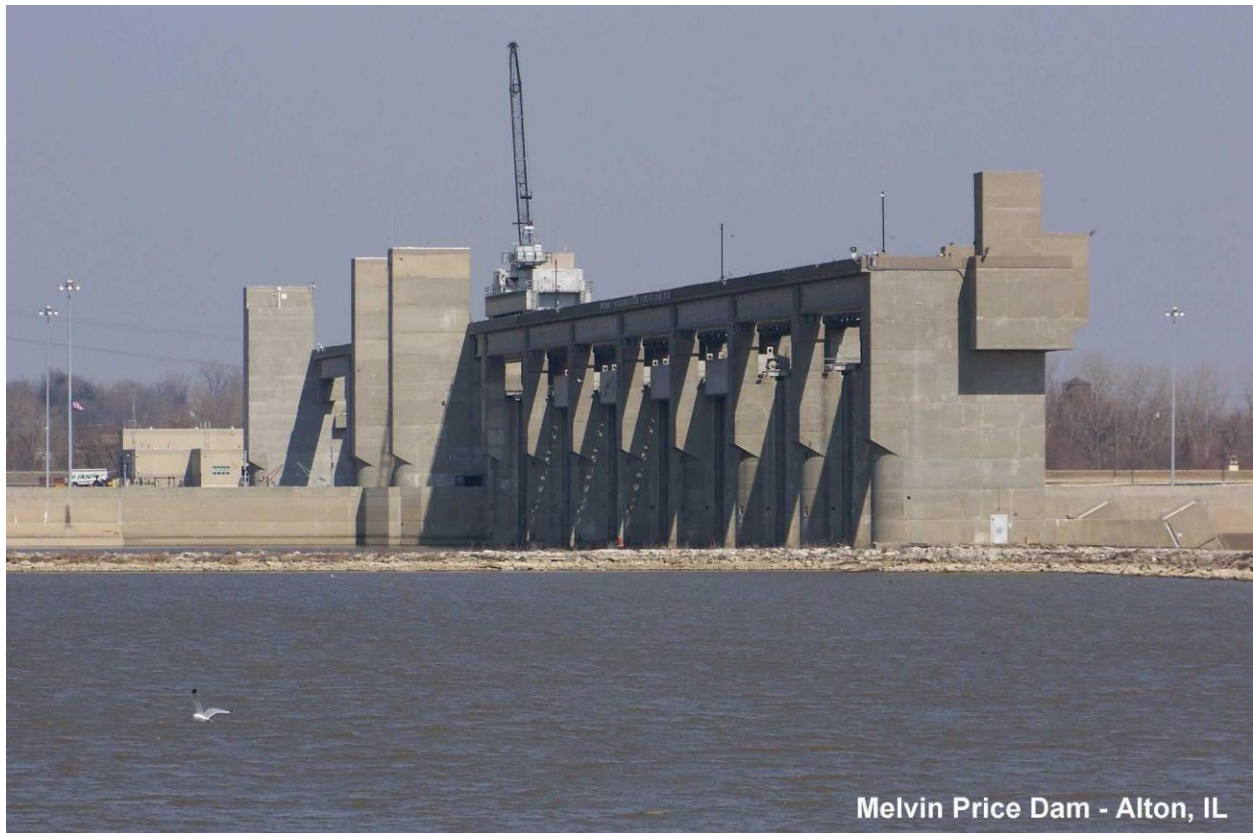


The Dam That Was Too Big to Hide: Part 1

By Brad Walker, Rivers Director – Missouri Coalition for the Environment

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A huge block of concrete looms in the Mississippi River just south of Alton, Illinois. It's the Melvin Price Locks and Dam, and its story flows like a reality TV show. The US Corps of Engineers (Corps) had plans to build the \$1 billion project completely under the public's radar; but a burning river, leaking oil platforms and toxic housing sites helped derail the rush for the big dam.



First some background on who does what on our rivers.

Since before our nation was formed, the Corps has been considered by many as the premier waterways organization in North America. It started by surveying and mapping our rivers, then clearing the rivers of tree snags for steamboats, and finally by constructing navigation dams and locks to accommodate much larger steel barges.

The Corps does not have the sole responsibility for our rivers though. Instead, several agencies share jurisdiction for what occurs in and near our rivers. The Corps is generally responsible for river navigation on what shippers call the Inland Waterways System (IWS), flood risk reduction (a more accurate and modern term for flood control), and building and managing reservoirs (especially in the central and eastern U.S.). It also has other shared responsibilities for recreation and water supply. The Environmental Protection Agency (EPA) has been charged with protecting our rivers from pollution since its creation in December 1970. The US Fish and

Wildlife Service (USFWS) has responsibility for maintaining and operating national fish and wildlife refuges in our rivers including the Upper Mississippi River (UMR) Fish and Wildlife Refuge, created in 1924, which stretches north 284 miles from Rock Island, IL to Lake City, MN.

Most of the 30 navigation locks and dams that make up the UMR portion of the Inland Waterways System were authorized by Congress. The Corps managed lock and dam construction during the 1930's as a jobs program to help move the nation out of the economic woes of the Great Depression. Locks and Dam 26 at Alton, Illinois, completed in 1938, was the first to contain two locks, one 600-foot long and the other 300-foot long. See our webpage [here](#) for additional information on the Corps and their work on our rivers.

Expansion of Locks and Dam 26

Because of increased barge traffic, by the mid-1950's the upper Mississippi barge industry was asking the Corps to construct a 1,200-foot lock at the dam at Alton. The Corps was already busy working on the Ohio River Navigation Modernization Program replacing most of the existing locks and dams with larger dams and 1,200-foot locks at each. This request prompted the Corps' St. Louis District to contract with the engineering firm of Tippetts, Abbott, McCarthy and Stratton (TAMS) in 1958 to prepare an engineering and economic report in order to justify a new 1,200-foot lock. The enlarged lock proposal never went beyond the district level. A second report was drafted by the St. Louis District in 1964 but the Secretary of Army rejected the report because there had been no hearings held by the Corps and the economic data was 10-years old. The District prepared a third unused report in 1966.

In 1968 it was decided at a level above the St. Louis District that because of projected barge traffic growth two new 1,200-foot locks would be required at Alton. It had also been decided that the existing Locks and Dam were structurally unsound and that it would cost as much to rehabilitate them, so a replacement locks and dam should be constructed. The St. Louis District completed a twin 1,200-foot lock and dam facility design later that year. The Secretary of the Army approved the Locks and Dam 26 Replacement plan in June 1969.

Six months later the world changed. On January 1, 1970 President Nixon signed into law the National Environmental Policy Act (NEPA) that required Environmental Impact Statements (EIS) for major government projects. This law gave American citizens and nonprofit organizations the rights to legally engage in policy review and the project development process on our nation's waters.

The timing became inconvenient for the Corps' plan to build the replacement locks and dam since they had to comply with the new law and prepare an EIS. The Corps apparently planned a streamlined effort by completing the Draft EIS in May 1974 and the Final EIS a month later in June. Congress must have also believed that it was going to be smooth sailing because they appropriated funds for the new twin 1,200-foot locks and dam project in 1974.

Railroads and Nonprofits Oppose the Project

On August 6, 1974, before construction bids were opened for the twin 1,200-foot locks and dam project, 21 railroads, the Sierra Club and the Izaak Walton League filed suits in U.S. District Court in an attempt to stop the project. A month later to the day, Federal Judge Charles Richey suspended the design work on Locks and Dam 26 Replacement project. The court cited two primary issues: The first concerned the lack of Congressional authorization and the second concerned the EIS. The Corps relied on Section 6 of the Rivers and Harbors Act of 1909 that allows the Secretary of the Army to approve the repair of an existing structure. However, Section 9 of the Rivers and Harbors Act of 1899 required Congressional authorization when an entirely new project was being proposed. Secondly, the court agreed with the plaintiffs that the Corps' Final EIS was likely inadequate.

Rather than fight the injunction the Corps spent the next two years reevaluating the project including sending alternatives to the Board of Engineers for River and Harbor (BERH) for review. BEHR recommended in 1976 a new dam with only a single 1,200-foot lock due to the uncertain environmental impacts that would be caused by two 1,200-foot locks. The Corps also redrafted its Draft Supplemental EIS in June 1975.

After receiving the approved Chief of Engineers' report on the new single 1,200-foot Lock and Dam project, in August 1976 the Secretary of the Army recommended that Congress authorize the new dam project and provided them with a Final EIS and a proposed legislation. Many hurdles would continue to delay construction, however.

During 1976, impelled by Congress through the Water Resources and Development Act of 1976, the Corps assembled two river environmental study groups called Great River Environmental Action Teams (GREAT); GREAT I in the St. Paul District and GREAT II in the Rock Island District. These teams were to develop what they believed to be a balanced resource management plan for the Upper Mississippi River.

Congress Steps into the Fray

Over the next 26 months Congress held hearings on the new project. Because the Corps was no longer pursuing the twin locks projects the US District Court concurrently dissolved the primary injunction granted in 1974.

At least three nonprofit groups, including Missouri Earth Advocate, Sierra Club, and The Coalition on American Rivers (Champaign, IL), published lengthy reports in 1977 discussing their specific concerns regarding the project. The actual structural condition of the existing dam came into question. The US Department of Transportation, the Illinois DOT and others challenged the need for a new dam and some even offered alternate designs for its rehabilitation. Another major claim emerged that the Corps had a plan for deepening the existing 9-foot barge channel to 12-feet deep and adding 1,200 locks at dams upstream of Alton on the Upper Mississippi and Illinois River.

On October 21, 1978 Congress supplanted the conversation on the need for a replacement dam by authorizing a new dam – designated 26R - with one 1,200-foot lock in the Inland Waterways Authorization Act of 1978. The legislation included two other major requirements. For the first time the barge industry would help fund the construction of facilities on the IWS. Through a four-cent fuel tax on IWS barges and deposited to the Inland Waterways Trust Fund the industry would cover half the costs of Lock and Dam 26R. The Act also stated that there can be no expansion of the UMR IWS (another lock or other new facilities) prior to approval of the UMR Comprehensive Master Plan. The Plan would require studies of the environmental and economic effects of expanded barge and shipping infrastructure.

Congress appropriated funding for the single Lock and Dam 26R project in October 1979 and construction began the next month.

Primarily because Congress had authorized the new single lock project, the lawsuits and appeals by the railroads and nonprofit groups were dismissed in April 1981. The Corps then proceeded to build the new dam and the first 1200-foot lock at the new location downstream of Alton.

The Second Lock Returns

The Corps still wanted to construct a second a 1,200-foot lock at the new project.

In early January 1982 the UMR Basin Committee released their UMR Comprehensive Master Plan ordered by Congress, which recommended:

- 1) Immediate authorization of 2nd 600-foot lock with a NEPA exemption
- 2) Reducing erosion within and along the river

- 3) Implementing a Habitat Restoration and Enhancement Program
- 4) Implementing a Long Term Resource Monitoring Program
- 5) Implementing an inventory and analysis data system for the river environment
- 6) Implementing a recreation program
- 7) Monitoring barge traffic movement
- 8) Continuing dredge material disposal within the floodplain
- 9) Evaluating economical reuse of dredged material
- 10) Creating a cooperative arrangement to maintain, coordinate and manage resources activity within UMR System

A board of engineers approved the two GREAT Reports two months later.

In August 1985, Congress provided a tentative approval of a second lock at the new Lock and Dam 26 under construction south of Alton. Congress also ordered an extensive Environmental Management Program (EMP) on the upper Mississippi and that barge shipping infrastructure and the EMP were to be "on equal fiscal footing."

During the next year conservation organizations continued their questioning of the need for a second lock at Lock and dam 26R since the single 1,200-foot lock would have a capacity of at least 100 million tons per year. The groups, particularly the Izaak Walton League of America, also questioned the Corps' new Major Rehabilitation Program (MRP) for UMR and Illinois River Locks and Dams. The Corps originally asserted that the \$300 million MRP was a navigation expansion program that needed no Congressional authorization and the Corps also ignored the requirements of NEPA in determining its systematic impact upon the UMR environment. Due to the pressure from the IWLA, by mid-1986 the Corps decided to "modify key aspects of a \$300-million plan to rehabilitate most of the 26 navigational locks and dams on the UMR", thus avoiding litigation.

Congress Boosts Second Lock Over Final Hurdles

With its passage on November 17, 1986, the Water Resources Development Act of 1986 settled the fate of the second lock. In the bill Congress approved the UMR Comprehensive Master Plan. Specifics included formally creating the UMR Environmental Management Program; the approval of the second lock at Lock and Dam 26R; requiring the monitoring of traffic movements on the system for the possibility of future system expansion; providing an UMR recreational project authorization including conducting an assessment of the economic benefits generated by recreational activities in the system; increasing the capacity of specific locks within the UMR IWS through nonstructural measures; making minor structural improvements; and studying effective reuses of river dredging material.

The Corps continued to develop its Draft EIS (DEIS) for the second lock. In December 1986 EPA rated the DEIS as "Category 3 Inadequate" and provided numerous comments to the Corps. In November, 1987, after adjusting the DEIS to accommodate reviewer comments, the Corps released its Draft Supplemental EIS, which was still considered insufficient by US Fish and Wildlife Service, the State of Illinois and nonprofit conservation organizations primarily for its failure to respond to system wide environmental mitigation required from expanded barge traffic. Finally, in November 1988 the Corps agreed to take specific steps to minimize potential environmental damage. As a result, the IWLA then decided to drop plans to sue the Corps.

On December 7, 1988 the Corps issued its Record of Decision regarding Melvin Price Locks and Dam. Its plan for the Second Lock included the intent to perform studies evaluating barge traffic and the impact of expanded barge traffic upon the river's ecosystems and to monitor the impact of implemented mitigation measures. This allowed construction of the second lock to proceed.

On October 10, 1989, 33 years after the barge industry began asking for a 1,200-foot lock at Locks and Dam 26, the Melvin Price 1,200-foot Lock and Dam became operational. The opening of the second 600-foot lock at the facility followed on June 18, 1994.

Note: This history is based upon documents available to MCE. There are undoubtedly other documents that could fill in some gaps. We believe that the article portrays the history of the Melvin Price Locks and Dam accurately with the information we have.

Part 2

Part 2 of this article will examine the impact of the new environmental laws and the advocacy of conservation organizations upon the Corps and its water resources development process.

Unexpected direct and indirect actions affected the process surrounding the approval, development and construction of a facility to replace the original Locks and Dam 26 on the Mississippi River at Alton, Illinois, which significantly altered how the U.S. Army Corps of Engineers planned their projects after 1970. The facility that became known as the Melvin Price Locks and Dam (named after the local Congressional Representative who was involved in getting it built) was at the forefront of the transition from a Corps that had very little oversight and essentially zero public input, to an agency operating increasingly under the skeptical scrutiny of the public. The Melvin Price project was equally important in the transition away from a process that ignored the impact of large-scale projects on the environment.

Had it not been for the National Environmental Policy Act of 1970 citizens would not have the rights they have today to engage in the project planning process and to gain access to government documents that allow them to fully understand why a project is being planned, how much it might really cost, who it primarily benefits, and whether there will be public benefits. Maybe most importantly, the law provided a stick that the public could use to protect the environment and counter the growing influence of special interests on the use of their taxes.

Through opposition to the project, the Melvin Price saga revealed well hidden truths that needed serious vetting by Congress and public scrutiny. We will cover several of them here:

- 12-Foot Barge Channel

When opponents to the expansion of the Alton locks to 1,200 feet in length claimed the project was just the first part of the Corps plan to deepen a large segment of the Upper Mississippi river (UMR) and the Illinois River 9-foot deep channel to a 12-foot channel, the Corps' defense was to simply say it had no such plans, that it would be too expensive (if all of the costs were actually charged to a deepening program), and that it had no authorization to allow that channel modification. However, it is difficult to ignore the statements contained in the pre-1970 reports drafted for either the expansion or replacement of the existing Alton Locks and Dam 26 regarding a 12-foot channel.

Contradicting later Corps denials, in reports and other documents dating from 1958 a change to a 12-foot depth was contemplated on the UMR and Illinois River. For example in the St. Louis District's 1966 Report on Replacement on Lock & Dam 26 the lock sill depth was established at 18 feet rather than the 12 foot depth of the existing dam's locks and the report states that this depth would "increase the project depth from nine to twelve feet".

In the 1968 report 15-foot sill depths were to be used at the two 1,200-foot locks. "This would increase the present project depth from nine to 12 feet." (p. A-9) The report also mentioned that a study was underway "to determine the advisability of providing a practical navigation channel of 12-foot depth" on both the UMR and the Illinois River. (p. 3)

The Corps later went through several gyrations explaining the need for the deeper sills other than for a 12-foot channel, which lacked credibility, especially when compared with documentation from the Ohio River Navigation Modernization Program that was ongoing since the 1950's and which was replacing existing dams with fewer and larger dams having 1,200-foot locks. The Ohio River Basin Comprehensive Study stated "Preliminary estimates are that after completing the replacement plan 95 percent of the Ohio River will have a minimum channel of 12 feet."

- Congressional Authorization for a New Facility

It became obvious relatively quickly in the early 1970's that the Corps had no legal Congressional authorization for constructing a new locks and dam facility at Alton, Illinois. The U.S. District Court's granted injunction in 1974, prompted by the opponent's lawsuits, stated that Congressional authorization was, per law, specifically required for a new facility. The Corps then sought and ultimately received the needed Congressional authorization in 1978. This also begs the question; did the Corps receive Congressional authorizations prior to making the replacement of over 50 locks and dams on the Ohio River with new larger dams and 1,200-foot locks at a cost of well over \$1 billion in taxpayer funds?

- Ecosystem Restoration and Mitigation

The National Environmental Policy Act's requirement for Environmental Impact Statements played a major role in getting much improved mitigation of environmental damages at the sites of new projects. It was the exposure of the proposed new facility at Alton and the concerns for increasing impacts to the river cause by more barge traffic generated by opponents of the project, especially on the second lock, that created the atmosphere for establishing the UMR Environmental Management Program (EMP). This is not in anyway to diminish the immense contribution that the state and federal natural resources agencies provided. However, without the public exposure and the pressure it placed on Congress, EMP would likely never have happened in the face of the Corps' Assistant Secretary opposing it. EMP was groundbreaking in its composition of programs that provided both habitat restoration and scientific data gathering and monitoring. Although its funding remains inadequate and after more than 25 years the UMR and Illinois River remain far too degraded, Congress has at least recognized EMP's success's and importance.

- Mitigation of Cumulative Impacts

Several lengthy documents and important policy decisions were made regarding the cumulative environmental effects of the existing barge traffic volume and the volume projected by the Corps for the new locks and dam facility at Alton. The documents include the UMR Comprehensive Master Plan, Great River Environmental Action Teams Reports (GREAT I and II), Environmental Impact Statements for both the single lock facility and the second lock, and the revised Major Rehabilitation Program (MRP) for UMR and Illinois River Locks and Dams. The policy changes are documented in the Inland Waterways Authorization Act of 1978 and the Water Resources Development Act of 1986.

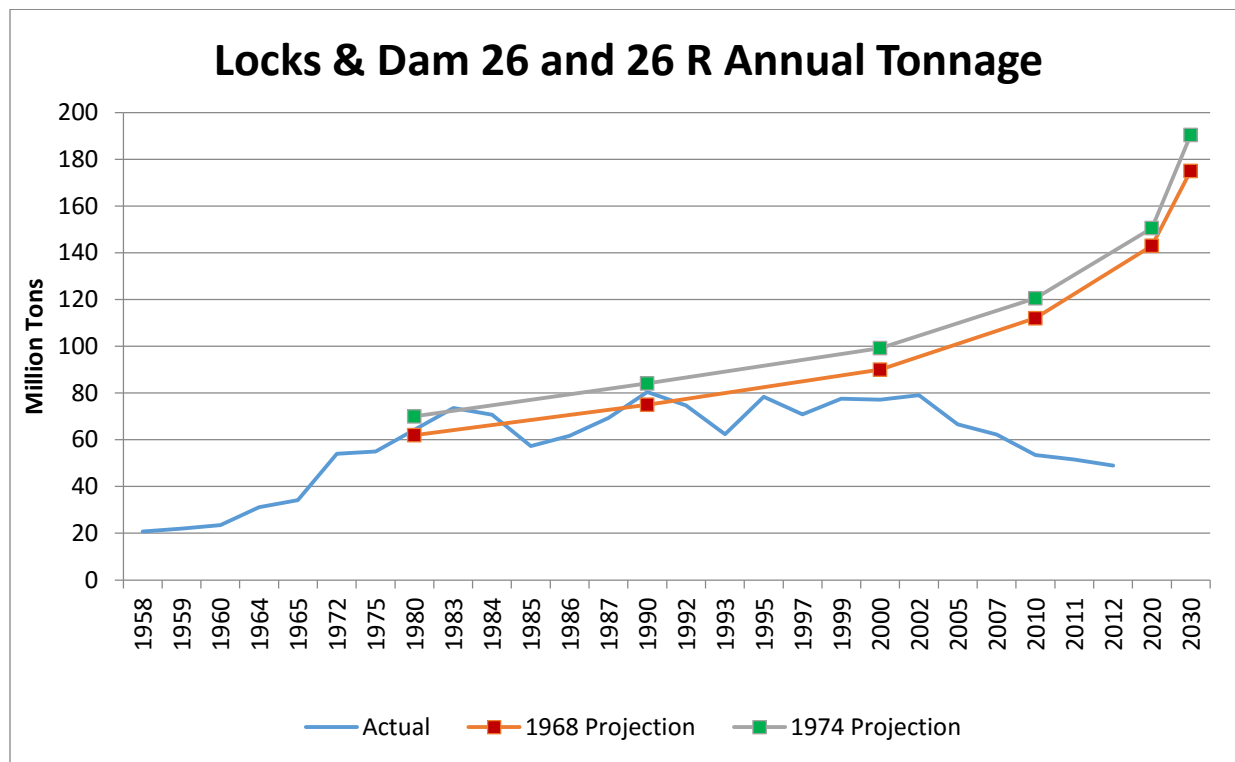
- Inland Waterways Trust Fund

Although there were proponents within Congress who saw the problem with the complete subsidization of the Inland Waterways System (IWS), it would have been extremely hard to pass any legislation requiring the barge and shipping industry to contribute to the funding of the IWS infrastructure entirely without public support. The opponents of the project brought needed public exposure over a decade through newspaper articles, reports and legal actions. Although the 1978 and 1986 legislations initiated the first sharing of the cost (50%) of rehabilitating existing and construction of new locks and dams, it did not force the industry to contribute to the major IWS expense – operation and maintenance.

The research for these two articles was rather humbling. To look back to the mid to late 1970's and realize that the conservation and environmental groups made the same arguments using the very same facts that we use today, such as the issue of river circuitry and units trains showing the superior fuel efficiency of freight rail compared to barge transportation, was enlightening. I was also reminded that is there is so much useful and essential information that

is not on the Internet and can only be found in hard copies of aging documents. Absent the articles and reports found in overlooked file cabinets, the conclusions drawn below could not be made.

Without the railroads and nonprofits exposing the costs and impacts of Corps projects, no one would have challenged the veracity of the Corps' overly optimistic barge traffic projections (See graph at below) that were being used to justify the lock expansion. Melvin Price Locks and Dam would likely have had two 1,200-foot locks and several other dams upstream would likely already have 1,200-foot locks – all at the total expense of the public. As can be seen from the chart below, the peak volume at the Alton Locks and Dam occurred the in 1990, the year after Melvin Price (single 1,200-foot) Lock and Dam opened.



On the environmental and social sides of the ledger, it's likely that the EMP and other natural, recreational and area educational facilities like Riverlands that we all benefit from today would not resemble what exists or may not exist at all.

This is not hyperbole.

An October 28, 1989 article by the St. Louis Post Dispatch titled "Corps of Engineers Brave New World" placed the impact of the opponents of the new Alton facility had. Below is the article's opening and closing comment:

"Thanks to environmental lobbyists over the last decade, the new Lock and Dam 26 on the Mississippi river will show what the U.S. Army Corps of Engineers can do to protect wildlife and its natural habitat along a major water project when it has to. And Congress has said it has to. This approach should mark a new attitude on the part of the corps that broadens its perspective from purely pork-barrel water projects."

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"It's about time - and it took a lot of public interest work and a determined Congress to make the change."