

**INLAND WATERWAYS USERS BOARD  
18<sup>TH</sup> ANNUAL REPORT  
TO THE  
SECRETARY OF THE ARMY  
AND THE  
UNITED STATES CONGRESS**

**WITH APPENDICES**

**March 2004**



Leaking Spare Miter Gates, Lock and Dam 19, Mississippi River

# TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	1
Introduction.....	7
Background.....	7
The Board’s Perspective on Infrastructure Investment.....	9
Benefits Foregone .....	10
Capstone Activities .....	11
Lock and Dam 19, Mississippi River, Iowa (major rehabilitation) .....	12
Lock No. 27, Mississippi River, Illinois (major rehabilitation) .....	13
McAlpine Locks and Dam, Kentucky and Indiana (construction) .....	14
Olmsted Locks and Dam, Illinois and Kentucky (construction) .....	15
Upper Mississippi River and Illinois Waterway Navigation, Illinois, Iowa, Minnesota, Missouri, and Wisconsin.....	16
High Priority Projects .....	17
Inner Harbor Navigation Canal (IHNC) Lock, Louisiana (construction).....	17
Monongahela River Locks and Dams 2, 3 and 4, Pennsylvania (construction) .....	17
Marmet Locks and Dam, Kanawha River, West Virginia (construction) .....	18
Kentucky Lock and Dam, Kentucky (construction) .....	18
Lock and Dam 11, Mississippi River, Iowa and Wisconsin (major rehabilitation).....	19
Priority Studies and PED Projects .....	20
Priority No.1: Ohio River Mainstem Systems Study, Illinois, Indiana, Kentucky, Ohio, Pennsylvania and West Virginia (study) .....	20
Priority No. 2: Greenup Locks and Dam, Ohio River, Kentucky and Ohio (PED).....	20
Priority No. 3: John T. Myers Locks and Dam, Ohio River, Indiana and Kentucky (PED) ...	21
Priority No. 4: Bayou Sorrel Lock, Intracoastal Waterway, Louisiana (PED).....	21
Priority No. 5: Calcasieu Lock, Louisiana (study) .....	21
Priority No. 6: Chickamauga Lock and Dam, Tennessee River, Tennessee (PED).....	22
Priority No. 7: Gulf Intracoastal Waterway (GIWW) Modifications, Texas (study) .....	22
Complete Expeditiously.....	23
Lock and Dam 24, Mississippi River, Illinois and Iowa (major rehabilitation).....	23
Lock and Dam 3, Mississippi River, Minnesota (major rehabilitation) .....	23
Authorized Navigation Channels.....	24
Missouri River Flows.....	24
Operations and Maintenance .....	25
“Low-Use” Rivers.....	25
Studies.....	26
Funding for Environmental Mitigation.....	26
Conclusion .....	26
Acknowledgements.....	27
Appendix A – History and List of Board Members.....	A-
1	
Appendix B - Map and List of Fuel Taxed Waterways.....	B-1

# INLAND WATERWAYS USERS BOARD

## 18<sup>th</sup> ANNUAL REPORT

### March 2004

#### EXECUTIVE SUMMARY

The Inland Waterways Users Board, created by the Water Resources Development Act of 1986, reports, with grave concern, that inland waterways are one of our most underappreciated national assets. Underappreciated because they are largely invisible to most of the American people. Stealth barges ply the nearly 12,000 miles of commercially active inland and intracoastal waterways, touching 38 states, quietly moving over 600 million tons of cargo annually (18% of intercity freight by ton-miles), with less fuel consumption, less air pollution, less urban congestion, and minimal community impacts as compared to alternative modes.

In addition, our waterways are much more than transportation routes. They are living resources, providing many other benefits in the form of flood control, hydroelectric power, local water supply, recreational opportunities, and habitat for fish and wildlife.

The Inland Waterways Users Board is extremely concerned and reports to you that this invaluable system is suffering from serious neglect. The Nation is not making the necessary investments in modernization of the system. We have been deferring timely maintenance for so many years that we are now experiencing serious structural failures. For example, a gate failure occurred at John Day Lock, located on the Columbia River, in 2002, closing it for four months, and severe deterioration in the Greenup Lock, located 5.0 miles below Greenup, KY on the Ohio River, required emergency shut-down and repair in 2003, lasting eight weeks.

Without immediate congressional action to upgrade and improve this previously world class system, agricultural exports will be in peril, power costs will drastically increase, manufacturing costs for consumer durables and non-durables using chemicals and petrochemicals will increase dramatically and the environment will suffer increased pollutants, noise, and congestion. The commercial navigation community is the only user who directly funds these multi-use projects with the twenty-cent per gallon fuel users tax. The Board anticipates the Congress and the Administration will use this report to craft appropriate legislation and fund projects at full efficient funding to the extent that the current Inland Waterways Trust Fund is able to match appropriated funds.

In order to continue serving our nation, the inland waterway system needs urgent attention. Specifically, in this 18<sup>th</sup> Annual Report, the Board makes the following recommendations:

**1. The Board strongly urges the Administration and Congress to support completion of the following five top priority Capstone Activities.** The Board considers these Capstone Activities

to be of equal importance and recommends that all five be funded at the Full Efficient Funding level for FY 2005, as outlined in Table 1.

- **Lock and Dam 19**, Mississippi River, *Iowa* (Major Rehabilitation)
- **Lock No. 27**, Mississippi River, *Illinois* (Major Rehabilitation)
- **McAlpine Locks and Dam**, *Kentucky and Indiana* (Construction)
- **Olmsted Locks and Dam**, *Illinois and Kentucky* (Construction)
- **Upper Mississippi River and Illinois Waterway Navigation**, *Illinois, Iowa, Minnesota, Missouri, and Wisconsin* (Study)

2. **Congress must continue to fund authorized projects at a full efficient funding level in order to stop the waste of taxpayer dollars.** This includes the Board's High Priority Construction and Major Rehabilitation projects, which are listed below and in Table 1. The Board attaches equal priority to all of these high priority projects.

- **Inner Harbor Navigation Canal Lock**, *Louisiana* (Construction)
- **Monongahela River Locks and Dams 2, 3, and 4**, *Pennsylvania* (Construction)
- **Marmet Locks and Dam**, *West Virginia* (Construction)
- **Kentucky Lock and Dam**, *Kentucky* (Construction)
- **Lock and Dam 11**, Mississippi River, *Iowa and Wisconsin* (Major Rehabilitation)

3. Congress must fund the priority PED projects and studies at the full efficient funding level. Seven such PED projects and studies have been identified and ranked in Table 1.

4. The Board has also identified two projects which are very near completion, **Lock and Dam 24**, Mississippi River, *Illinois and Iowa* (Major Rehabilitation), and **Lock and Dam 3**, Mississippi River, *Minnesota* (Major Rehabilitation). **These two projects should be funded so as to get the job done.**

5. Authorized Navigation Channels. The Board has observed that Congressional intent continues to be thwarted with the use of regulations and laws that go far beyond their intent by both Federal and state government agencies. The Snake River is a case in point. Due to pressure from other agencies, the U.S. Army Corps of Engineers has halted routine and necessary dredging to maintain the Congressionally-authorized 14-foot channel for the last five years. Other major arteries, including the Mississippi, Illinois, and Missouri Rivers, have faced or could face similar fates if this issue is not addressed by Congress immediately. **To ensure that Congressional will and intent is preserved, legislative language should be modified from “authorized” to “mandated” when referring to navigation projects.**

6. Missouri River Flows. The flows from the Missouri River are over 60% of the water in the middle Mississippi River (between St. Louis, Missouri and Cairo, Illinois) during late summer/early fall (the major agricultural export season). Maintaining a safe and adequate channel is essential to protect our agricultural export market. With every 1-inch loss of water, each barge is unable to move 17 tons (about  $\frac{3}{4}$  of a semi truck) and a regular 30-barge tow

leaving St. Louis will decrease the total tonnage by 510 tons or about 22 semi-trucks. If flows from the Missouri River become unreliable, either 1) agricultural just-in-time markets will evaporate or 2) more traffic will move by truck or rail, increasing air and noise pollution and negatively impacting society's quality-of-life. **Congress must mandate that flows from the Missouri River will adequately ensure that the Mississippi River is reliably navigable under all but the most severe conditions.**

7. Operations and Maintenance. The Board continues to adamantly oppose any use of the Inland Waterways Trust Fund for Operations and Maintenance. The Board counsels Congress to adequately fund the national backlog that, if not addressed, will eventually result in a catastrophic failure, crippling the nation's infrastructure. **Congress, if it intends to keep middle America's economic engine running, must increase the O & M by at least \$100 million and then ensure that future budgets, at a minimum, are increased at the rate of inflation.**

8. "Low-Use" Rivers. The concept that "low-use" rivers do not need the same type of O&M as "high-use" rivers is an ill-conceived concept by individuals who are uninformed about the navigation system as a transportation mode. No reasonable transportation expert would recommend the closure of all non-hub airports. As with the feeder airports, feeder rivers increase the economic and environmental efficiency of the entire system. Without reliability on all parts of the system, the system fails. **Congress must protect these "low-use", tributary rivers with appropriate O&M funding.**

9. Studies. **Congress should fiscally equip the U.S. Army Corps of Engineers and protect them from endless oversight, allowing them to complete studies in a reasonable timeframe.** The Board's priority studies are listed, in order of importance, in Table 1. The Board counsels the Congress to use their leadership and foresight to make this tough decision and look to the Corps only for input in making these project decisions. The Corps is not equipped, nor is anyone, to produce reports that state absolutes. A case in point is the lock and dam system on the Mississippi and Illinois Rivers, where the citizens have been poorly served with an unreasonably long study. Lock records for the Upper Mississippi River depict a frightening trend of increasing lock unavailability. This system has experienced a 10% annual growth rate in unavailability from 1991 – 2002, that equates to a cumulative loss of over one lock year's worth of capability. The Board encourages Congress to follow in the footsteps of the visionaries who said in the 1930's that this system on the Mississippi and Illinois Rivers would facilitate the Midwest becoming the breadbasket to the world. **The Board encourages Congress to build and improve this critical infrastructure with the same courage and optimism towards our economy that our forefathers demonstrated. The Upper Mississippi River and Illinois Waterway effort has been elevated to a Capstone Activity (see Recommendation 1).**

10. Funding for Environmental Mitigation. The Board notes that the President's Budget request for FY 2005 includes \$98 million for Columbia River Fish Mitigation on that portion of the inland waterway system. Although the Corps should consider environmental impacts of projects, the **Board encourages Congress to appropriate funds for these projects from the**

**responsible agencies, namely the U.S. Fish and Wildlife Service, the Environmental Protection Agency, and state conservation or natural resource departments.**

In conclusion, waterborne transportation is vital to the U.S. economy. It is the most economically efficient mode of freight transportation, thus saving shippers and consumers more than \$7.8 billion annually compared to alternate transportation modes. Essential bulk commodities valued at more than \$78 billion are transported annually on the inland navigation system. Further, our inland waterways generate benefits for all Americans because they deliver goods in an environmentally sustainable manner and form an essential link in the intermodal distribution system. We must take care of this precious resource.

**Table 1. Inland Waterways Users Board Priority Projects**

Name	Full Efficient Funding for FY 2005 (\$million)	States Directly Impacted	Economic Impact To Each State
<b>CAPSTONE ACTIVITIES</b>			
Lock And Dam 19, Mississippi River, IA (Major Rehab)	4.80	LA, IA, IL, MN, WI, MO, KY, AL, TN, AR, PA, TX, OH, MS, OK, WV, AR	36 million tons, at least 16 states
Locks No. 27, Mississippi River, Illinois (Major Rehab)	5.80	LA, MO, IL, IA, MN, WI, KY, AL, TN, TX, WV, IN, PA, OH, MS, AR, OK, KS, NE	85 million tons, at least 19 states
McAlpine Locks and Dam, Kentucky and Indiana (Const)	120.00	LA, KY, OH, WV, IL, IN, PA, TN, MO, AR, TX, MS, AL, FL, IA, OK, MN, WI	55 million tons, valued at \$12 billion serving 18 states
Olmsted Locks and Dam, Illinois and Kentucky (Const)	110.00	LA, KY, OH, WV, IL, IN, PA, TN, MO, AR, TX, MS, AL, FL, IA, OK, MN, WI, KS, NE	97 million tons, valued at \$20 billion serving 20 states
Upper Mississippi River and Illinois Waterway Navigation, Illinois, Iowa, Minnesota, Missouri, and Wisconsin (Study)	20.78* *PED Capability. Study completion assumed in '04.	LA, MO, IL, IA, MN, WI, KY, AL, TN, TX, WV, IN, PA, OH, MS, AR, KS, NE	134 million tons valued at \$23 billion serving 18 states
<b>HIGH PRIORITY CONSTRUCTION AND MAJOR REHABILITATION PROJECTS</b>			
Inner Harbor Navigation Canal Lock, Louisiana (Const)	24.00	LA, MS, AL, FL, TX, AR, TN, MO, KY, IL, IN, OH, WV, PA, IA, MN	17 million tons valued over \$6.6 billion for 16 states
Monongahela River Locks and Dams 2, 3, and 4, Pennsylvania (Const)	60.00	PA, WV, OH, KY, IN, IL, MO, TN, LA, AR, MS, AL, TX, OK, IA	22 million tons valued at \$1.6 billion serving 15 states
Marmet Locks and Dam, West Virginia (Const)	75.00	WV, OH, KY, LA, PA, IN, IL, TN, MO, IA, MN, OK, AL, FL	17 million tons valued over \$800 million serving 14 states
Kentucky Lock and Dam, Kentucky (Const)	55.00	TN, KY, IL, LA, WV, PA, IN, OH, MO, AL, MS, AR, IA, TX, MN, WI, OK, FL, NE, KS	35 million tons valued at \$6.2 billion serving 20 states
Lock and Dam 11, Mississippi River, Iowa and Wisconsin (Major Rehab)	10.9	MN, LA, IL, WI, TN, MO, IA, KY, WV, TX, IN, MS, AR, AL	22.5 million tons, at least 14 states

Name	Full Efficient Funding for FY 2005 (\$million)	States Directly Impacted	Economic Impact To Each State
<b>USERS BOARD PRIORITY</b>	<b>PRIORITY PED PROJECTS AND STUDIES</b>		
1	Ohio River Mainstem Systems Study, Illinois, Indiana, Kentucky, Ohio, Pennsylvania, and West Virginia (Study)	1.08	LA, KY, OH, WV, IL, IN, PA, TN, MO, AR, TX, MS, AL, FL, IA, OK, MN, WI, KS, NE 275 million tons valued at \$32 billion serving 20 states
2	Greenup Locks and Dam, Ohio River, Kentucky and Ohio (PED)	3.12	TN, KY, IL, LA, WV, PA, IN, OH, MO, AL, MS, AR, IA, TX, MN, WI, OK, FL 74 million tons valued at \$9.6 billion serving 18 states
3	John T. Myers Locks and Dam, Ohio River, Indiana and Kentucky (PED)	2.00	TN, KY, IL, LA, WV, PA, IN, OH, MO, AL, MS, AR, IA, TX, MN, WI, OK, FL 75 million tons valued at \$14 billion serving 18 states
4	Bayou Sorrel Lock, Intracoastal Waterway (PED)	0.55	TX, LA, MS, AR, OK, TN, KY, MO, IL, IN, OH, WV, PA, IA, MN 22.2 million tons serving at least 15 states
5	Calcasieu Lock, Louisiana (Study)	1.0	TX, LA, MS, AL, FL, AR, OK, TN, KY, MO, IL, IN, OH, WV, PA, IA, MN 40 million tons serving at least 17 states
6	Chickamauga Lock and Dam, Tennessee River, Tennessee (PED)	17.0	TN, KY, AL, IN, WV, PA, LA, AR, TX, MO, IL, OK 2 million tons valued at \$562 million serving 12 states
7	Gulf Intracoastal Waterway Modifications Texas	1.0	TX, LA, MS, AL, FL, AR, OK, TN, KY, MO, IL, IN, OH, WV, PA, IA, MN 65 million tons valued at \$38 billion serving 17 states
<b>COMPLETE EXPEDITIOUSLY</b>			
Lock and Dam 24, Mississippi River, Illinois and Iowa (Major Rehab)	8.80	LA, IA, IL, MN, WI, IN, MO, KY, AL, TN, AR, PA, TX, OH, MS, OK, WV, NE	39 million tons, at least 18 states
Lock and Dam 3, Mississippi River, Minnesota (Major Rehab)	5.00	MN, LA, IL, WI, TN, MO, IA, KY, WV, TX, IN, MS, AR, AL	11.5 million tons, at least 14 states
Total	525.8		

# INLAND WATERWAYS USERS BOARD

## 18<sup>th</sup> ANNUAL REPORT

### March 2004

## ANNUAL RECOMMENDATIONS AND PRIORITIES

### Introduction

The Inland Waterways Users Board, created by the Water Resources Development Act of 1986, reports, with grave concern, that inland waterways are one of our most underappreciated national assets. Underappreciated because they are largely invisible to most of the American people. Stealth barges ply the nearly 12,000 miles of commercially active inland and intracoastal waterways, touching 38 states, quietly moving over 600 million tons of cargo annually (18% of intercity freight by ton-miles), with less fuel consumption, less air pollution, less urban congestion, and almost no negative community impacts as compared to alternative modes.

In addition, our waterways are much more than transportation routes. They are living resources, providing many other benefits in the form of flood control, hydroelectric power, local water supply, recreational opportunities, and habitat for fish and wildlife.

The Inland Waterways Users Board is extremely concerned and reports to you that this invaluable system is suffering from serious neglect. The Nation is not making the necessary investments in modernization of the system, we have been deferring timely maintenance for so many years that we are now experiencing serious structural failures. For example, a gate failure occurred at John Day Lock, located on the Columbia River, in 2002, closing it for four months, and severe deterioration in the Greenup Lock, located 5 miles below Greenup, KY on the Ohio River, required emergency shut-down and repair in 2003, lasting eight weeks.

### Background

The Inland Waterways Users Board (the "Board") is composed of 11 members that represent different geographical sections of the nation and different commodities such as farm products, coal, petroleum products and petrochemicals. The Board traditionally meets three times each year to develop and make recommendations to the Secretary of the Army and the Congress regarding construction and major rehabilitation investments, and spending levels on the commercial navigation features of the inland waterways system. **Inland Waterways Users Board Meeting No. 44** was held in Washington, DC on February 13, 2003, **Inland Waterways Users Board Meeting No. 45** was held in Houston, Texas on September 24, 2003, and **Inland Waterways Users Board Meeting No. 46** was held in Washington, DC on February 19, 2004.

In exercising its authorized mandate, the Board must carefully balance fuel tax revenues flowing into the Inland Waterways Trust Fund against the inland navigation project construction and major rehabilitation expenditures proposed and advocated by waterways users, exporters, the Administration, Congress, and others. Under the provisions of the Water Resources Development Act of 1986 (“WRDA ‘86”), the commercial users currently pay a \$0.20 per gallon fuel tax to the Inland Waterways Trust Fund. They also pay a \$.043 per gallon fuel tax to the General Treasury for deficit reduction. It should be noted that the commercial users are the *only* beneficiaries of the inland waterways system who pay a user fee or fuel tax. Those beneficiaries who receive flood control, water supply, recreational and other benefits do not contribute to the construction or maintenance of the system providing these benefits. The revenues deposited into the Inland Waterways Trust Fund pay 50% of the cost of new and replacement construction and major rehabilitation projects with the Federal Government paying the other 50%. Distinct from project construction and major rehabilitation, the ongoing maintenance of the existing fuel-taxed system is and has always been a 100% Federal responsibility.

As the Board issues its 18<sup>th</sup> Annual Report to the Secretary of the Army and Congress, the inland waterways continue to face a critical challenge in achieving adequate funding levels for the projects to proceed at an efficient construction timetable. The commercial users of the inland waterways have paid more than one and one-half billion dollars in fuel taxes since the fuel tax was enacted, however, the monies deposited in the Inland Waterways Trust Fund have not been fully utilized for the intended purpose of navigation infrastructure improvements. While the Congress has traditionally supported the inland navigation system, at this time adequate Federal funding is not being made available to start new projects or to complete ongoing construction projects in a cost efficient manner, let alone on time or on budget. Failure to adequately fund the projects that are already under construction is an extraordinarily expensive short-term budget solution that creates infrastructure problems of much greater magnitude, importance and cost. The Board firmly believes that future balanced budgets and our future economic competitiveness will be built upon a solid national infrastructure, of which the inland waterway system is a key component. Thus, the Board strongly endorses an appropriation and allocation process that will allow optimum efficient use of the Inland Waterways Trust Fund and allow construction projects to proceed at full funding levels.

The Board is convinced that funds spent to maintain and improve our waterway infrastructure yield a very high benefit-to-cost ratio that will have a positive impact upon this Nation’s economy for decades and generations to come. The United States’ ability to compete and grow in the global economy is contingent upon our ability to efficiently transport raw goods, commodities, and finished products throughout the U.S. and for export. We have the best, most efficient waterways system in the world; one that is studied and emulated around the globe. However, 53% of all lock chambers on this system have now exceeded their design life of 50 years. The United States cannot afford to let this world-class system fall into disrepair and obsolescence, particularly when there is a surplus in the funds contributed by the users.

## **The Board's Perspective on Infrastructure Investment**

The Board supports a balanced program including new and replacement construction, major rehabilitation and small-scale improvements of inland navigation facilities without the imposition of additional fuel taxes. The Board is unequivocally opposed to any increase in user fees be they fuel taxes, lockage or congestion fees, harbor maintenance fees, or ton-mile fees. The Board strongly believes maintenance of the existing system is a 100% Federal responsibility and hopes several measures aimed towards project construction and operating cost reductions will preclude any other proposals for fuel tax increases. The Board agrees with the Tax Foundation's conclusion regarding user fees which states, "Therefore the imposition of the Inland Waterways tax simply leads to a reduction in the demand for waterborne transportation services and either reduces interstate trade and commerce, or moves that trade to truck and rail modes. This leads to unintended consequences such as increased air pollution, higher energy use, and more traffic accidents. With matching federal funds, the primary goal must be to manage costs and spending before entertaining the question of raising taxes."

The Board strongly supports inland navigation construction and rehabilitation projects that are affordable within the existing fuel tax income of the Inland Waterways Trust Fund and matching Federal funds. The Board is convinced that project costs can be reduced through innovative design and construction techniques. It is a much better bargain to build the projects awaiting construction in a timely and cost efficient manner and at significantly reduced costs, than to realize only one or two of these new starts each decade at inflated costs. Alternatively, should the Congress approve projects absent cost reductions, additional scarce Federal resources will be spent and increased pressure will be exerted to impose additional fuel taxes that could render our inland and coastal shallow draft system largely noncompetitive.

The Board continues to believe that appropriately timed use of Inland Waterways Trust Fund monies for major rehabilitation of projects is a fiscally sound and wise investment of limited resources. The inland navigation industry agreed to compromise on funding such projects despite the lack of statutory support. The use of these funds for rehabilitation will delay the spending of far larger sums on capital replacement projects.

As part of the Water Resources Development Act of 1992, the Inland Waterways Trust Fund pays 50% of the cost of major rehabilitations, which is work designed to extend the life of a project without having to completely replace it. Over the next few decades there will be roughly \$40 million a year in major rehabilitation capability requirements, half of which will be paid from the Inland Waterways Trust Fund. This will constitute a major future obligation for the inland navigation industry. Many parts of the system are in need of major repairs, and the magnitude of expenditures required, plus the number of eligible projects, means that major rehabilitation is equivalent to about two replacement construction project starts every decade.

The major rehabilitation projects currently underway or expected soon for the Upper Mississippi River are needed to ensure continued operation of that waterway segment because construction of necessary replacement facilities cannot be advanced in the proper time frame. This is of major concern to the Board because these major rehabilitation projects do not address the significant capacity constraints on the Upper Mississippi River.

A critical element of assessing the condition of the Nation's navigation infrastructure is the backlog of maintenance for U.S. Army Corps of Engineers projects. The Board strongly believes that additional Federal general revenue funds should be appropriated for the Civil Works program over the next several years to reduce the large maintenance backlog. However, in taking this position, the Board is not in any way suggesting that the Inland Waterways Trust Fund should be used for this purpose.

The Corps has been extensively reviewing the size and nature of their maintenance backlog inventory at the direction of Lieutenant General Flowers, the Chief of Engineers. The value of the critical maintenance backlog by the end of FY 2004 is estimated to be approximately \$1.01 billion, an increase of \$127 million from the previous year. The navigation share is about 60 percent or \$606 million, of which approximately \$400 million is for the fuel taxed inland waterways system. This is an indication of the deteriorating condition of our aging navigation infrastructure. At this time, 53 percent of the locks and dams operated by the U.S. Army Corps of Engineers are over 50 years old. Delaying the performance of necessary maintenance materially and adversely affects the service provided by these navigation projects. It also leads to further deterioration and accelerates the need for major rehabilitation work sooner than would be required and often at higher costs. If unchecked for an extended period, it could ultimately lead to the need for replacement projects years before otherwise needed. The Board encourages the U.S. Army Corps of Engineers to continue the efforts at reducing the maintenance backlog.

Every dollar in the Trust Fund is needed to fund critical waterway improvement projects. The priority projects in this report that are already under construction will require \$3.1 billion to complete, of which \$1.55 billion will have to be funded by the Trust Fund. The current surplus of \$391.6 million plus the next six years of revenue to the Inland Waterways Trust Fund fees are already committed to projects under construction.

### Benefits Foregone

Delays in completing ongoing construction and major rehabilitation projects result in postponing the realization of economic benefits that provided project justification. Inefficient funding levels have also resulted in significant construction cost increases. An analysis of funding levels proposed in the FY05 President's budget indicate further delays in project completion dates compared with an efficient funding stream. Projects under construction have slipped a combined total of 31 years from their initial optimum schedules, resulting in economic benefits foregone of \$4.3 billion that can no longer be recovered (see Figure 1). If these projects are now funded through completion at a fully efficient level it could save as much as a combined

76 years of construction across all projects and allow the realization of economic benefits of \$2.4 billion that will otherwise be foregone under constrained funding schedules.

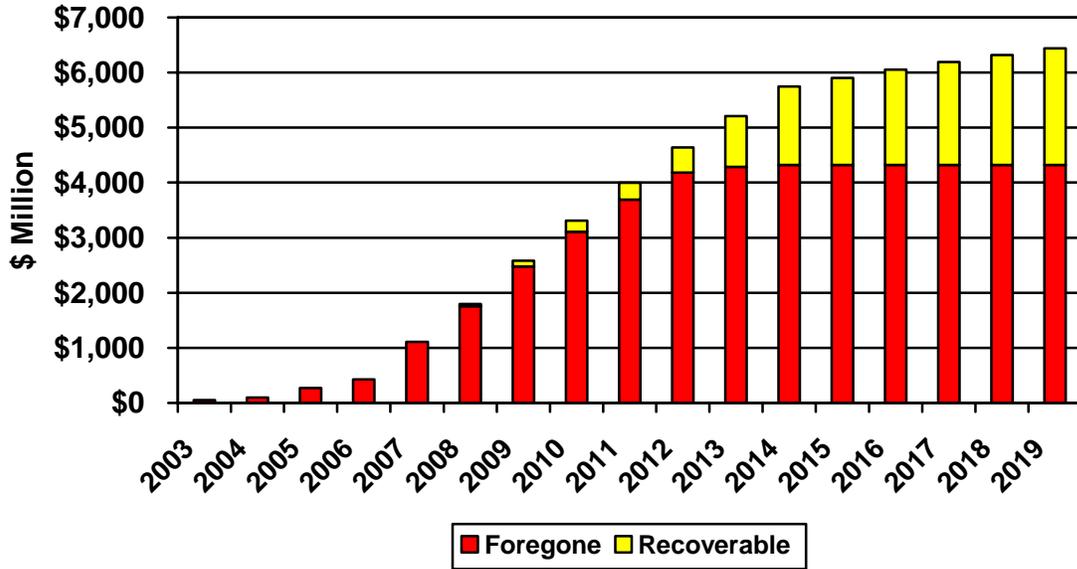


Figure 1. Economic Benefits of Projects Foregone from Delays

**In order to continue serving our nation, the inland waterway system needs urgent attention. Specifically, in this 18<sup>th</sup> Annual Report, the Board makes the following recommendations.**

**Capstone Activities**

The Board strongly urges the Administration and Congress to support completion of the following five top priority Capstone Activities. The Board considers these Capstone Activities to be of equal importance and recommends that all five be funded at the Full Efficient Funding level for FY 2005, as outlined in Table 1 (on page 5).



Lock and Dam 19, Mississippi River, Iowa (major rehabilitation)

Lock and Dam 19 is located on the Mississippi River 364 river miles above the mouth of the Ohio at Keokuk, Iowa. The photo above illustrates the severe deterioration of the concrete in this lock.

2005 Total Estimated Project Cost:	\$21.4 million
FY2005 Administration Request:	\$ 4.8 million
Balance after FY2005 needed to complete:	\$15.4 million
FY2005 Estimated Full Capability Funding:	\$ 4.8 million

Lock No. 27, Mississippi River, Illinois (major rehabilitation)

Lock 27 moves more cargo than any other navigation structure on the Mississippi River. The main lock is 110 by 1200 feet and the auxiliary lock is 110 by 600 feet. They are located at Mississippi River mile 185.5 near Granite City, Illinois, and went into operation in 1953. Serious fatigue damage to the original main chamber upstream lift gate leaf is depicted in the photo below.

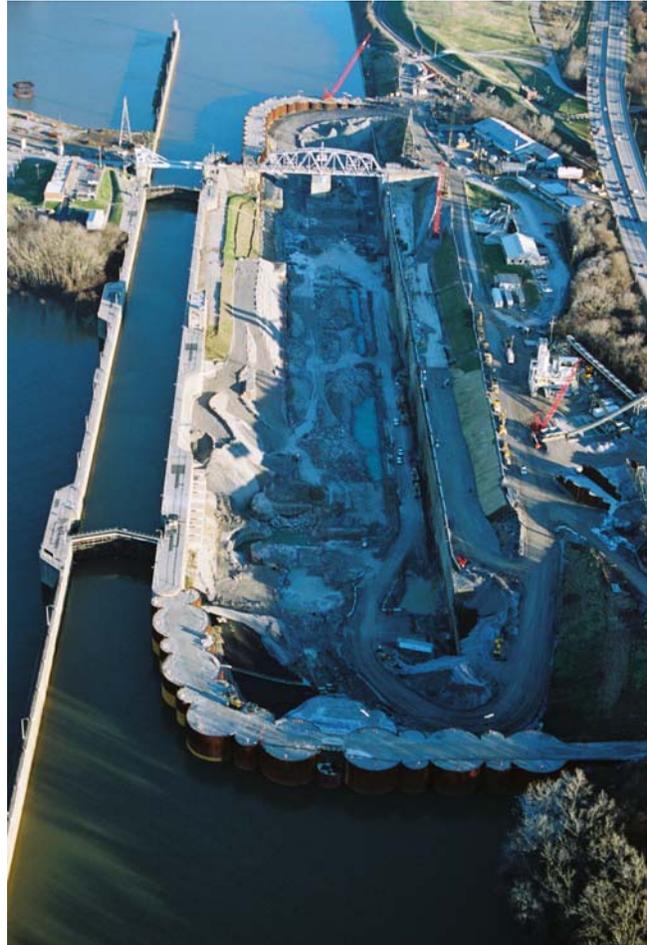
2005 Total Estimated Project Cost:	\$45.7 million
FY2005 Administration Request:	\$ 0
Balance after FY2005 needed to complete:	\$45.7 million
FY 2005 Estimated Full Capability Funding:	\$ 5.8 million



Lock 27: Serious fatigue damage to original main chamber upstream lift gate leaf.

McAlpine Locks and Dam, Kentucky and Indiana (construction)

The project is located in Louisville, Kentucky, on the Lower Ohio River. Congestion, navigation complexities and obsolescence of this facility cause major delays and a significant bottleneck on the Ohio River. Funds to initiate construction were appropriated in FY 1996. The project was authorized in 1990 and consists of a new 1200-foot chamber to be constructed to replace the old 600-foot auxiliary chamber using innovative design and construction methods, and the construction of a new bridge to access Shippingport Island. During construction of the new lock chamber, only one chamber, the 1200-foot main chamber, is available (see photo of construction at right which shows the single chamber).



If this main chamber is shut down for any reason, traffic flows on the Ohio River would come to a complete halt because there is no auxiliary chamber to pass the traffic. The Board is therefore very concerned that Full Capability Funding be made available for this project so that the construction of the new lock can proceed as quickly as possible. The photo below illustrates ongoing construction activity at McAlpine, and the single chamber available at this time.

2005 Total Estimated Project Cost:	\$350.0 million
FY2005 Administration Request:	\$ 58.0 million
Balance after FY2005 needed to complete:	\$148.3 million
FY2005 Estimated Full Capability Funding:	\$120.0 million

Olmsted Locks and Dam, Illinois and Kentucky (construction)

The Olmsted Locks and Dam project is located in a strategic reach of the Ohio River that provides a connection between the Ohio, Tennessee, Cumberland, and Mississippi Rivers. The area has been described as the “hub” of the Ohio and Mississippi rivers waterway system. More tonnage passes this point than any other place in America’s inland navigation system, which makes this project absolutely critical from a commercial navigation perspective. Innovative in-the-wet construction techniques are being used at the Olmsted project, as shown in the photo on the right.



Olmsted, authorized in the Water Resources Development Act of 1988, will replace the Ohio River Locks and Dams 52 and 53 and is located in Pulaski County, Illinois and Ballard County, Kentucky on the Ohio River near Olmsted, Illinois. It will consist of twin 110 by 1200-foot locks and a dam comprised of a 2,200-foot navigable pass and a fixed weir. Temporary 110 by 1200-foot locks were completed at Locks and Dams 52 and 53 in 1969 and 1980, respectively, to permit transit of 15-barge tows with one lockage. Benefits foregone and not recoverable now exceed \$2.7 billion due to the six-year delay from the initial optimum schedule. Inefficient funding could add another two years to this critical project.

2005 Total Estimated Project Cost:	\$1400.0 million
FY2005 Administration Request:	\$ 75.0 million
Balance after FY2005 needed to complete:	\$ 661.7 million
FY2005 Estimated Full Capability Funding:	\$ 110.0 million

## Upper Mississippi River and Illinois Waterway Navigation, Illinois, Iowa, Minnesota, Missouri, and Wisconsin

This study addresses lock capacity and reliability and the need for navigation capacity expansion on the Mississippi River from St. Louis to Minneapolis-St. Paul and on the Illinois Waterway from the confluence with the Mississippi River to Chicago and Lake Michigan. The study area covers 1,202 river miles encompassing 37 existing locks and dams, 29 on the Mississippi River and eight on the Illinois Waterway, a river reach constituting 10 percent of the inland waterways system and providing the origin or destination of 48 percent of the ton-miles of the total inland waterways system. The study is a comprehensive and complex examination of an entire navigation system, involving engineering, economic and environmental analyses of impacts associated with a wide variety of future conditions on the two rivers. The system's principal problems are, (1) delays to commercial traffic at locks on both rivers upstream of Melvin Price Locks and Dam due to increasing traffic and limited lockage capacity caused primarily by diminutive 600-foot locks that are unable to handle modern 1200-foot tows without engaging in costly, time-consuming multi-locking operations; (2) system congestion resulting in competition and conflict between recreational and commercial users; and (3) the need to properly balance the use of this vital water transportation corridor with preservation of its nationally significant environmental values.

An Alternative Formulation Briefing Pre-Conference Report was released on February 9, 2004. The results of the AFB will be documented in a Draft Feasibility Report scheduled for release in May 2004 for agency and public review. Following this review, the Corps will produce a final report for the Chief of Engineers to consider submitting to the administration and the Congress in the form of a Chief's Report in November 2004.

The Board is increasingly concerned about the significant delays that have occurred in completing this study and strongly recommends that full funding be appropriated to complete all elements of the Final Feasibility Report by August 2004 in time for possible inclusion by Congress of appropriate project authorization language in a Water Resources Development Act of 2004. The Board believes that after 14 years and more than \$74 million programmed for this study, the U.S. Army Corps of Engineers must dedicate whatever technical and managerial resources necessary to meet the 2004 deadline to complete the Final Report and submit it to Congress. The Board remains convinced that completion of the study will provide the appropriate justification for construction of new locks or the extension of the existing locks based upon structural condition of the facilities, capacity and forecasted demand, navigation safety and efficiency, and benefit-to-cost ratio. The Board believes that the locks and dams in the southernmost reach of the study area are most in need of improvements. Further, The Board notes and supports language in the Water Resources Development Act of 1999 (P.L. 106-53) that directs the U.S. Army Corps of Engineers to expedite completion of the study and if justified, proceed directly to Preconstruction Engineering and Design (PED) for the design of new 1200-foot locks at Locks and Dams Nos. 25, 24, 22, 21 and 20 on the Mississippi River. The Board

likewise supports expedited PED initiation and completion for the Peoria and LaGrange Locks and Dams on the Illinois Waterway as soon as the improvement of each has been found to be economically justified.

2005 Total Estimated Study Cost:	\$74.1 million
FY2005 Administration Request:	\$ 0
Balance after FY2005 needed to complete:	\$30.1 million
FY2005 Estimated Full Capability Funding:	\$20.78 million

### **High Priority Projects**

Congress must continue to fund authorized projects at a full efficient funding level in order to stop the waste of taxpayer dollars. This includes the Board's High Priority Projects, which are discussed below and listed in Table 1 (on page 5). The Board attaches equal priority to all of these high priority projects.

#### **Inner Harbor Navigation Canal (IHNC) Lock, Louisiana (construction)**

The Inner Harbor Navigation Canal Lock is a part of the Mississippi River - Gulf Outlet, Louisiana (MRGO) project, a deep draft seaway canal extending from New Orleans to the Gulf of Mexico, east of the Mississippi River. One of the MRGO project's four basic items is a new lock with connecting channels at the IHNC. Construction of a replacement lock was authorized in 1956. The existing lock was completed in 1923 by non-federal interests and ultimately ended up being purchased by the U.S. Army Corps of Engineers in 1986. The existing facility is a vital link between the Mississippi River and the Gulf Intracoastal Waterway (GIWW), and is a connecting link for ship traffic between the MRGO and the Mississippi River at New Orleans. The IHNC Lock is now 81 years old and is one of the most congested locks on the system. Based on Congressional guidance, an open planning process has been adopted in an attempt to build consensus among the major stakeholders. Also, the Water Resources Development Act of 1996 authorized a comprehensive community impact mitigation plan to be implemented in conjunction with the lock project. The Board recommends that construction proceed at the U.S. Army Corps of Engineers full capability. Innovative construction methods are being utilized to achieve significant cost savings, such as cellular, pre-cast and float-in construction.

2005 Total Estimated Project Cost:	\$771.3 million (incl \$67 million non-Fed)
FY2005 Administration Request:	\$ 10.0 million
Balance after FY2005 needed to complete:	\$587.5 million
FY2005 Estimated Full Capability Funding:	\$ 24.0 million (+\$11.3 million non-Fed)

#### **Monongahela River Locks and Dams 2, 3 and 4, Pennsylvania (construction)**

The project is located on the lower portion of the Monongahela River near Pittsburgh, Pennsylvania, and was authorized by the Water Resources Development Act of 1992. These

three facilities are the last of the old and undersized locks on the Monongahela River and have been in service for almost 100 years. These facilities are dangerously near the end of not just their design life, but their practical life as well. They will be replaced with two new facilities. The Dam at Lock 2 and the Locks and Dam at Lock 3 are badly deteriorated and subject to failure. The condition and size of these locks are a major impediment to low cost water transportation on the Monongahela River and the Upper Ohio River. Construction was initiated in 1995. The project consists of a new gated dam to be installed at Lock and Dam 2, and new twin 84 by 720-foot chambers at Lock and Dam 4, which will provide adequate capacity to meet the needs of navigation on the Lower Monongahela River for the next 50 years.

2005 Total Estimated Project Cost:	\$750 million
FY2005 Administration Request:	\$ 31.0 million
Balance after FY2005 needed to complete:	\$431.5 million
FY2005 Estimated Full Capability Funding:	\$ 60 million

### Marmet Locks and Dam, Kanawha River, West Virginia (construction)

The project is located in Kanawha County near Belle, West Virginia, on the Kanawha River about 68 miles above the confluence with the Ohio River. Funds to initiate construction were appropriated in FY 1998. The project was authorized in the Water Resources Development Act of 1996 and calls for the addition of a 110 by 800-foot lock on the landward side of the existing chambers. With the new lock now operational at Winfield, this facility is the busiest lock in the inland navigation system due to its small twin 56 by 360-foot chambers, which can only process one modern 35 by 195-foot barge at a time, and excessive navigation delays have increased significantly causing serious congestion problems. The Marmet and Winfield locks must be viewed as an integrated system and the Board strongly believes this project should have been integral to the Winfield project and constructed concurrently.

2005 Total Estimated Project Cost:	\$333.0 million
FY2005 Administration Request:	\$ 50.0 million
Balance after FY2005 needed to complete:	\$103.7 million
FY2005 Estimated Full Capability Funding:	\$ 75.0 million

### Kentucky Lock and Dam, Kentucky (construction)

The Kentucky Lock project is located in Livingston County, Kentucky on the Tennessee River, 22.4 miles above the confluence with the Ohio River. The project was authorized for construction in the Water Resources Development Act of 1996, and calls for an additional lock measuring 110 by 1200-feet landward of the existing lock. Funds to initiate construction were appropriated in FY 1998. The single existing 110 by 600 foot chamber is insufficient to handle increasing tonnage. Also, the lack of an auxiliary chamber forces tows to use Barkley Lock during periods of extended delays and closures.

2005 Total Estimated Project Cost: \$641.6 million  
FY2005 Administration Request: \$ 25.0 million  
Balance after FY2005 needed to complete: \$475.0 million  
FY2005 Estimated Full Capability Funding: \$ 55.0 million

Lock and Dam 11, Mississippi River, Iowa and Wisconsin (major rehabilitation)

The project is located at Mississippi River Mile 583.0, at Dubuque, Iowa. Lock and Dam No. 11 became operational in 1937 and has been in service for 67 years. As the structures and equipment approach the end of their projected lives, breakdowns and failure of mechanical and electrical equipment become more frequent and expensive, resulting in delays and loss of revenue to commercial waterway users. The annual transportation benefits for traffic utilizing the Upper Mississippi River (above Lock 25) are approximately \$500 million, of which 50 percent depends on traffic transiting Lock 11. The major rehabilitation work includes replacement of miter gate electrical systems, miter gate and tainter valve machinery, miter gate anchor bar and dam tainter gate chain; culvert valve rehabilitation; and additional scour protection above and below the dam. The photo below shows damage to the concrete at Lock 11.

2005 Total Estimated Project Cost: \$31.2 million  
FY2005 Administration Request: \$ 0  
Balance after FY2005 needed to complete: \$26.8 million  
FY2005 Estimated Full Capability Funding: \$10.9 million



Miter Gate Concrete at Lock and Dam 11, Mississippi River, 2003

## **Priority Studies and PED Projects**

The Board has ranked the priority studies and PED projects as indicated below.

### **Priority No.1: Ohio River Mainstem Systems Study, Illinois, Indiana, Kentucky, Ohio, Pennsylvania and West Virginia (study)**

Authorized by the U.S. Senate Committee on Public Works Resolution, dated 16 May 1955 and the U.S. House Committee on Public Works and Transportation Resolution, dated 11 March 1982, this study is using a regional “systems approach” to address the investments needed to provide an efficient navigation system on the Ohio River Mainstem. The feasibility study will identify projected use of the system, forecast the adequacy of the system, identify long-term maintenance, major rehabilitation and/or new construction needs, and identify significant economic, environmental, and social impacts which may result from any identified improvements.

The Board recommends the study of this critical waterway segment should be concluded as expeditiously as possible. Progressing project-specific improvements simultaneously with this system study should also seriously be considered because there is a small window of opportunity whereby innovative design and construction can achieve significant savings. If not done simultaneously the opportunity will be lost and costs will dramatically increase

2005 Total Estimated Study Cost:	\$50.3 million
FY2005 Administration Request:	\$ 1.08 million
Balance after FY2005 needed to complete:	\$ 0
FY2005 Estimated Full Capability Funding:	\$1.08 million

### **Priority No. 2: Greenup Locks and Dam, Ohio River, Kentucky and Ohio (PED)**

This project is located on the Ohio River, 341 miles below Pittsburgh, PA, and 5 miles below Greenup, KY. Congress authorized extension of the existing 600-foot auxiliary chamber into a second 1200-foot lock in WRDA 2000. The estimated project cost for construction is \$247 million.

2005 Total Estimated Study Cost:	\$6.9 million
FY2005 Administration Request:	\$0.31 million
Balance after FY2005 needed to complete:	\$0
FY2005 Estimated Full Capability Funding:	\$3.1 million

Priority No. 3: John T. Myers Locks and Dam, Ohio River, Indiana and Kentucky (PED)

John T. Myers Locks and Dam is located at Ohio River Mile 846, about 3 miles below Uniontown, KY. Congress authorized extension of the existing 110 by 600-foot auxiliary chamber into a 110 by 1200-foot lock chamber in WRDA 2000. This effort will give the J.T. Myers project twin 1200 foot locks, and will enable the J.T. Myers facility to manage tow traffic during planned and unscheduled main lock closures without significant delays to inland navigation. The estimated project cost for this construction is \$225 million.

2005 Total Estimated Study Cost:	\$8.4 million
FY2005 Administration Request:	\$0.7 million
Balance after FY2005 needed to complete:	\$0.3 million
FY2005 Estimated Full Capability Funding:	\$2.0 million

Priority No. 4: Bayou Sorrel Lock, Intracoastal Waterway, Louisiana (PED)

A comprehensive system analysis of seven (7) Gulf Intracoastal Waterway (GIWW) locks in southern Louisiana, between the Mississippi River and the Sabine River was conducted to determine if the seven GIWW locks should be replaced or if additional locks should be constructed. Results of the Reconnaissance phase indicated that there were immediate needs for capacity increases at Bayou Sorrel and Calcasieu locks and determined that all the locks are structurally sound, but experience significant delays due to restrictive dimensions. The Feasibility phase began in June 1995, but was limited to addressing capacity needs at Bayou Sorrel only. Bayou Sorrel was expedited because it has the most immediate need for additional capacity and must be replaced for flood control purposes as well. The Board recognizes the replacement of Bayou Sorrel Lock represents a near-term opportunity for cost-effectively addressing both flood damage reduction and navigation needs.

2005 Total Estimated Study Cost:	\$1.5 million
FY2005 Administration Request:	\$0.55 million
Balance after FY2005 needed to complete:	\$0.596 million
FY2005 Estimated Full Capability Funding:	\$0.55 million

Priority No. 5: Calcasieu Lock, Louisiana (study)

Initial results of a study of seven Intracoastal Waterway Locks in southern Louisiana indicate that there are immediate needs for capacity increases at Calcasieu lock. The preliminary study determined that all the locks are structurally sound, but experience significant delays due to restrictive dimensions. As a result, this Feasibility effort is specifically addressing capacity needs

at Calcasieu Lock only. The Board recognizes that Calcasieu Lock represents a near-term opportunity to address navigation needs.

2005 Total Estimated Study Cost:	\$3.19 million
FY2005 Administration Request:	\$0.20 million
Balance after FY2005 needed to complete:	\$1.4 million
FY2005 Estimated Full Capability Funding:	\$1.0 million

#### Priority No. 6: Chickamauga Lock and Dam, Tennessee River, Tennessee (PED)

Chickamauga Lock and Dam is located at mile 471 of the Tennessee River in the port of Chattanooga, Tennessee. The Tennessee Valley Authority (TVA) built the project in the 1930's. The lock was placed in temporary operation in 1938 and was completed in 1940. The lock chamber measures 360 by 60.

The lock and dam at Chickamauga, owned by the Tennessee Valley Authority (TVA), are badly deteriorating from adverse reactions of the aggregate used to build the facility. Despite the many efforts of the TVA and the U.S. Army Corps of Engineers to offset the effects of the deterioration, the facility will permanently shut down in several years due to its condition. The Board recognizes a critical need for immediate action to be undertaken at Chickamauga Lock and Dam and fully supports the design and construction of a replacement facility at this location before the facility is forced to close. If this navigation facility were to be closed, hundreds of miles of navigable waterways on the upper reaches of the Tennessee River would be eliminated. The recommendation from the Feasibility report for this facility is the construction of a replacement chamber to replace the existing 360-foot chamber. The estimated construction costs are \$321 million for a 75x400 foot chamber.

2005 Total Estimated Project Cost:	\$321.0 million
FY2005 Administration Request:	\$ 0
Balance after FY2005 needed to complete:	\$313.1 million
FY2005 Estimated Full Capability Funding:	\$ 17.0 million

#### Priority No. 7: Gulf Intracoastal Waterway (GIWW) Modifications, Texas (study)

The study encompasses two locations on the Gulf Intracoastal Waterway (GIWW) along the Texas coast: Brazos River Floodgates, located approximately seven miles southwest of Freeport, Texas, at the intersection of the Brazos River and the GIWW; and the Colorado River Locks, located approximately 45 miles southwest of Freeport, Texas, at the intersection of the Colorado River and the GIWW. In 1991, the Colorado River was diverted into Matagorda Bay, Parkers Cut was closed and a bypass channel was constructed. These changes created major navigation hazards and have resulted in deaths, injuries, pollution incidents, changes in fish migration patterns and major navigation delays. Both crossings were designed when barges were

carried astern on a towline rather than the current practice of pushing a string of barges. Potential alternatives include realigning the approaches to the crossings, increasing the width of the gates or removing them entirely.

The Board is concerned about both the cost and time consumed for these studies and recommends that both interim Feasibility studies be expedited. The Board recommends that complete removal of the locks and floodgates be objectively evaluated.

2005 Total Estimated Project Cost:	\$10.8 million
FY2005 Administration Request:	\$ 0.35 million
Balance after FY2005 needed to complete:	\$ 8.4 million
FY2005 Estimated Full Capability Funding:	\$ 1.0 million

### **Complete Expeditiously**

The Board has also identified two major rehabilitation projects which are very near completion, Lock and Dam 24 and Lock and Dam 3, both on the Mississippi River. The Board recommends that these two projects be funded so as to get the job done.

#### **Lock and Dam 24, Mississippi River, Illinois and Iowa (major rehabilitation)**

This project is located at Mississippi River Mile 273.5 above the mouth of the Ohio River, in the vicinity of Clarksville, Missouri. The Board supports completion of the rehabilitation work for this facility to ensure adequate lock serviceability until the construction of a new 1200-foot lock. Rehabilitation work includes the replacement of miter gates and miter gate machinery, the auxiliary lock closure structure, power distribution system, lock motors and controllers, and control system; addition of a protection cell, bendway weirs, and debris openings in the dam guardwall; and repairs to the dam bridge columns. Additional major rehabilitation work will be performed on the existing lock landwall, intermediate wall, upstream and downstream guidewalls, and the Illinois Abutment.

2005 Total Estimated Project Cost:	\$87.6 million
FY2005 Administration Request:	\$ 8.8 million
Balance after FY2005 needed to complete:	\$15.9 million
FY2005 Estimated Full Capability Funding:	\$ 8.8 million

#### **Lock and Dam 3, Mississippi River, Minnesota (major rehabilitation)**

The project is located on the Mississippi River 56 miles downstream from Minneapolis and six miles upstream of Red Wing, Minnesota. The facility has a main embankment that is subject to overtopping and severe damage during major flood events, and an extensive system of spot dikes that are deteriorating at an accelerated rate. Major rehabilitation work includes repairs

and modifications of the system of spot dikes and the main embankment to protect the dikes and prevent probable failure of the embankment system and loss of pool, which would curtail navigation if left in the current condition.

2005 Total Estimated Project Cost:	\$48.8 million
FY2005 Administration Request:	\$ 0
Balance after FY2005 needed to complete:	\$44.3 million
FY2005 Estimated Full Capability Funding:	\$ 5.0 million

### **Authorized Navigation Channels**

The Board has observed that Congressional intent continues to be thwarted with the use of regulations and laws that go far beyond their intent by both Federal and state government agencies. The Snake River is a case in point. Due to pressure from other agencies, the U.S. Army Corps of Engineers has halted routine and necessary dredging to maintain the Congressionally-authorized 14-foot channel for the last five years. Other major arteries, including the Mississippi, Illinois, and Missouri Rivers, have faced or could face similar fates if this issue is not addressed by Congress immediately. **To ensure that Congressional will and intent is preserved, legislative language should be modified from “authorized” to “mandated” when referring to navigation projects.**

### **Missouri River Flows**

The flows from the Missouri River are over 60% of the water in the middle Mississippi River (between St. Louis, Missouri and Cairo, Illinois) during late summer/early fall (the major agricultural export season). Maintaining a safe and adequate channel is essential to protect our agricultural export market. With every 1-inch loss of water, each barge is unable to move 17 tons (about  $\frac{3}{4}$  of a semi truck) and a regular 30-barge tow leaving St. Louis will decrease the total tonnage by 510 tons or about 22 semi-trucks. If flows from the Missouri River become unreliable, either 1) agricultural just-in-time markets will evaporate or 2) more traffic will move by truck/train, increasing air and noise pollution and negatively impacting society’s quality-of-life. **Congress must mandate that flows from the Missouri River will adequately ensure that the Mississippi River is reliably navigable under all but the most severe conditions.**

## Operations and Maintenance

The Board continues to adamantly oppose any use of the Inland Waterways Trust Fund for Operations and Maintenance. The Board counsels Congress to adequately fund the national backlog that, if not addressed, will eventually result in a catastrophic failure, crippling the nation's infrastructure. Figure 2 below shows the upward trend in navigation lock unavailability due to scheduled and unscheduled outages for the period 1991 to 2003. **Congress, if it intends to keep middle America's economic engine running, must increase the O & M by at least \$100 million and then ensure that future budgets, at a minimum, are increased at the rate of inflation.**

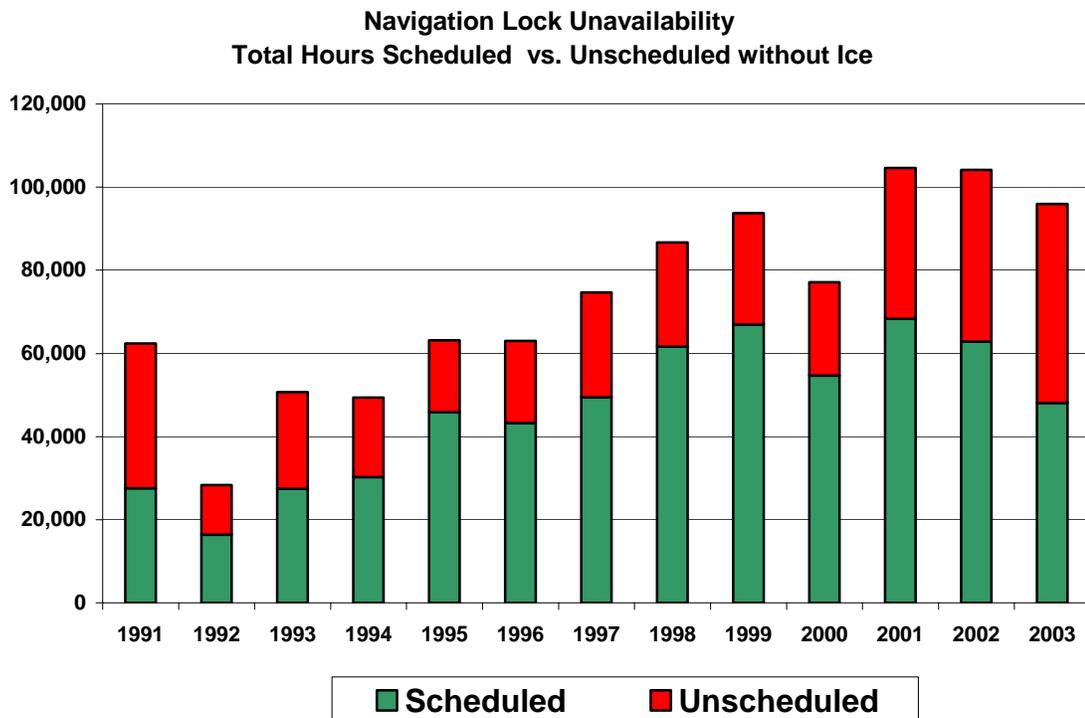


Figure 2. Navigation Lock Unavailability 1991 – 2003.

## “Low-Use” Rivers

The concept that “low-use” rivers do not need the same type of O&M as “high-use” rivers is an ill-conceived concept by individuals who are uninformed about the navigation system as a transportation mode. No reasonable transportation expert would recommend the closure of all non-hub airports. As with the feeder airports, feeder rivers increase the economic and environmental efficiency of the entire system. Without reliability on all parts of the system, the

system fails. **Congress must protect these “low-use”, tributary rivers with appropriate O&M funding.**

## **Studies**

**Congress should fiscally equip the U.S. Army Corps of Engineers and protect them from endless oversight, allowing them to complete studies in a reasonable timeframe.** The Board’s priority studies are listed, in order of importance, in Table 1 (on page 4). The Board counsels the Congress to use their leadership and foresight to make this tough decision and look to the Corps only for input in making these project decisions. The Corps is not equipped, nor is anyone, to produce reports that state absolutes. A case in point is the lock and dam system on all the waterways, including the Mississippi and Illinois Rivers, where the citizens have been poorly served with an unreasonably long study. Lock records for the Upper Mississippi River depict a frightening trend of increasing lock unavailability. This system has experienced a 10% annual growth rate in unavailability from 1991 – 2002, that equates to a cumulative loss of over one lock year’s worth of capability. The Board encourages Congress to follow in the footsteps of the visionaries who said in the 1930’s that this system on the Mississippi and Illinois Rivers would facilitate the Midwest becoming the breadbasket to the world. **The Board encourages Congress to build and improve this critical infrastructure with the same courage and optimism towards our economy that our forefathers demonstrated. The Upper Mississippi River and Illinois Waterway Study has been elevated to a Capstone Activity (see page 16).**

## **Funding for Environmental Mitigation**

The Board notes that the President’s Budget request for FY 2005 includes \$98 million for Columbia River Fish Mitigation on that portion of the inland waterway system. Although the Corps should consider environmental impacts of projects, the **Board encourages Congress to appropriate funds for these projects from the responsible agencies, namely the U.S. Fish and Wildlife Service, the Environmental Protection Agency, and state conservation or natural resource departments.**

## **Conclusion**

In conclusion, waterborne transportation is vital to the U.S. economy. It is the most economically efficient mode of freight transportation, thus saving shippers and consumers more than \$7.8 billion annually compared to alternate transportation modes. Essential bulk commodities valued at more than \$78 billion are transported annually on the inland navigation system. Further, our inland waterways generate benefits for all Americans because they deliver goods in an environmentally sustainable manner and form an essential link in the intermodal distribution system. We must take care of this precious resource.

## **Acknowledgements**

The Inland Waterways Users Board wishes to express its sincere appreciation to Major General Carl A. Strock, the U.S. Army Corps of Engineers Director of Civil Works and Executive Director to the Board, Mr. Norman T. Edwards from the Corps Directorate of Civil Works Planning Division and Executive Secretary to the Board, and Ms. Anne Sudar and Mr. David Grier from the Corps Institute for Water Resources for all the support they provide. Also, the Corps' division and district staffs and the staffs at Corps Headquarters and the Institute for Water Resources have provided thorough and timely information for the Board's use and have always tried to best answer the Board's tough questions.

## **APPENDIX A**

### **History**

The Inland Waterways Fuel Tax was established to support inland waterway infrastructure development and rehabilitation. Commercial users are required to pay this tax on fuel consumed in inland waterway transportation. Revenues from the tax are deposited in the Inland Waterways Trust Fund and fund 50% of the cost of inland navigation projects each year as authorized. The amount of tax paid by commercial users in 2004 is \$.20 per gallon of fuel. This tax rate generates approximately \$100 million in contributions annually to the Inland Waterways Trust Fund. Additionally, a tax of \$.043 per gallon of fuel is paid toward General Treasury revenues and utilized for deficit reduction.

Reflecting the concept of “Users Pay, Users Say”, the Water Resources Development Act of 1986 (Public Law 99-662) (“WRDA ‘86”) established the Inland Waterways Users Board (the “Board”), a federal advisory committee, to give commercial users a strong voice in the investment decision-making it was supporting by its cost-sharing tax payments. The principal responsibility of the Board is to recommend to the Congress, the Secretary of the Army and the U.S. Army Corps of Engineers the prioritization of new and replacement inland navigation construction and major rehabilitation projects.

**INLAND WATERWAYS USERS BOARD MEMBERS  
(As of March 2004)**

**Board Chairman**

Mr. Gerald W. Brown  
President  
Cargill Marine and Terminal, Inc.  
Minneapolis, Minnesota

**Board Vice Chairman**

Mr. W. Norbert Whitlock  
Senior Vice President  
American Commercial Barge Line Company  
Jeffersonville, Indiana

**Board Members**

Mr. D. Bryan Bashore  
Vice President  
Peabody COALSALES Company  
St. Louis, Missouri

Mr. Mark R. Buese  
Senior Vice President  
Kirby Corporation  
Houston, Texas

Mr. Larry R. Daily  
President  
Alter Barge Line, Inc.  
Bettendorf, Iowa

Mr. Charles A. Haun  
Executive Vice President  
Parker Towing Company, Inc.  
Tuscaloosa, Alabama

Mr. Mark K. Knoy  
President  
AEP MEMCO LLC.  
Chesterfield, Missouri

Mr. W. Scott Noble  
Vice President, Vessel Operations  
Ingram Marine Group/Midland Enterprises LLC  
Cincinnati, Ohio

Mr. Looman F. Stingo  
Senior Vice President of Logistics  
Holcim (US), Inc.  
Waltham, Massachusetts

Mr. Ronald G. Stovash  
Senior Vice President  
CONSOL Energy, Inc.  
Pittsburgh, Pennsylvania

## **APPENDIX B**

### **LIST OF THE FUEL TAXED INLAND AND INTRACOASTAL WATERWAYS AND SYSTEM MAP**

Statutory Definitions of Inland and Intracoastal  
Fuel Taxed Waterways of the United States

SOURCES: Public Law 95-502, October 21, 1978.  
Public Law 99-662, November 17, 1986.

1. Alabama-Coosa Rivers: From junction with the Tombigbee River at river mile (hereinafter referred to as RM) 0 to junction with Coosa River at RM 314.
2. Allegheny River: From confluence with the Monongahela River to form the Ohio River at RM 0 to the head of the existing project at East Brady, Pennsylvania, RM 72.
3. Apalachicola-Chattahoochee and Flint Rivers (ACF): Apalachicola River from mouth at Apalachicola Bay (intersection with the Gulf Intracoastal Waterway) RM 0 to junction with Chattahoochee and Flint Rivers at RM 107.8. Chattahoochee River from junction with Apalachicola and Flint Rivers at RM 0 to Columbus, Georgia at RM 155 and Flint River, from junction with Apalachicola and Chattahoochee Rivers at RM 0 to Bainbridge, Georgia, at RM 28.
4. Arkansas River (McClellan-Kerr Arkansas River Navigation System): From junction with Mississippi River at RM 0 to Port of Catoosa, Oklahoma, at RM 448.2.
5. Atchafalaya River: From RM 0 at its intersection with the Gulf Intracoastal Waterway at Morgan City, Louisiana, upstream to junction with Red River at RM 116.8.
6. Atlantic Intracoastal Waterway: Two inland waterway routes approximately paralleling the Atlantic coast between Norfolk, Virginia, and Miami, Florida, for 1,192 miles via both the Albemarle and Chesapeake Canal and Great Dismal Swamp Canal routes.
7. Black Warrior-Tombigbee-Mobile Rivers: Black Warrior River System from RM 2.9, Mobile River (at Chickasaw Creek) to confluence with Tombigbee River at RM 45. Tombigbee River (to Demopolis at RM 215.4) to port of Birmingham, RM's 374-411 and upstream to head of navigation on Mulberry Fork (RM 429.6), Locust Fork (RM 407.8), and Sipsey Fork (RM 430.4).
8. Columbia River (Columbia-Snake Rivers Inland Waterways): From the Dalles at RM 191.5 to Pasco, Washington (McNary Pool), at RM 330, Snake River from RM 0 at the mouth to RM

231.5 at Johnson Bar Landing, Idaho.

9. Cumberland River: Junction with Ohio River at RM 0 to head of navigation, upstream to Carthage, Tennessee, at RM 313.5.

10. Green and Barren Rivers: Green River from junction with the Ohio River at RM 0 to head of navigation at RM 149.1.

11. Gulf Intracoastal Waterway: From St. Mark's River, Florida, to Brownsville, Texas, 1,134.5 miles.

12. Illinois Waterway (Calumet-Sag Channel): From the junction of the Illinois River with the Mississippi River RM 0 to Chicago Harbor at Lake Michigan, approximately RM 350.

13. Kanawha River: From junction with Ohio River at RM 0 to RM 90.6 at Deepwater, West Virginia.

14. Kaskaskia River: From junction with Mississippi River at RM 0 to RM 36.2 at Fayetteville, Illinois.

15. Kentucky River: From junction with Ohio River at RM 0 to confluence of Middle and North Forks at RM 258.6.

16. Lower Mississippi River: From Baton Rouge, Louisiana, RM 233.9 to Cairo, Illinois, RM 953.8.

17. Upper Mississippi River: From Cairo, Illinois, RM 953.8 to Minneapolis, Minnesota, RM 1,811.4.

18. Missouri River: From junction with Mississippi River at RM 0 to Sioux City, Iowa, at RM 734.8.

19. Monongahela River: From junction with Allegheny River to form the Ohio River at RM 0 to junction of the Tygart and West Fork Rivers, Fairmont, West Virginia, at RM 128.7.

20. Ohio River: From junction with the Mississippi River at RM 0 to junction of the Allegheny and Monongahela Rivers at Pittsburgh, Pennsylvania, at RM 981.

21. Ouachita-Black Rivers: From the mouth of the Black River at its junction with the Red River at RM 0 to RM 351 at Camden, Arkansas.

22. Pearl River: From junction of West Pearl River with the Rigolets at RM 0 to Bogalusa, Louisiana, RM 58.

23. Red River: From RM 0 to the mouth of Cypress Bayou at RM 236.
24. Tennessee River: From junction with Ohio River at RM 0 to confluence with Holstein and French Rivers at RM 652.
25. White River: From RM 9.8 to RM 255 at Newport, Arkansas.
26. Willamette River: From RM 21 upstream of Portland, Oregon, to Harrisburg, Oregon, at RM 194.
27. Tennessee-Tombigbee Waterway: From its confluence with the Tennessee River to the Warrior River at Demopolis, Tennessee.

# The Fuel-Taxed Inland and Intracoastal Waterway System

