

**INLAND WATERWAYS USERS BOARD
14TH ANNUAL REPORT
TO THE
SECRETARY OF THE ARMY
AND THE
UNITED STATES CONGRESS**

WITH APPENDIXES

August 2000 (Final Version)

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EXECUTIVE SUMMARY

The U.S. Army Corps of Engineers Civil Works program is, and has for many decades been, responsible for this Nations water resources; a Herculean responsibility that includes development, management, protection and enhancement of our rivers, lakes and streams and their related land resources for commercial navigation, hydropower, flood damage reduction, natural resources and environmental restoration, and associated recreation. This includes specific and direct responsibility for the expenditure of Congressional Civil Works appropriations for the design, construction, operation and maintenance of waterways, ports and harbors infrastructure which exist for a primary purpose of facilitating commerce into, out of and throughout the United States.

In November 1986, the Water Resources Development Act of 1986 (Public Law 99-662) established a means for economic and professional support to be provided by the inland waterways industry to aid the U.S. Army Corps of Engineers in achieving its mission. To this end, commercial users are required to support inland waterway infrastructure development and rehabilitation via a tax on fuel consumed in inland waterway transportation. This Inland Waterways Fuel Tax is contributed to the Inland Waterways Trust Fund and it funds 50% of the cost of inland navigation projects each year. The amount of tax paid by commercial users in 2000 is \$.20 per gallon of fuel. This amounts to over a \$100 million contribution 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. As a result, The Inland Waterways Users Board (the Board) was established by the Water Resources Development Act of 1986 to give commercial users a strong voice in the investment decision-making it was supporting by its cost sharing tax payments. Hence was born the concept of A Users Pay, Users Say.

The Board is an advisory committee to Federal policy-makers, taking an active role each year in the development of federal waterway policies and the corresponding appropriation and expenditure of funds for construction and maintenance projects on the commercial waterways system of the United States. The Board consists of 11 members whose appointment is required by law to be representative of shippers and carriers who are primary users of the waterways for commercial purposes. The Board must also be representative of the various commodities that move commercially on the waterways and of the geographic scope of navigation interests to adequately address its obligation to assist in formulating recommendations for national prioritization of inland waterway infrastructure requirements.

The Board=s role in facilitating an Industry-Corps partnership has and will continue to result in innovative construction techniques that will achieve significant construction cost

reductions and improve project implementation timelines. This partnership is one of the ways the inland waterways industry and commercial users will be able to manage the severe pressures that will continue into Fiscal Year (FY) 2001 and beyond.

The primary role of the Inland Waterways Users Board as an advisory committee is to establish priorities among and between significant new and replacement construction projects, rehabilitation, preconstruction engineering and design, studies and future projects for the allocation of limited Inland Waterways Trust Fund and Federal matching dollars. As the Board again issues its Prioritization Lists to the Secretary of the Army and Congress, the inland waterways continue to face a critical challenge in achieving capability funding levels for the projects to proceed in their order of priority.

The Board continues to note that the monies deposited in the Inland Waterways Trust Fund have not been fully utilized for the intended purpose of navigation infrastructure improvements. Further, there continues to be a lack of general federal apportionment to match the dollars generated for the Inland Waterways Trust Fund for navigation infrastructure improvements. The commercial users of the inland waterways have paid a considerable amount in fuel taxes since its enactment and the Board feels the funds generated by commercial users have been greatly under-utilized. The Federal Government has a corresponding obligation to match the fuel tax revenues by providing 50% of the cost of lock and dam projects. 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. We cannot maintain our world-class system without immediate attention to much-needed rehabilitation projects, small-scale improvements, scheduled construction of replacement projects, and effective use of realistic tools and models to study projects for future funding. This will require proper allocation and expenditure of Inland Waterways Trust Fund monies currently available.

The Board strongly believes that funds spent to maintain and improve our waterway infrastructure yield an overwhelming benefit-to-cost ratio that will have a positive impact upon this Nation's economy for decades and generations to come. While the Congress supports the inland navigation system, at this time adequate federal funding is not being made available to start new projects or to complete continuing construction projects in a cost efficient manner, let alone on time or on budget. This is a continuing challenge. The Inland Waterways Trust Fund has adequate dollars to meet the projected construction and rehabilitation requirements of the system over the next several years. Using trust funds to balance the budget is an extraordinarily expensive short-term 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 waterways are a significant, key component, and thus the Board strongly endorses an allocation and appropriation process that will allow optimum use of the Inland Waterways Trust Fund and allow construction projects to proceed at full capability funding levels.

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 navigation construction and major rehabilitation projects. The Board uses a prioritization format to objectively identify differences between proposed projects. This ranking tool examines eight project factors; condition, capacity and future demand, costs and benefits, operating and safety considerations, traffic delays, environmental concerns, timing, and public and political support for projects.

The Board recommends completion of the following inland navigation construction projects and studies potentially leading to construction projects at optimum capabilities and that funding be provided at the full spending capability of the U.S. Army Corps of Engineers. A summary of the Board Recommended Prioritization of the projects and studies for FY 2001 follows:

Construction of New and Replacement Projects

Priority No. 1: Olmsted Locks and Dam, Illinois and Kentucky

Priority No. 2: Inner Harbor Navigation Canal (IHNC) Lock, Louisiana

Priority No. 3: Monongahela River Locks and Dams 2, 3 and 4, Pennsylvania

Priority No. 4: McAlpine Locks and Dam, Kentucky and Indiana

Priority No. 5: Marmet Locks and Dam, Kanawha River, West Virginia

Priority No. 6: Kentucky Lock, Kentucky

Priority No. 7: Robert C. Byrd (formerly Gallipolis) Locks and Dam, West Virginia and Ohio

Priority No. 8: Winfield Lock and Dam, West Virginia

Major Rehabilitation Projects

Priority No. 1: Lock and Dam 24, Mississippi River, Illinois and Iowa

Priority No. 2: Lock and Dam 3, Mississippi River, Minnesota

Priority No. 3: London Locks and Dam, Kanawha River, West Virginia

Priority No. 4: Locks and Dams 11 and 12, Mississippi River, Illinois, Iowa and Wisconsin

Preconstruction Engineering and Design (PED) Projects

Priority No. 1: Upper Mississippi River and Illinois Waterway Navigation Improvements, Illinois, Iowa, Minnesota, Missouri, and Wisconsin

Priority No. 2: John T. Myers Locks and Dam, Ohio River, Indiana and Kentucky

Priority No. 3: Greenup Locks and Dam, Ohio River, Kentucky and Ohio

Studies and Future Projects

Priority No. 1: Upper Mississippi River and Illinois Waterway Navigation, Illinois, Iowa, Minnesota, Missouri, and Wisconsin

Priority No. 2: Intracoastal Waterway Locks (Bayou Sorrel) , Louisiana - Seven Intracoastal Waterway Locks in Southern Louisiana

Priority No. 3: Ohio River Mainstem Study, Illinois, Indiana, Kentucky, Ohio, Pennsylvania and West Virginia

Priority No. 4: Calcasieu Lock, Louisiana

Priority No. 5: Gulf Intracoastal Waterway (GIWW) Modifications, Texas

Priority No. 6: Black Warrior and Tombigbee Rivers, Alabama

In conclusion, the long-term objectives of the Board that are hereby submitted to the Congress and the Executive Branch involve rehabilitating and extending the life of the existing system to preserve its efficiency, coupled with a program for constructing needed replacement navigation facilities. The ultimate consequence is an efficient, competitive and safe waterways system without the imposition of higher fuel taxes. The timely completion of each of these required navigation projects is critical to a viable and reliable waterways system and is a key component of the Nation's infrastructure and global competitiveness.

By carefully scheduling new and replacement construction starts, the Board is convinced that necessary major rehabilitation and the replacement projects discussed above can be accomplished in the next 10 years based on current Inland Waterways Trust Fund revenue projections, assuming matching federal funds are appropriated.

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ANNUAL RECOMMENDATIONS AND PRIORITIES

INTRODUCTION AND 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 priorities, and spending levels on the commercial navigation features of the inland waterways system

In exercising its Congressional mandate, the Board must carefully balance fuel tax revenues flowing into the Inland Waterways Trust Fund against the 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 (WRDA) of 1986, the commercial users currently pay a \$.20 per gallon fuel tax for contribution to the Inland Waterways Trust Fund. They also pay a \$.043 per gallon fuel tax for contribution 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/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 pays 50% of the cost of new and replacement construction and major rehabilitation projects with the Federal Government paying the other 50%. Maintenance of the existing fuel-taxed system is and has always been a 100% Federal responsibility.

The Board's advisory role will be critical during the next decade because of federal financial limitations, apparent changing attitudes in the Administration relative to the desirability of continued waterways infrastructure promotion and developments which the Board believes reflect a great misunderstanding of the national importance and global market significance of a viable inland waterways system.

The Board recognizes these changing circumstances and assumes an appropriate level of responsibility for recommending to the Administration and the Congress a program for spending Inland Waterways Trust Fund revenues that will first attempt to keep in good working order the system we already have, and second, enhance the efficiency of the system where those

commitments can be made without increases in the fuel taxes, and then only on those projects which must be replaced.

The Board and the industry believe that the efficiency of the inland waterways system can be maintained and enhanced without spending money at levels which would deplete the Inland Waterways Trust Fund to a point which might cause some to impose additional fuel taxes. However, the Federal Government must meet its obligation to fund its share of projects to insure a viable system. Board members, as active daily participants in the business of producing and transporting a wide variety of agricultural commodities, coal, petroleum products and chemicals, see how world markets are changing to reflect new low cost producers' efforts to capture overseas markets.

Inland Waterways Users Board Meeting No. 34 was held in Washington, D.C., on November 3, 1999, **Inland Waterways Users Board Meeting No. 35** was held in St. Louis, Missouri, on April 13, 2000, and **Inland Waterways Users Board Meeting No. 36** was held in Portland, Oregon, on July 27, 2000.

RECOMMENDATIONS AND PRIORITIES

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 navigation facilities without the imposition of additional fuel taxes. The Board is very concerned with the recent practice of not providing sufficient federal funding to match the significant funds currently being generated by the industry-paid 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 and operating cost reductions will preclude any other proposals for fuel tax increases. With matching federal funds, the primary goal must be to manage costs and spending before entertaining the question of raising taxes.

The Board applauds the U.S. Army Corps of Engineers actions to re-engineer many of its business and engineering processes. The Board also applauds the U.S. Army Corps of Engineers' decision to adopt innovative design and construction techniques and other cost saving concepts, and their partnering work groups with industry to reduce project costs.

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 Corps has been extensively reviewing the size and nature of their maintenance backlog inventory at the direction of Lieutenant General Ballard, the Chief of Engineers. The value of the maintenance backlog for

FY 2001 is currently estimated to be approximately \$450 million, the highest level in several years. The navigation share is 61 percent or about \$275 million. This is an indication of the deteriorating condition of our aging navigation infrastructure. More than 50 percent of the locks and dams operated by the U.S. Army Corps of Engineers are over 50 years old. The Board is greatly concerned about the large amount of maintenance backlog and its growing size. Prolonging 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 new 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. Furthermore, the Board suggests that additional funds be appropriated for the Civil Works program over the next several years to be dedicated to reducing the large maintenance backlog to an insignificant amount.

The Board strongly supports navigation construction and rehabilitation projects that are affordable within the existing fuel tax rate structure, 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 which could render our inland and coastal shallow draft system largely uncompetitive and obsolete. The recommended investment program should reflect these cost reduction targets. Finally, investments must be prioritized within the constraint imposed by the Inland Waterways Trust Fund and availability of matching federal funds.

The Board strongly believes that funds spent to maintain and improve our waterway infrastructure yield an overwhelming benefit-to-cost ratio that will have a positive impact upon this Nation's economy for decades and generations to come. While the Congress supports the inland navigation system, at this time it appears that adequate federal funding is not being made available to start new projects or to complete continuing construction projects in a cost efficient manner, let alone on time or on budget. This is a continuing challenge. The Inland Waterways Trust Fund has adequate dollars to meet the projected construction and rehabilitation requirements of the system over the next several years. Using trust funds for General Treasury purposes in balancing the budget is an extraordinarily expensive short-term solution to one problem that, in its wake, 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 waterways are a significant, key component. For each of these reasons, the Board strongly endorses an allocation and appropriation process that will allow optimum use of the Inland Waterways Trust Fund and allow construction projects to proceed at full capability funding levels.

OVERVIEW OF THE BOARD'S RECOMMENDED NAVIGATION INVESTMENT PROGRAM

The Board has formulated a recommended navigation investment program with the following components:

Construction of New and Replacement Projects. The Board's recommended program includes ongoing navigation construction projects and navigation projects where construction can be initiated in the near future. Federal funds for these projects must be available to match the 50% share from the Inland Waterways Trust Fund. The Board's program assumes optimum scheduling of these projects in priority order and the Board further recommends each project proceed at a full capability funding levels. This pace will allow for the maintenance of a positive Inland Waterways Trust Fund balance.

Major Rehabilitation Projects. The Board-recommended program includes adequate resources for major rehabilitation of navigation projects where appropriate. Any navigation investment program should include a major rehabilitation element. These expenditures support and extend the existing waterways assets.

Preconstruction Engineering and Design (PED) Projects. The Board-recommended investments also include the future projects resulting from studies that are in an interim engineering and design phase before construction is initiated.

Studies and Future Projects. While not representing capital expenditures, planning studies are currently underway to identify the future navigation investment needs. The Board recognizes that, as potential projects are identified by these studies, investment priorities will have to be revisited. The Board has provided their perspective and recommendations on the studies.

CONSTRUCTION OF NEW AND REPLACEMENT PROJECTS

The Board recommends continuation and completion of the following navigation projects under currently approved schedules, but with special emphasis on project management, cost control, and innovative cost reduction techniques to complete the project within budget.

The Board's recommended inland navigation project construction program includes new projects eligible for 50% funding from the Inland Waterways Trust Fund. Using the eight prioritization factors listed below, these new projects are evaluated and then ranked by investment priority. The Inner Harbor Navigation Canal (IHNC) Lock Replacement project was the last new project added to the Construction Projects category as funds to initiate construction were appropriated in FY 1999.

The Board developed a prioritization process for ranking projects pending construction approval. In order to arrive at a national prioritization ranking, the following factors were considered:

- ☐ Structural condition of project;
- ☐ Capacity and forecasted demand;
- ☐ Benefit-to-cost (B/C) ratio;
- ☐ Operational problems that affect navigation safety or efficiency;
- ☐ Traffic delays;
- ☐ Environmental issues;
- ☐ Timing with respect to the Inland Waterways Trust Fund balance; and
- ☐ Support or opposition for the project.

After serious consideration of the above-referenced factors, the Board makes the following recommendations:

PRIORITIZATION OF NEW AND REPLACEMENT CONSTRUCTION PROJECTS

Priority No. 1: Olmsted Locks and Dam, Illinois and Kentucky. 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. Virtually all traffic moving between the Ohio River and tributaries and the Mississippi River and tributaries moves through the project area.

2001 Total Estimated Project Cost: \$1.00 billion with \$38.14 million requested for FY 2001 to continue lock construction, and \$532.84 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$72.0 million.

Priority No. 2: Inner Harbor Navigation Canal (IHNC) Lock, Louisiana. The IHNC 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 located in a highly congested urban and commercial area and forecasted future traffic will significantly exceed the lock's capability. 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. A strong need exists for this replacement lock to eliminate huge delays that are consistently higher than at any other lock on the inland navigation system. The Board has ranked the IHNC Lock higher than most other inland navigation projects recently prioritized for construction. The Board strongly applauds the appropriation of funds in FY 1999 to initiate construction of the IHNC Lock and 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. The Board recommends that costs be allocated to the shallow and deep draft portions accordingly and concurs with cost sharing the shallow draft portion from the Inland Waterways Trust Fund. The Board reluctantly accepts the cost allocation formula used by the U.S. Army Corps of Engineers to assign project costs between the shallow and deep draft portions of this project.

2001 Total Estimated Project Cost: \$575 million including both shallow draft and deep draft portions. The requested amount for FY 2001 is \$14.35 million to continue planning and Engineering and Design (E&D), and \$516.5 million necessary after FY 2001. The Water Resources Development Act of 1986 provided that the costs allocable to inland navigation (shallow draft) be cost shared with the Inland Waterways Trust Fund. Estimated Full Capability Funding Level for FY 2001: \$21.35 million.

Priority No. 3: Monongahela River Locks and Dams 2, 3 and 4, Pennsylvania. 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. 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.

2001 Total Estimated Project Cost: \$705 million with \$35.0 million requested for FY 2001 for E&D, real estate and relocation activities, and \$541.3 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$75.0 million.

Priority No. 4: McAlpine Locks and Dam, Kentucky and Indiana. 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 be constructed to replace the old 600-foot

auxiliary chamber using innovative design and construction methods to achieve reduced costs, and the construction of a new bridge to access Shippingport Island.

2001 Total Estimated Project Cost: \$268 million with \$14.0 million requested for FY 2001 for planning and E&D, and \$218.64 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$20.0 million.

Priority No. 5: Marmet Locks and Dam, Kanawha River, West Virginia. 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. This project is more than 60 years old and the size of the chambers severely restricts the use of modern, efficient towing equipment. 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.

2001 Total Estimated Project Cost: \$313 million with \$6.5 million requested for FY 2001 to initiate land acquisition, and \$272.7 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$13.6 million.

Priority No. 6: Kentucky Lock, Kentucky. The Kentucky Lock and Dam 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 facility faces potential increased traffic stemming from: (1) increasing Cumberland River traffic using Barkley Canal and Kentucky Lock rather than the Lower Cumberland River; (2) increasing Tennessee River traffic; and (3) new traffic using the Tennessee-Tombigbee Waterway. Lock delays average five hours and occasionally some are as much as 19 hours. Currently, Barkley is only utilizing eight to ten percent of capacity. Therefore, the Board believes a non-structural traffic control system should be employed to reduce delays during construction of a replacement chamber at Kentucky Lock. If inadequate funds exist, the traffic control system would minimize the economic impact if the project were delayed one to three years for completion.

2001 Total Estimated Project Cost: \$533 million with \$14.9 million requested for FY 2001 to continue construction, and \$469.01 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$40.0 million.

Priority No. 7: Robert C. Byrd Locks and Dam, West Virginia and Ohio. The project (formerly Gallipolis), authorized in the Water Resources Development Act of 1986, is located at Ohio River mile 279.2 in the Middle Ohio Valley, about 30 miles upstream from Huntington, West Virginia. The newly completed 110 by 1200-foot main chamber and 110 by 600-foot auxiliary chamber provide better lock approach conditions. The project also includes rehabilitation of the existing dam, replacing the roller gates and strengthening its foundation. The project eliminates a major congestion problem, a severe navigation hazard, and increasingly difficult O&M problems due to old age. The locks became operational in October 1992 and the dam rehabilitation is continuing. The Board recommends that the remaining work be expedited to complete by FY 2001 so the Construction, General appropriation account can be closed out and this project be removed from future reports.

2001 Total Estimated Project Cost: \$379 million with \$2.7 million requested for FY 2001 to continue the existing dam rehabilitation and mitigation activities, and \$7.94 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$2.7 million.

Priority No. 8: Winfield Lock and Dam, West Virginia. The Winfield Locks and Dam project, authorized for construction in the Water Resources Development Act of 1986, is located on the Kanawha River near Eleanor, West Virginia, about 31 miles above the confluence with the Ohio River. Winfield was the busiest project in the inland navigation system in terms of lockages until the new 110 by 800-foot lock became operational in November 1997. The existing 56-year-old, twin 56 by 360-foot chambers are being used as auxiliary locks. The project, including a 110-foot wide non-navigable gate bay, is scheduled for completion in 2002. The Board recommends the remaining work be expedited so the Construction, General appropriation account can be closed out and this project be removed from future reports.

2001 Total Estimated Project Cost: \$227.5 million with \$300,000 requested for FY 2001 to continue construction, and \$1.58 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$300,000.

MAJOR REHABILITATION PROJECTS

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 scarce dollars. 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.

The Board wishes to make special mention of future infrastructure needs as related to the major rehabilitation program. The key factor in assessing future needs is costs, especially in light of the level of traffic growth on the system.

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 of additional major rehabilitation required, 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. If actual needs exceed or fall short of \$40 million annually, the scheduling and pace of replacement construction projects would be affected accordingly.

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.

Two major rehabilitation projects ranked by the Board in their 1999 annual report, Mississippi River Lock and Dam No. 14 (Priority No. 4) and Mississippi River Lock and Dam No. 25 (Priority No. 2) are not included here, as these projects are scheduled to be completed in 2000. Also, The major rehabilitation effort for Mississippi River Lock and Dam No. 24 was included in two parts in the 1999 report, Part 1 (Priority No. 1) and Part 2 (Priority No. 5). These two parts have been combined into one project by the Congress beginning with the FY 2000 Civil Works program of the U.S. Army Corps of Engineers and the combination is reflected in the prioritization.

PRIORITIZATION OF MAJOR REHABILITATION PROJECTS

Priority No. 1: Lock and Dam 24, Mississippi River, Illinois and Iowa. 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 the rehabilitation work for this facility, cumulatively costing approximately \$70 million, 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. Furthermore, the Board strongly recommends that the construction of a new 1200-foot lock be initiated immediately at this location. The Board recommends that the U.S. Army Corps of Engineers accelerate completion of the Upper Mississippi River - Illinois Waterway study and pursue authorization for the construction of new 1200-foot locks at Locks and Dams Nos. 25, 24, 22, 21 and 20 on the Mississippi River. The Board is firmly convinced that completion of the study will provide the

appropriate support for construction of a new lock based upon the eight factors listed above including structural condition of the facilities, capacity and forecasted demand, navigation safety and efficiency and benefit-to-cost ratio.

2001 Total Estimated Project Cost: \$69.99 million with \$5.75 million requested for FY 2001 and \$43.85 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$5.75 million.

Priority No. 2: Lock and Dam 3, Mississippi River, Minnesota. 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.

2001 Total Estimated Project Cost: \$16.2 million with \$5.0 million requested for FY 2001 and \$8.62 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$5.0 million.

Priority No. 3: London Locks and Dam, Kanawha River, West Virginia. The project is located at mile 82.8 on the Kanawha River above the confluence with the Ohio River. The study examining the navigation facilities on the Kanawha River has recommended that the facility at London undergo a major rehabilitation. This project is more than 60 years old and the size of the chambers severely restricts the use of modern, efficient towing equipment. Future delays will increase significantly with the completed construction of a new lock at Winfield and a new lock authorized at Marmet. The Board agrees that condition problems here warrant major rehabilitation, but is unaware of additional investment needs eligible for cost sharing with the Inland Waterways Trust Fund.

2001 Total Estimated Project Cost: \$22.2 million with \$1.8 million requested for FY 2001 for E&D and to initiate construction, and \$17.89 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$5.0 million.

Priority No. 4: Locks and Dams 11 and 12, Mississippi River, Iowa, Illinois and Wisconsin. The Board recognizes and acknowledges that Lock and Dam 11 and Lock and Dam 12 are separate projects with individual funding requirements. However, the Board strongly believes that these projects should share a single ranking and should be funded and undertaken simultaneously. If approached one at a time, navigation restrictions and delays, with their corresponding costs, will merely be shifted from the first project undertaken to the second project. Scheduling which allows for significant work to be performed during non-navigable periods of the year will also allow for work to proceed on both facilities at the same time.

Lock and Dam 11, Mississippi River, Iowa and Wisconsin. 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 62 years. However, reliability and operational problems are occurring that have significant impacts. The mechanical and electrical systems are original equipment installed in the 1930=s, are obsolete and are increasingly breaking down. Spare and replacement parts are difficult to find. Any failure of the electrical components, the miter gates or anchorages, tainter valve or gate machinery, or culvert valve will significantly reduce the efficiency and effectiveness of the facility and could lead to closure for an extended period. 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.

2001 Total Estimated Project Cost: \$24.6 million with \$3.21 million requested for FY 2001 to initiate construction, and \$21.39 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$3.21 million.

Lock and Dam 12, Mississippi River, Iowa and Illinois. The project is located at Mississippi River Mile 556.7, near the City of Bellevue, Iowa. Lock and Dam No. 12 became operational in 1939, and has been in service for 60 years. However, reliability and operational problems are occurring that have significant impacts. The mechanical and electrical systems are original equipment installed in the 1930=s, are obsolete and are increasingly breaking down. Spare and replacement parts are difficult to find. Any failure of the electrical components, the miter gates or their anchorages, tainter valve or gate machinery, or culvert valve will significantly reduce the efficiency and effectiveness of the facility and could lead to closure for an extended period. 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.

2001 Total Estimated Project Cost: \$15.5 million with \$5.26 million requested for FY 2001 to initiate construction, and \$8.27 million necessary after FY 2001. Estimated Full Capability Funding Level for FY 2001: \$5.26 million.

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) PROJECTS

These Preconstruction Engineering and Design (PED) projects will potentially lead to near-term future New and Replacement Construction Projects.

Priority No. 1: Upper Mississippi River and Illinois Waterway Navigation Improvements, Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The Water Resources Development Act of 1999 directed the U.S. Army Corps of Engineers to expedite completion of the study and if justified, proceed directly to PED for the design of new 1200-foot locks at Locks

and Dams Nos. 25, 24, 22, 21 and 20 on the Mississippi River. No projects are authorized for construction yet.

2001 Total Estimated Cost: \$72.0 million with \$4.71 million requested for FY 2001 to continue preliminary engineering and design, and \$61.88 necessary after FY 2001 to complete PED activities, currently scheduled for December 2007. Estimated Full Capability Funding Level for FY 2001: \$14.0 million.

Recommendations: The Board strongly recommends that the U.S. Army Corps of Engineers accelerate completion of the Upper Mississippi River - Illinois Waterway study and pursue authorization for the construction of new 1200-foot chambers at Locks and Dams Nos. 25, 24, 22, 21 and 20 on the Mississippi River. The Board is firmly convinced that completion of the study will provide the appropriate justification for construction of new locks based upon the eight factors listed above including structural condition of the facilities, capacity and forecasted demand, navigation safety and efficiency and benefit-to-cost ratio.

Priority No. 2: John T. Myers Locks and Dam, Ohio River, Indiana and Kentucky. Initial results of the Ohio River Mainstem Study indicated a need for capacity increases at John T. Myers and Greenup Locks and Dams. The anticipated recommendation from the interim Feasibility report for this facility is the construction of a second 1,200-foot chamber by extending the existing 600-foot auxiliary chamber. The estimated project cost for this construction is \$230 million.

2001 Total Estimated Cost: \$8.0 million with \$2.21 million requested for FY 2001 to continue PED activities initiated in FY 2000, and \$5.31 million necessary after FY 2001 to complete PED activities, currently scheduled for September 2004. Estimated Full Capability Funding Level for FY 2001: \$2.21 million.

Recommendations: The Board strongly recommends that PED activities continue through to an expeditious completion to allow the U.S. Army Corps of Engineers to proceed with project authorization and implementation.

Priority No. 3: Greenup Locks and Dam, Ohio River, Kentucky and Ohio. Initial results of the Ohio River Mainstem Study indicated a need for capacity increases at John T. Myers and Greenup Locks and Dams. The anticipated recommendation from the interim Feasibility report for this facility is the construction of a second 1,200-foot chamber by extending the existing 600-foot auxiliary chamber. The estimated project cost for this construction is \$238.8 million.

2001 Total Estimated Cost: \$9.0 million with \$1.3 million requested for FY 2001 to initiate PED activities, and \$7.7 million necessary after FY 2001 to complete PED activities,

currently scheduled for September 2004. Estimated Full Capability Funding Level for FY 2001: \$2.5 million.

Recommendations: The Board strongly recommends that PED activities continue through to an expeditious completion to allow the U.S. Army Corps of Engineers to proceed with project authorization and implementation.

STUDIES AND FUTURE PROJECTS

The Board recognizes that additional investment needs will be identified by pre-authorization planning studies currently underway. Many of these studies are evaluating solutions to significant problems of capacity, condition, and environmental compliance. The Board also notes that as these studies are completed, integration of the resulting projects into design and construction priorities will be required. The Board has ranked Studies and Future Projects because they will identify navigation projects necessary to continue a viable waterways system.

Two navigation studies ranked by the Board in their 1999 report have been completed, the Kanawha River Navigation Study (Priority No. 7) and the Green and Barren Rivers Navigation Disposition Study (Priority No. 8), and so are not included in this report.

The Board's evaluation and comments related to individual studies follows:

Priority No. 1: Upper Mississippi River and Illinois Waterway Navigation, Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The Reconnaissance phase of the study began in 1990 and was completed in 1993. The Feasibility phase began in April 1993 and is scheduled for completion in December 2000. The system study is being jointly conducted by the Corps= Rock Island, St. Paul and St. Louis Districts of the Mississippi Valley Division. The study addresses the need for navigation capacity expansion along the Mississippi River, including 29 locks and dams, between Minneapolis-St. Paul and the confluence of the Mississippi River and Ohio River, and along the Illinois Waterway, including eight locks and dams, between Chicago and the Great Lakes and the Mississippi River above Melvin Price Locks and Dam. A systems approach has been adopted to examine existing engineering, economic, environmental and social parameters, and to determine system investment needs, including the mitigation of environmental impacts. The system's principal problems are, (1) delays to commercial traffic at locks upstream of Melvin Price Locks and Dam due to limited lockage capacity and increasing traffic, and (2) system congestion resulting in competition and conflict between recreational and commercial users. The 600-foot locks on both waterways routinely handle 1200-foot tows in costly and time consuming lock operations.

2001 Estimated Cost: The total estimated study cost is \$59.98 million with \$2.1 million requested for FY 2001 to complete the Feasibility phase and the NED plan. No funding

is necessary after FY 2001 as this study is scheduled to be completed in December 2000. Estimated Full Capability Funding Level for FY 2001: \$2.1 million.

Recommendations: The Board is concerned about the delay in completing this study and strongly recommends adequate funding be appropriated to complete all necessary elements of this study as soon as possible. The future navigation needs of this waterway segment must be determined immediately so that design and construction of needed replacement facilities can be initiated. Furthermore, the Board recommends that the U.S. Army Corps of Engineers pursue authorization for the construction of new 1200-foot locks at Locks and Dams Nos. 25, 24, 22, 21 and 20 on the Mississippi River.

Priority No. 2: Intracoastal Waterway Locks (Bayou Sorrel), Louisiana. A study is being conducted of seven (7) Intracoastal Waterway Locks in southern Louisiana, between the Mississippi River and the Sabine River. The purpose of this comprehensive system analysis is to determine if the seven GIWW locks should be replaced or if additional locks should be constructed. Results of the Reconnaissance phase completed in January 1993 indicate that there are 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 and is addressing capacity needs at Bayou Sorrel only. Bayou Sorrel is being expedited because it has the most immediate need for additional capacity and needs to be replaced for flood control purposes as well. The Board supports continuing the lock system evaluation. However, Bayou Sorrel represents a near-term opportunity for cost-effectively addressing both flood damage reduction and navigation needs.

2001 Estimated Cost: The total estimated study cost is \$5.38 million with \$686,000 requested for FY 2001 to complete the Feasibility phase. No funds are necessary after FY 2001 as this study is scheduled to be completed in March 2001. The Reconnaissance phase was completed in June 1995. Estimated Full Capability Funding Level for FY 2001: \$686,000.

Recommendations: The Board urges the U.S. Army Corps of Engineers to complete the Feasibility phase of the study with an interim report and recommendation for Bayou Sorrel as soon as possible. This will allow the design and construction to begin of this project that is important for both navigation and flood damage reduction.

Priority No. 3: Ohio River Mainstem Systems Study, Illinois, Indiana, Kentucky, Ohio, Pennsylvania and West Virginia. This study is a navigation system analysis. The Feasibility phase will address the economic, social and environmental impacts of both large scale investments and small scale improvements for additional lock capacity at Ohio River navigation facilities such as John T. Myers, Newburgh, and Cannelton Locks and Dams located downstream of McAlpine Locks and Dam, and Elmsworth, Dashields and Montgomery Locks and Dams located on the Upper Ohio River. The emphasis will be on the Lower Ohio River where forecasted traffic growth is the greatest.

2001 Estimated Cost: The total estimated study cost is \$45.3 million with \$4.14 million requested for FY 2001 to continue the Feasibility phase and \$1.51 million necessary after FY 2001. The Feasibility phase is scheduled for completion in January 2003. Estimated Full Capability Funding Level for FY 2001: \$4.14 million.

Recommendations: The Board recommends the study of this critical waterway segment continue as scheduled because additional capacity is anticipated for several Ohio River navigation facilities. Progressing project specific improvements simultaneously with this system study should 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.

Priority No. 4: Calcasieu Lock, Louisiana. Initial results of the study of seven Intracoastal Waterway Locks in southern Louisiana indicate that there are immediate needs for capacity increases at Bayou Sorrel and Calcasieu Locks. It 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 supports continuing the multiple locks evaluation, but recognizes that Calcasieu Lock represents a near-term opportunity to address navigation needs.

2001 Estimated Cost: The total estimated study cost is \$2.9 million with \$339,000 requested for FY 2001 to continue the Feasibility phase, initiated in FY 2000 per a favorable Reconnaissance report, and \$2.13 million necessary after FY 2001 to complete the Feasibility phase, currently scheduled for September 2005. Estimated Full Capability Funding Level for FY 2001: \$600,000.

Recommendations: The Board strongly recommends the Feasibility phase of this interim study continue as scheduled because additional capacity needs for this segment of the waterway are anticipated. Progressing project specific improvements simultaneously with this system study should be considered to take advantage of the window of opportunity.

Priority No. 5: Gulf Intracoastal Waterway (GIWW) Modifications, Texas. 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. Both projects serve to improve navigation safety by controlling traffic flow and currents at these dangerous intersections, and to control sand and silt deposition at these two intersections. These thruways are too narrow to accommodate modern barge sizes and tow configurations, resulting in tows being moored and barges being taken across the intersections

one at a time. Potential alternatives include realigning the approaches to the crossings or increasing the width of the gates. Funds to initiate the Reconnaissance phase of the study have been requested for FY 2001, which is currently scheduled to be completed in January 2001. Two interim Feasibility studies, one for the Brazos River Floodgates and one for the Colorado River Locks, will be initiated pending a favorable Reconnaissance report.

2001 Estimated Cost: The total estimated study cost is \$7.49 million with \$195,000 requested for FY 2001 to complete the Reconnaissance phase and initiate the Feasibility phase, and \$7.21 million necessary after FY 2001 to complete the Feasibility phase, currently scheduled for March 2008. Estimated Full Capability Funding Level for FY 2001: \$414,000.

Recommendations: The Board recommends that Reconnaissance phase of this study be completed as scheduled and the Feasibility phase initiated immediately thereafter.

Priority No. 6: Black Warrior and Tombigbee Rivers, Alabama. The Black Warrior-Tombigbee (BWT) Waterway, in Alabama, has a total lift of 255 feet provided by six locks and dams. The study will investigate traffic delays at constrictive bends and bridges, and at heavily used locks at Demopolis and Coffeeville. The Feasibility study will be conducted in three stages: the first phase will assess the timing and magnitude of navigation needs; the second phase will formulate and evaluate alternatives derived from the needs identified in the first phase; and the third phase will focus on engineering and design of those plans recommended in the second phase. The Reconnaissance phase was completed in December 1998.

2001 Estimated Cost: The total estimated study cost is \$15.04 million with \$521,000 requested for FY 2001 to continue the first phase of the Feasibility study, and \$14.06 million necessary after FY 2001 to complete the Feasibility phase, currently scheduled for April 2008. Estimated Full Capability Funding Level for FY 2001: \$521,000.

Recommendations: The Board recommends completion of the first phase of the Feasibility study as scheduled. The second phase of the study should only be initiated if the first phase has positive results.

SPECIAL CONSIDERATION OF INLAND NAVIGATION PROJECTS

The Board desires to take special note of certain navigation-related projects that have been undertaken but are either not subject to cost sharing with the Inland Waterways Trust Fund or not related to the prioritization tasks undertaken by the Board. The Board offers comments on two projects as follows:

The lock and dam at **Chickamauga Lock on the Tennessee River, Tennessee**, 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 TVA and the U.S. Army Corps

of Engineers to offset the affects of the deterioration, the facility will permanently shut down in several years due to its condition. The Board recognizes a need for action to be undertaken at Chickamauga Lock 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.

While there are no new navigation construction projects or major rehabilitation efforts proposed for the **Columbia or Snake rivers** at this time, the Board is greatly concerned about a proposal to remove or breach the dams at Ice Harbor, Lower Monument, Little Goose and Lower Granite on the Snake River in an attempt to restore endangered salmon populations. Currently, the Columbia-Snake River system allows commercial navigation from the coastal deep draft ports all the way to Lewiston, Idaho. This is a vital transportation link for the manufacturers and farmers in the Pacific Northwest, especially for grain and farm products and timber and forest products destined for export markets. The proposal to breach these four dams is single purpose in nature and fails to address the significant economic impacts in the region estimated to be well over \$300 million per year. Breaching these dams would: eliminate commercial navigation on the Snake River extending 140 miles to Lewiston, Idaho; eliminate hydropower generated electricity at a time when potential energy shortages are being predicted for the region for the near future; eliminate irrigation of approximately 35,000 acres of farmland; and also adversely impact water supply and flood control. The Board is aware of alternatives to help restore salmon populations that do not include the breaching of dams. The Board fully supports efforts to restore the salmon population in the Pacific Northwest using other measures that do not mandate the breaching of these dams and the associated adverse impacts to the economy of the region.

ACKNOWLEDGMENTS

The Inland Waterways Users Board wishes to express its sincere appreciation to Major General Hans A. Van Winkle, the U.S. Army Corps of Engineers Deputy Commander for 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 Mr. Mark R. Pointon, the Executive Assistant to the Board 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
INLAND WATERWAYS USERS BOARD MEMBERS
(As of August 31, 2000)

APPENDIX A

INLAND WATERWAYS USERS BOARD MEMBERS
(as of August 31, 2000)

Board Chairman

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

Board Vice Chairman

Charles A. Ebetino, Jr.
Senior Vice President - Power Generation Group
(Fuel Supply and Business Support)
American Electric Power Service Corporation (AEP)
Lancaster, Ohio

Board Members

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

Ms. Lisa L. Fleming
Associate General Counsel
Midland Enterprises Inc.
Cincinnati, Ohio

Mr. J. Stephen Lucas
Vice President - Export/Operations
Louis Dreyfus Corporation
Wilton, Connecticut

Mr. Markos K. Marinakis
Director and CEO
Marinakis Chartering, Inc.
New York, New York

Mr. Daniel P. Mecklenborg
Vice President and General Counsel
Ingram Barge Company
Nashville, Tennessee

Mr. Timothy M. Parker, Jr.
President
Parker Towing Company, Inc.
Tuscaloosa, Alabama

Mr. William G. Rieland
Vice President, Transportation and Marketing Services
Consolidation Coal Company (CONSOL)
Pittsburgh, Pennsylvania

Mr. George H. Shaver
President (Owner)
Shaver Transportation Company
Portland, Oregon

Mr. Lester E. Sutton
Manager, Government Affairs
Kirby Corporation (Hollywood Marine, Inc.)
Houston, Texas

APPENDIX B

LIST OF THE FUEL TAXED
INLAND AND INTRACOASTAL WATERWAY SYSTEM

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 Albermarle 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 Sipsev 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.