

**DEPARTMENT OF THE ARMY**

**COMPLETE STATEMENT**

**OF**

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**BEFORE**

**THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT**

**UNITED STATES HOUSE OF REPRESENTATIVES**

**ON**

**HOW RELIABILITY OF THE INLAND WATERWAY SYSTEM  
IMPACTS ECONOMIC COMPETITIVENESS**

**APRIL 18, 2012**

Mr. Chairman and distinguished members of the Subcommittee, Thank you for the opportunity to testify on the economic importance of the Nation's inland waterways. I am Major General John Peabody, Commander of the Mississippi Valley Division, U.S. Army Corps of Engineers (Corps). I appear before you today on behalf of the thousands of Corps professionals who labor dutiful, long hours, often in dangerous weather conditions, to help facilitate commercial navigation and to deliver other benefits for the nation.

## **OVERVIEW**

The goal of the Corps commercial navigation program is to facilitate commercial navigation by providing safe, reliable, highly cost-effective, and environmentally sustainable waterborne transportation systems. On the inland waterways, the Corps constructs, replaces, rehabilitates, and expands the locks, dams, channels, levees, floodways, and other project features that enable vessels to transport commercial cargo along about 12,000 miles of inland waterways. It also operates and maintains these features, including 221 operable lock chambers at 178 active sites. Approximately 9,000 miles of these waterways are within the greater Mississippi River basin.

## **VALUE TO THE NATION**

The Mississippi watershed is the third largest watershed in the world. More importantly, it is the largest naturally navigable riverine system in the world. Thanks to well over a century of investments by the nation, the Corps has engineered structures throughout this watershed that have resulted in a navigable network of interior waterways that is greater in length than the navigable systems in the entire rest of the world combined. The Mississippi watershed drains a large area, which includes one of the world's largest contiguous areas of productive farmland, the American Mid-West as well as major sources of underground mineral and energy wealth. This geographic reality forms the basis for a unique geopolitical advantage, enabling the United States to cheaply move goods from its interior to the Gulf coast for export. It also allows minerals to be moved cheaply to the industrial centers of the Ohio Valley, and connects these centers to much of the nation as well as the world, via the coastal port complex of the lower Mississippi River, from Baton Rouge to New Orleans.

The Nation's three busiest inland waterways – the Ohio River, the Mississippi River, and the Illinois Waterway – lie within the Mississippi watershed or are connected to it. They provide a low cost way for shippers to move goods. Through portions of the Gulf Intracoastal Waterway, they connect significant coal and petroleum producing areas with the refining and energy production centers of the country. They also help make the exportation of grain through New Orleans, from areas in the Midwest over a thousand miles inland, competitive with any location in the world.

The three principal inland waterways have been engineered by the Corps to deliver reliable, high volume waterborne transportation benefits. Since the 1960s, the Federal government has invested heavily in the maintenance and rehabilitation of these major transportation arteries, which support substantial movements of agricultural products, energy-related materials, and other bulk commodities and handle the vast majority of all inland waterways traffic. The Corps is giving priority to the continued maintenance and rehabilitation of the locks and dams on these key waterways.

## **RELIABILITY**

America's world-class infrastructure is aging and will require major investments to sustain its productivity. Our nation's prior success in building engineered infrastructure has provided enormous advantages and superior services. Whether driving on our roads and highways, crossing over bridges which span watercourses and valleys, or enjoying the services provided by the development of our water resources, we have come to expect our infrastructure has always been, and will always be, there for us. When we flick on a light switch we expect the lights in our homes to come on; when we turn on a faucet, we expect clean, fresh, drinking water; when we flush a toilet, we expect the waste to disappear; and, when we drive our automobiles on a highway or a bridge, we expect a safe, smooth and timely ride. Our infrastructure-enabled lifestyle has become completely the norm of modern life. It is only when faucets runs dry, lights flicker out, or traffic slows to a standstill that most Americans even think about what should be self-evident – that our quality of life, health, economy, and national security have all been built upon the foundation of engineered infrastructure systems.

Americans can and should be proud to have the most extensive and one of the best performing and most reliable public works infrastructure in the world. But like everything built by man, infrastructure has limits to its useful life, and it requires constant maintenance and periodic renewal. These continuous investments are essential if we are to ensure the reliability of our infrastructure investments. Infrastructure must be properly maintained to ensure and extend its useful life. It must be periodically rehabilitated when it begins to wear out and deteriorate. When it is no longer viable to rehabilitate it or economical to maintain it, it must be recapitalized, repurposed, or removed, based on the return to the nation.

Specifically with regard to inland waterways, the Corps has a portfolio of 221 locks with an average age of 60 years. They have performed well, but many of them are showing obvious signs of wear and tear. In a select few cases, the condition of a lock or dam has deteriorated to a point that catastrophic failure is a real possibility. In all such cases with which I am familiar, there is an active construction project to replace or remediate the project.

Catastrophic failure of a lock or dam at a high-volume point along one of the major waterways would have significant economic consequences because other transportation modes generally lack the capacity to either quickly or fully accommodate

the large volume of cargo moved on the inland waterways. Therefore, cost and congestion of other modes (mostly rail) could be greatly affected and some cargoes may be delayed for extended periods. For example, the Corps extended a planned 18 day closure at Greenup Locks in 2006 when extensive deterioration of the miter gates was discovered. This lengthy, unplanned delay cost shippers over \$40 million and several utilities came within days of having to shut down due to exhausted supplies of coal.

The Army Corps of Engineers is focused on maintaining the key features of our existing infrastructure to avoid such a catastrophic failure. We are also monitoring the system's condition via periodic inspections, in order to identify and address any significant decline in its efficiency or reliability. Our increased monitoring efforts over the past decade illustrate that there has been a recent increase in the number of unscheduled lock outages and the Corps will continue its efforts to attack this trend. In particular, the Corps measures performance based on the total number per year of one-day and seven-day closures due to mechanical failures of main lock chambers on the high and moderate use inland waterways.

### **PROACTIVE EFFORTS**

The Corps continues to be concerned about the condition of our infrastructure and is working to address it. For the last decade we have been taking several steps to address this challenging issue, to include increased efforts to document project conditions and prioritize resource allocation to the greatest needs, target resource allocation more efficiently, reducing equipment capacity, and regionalizing assets across multiple districts. These initiatives have been increasing in scope and specificity in recent years. We also undertook a case study of lock and dam construction projects, which revealed some issues for improved construction management. Subsequently, the Corps partnered with the inland waterways navigation industry in developing a long-term approach to recapitalizing our inland navigation infrastructure. Process improvements were identified and implemented to improve and strengthen our project delivery processes. These involve more accurate and risk-based cost and schedule estimating, improved program and project management, and improved contracting methods. We have initiated risk-based asset management principals in our maintenance program, but are still seeking to fully capture and quantify reliability issues with fidelity, so as to best focus our maintenance, rehabilitation and recapitalization efforts. The Corps has embarked on a Civil Works Transformation effort that is focusing on accelerated planning studies, improving methods of delivery, and developing a detailed asset management system. All of these efforts collectively will result in more effective processes to deliver Corps projects and manage them with maximum efficiency. We have already made significant progress in becoming more efficient in managing our projects, and will continue to seek ways to further improve.

We have made – and will continue to make – hard decisions with regard to use of available resources. The Corps has reduced hours of operation at several of our lower

use locks and is currently initiating similar actions at several other sites. We have also deferred dredging at many of our lower use inland waterways.

## **INLAND WATERWAYS CAPITAL INVESTMENTS**

In allocating funds within the civil works program, the Corps gives priority to the work that offers the greatest return to the Nation in achieving economic, environmental, and public safety objectives. For example, this includes providing priority funding for the maintenance of existing high-performing inland waterways. However, current revenues to the Inland Waterways Trust Fund require the Corps to limit spending for inland waterways capital investments.

In September 2011, as part of his Jobs Bill proposal, President Obama transmitted a legislative proposal to the Congress to reform the laws governing the Inland Waterways Trust Fund. The proposal would provide an additional source of financing for major new investments in the inland waterways to support economic growth. It includes a new user fee, which would supplement the revenue collected from the fuel tax, and would increase the total paid by commercial navigation users sufficiently to meet their share of the costs of activities financed from the Inland Waterways Trust Fund.

## **CONCLUSION**

The Army Corps of Engineers will continue to provide engineering analysis, make recommendations, and execute programs and projects to carry out its responsibilities related to the inland waterways.

Mr. Chairman and Members of the Subcommittee, this concludes my testimony. I am grateful for the opportunity to testify regarding the benefits and reliability of the water infrastructure system of this nation. I look forward to answering any questions you or the other Members may have.