



**WRITTEN STATEMENT FOR THE RECORD
COLLISTER JOHNSON, JR., ADMINISTRATOR
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION**

**BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES**

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I want to thank Chairwoman Johnson, Ranking Member Baker, and Members of the Subcommittee for this opportunity to present a written statement to be included in the hearing record on this important topic of aquatic invasive species in the Great Lakes.

The U.S. Saint Lawrence Seaway Development Corporation (SLSDC) is responsible for the operations and maintenance of the U.S. portion of the St. Lawrence Seaway between Montreal and Lake Erie. This responsibility includes maintaining and operating the two U.S. Seaway locks located in Massena, N.Y., and vessel traffic control in areas of the St. Lawrence River and Lake Ontario. For nearly 50 years, the binational St. Lawrence Seaway has served as a vital transportation corridor for the international movement of bulk and general cargoes such as steel, iron ore, grain, and coal.

Maritime commerce on the Great Lakes Seaway System is a critical transportation link for the continent's agricultural and industrial heartland, annually sustaining more than 150,000 U.S. jobs, \$4.3 billion in personal income, \$3.4 billion in transportation-related business revenue, and \$1.3 billion in federal, state, and local taxes.

Maritime commerce, however, has also served as one pathway of introduction of aquatic invasive species as they are transported into the System in the ballast water of ships. Ships take on ballast water in other countries for stability during the ocean crossing. This water is pumped out when the ships unload and/or pick up cargo in Great Lakes ports. Many of the species, such as zebra mussels, are thought to have arrived in the Great Lakes this way. Now they are being spread throughout the continent's interior through natural processes and by the activities of humans through a variety of commercial and recreational activities. Aquatic invasive species clearly pose a major environmental challenge to the waterway, and action is needed now to stop the further introduction and spread of aquatic invasive species.

There is a compelling need for federal legislation to address this serious environmental challenge. International rules, national laws, state laws, and a myriad of regulations govern the use and discharge of ballast water, and are constantly changing. Recent court rulings on ballast water laws have also been adding new, sometimes stricter interpretations of existing statutes. Clearly, consistency is lacking in this ‘patchwork’ approach. To be effective, a strong, uniform federal statute addressing ballast water is required.

A number of considerations must be taken into account in the formulation of this federal legislation. The water quality standard for ballast water discharged in U.S. waters is an area subject to debate. Without a uniform standard, there is uncertainty in the industry and shipowners are reluctant to proceed with installing ballast water technology if it does not perform to the most rigid standard. Formulation of a reasonable but environmentally sound standard is a critical first step in solving the problem. I believe there are several technologies – ranging from biocides to de-oxygenation to Ultraviolet radiation – that can be employed to meet a uniform federal standard.

Secondly, the timetable for implementation of the technology must be given careful consideration. I understand that shipowners can incorporate ballast water technology into the new build process efficiently and relatively inexpensively. The problem lies with existing ships, especially older ships. The timetable must not be so strict that it discourages owners from retrofitting their ships with new technology. A reasonable phase-in of appropriate and available technology is recommended.

Finally, there does not exist today any widely accepted and validated testing protocols or criteria for enforcing a ballast water standard once one is promulgated. This needs to be addressed concurrently with the development of ballast water technology.

A number of legislative proposals were introduced in the 109th Congress to combat invasive species. One proposal, S. 363, the Ballast Water Management Act of 2005, was approved by the Senate Committee on Commerce, Science and Transportation on July 21, 2005, but saw no further action in the 109th Congress. The Department of Transportation presented its position on S. 363 in a May 16, 2006 views letter to then Committee Chairman Senator Ted Stevens:

“...The Department of Transportation believes that a strong, consistent, national Federal standard is necessary to address the environmental and commercial issues posed by this problem. Inconsistent standards throughout the country fail to recognize that the national nature of this problem calls for a national solution. Only national ballast water standards can control what is essentially a matter involving interstate maritime commerce and international environmental issues.”

In that letter, the Department provided additional comments and expressed its support for federal legislation to prevent the further introduction of invasive species through ballast water, and for S. 363 specifically. The Department is prepared to again be engaged in the discussion as the 110th Congress proceeds to address this important issue.

Turning to ballast water management requirements, I want to point out to the Committee that those standards employed in the Great Lakes St. Lawrence Seaway System are the most stringent in the world. U.S. Coast Guard (USCG) regulations and Transport Canada’s ballast water control and

management regulations require all ships destined for Great Lakes ports from beyond the Exclusive Economic Zone to exchange their ballast at sea. If the ships have not complied, they may be required to retain the ballast water on board, pump the ballast water ashore, treat the ballast water in an environmentally sound manner or return to sea to conduct a ballast water exchange. In addition, Transport Canada regulations now require all ships destined for the Great Lakes in NOBOB – no ballast on board – condition, to conduct salt water flushing.

The SLSDC continues to perform its Enhanced Seaway Inspection (ESI) program, inspecting all ocean vessels for safety and environmental protection issues in Montreal, Quebec, before they enter U.S. waters. The SLSDC and the USCG, in conjunction with Transport Canada and the Canadian St. Lawrence Seaway Management Corporation (SLSMC), signed a Memorandum of Understanding in March 1997 to develop the program of coordinated vessel inspection and enforcement activities to expedite the safe transit of shipping through the Great Lakes Seaway System. The ballast water exchange program continues to be an important function of the ship inspection program. These inspections are carried out concurrently with the ESIs, by SLSDC personnel in Montreal and by USCG and Corporation staff at Snell Lock in Massena. These programs support the Oil Pollution Act of 1990 and the Non-Indigenous Aquatic Nuisance Prevention and Control Act of 1990. The inspectors verify a vessel's successful ballast water exchange through a boarding program, which includes measuring the salinity of on-board ballast. Ballast with a salinity of 30 parts per thousand or more is considered evidence that the tanks have been adequately exchanged and provide a reasonably harsh environment for any remaining organisms. During the 2006 season, Seaway marine inspectors conducted 82 ballast water inspections in conjunction with the ESI program, and performed an additional 57 ballast water exams for subsequent voyages at the U.S. Seaway locks in Massena, N.Y.

However, we recognize that the Great Lakes have still experienced new introductions of aquatic invasive species, even after the inception of a well-enforced mandatory ballast water exchange program. There is a growing consensus that ballast water exchange – the best practice method now employed to deal with the problem – is not adequate to protect the Great Lakes and the St. Lawrence River.

While the SLSDC does not have statutory jurisdiction over ballast water regulation, which is the domain of the USCG, aquatic invasive species is an issue of prime importance to our mission of moving vessels safely into the Great Lakes. As a result, the SLSDC is involved, where appropriate, in projects that are seeking a workable, sustainable solution to the problem of aquatic invasive species through better technology and commercial marine practices that promise a more effective resolution than ballast water exchange alone is able to supply.

I have been working with Great Lakes Seaway System stakeholders to catalyze industry-government partnerships to address the ballast water issue through research and development of new technologies. The SLSDC is involved in the "Green Marine" program, a marine industry environmental partnership of seven marine trade associations and more than 500 Canadian and U.S. companies including shipowners, which has identified exotic species vectoring via ballast water as one of the highest priorities within the System requiring prompt action. One of the System's largest international carriers is in the final phase of implementing a ballast water treatment program, conducting full-scale tests for months onboard two operating vessels. The

system employs a combination of treatments but, unlike others, does not use any chemical additives. The treatment technology is promising, and testing to determine its effectiveness in complying with standards set by the International Maritime Organization is ongoing.

The desire to operate vessels and implement shipping procedures responsive to the public's needs prompted creation of the Great Ships Initiative (GSI), which is focusing resources and expertise on producing solutions to the problem of ship-mediated invasive species in the Great Lakes. The GSI is an industry-led cooperative effort initiated by the Northeast-Midwest Institute, in collaboration with the American Great Lakes Ports Association, designed to develop safe, effective, affordable and quick answers. It incubates treatment alternatives for promising technologies such as ultraviolet irradiation, deoxygenation, filtering, nonoxydizing biocides and shoreside treatment. The initiative has three objectives: (1) identify promising treatment systems; (2) provide expert technical support to accelerate the research and testing of promising systems; and (3) facilitate the evaluation and approval by regulators of promising treatment alternatives. There will be research capabilities at three different levels: "bench scale" in the laboratory; "pilot scale" (barge-based); and at full size ship-board scale. The two primary activities will be to (1) identify and verify treatment technologies that stop the introduction of exotic organisms by ocean-going ships; and (2) monitor Great Lakes ports and harbors for new introductions of invasive species by ships. The two Seaway Corporations are actively involved in the GSI.

I want to mention another major player in helping address broad environmental problems, the Great Lakes Maritime Research Institute, a U.S. Maritime Administration National Maritime Enhancement Institute established in 2004. A joint project between the University of Minnesota-Duluth and the University of Superior-Wisconsin, the Institute pursues research efforts in marine transportation and environmental planning including aquatic invasive species, as outlined in the Coast Guard and Maritime Transportation Act of 2004. The Seaway Corporations are working closely with the Institute, as well as the U.S. Maritime Administration, the U.S. Army Corps of Engineers, the USCG and U.S. Navy, along with the marine industry to move forward on implementation of safe, reliable and affordable ballast water solutions from the many potential technologies that scientists have reviewed over the past decade.

In addition, the SLSDC plays a key role on the Great Lakes Regional Waterways Management Forum, a group of U.S. and Canadian federal representatives who work cooperatively to identify and resolve waterways management issues in the Great Lakes region. The Forum specifically reviews issues that cross multiple jurisdictional zones and/or involve international issues and is tasked with developing operational solutions that improve the use and effectiveness of the Great Lakes for the public. Over the past few years, the SLSDC has played an active role on the Forum's ballast water working group. The ballast water working group was developed to harmonize efforts between the USCG, Transport Canada, and the two Seaway Corporations to coordinate and exchange compliance and research efforts for reducing aquatic nuisance species invasions via ballast water in the Great Lakes.

The two Seaway Corporations are also committed to sharing with the public the progress that has been made to date on marine environmental challenges impacting the waterway. The binational website, www.greatlakes-seaway.com, now includes a section providing timely updates on ballast water initiatives as well as other environmental activities.

Substantial coordination and research is ongoing in an aggressive effort to find solutions to the problem of aquatic invasive species in the Great Lakes. The SLSDC will continue to pursue and promote the responsible, coordinated efforts underway to address the serious problems that result from invasive species. We are committed to working with Congress to construct the federal legislative response necessary to address the problem quickly and uniformly.

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