

**WRITTEN STATEMENT FOR THE RECORD
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**HEARING OF THE
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HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
UNITED STATES HOUSE OF REPRESENTATIVES**

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Chairman Rouzer, Ranking Member Napolitano, and Members of the Subcommittee, thank you for the opportunity to submit written testimony for the record regarding the Fiscal Year (FY) 2024 budget request for the Great Lakes St. Lawrence Seaway Development Corporation (GLS or Corporation). I am glad to present this information and to report on the activities of the GLS.

The GLS is a wholly owned government corporation within the U.S. Department of Transportation (USDOT) with its funding appropriated since 1987 from the user fee-based Harbor Maintenance Trust Fund (HMTF). Since its creation, the GLS has been funded through appropriations derived from user fees and not from the Treasury's General Fund. Prior to 1987, the GLS's funding was derived from tolls to commercial vessels transiting the St. Lawrence Seaway.

The GLS's mission is to operate and maintain the U.S. infrastructure and waterways of the St. Lawrence Seaway, while performing trade and economic development activities designed to enhance the utilization of the Great Lakes St. Lawrence Seaway System. The GLS is primarily responsible for maintaining and operating Eisenhower and Snell locks located in Massena, New York, and controlling commercial vessel traffic in U.S. areas of the St. Lawrence River and Lake Ontario. A majority of GLS employees are veterans, and we have a unionized trade workforce, providing quality jobs in upstate New York. Since the opening of the St. Lawrence Seaway in 1959, the GLS has directly served commercial marine transportation stakeholders by providing a safe, reliable, and efficient deep-draft international waterway, in cooperation with its Canadian counterpart, the St. Lawrence Seaway Management Corporation (SLSMC).

Over its 65-year history, more than 3 billion metric tons of cargo valued at more than \$500 billion has transited the St. Lawrence Seaway, including grain, iron ore, iron and steel, project cargoes, and other raw and bulk commodities. During the 2022 navigation season, more than 36 million metric tons of cargo valued at \$13 billion moved through the binational waterway.¹ In recent years, international cruise ships have also been touring U.S. Great Lakes ports via the Seaway in record numbers.

¹ https://greatlakes-seaway.com/wp-content/uploads/2023/03/tonnage2022_12_en.pdf

A vessel entering the St. Lawrence Seaway at Montréal, Canada, and transiting to Lake Erie crosses the international border 27 times while passing through the St. Lawrence Seaway's 15 locks (2 U.S. and 13 Canadian). As a consequence of this unique geography, when constructing the Seaway in 1954, the United States and Canada created a binational governance approach for the Seaway through an exchange of diplomatic notes, constituting a binding international agreement between the countries. It was and remains a bold, optimistic, unique, and effective governance approach; all other U.S. inland waterways are operated, maintained, and managed directly by the U.S. Army Corps of Engineers and the U.S. Coast Guard. Due to the geography of the St. Lawrence River and the importance of the sovereignty issues involved, however, the U.S. and Canadian Governments established a binational framework of civilian Federal oversight and control of this international waterway, which today is administered by the GLS and the Canadian SLSMC.

To carry out its mission, the GLS possesses legal authorities that distinguish it from other operating administrations at the U.S. Department of Transportation and from most other Executive Branch agencies. The Wiley-Dondero Act of 1954 (Seaway Act), which created and permanently authorized the GLS, incorporated authorities that were first put into law through the Government Corporation Control Act of 1945. The GLS was created as a government corporation to manage this public infrastructure asset and provide a direct service to customers – moving vessels safely and efficiently through a binational waterway. The succinct and plain language of the Corporation's enabling statute allows sufficient flexibility to manage its operations in a business-like manner. Some of the distinguishing attributes include the ability to make and carry out contracts or agreements as necessary to conduct business as well as the ability to acquire real and personal property and sell, lease, or dispose of such property. Together with its mission of providing 24/7 marine transportation services, these legal authorities help promote a culture within the GLS of accountability and customer service.

The deep degree of trust and operational cross-border interaction that has developed between the U.S. and Canadian Seaway entities over the past six decades helps maintain a transit experience for Seaway users that is essentially seamless from a vessel captain's perspective. It is a remarkable achievement given the operational complexities and multiple jurisdictions that impact that transit.

The St. Lawrence Seaway directly serves an eight-State, two-province region that accounts for one-quarter of the U.S. gross domestic product (GDP), one-half of North America's manufacturing and services industries, and is home to nearly one-quarter of the continent's population.

The Seaway's importance for national security and the Nation's transportation supply chain lies in its (a) strategic location connecting the Great Lakes region of North America to the Atlantic Ocean, (b) economic significance supporting economic growth, job creation, and trade, while enabling efficient transportation of goods and reducing shipping costs and congestion on alternative routes, (c) role in defense and security in the transportation of goods, equipment, and supplies necessary for military operations, including the movement of naval vessels, and (d) supply chain resilience as an alternative transportation route in the event of disruptions or congestion at other ports or transportation corridors.

Annual commerce on the Great Lakes Seaway System, including U.S. flag interlake activity, typically exceeds 180 million metric tons and serves U.S. farmers, manufacturing workers, miners, and commercial interests throughout the Great Lakes region. Virtually every type of bulk and general cargo commodity moves on the Great Lakes Seaway System, including iron ore for the U.S. steel industry; limestone for construction and steel industries; grain exports from U.S. farms; general cargo such as iron and steel products and heavy machinery; and cement, salt, and stone aggregates for agriculture and industry. Additionally, the Seaway has emerged as a critical transportation route for the shipment of large components essential to the wind energy industry.

Maritime commerce on the Great Lakes Seaway System provides shippers with nearly \$4 billion in annual cost savings compared to the next least expensive mode of transportation.² The Seaway also produces significant economic benefits to the Great Lakes region. An economic impact study completed in 2018 concluded that maritime commerce on the Great Lakes Seaway System sustains over 237,000 U.S. and Canadian jobs, \$35 billion in economic activity, \$14.2 billion in personal income, and \$6.6 billion in federal, state/provincial, and local taxes each year.³ An update to the 2018 study is expected to be released later this year.

FY 2024 Budget Request

For FY 2024, the President's Budget requests an appropriation of \$40.3 million from the HMTF to fund the GLS's operations and maintenance of the U.S. portion of the St. Lawrence Seaway, as well as capital infrastructure projects to rehabilitate and modernize the GLS's perpetual assets and associated equipment. The request represents an increase of \$1.8 million from the FY 2023 enacted level.

The budget request includes two programs – (1) Seaway Operations and Maintenance and (2) Seaway Infrastructure, which support the Administration's priorities of safety, job creation and economic growth, and transformational infrastructure investments.

The FY 2024 request for the GLS's Seaway Operations and Maintenance program is \$24.0 million to provide the GLS with the financial and personnel resources necessary to perform its operational, maintenance, and administrative functions, including lock operations, marine services, vessel traffic control, asset maintenance, ballast water management, safety and environmental inspections, and trade promotion and economic development.

For its Seaway Infrastructure program, the FY 2024 President's Budget includes a request of \$16.3 million for 12 infrastructure-related capital projects, including \$7 million for the replacement of 65-year old GLS Administration Building, a primary business center for the Corporation in Massena; \$3 million to replace deteriorated and damaged concrete at Eisenhower Lock and Snell Lock; \$1.5 million to upgrade electrical distribution equipment at the GLS locks and maintenance facility; and \$1.5 million for paving and drainage upgrades to GLS roadways.

² U.S. Army Corps of Engineers, Great Lakes Navigation System: Economic Strength to the Nation, January 2009.

³ *Economic Impacts of Maritime Shipping in the Great Lakes-St. Lawrence Region*, Martin Associates, July 2018.

Beginning in FY 2024, the GLS will launch a multi-year effort to rehabilitate and/or replace its various buildings and facilities in Massena, N.Y., that are used for both employee workspace and storage and were built during the construction of the U.S. assets of the St. Lawrence Seaway in the 1950s. All these facilities/buildings are owned and operated by the GLS, including the Administration Building. Most of these buildings/facilities have reached the end of their useful life and do not meet ADA or energy standards.

In FY 2022, the GLS contracted with an architectural/engineering firm to establish a facility master plan to include a review of the entire GLS's Massena building/workplace inventory to assess current conditions, address needed maintenance and/or rehabilitation to meet current workplace and energy standards, and provide cost estimates for new, more energy and space efficient workspaces. The facility master plan identified 20 capital improvement projects with a total projected cost of approximately \$32 million over the next 20 years.

Safety and Reliability

The continued safety and reliability of the St. Lawrence Seaway is the foundation upon which we can promote and accommodate increases in maritime cargo. The Seaway is already one of the world's safest waterways and that safety record continues to improve. Over the past 25 years, the average number of international vessel incidents in the Seaway requiring GLS intervention has decreased significantly. From 1996-2006, the average number of incidents was 19 per year. However, from 2007-2021, the average number of incidents declined to only 6 per year. This positive development can be attributed to several factors, including the U.S.-Canadian Enhanced Seaway Inspection Program, the use of the Seaway's Automatic Identification System (AIS) vessel traffic management technology beginning in 2002, the use of the Seaway's Hands Free Mooring system beginning in 2018, the well-trained and skilled GLS lock operations and maintenance staff, and a major fleet renewal program implemented by many of the Seaway's commercial carriers.

In addition, since the Seaway's opening in 1959, the GLS has consistently maintained a near-perfect reliability rate of 99 percent for commercial users of its locks in the U.S. sector of the waterway. During the 2022 navigation season (March 22, 2022-January 1, 2023), the GLS workforce ably operated and maintained the waterway and lock system at a reliability rate of 99.6 percent and lock availability rate of 99.97 percent. This high mark of success is due primarily to the GLS's efficient management and operations of the locks and control of vessel traffic. Global customers from nearly 50 countries return each year to use the Seaway because of the waterway's strong safety record, efficient operations, and strong reliability rate.

Upgrades to the Seaway's traffic management system are currently underway and are expected to provide additional safety, reliability, and environmental benefits. While the primary goal of the envisioned Vessel Information System (VIS) project is to improve transits within the Seaway, new applications for connecting the entire Great Lakes together will help enable enhanced voyage planning from foreign origin, transit through the Great Lakes, and to destination. The VIS will have the ability to gather and process data that could provide recommendations to safely facilitate maximum operational efficiency. This includes scheduling vessel inspections, bridge closures, pilotage services, and dock usage at ports, as well as

lockages, while respecting the interests of individual vessels. This multi-year project is underway, in conjunction with the Canadian SLSMC, the U.S. Department of Transportation's Volpe National Transportation Systems Center (Cambridge, Massachusetts), other Great Lakes Seaway System users, and stakeholders.

Environmental Stewardship

The GLS also implements strict ballast water management efforts to prevent any new introductions of aquatic invasive species via commercial vessels entering Seaway waters. In 2008, the GLS and Canadian SLSMC jointly started enforcing regulations that all vessels with no ballast in their tanks must conduct saltwater flushing of the empty ballast water tanks before arriving in the Seaway. The GLS, along with the U.S. Coast Guard, Transport Canada, and the SLSMC, formed the Ballast Water Working Group (BWWG) to enforce ballast water inspections of all vessels to ensure these regulations are carried out. The BWWG's annual summary report documents the Group's inspection results and findings.⁴ The report measures both the performance of the binational inspection team in inspecting the ballast tanks of incoming ocean vessels and the compliance by the oceangoing trade in meeting U.S. and Canadian ballast water management requirements.

From both a performance and compliance perspective, the results of the 2022 report are outstanding. In 2022, every ballast tank of every ocean vessel entering the Seaway was assessed – 10,239 ballast tanks on 521 vessel transits. The BWWG found that the compliance rate by industry in 2022 for low salinity non-compliant tanks was 98.2 percent.⁵ In those rare instances where salinity levels do not meet the standard, the ballast tanks are retained to ensure no discharge is made in the Lakes, and tanks are then re-inspected on the vessel's outbound journey to ensure that the tank was not used on its voyage in the Great Lakes. Since 2009, 100 percent of international vessels entering the Seaway have received a ballast water management assessment by GLS inspectors or other BWWG partners.

The Great Lakes Seaway System has one of the most stringent inspection regimes in world. The effectiveness of the Seaway's ballast water inspection program has been publicly credited as a key factor in dramatically reducing the risk of introduction of invasive species into the Great Lakes. Since 2006, there have been only 2 new aquatic invasive species identified in the Great Lakes that the scientific community considers are possibly associated with ballast water, but the timing of introduction and actual source pathways are uncertain. This can be compared to 15 new aquatic invasive species that were identified from 1993-2006, the equivalent time period before the new regulations, which the scientific community strongly attributes to ballast water.

A recently published study has given independent scientific validation to the binational ballast water regulations. The study analyzed aquatic invasive species invasion rates and shipping data for three different regulatory periods, pre-regulation, partial regulation, and total regulation, and concluded that the Seaway's ballast water regulations are likely the primary, but possibly not only, reason for the dramatic reduction in the apparent invasion rate for the Great Lakes-St. Lawrence River basin. The report states, "To our knowledge, the 2006/2008 regulation is the

⁴ <https://greatlakes-seaway.com/en/commercial-shipping/transiting-the-seaway/ballast-water/>

⁵ https://greatlakes-seaway.com/wp-content/uploads/2023/03/2022_BW_Rpt_EN.pdf

only case of a policy intervention that is linked to a massive reduction of the invasion rate of a large aquatic ecosystem,” and “this case is an encouraging example of binational response to a transboundary problem, whose apparent success was achieved through rigorous application of an evidence-based, operationally feasible management solution involving participation by governments, the shipping industry, and academia from both countries.”⁶ The authors believe that the regulation has likely prevented several disruptive invasions, and it is their opinion that ballast water exchange should be maintained as a requirement for vessels entering the Great Lakes in the future, even if performance standards requiring ballast water treatment systems are imposed on all inbound vessels.

While the GLS has previously received validation of the effectiveness of its ballast water regulations and inspection program this independent validation is the most comprehensive and definitive analysis to date that verifies the effectiveness and success of this important binational environmental program. The GLS is proud of its efforts in serving as an environmental gatekeeper to the St. Lawrence Seaway and will continue to perform these important inspections.

Infrastructure Modernization

The locks, channels, and accompanying infrastructure of the St. Lawrence Seaway owned and maintained by the GLS are “perpetual” transportation assets that require periodic and regular capital reinvestment to continue operating safely, reliably, and efficiently. After 50 years of continuous operation with only minimal capital reinvestment, Congress approved the authorization and funding for the GLS’s infrastructure renewal program beginning in FY 2009. The start of the program marked the first time in the Seaway’s history that a coordinated effort to repair and modernize the U.S. Seaway infrastructure had taken place.

From FY 2009-2022, the GLS spent \$209 million on 62 infrastructure-related projects. Major infrastructure projects completed over that period included maintenance dredging in the U.S. portion of the Seaway navigation channel, lock miter gate and culvert valve machinery upgrades, culvert valve replacements, hands-free mooring installation at the locks, gatelifter upgrades, miter gate rehabilitation, tugboat replacements, and various other structural and equipment repairs and/or replacements.

During the 2022 navigation season, the GLS recorded the lowest level of delays on record for lock-related disruptions to navigation (2 hours, 3 minutes), resulting in a lock availability rate of 99.97 percent for the 286-day 2022 season. The successful planning and execution of the SIP, which began in FY 2009, is a key reason for the achievement of the high reliability rate.

The GLS Seaway Infrastructure Program (SIP) is developed annually by Corporation engineering, maintenance, lock operations, and policy staff following annual winter preventative maintenance work and inspections. This capital planning process ensures that aging machinery, equipment, and parts are rehabilitated/replaced; that buildings for employees and the public, grounds, and utilities are sufficiently maintained/refurbished; and that commercial trade continues to move on the Seaway safely and without interruption or delays.

⁶ Ricciardi, A., & MacIsaac, H. J. (2022). Vector control reduces the rate of species invasion in the world’s largest freshwater ecosystem. *Conservation Letters*, e12866. <https://doi.org/10.1111/conl.12866>

Trade and Economic Development

The statute that created the GLS provided general authority for the Corporation to undertake trade and economic development activities, and this is an important aspect of our mission. In recent years, Congress has provided additional funding for the GLS to expand this program. The GLS devotes resources to economic development activities aimed at increasing commercial trade through the St. Lawrence Seaway and improving economic conditions in the eight Great Lakes States. The primary benefit is the stimulation of U.S. and Canadian port city economies through increased maritime industry activity, including services and employment to support commerce via the Seaway. In 2015, the GLS designated a Great Lakes Regional Representative who leads this value-added service for the wider stakeholder community.

Activities undertaken by the GLS include facilitating new trade for Great Lakes Seaway System ports, conducting trade research and analysis to assist Great Lakes Seaway System stakeholders in identifying cargo trends and new business, participating in joint marketing efforts with the SLSMC, promoting the Seaway System to prospective customers, and assessing the economic impact of Great Lakes Seaway shipping.

The GLS's trade and economic development activities were instrumental in the 2014 launch of the first regularly scheduled international liner service to a U.S. port on the Great Lakes since the 1970's. Working directly with Great Lakes ports, the GLS helps identify ways to increase tonnage traffic in traditional cargoes as well as in diversifying the types of cargo moving through the Seaway.

Additionally, the GLS has been instrumental in the growth of international cruising activity in the Great Lakes. In January 2020, Viking Cruise Line announced its Great Lakes itineraries and the construction of two Seaway-sized cruise vessels. The first vessel made its maiden voyage in May 2022, while the second vessel entered the Great Lakes Seaway System in May 2023. This adds to the nine other cruise vessels that have itineraries in the Lakes. The GLS continues to work with U.S. Customs and Border Protection to find ways to streamline passenger processing and bring more cruise vessels to Great Lakes ports. Seaway stakeholders and Great Lakes communities are realizing the benefits of this growing tourism industry through the economic impact that the Great Lakes passenger cruising is stimulating. It is a success story that has resonated through local communities and is amplified by increasing recognition of the Great Lakes as a destination of choice in national and international profile.

Current Issues

Water Levels – Water outflows and levels from Lake Ontario to the lower St. Lawrence River can significantly impact the safe and efficient operation of commercial navigation in the Seaway. If Lake Ontario water levels reach certain levels, the downstream water levels and regulated outflows can become unsafe for commercial navigation through the Seaway. The 2023 shipping season has not been significantly affected by water level or outflow issues due to less precipitation or drier conditions overall this year.

Lake Ontario water outflows are regulated by the International Joint Commission (IJC), and its International Lake Ontario St. Lawrence River Board (Board) is the entity that manages the outflow rates. Outflows are governed by a water regulation plan, Plan 2014, which the IJC and the Board implemented in January 2017 after many years of interagency and binational discussions regarding the prioritization of uses for the boundary waters. The GLS and the Canadian Seaway have worked closely with the IJC and the Board over the past several years to ensure that the priority rights of the Seaway and commercial navigation established by the U.S. and Canadian Governments in the Boundary Waters Treaty of 1909, reaffirmed by both countries in their concurrence of Plan 2014, and reiterated in the accompanying joint U.S. and Canadian Government documents, including the Supplementary Order of Approval, continue to be respected.

Pilotage – All international vessels entering the Great Lakes St. Lawrence Seaway System are required by U.S. and Canadian regulations to have a certified vessel pilot on board to assist the vessel’s captain in navigating the vessel. The oversight of pilotage services is a state-regulated activity everywhere in the United States, except for the Great Lakes, where pilotage is regulated by the U.S. Coast Guard Office of Great Lakes Pilotage pursuant to the Great Lakes Pilotage Act of 1960.

In addition to overseeing the three U.S. pilot districts in the Great Lakes Seaway System, the U.S. Coast Guard also establishes the rates that the U.S. pilots may charge for the provision of their services to vessel owners. Changes in the rate adjustment methodology have been controversial and have been met with criticism and litigation from various U.S. and Canadian commercial navigation stakeholders. The availability and increasing cost of U.S. pilotage services in the Great Lakes Seaway System are crucial components of the Seaway’s safety and economic competitiveness. It is essential that the availability of Great Lakes Seaway System pilots be maintained in a manner that ensures safety while promoting the competitiveness of the waterway.

Safety – The GLS remains dedicated to safely and efficiently operating the U.S. portion of the St. Lawrence Seaway while also promoting the economic benefits of the marine mode, attracting new cargoes to the Great Lakes Seaway System, and leveraging technology and innovation to enhance the system’s performance and safety. Since the opening of the Seaway in 1959, the GLS has been a model of binational partnership, ensuring that this international waterway is one of the safest and most reliable transportation routes in the world. With the investments being made in the St. Lawrence Seaway by the United States and Canada, it will remain so for many years to come.

Green Shipping Corridor Network – In November 2022, the U.S. and Canada jointly announced the intention to facilitate development of a Green Shipping Corridor Network (GSCN) on the Great Lakes St. Lawrence Seaway System. Since that time, U.S. and Canadian federal agencies have coordinated with state, provincial, local, private-sector, non-governmental, and indigenous peoples’ organizations to begin that process.

On April 4, 2023, the GLS and SLSCM co-sponsored the first-ever Collaborative Forum (Forum) regarding establishing a GSCN on the System. The Forum was designed to create a common body of knowledge to identify opportunities for voluntary collaboration efforts and implementation strategies, based on best available science and technology, explore physical and operational issues affecting development of the GSCN, and establish GSCN Working Groups. It was a highly collaborative event, which included keynote speeches, interactive panels, and robust collaboration among the nearly 100 attendees. Feedback from attendees suggests that the Forum was well received as an informative and constructive first step in establishing the GSCN. The Seaway Corporations will continue to support the U.S. and Canadian governments towards establishment of a voluntary GSCN, including coordination with implementation working groups and planning future forums.

Thank you again for the opportunity to submit this statement for the record.

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