"The strategic importance of the Soo Locks cannot be overstated."

James C. Dalton, Director of Civil Works
U.S. Army Corps of Engineers
New Soo Lock Economic Validation Study
And Post Authorization Change Report
June 29, 2018

Photo courtesy of Roger LeLievre
The Great Lakes are one of America’s most important waterways. Each year they handle more than 150 million tons of cargo. U.S.-flag vessels (lakers) typically carry more than 80 million tons each year. Primary among those cargos are iron ore for steel production, limestone and cement for construction, and coal for power generation.

Lake Carriers’ Association (LCA) has represented U.S.-flag vessel operators since 1880 and is one of the oldest trade associations in the country. Today LCA has 13 members who collectively operate 45 vessels exclusively on the Great Lakes.

LCA is working hard to keep the Lakes a vital part of America’s transportation system. Currently there are four major initiatives: federal, uniform regulations governing vessel discharges, including ballast water; a second Poe-sized lock at Sault Ste. Marie, Michigan; construction of a second heavy icebreaker for Great Lakes service; and system-wide dredging.

Federal, uniform regulation of vessel discharges is important because currently both the U.S. Coast Guard (USCG), the U.S. Environmental Protection Agency and 25 states have their own requirements. Sixteen states have ballast water specific requirements. Therefore, compliance is difficult, if not impossible. That’s why LCA supports the Vessel Incidental Discharge Act (VIDA). The bill sets a uniform, federal standard that is the highest achievable given the current state of technology. As technology advances, so will the discharge standard.

The locks at Sault Ste. Marie, Michigan, connect Lake Superior to the lower four Great Lakes and St. Lawrence Seaway. Only two locks at the “Soo” are viable, and only one, the Poe, is capable of handling the largest and most efficient vessels. As a result, more than 90 percent of all cargo LCA members move through the locks transit the Poe.

Congress has long acknowledged the need for a second Poe-sized lock, and President Trump has publicly supported the project. Much is at stake. The U.S. Department of Homeland Security has forecast a 6-month closure of the Poe Lock would quickly bring steel production and heavy manufacturing to a virtual standstill and leave nearly 11 million Americans unemployed. Unfortunately, a flawed study of the project’s benefit/cost ratio (BCR) held it back.

All that changed in June 2018 when the U.S. Army Corps of Engineers issued its New Soo Lock Economic Validation Study that determined the project has a BCR of 2.42, well above the level required for inclusion in an Administration budget. James C. Dalton, the Corp’s Director of Civil Works, stressed that “The strategic importance of the Soo Locks cannot be overstated.” Another Corps official noted that “We [the Corps] recognize domestic steel production is almost entirely reliant” on the viability of the Soo Locks.

With this hurdle cleared, LCA will focus its efforts on having a substantial portion of the $922 million project estimate included in the Administration’s next budget. Construction is expected to take seven years to complete.

Shortly after our entry in World War II Congress funded construction of a heavy icebreaker to keep cargo moving on the Great Lakes when ice formed. That vessel, the MACKINAW, served the nation well from 1944 until its retirement in 2006. Since then, its replacement has proudly carried the same name, MACKINAW.

Icebreaking is one of the USCG’s most important missions on the Lakes, and to that end, the service supports the MACKINAW with six 140-foot-long icebreaking tugs and two, 225-foot-long buoy tenders with some icebreaking capabilities. Unfortunately, despite the crews’ best efforts, these forces were no match for the winter the winter of 2017/2018 and three of the last five winters.

At one point this winter five of the U.S. Coast Guard’s icebreaking assets were out of service at the same time! The delays in December and January were so significant that LCA members saw 1.8 million tons of cargo either delayed or outright cancelled.

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The USCG has begun the process of modernizing the 140s (they were built in the late 1970s and early 1980s), and this is an important step forward. However, another heavy, MACKINAW-class icebreaker is needed. Initial funding to design the vessel has been appropriated. Now LCA’s resources are focused on funding construction.

Steady increases in funding for dredging have reduced the backlog of sediment that needs to be dredged from ports and waterways from 18 million cubic yards to 13.5 million. However, the backlog must continue to be reduced. The vessels operated by LCA members lose anywhere from 50 to 270 tons of cargo for each inch of reduced draft. Congress must continue to adequately fund dredging the Lakes. Even when the backlog has been cleared, the natural rate of siltation will require that 3 million cubic yards of sediment be dredged each year.

These issues are formidable, but LCA’s members are committed to impacting these desired outcomes. Each year they invest upwards of $60 million to maintain and modernize their vessels in Great Lakes shipyards. Recent years have seen a number of vessels repowered or reconfigured to further reduce the industry’s already small carbon footprint. Everything points to a sustainable future for U.S.-flag shipping on the Great Lakes.

Very respectfully,

Jim Weakley
President
How Best Can The Lakes Serve The Nation

Twin the Poe Lock

- More than 90 percent of the cargo LCA members move through the Soo Locks transit the Poe Lock.
- All iron ore moved by vessel to domestic steelmakers must transit the Soo Locks.
- A second Poe-sized lock at full federal expense has been Congressionally authorized and a June 2018 Corps of Engineers report sets its benefit/cost ratio at 2.42, well above the level required for inclusion in an Administration budget.
- The Department of Homeland Security’s 2016 report on a 6-month closure of the Poe Lock forecasts nearly 11 million Americans would be unemployed as heavy manufacturing slows to a standstill.
- President Trump has made fixing the Soo Locks a national priority.
- Answer: Fund construction of the lock.

Icebreaking Resources Sufficient to Meet the Needs of Commerce

- Cargo movement during the ice season (typically early December through mid-April) can approach 20 million tons, or 15 percent of the annual total.
- Deliveries during this period are critical to maintaining steel production and power generation.
- Only one of the U.S. Coast Guard’s seven icebreakers stationed on the Lakes was built this century. Two other vessels tasked with icebreaking, while relatively new, have limited capabilities.
- U.S. and Canadian icebreaking resources were overwhelmed by the winters of 2014 and 2015 and the cargos cancelled or delayed cost the U.S. economy 5,800 jobs and $1.1 billion in economic activity.
- Another 1.8 million tons of cargo was either delayed or cancelled by heavy ice this past December and January.
- The Coast Guard Authorization Act of 2015 approved building a new heavy icebreaker for the Lakes and funds for initial design have been appropriated.
- Answer: Appropriate funds for construction of the icebreaker.

Enact Uniform, Federal Regulations Governing Ballast Water

- Vessels can transit the waters of many states, Ontario and Quebec in the course of a single voyage, but state regulation of ballast water is creating a patchwork of differing and conflicting requirements.
- The U.S. Coast Guard and U.S. EPA also have ballast water regulations and their requirements differ.
- The uncertainty over ballast water regulations threatens the viability of Great Lakes shipping.
- Answer: Enact the Vessel Incidental Discharge Act and establish uniform Federal regulation of ballast water.

Continue to Reduce Dredging Backlog

- More than 13 million cubic yards of sediment must be dredged from Great Lakes ports and waterways before vessels can again carry full loads.
- Even the loss of just one inch of draft on the largest vessels in the fleet leaves 270 tons of cargo on the dock.
- The Water Resources Reform and Development Act of 2014 requires that expenditures from the Harbor Maintenance Trust Fund be increased each year until they reach 100 percent of receipts by 2025.
- The natural rate of siltation build-up in U.S. Great Lakes ports is 3 million cubic yards per year, so the need for dredging will be constant even after the backlog has been eliminated.
- Answer: Continue to annually increase funding for dredging of Great Lakes ports and navigation channels.
U.S.-Flag Shipments of Dry-Bulk Cargos on the Great Lakes 2012-2017 and 5-Year Average

(\text{net tons})

\begin{table}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline
\textbf{Commodity} & \textbf{2012} & \textbf{2013} & \textbf{2014} & \textbf{2015} & \textbf{2016} & \textbf{2017} & \textbf{Average 2012-2016} \\
\hline
\textbf{Iron Ore} & & & & & & & \\
Direct Shipments & 42,700,840 & 41,218,215 & 41,924,590 & 37,397,501 & 41,094,539 & 41,924,553 & 40,867,137 \\
Transshipments & 2,488,187 & 2,633,826 & 3,699,617 & 3,467,452 & 2,980,293 & 4,064,262 & 3,053,875 \\
\textbf{Total - Iron Ore} & 45,189,027 & 43,852,041 & 45,624,207 & 40,864,953 & 44,074,832 & 45,988,815 & 43,921,012 \\
\hline
\textbf{Coal} & & & & & & & \\
Lake Superior & 11,947,617 & 12,216,668 & 11,325,509 & 12,867,046 & 9,609,901 & 10,254,462 & 11,593,348 \\
Lake Michigan & 2,654,506 & 2,314,161 & 1,870,773 & 1,093,993 & 526,568 & 369,327 & 1,692,000 \\
\textbf{Total - Coal} & 17,579,948 & 18,237,640 & 17,722,489 & 17,654,314 & 12,964,877 & 13,332,497 & 16,841,854 \\
\hline
\textbf{Limestone} & 21,794,394 & 22,111,494 & 21,459,429 & 23,142,584 & 21,193,495 & 21,553,131 & 21,940,349 \\
\textbf{Salt} & 1,020,157 & 1,004,837 & 1,400,068 & 1,411,169 & 1,259,409 & 1,067,836 & 1,219,128 \\
\textbf{Sand} & 336,316 & 371,279 & 376,456 & 319,891 & 265,220 & 375,638 & 333,832 \\
\hline
\textbf{Totals} & 89,474,636 & 89,154,692 & 90,140,143 & 87,201,168 & 83,254,653 & 85,737,884 & 87,845,058 \\
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\textbf{Members}

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Andrie Inc.
Armstrong Steamship Company
Bell Steamship Company
Central Marine Logistics, Inc.
Great Lakes Fleet
Inland Lakes Management, Inc.
The Interlake Steamship Company
Lake Michigan Carferry Service
Pere Marquette Shipping Company
Port City Marine Services
Soo Marine Supply, Inc.
VanEnkevort Tug & Barge Inc.

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The Association Representing Operators of U.S.-Flag Vessels on the Great Lakes Since 1880}