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U.S. Department of Transportation • Saint Lawrence Seaway Development Corporation

WINTER 2020

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The Seaway is Open



The Montreal-Lake Ontario (MLO) Section of the Seaway, including the U.S. section, opened on schedule, April 1. The Welland Canal Section of the Seaway opened to traffic on March 24. The entire Seaway is fully operational and open 24/7.

The Saint Lawrence Seaway Development Corporation's (SLSDC) Marine Services Division completed the Spring Buoy Run in a record 6 days, commissioning all buoys in the U.S. sector.

SLSDC's 2020 Major Winter Work Projects

It was a busy "off season" for the SLSDC. Major projects for the Winter 2020 non-navigation (work) season included rehabilitating the stiff-leg derricks at both locks, replacing damaged concrete in the filling, and emptying culvert valve recesses at Snell Lock and blast cleaning and painting culvert valves.

Rehabilitating all four stiff-leg derricks is one of the significant safety improvement projects of the year. These fixed derrick cranes are located at the upstream and downstream ends of both locks for the



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GUEST COLUMNIST

David Naftzger

Executive Director, Great Lakes St. Lawrence Governors & Premiers



A Fresh Outlook and Bold Goals in 2020

The Great Lakes St. Lawrence Governors & Premiers have bold goals for our region's maritime system — to double maritime trade, shrink the environmental footprint of the region's transportation network and support the region's industrial core. To accomplish these goals, the Governors and Premiers have helped lead a regional coalition including industry, government and other key partners. Actions include investing in critical infrastructure like the Soo Locks and stimulating innovation in new smart shipping technologies.

Ultimately, success depends on growing markets and many groups are working to drive different types of cargoes. In addition to these efforts, the Governors and Premiers have partnered to expand trans-Atlantic trade.

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The Governors and Premiers first commissioned a study on maritime trade with Europe to better understand historical patterns, barriers and opportunities. A partnership was created with the Port of Antwerp in Belgium — the top European trading partner by volume for our region's ports. The study revealed the importance of European trade for our region, and strong growth potential for certain products. Challenges include a lack of visibility in Europe, cost and reliability concerns.

The Conference of Great Lakes St. Lawrence Governors & Premiers (Conference) has spearheaded a campaign to help put our region "on the map" in western Europe. Annual, staff-led missions have helped introduce our region and its maritime opportunities to potential partners in ten different countries. These missions have led to a partnership and series of exchanges with the Central Commission for the Navigation of the Rhine which includes Belgium, France, Germany, the Netherlands and Switzerland.

In April 2020, the Conference will again lead a mission to western Europe. The focus will be on building traffic in break-



bulk, heavy lift and project cargoes, and include participation in the AntwerpXL trade show. Delegation members will include staff from the Saint Lawrence Seaway Development Corporation and representatives of our region's ports that specialize in these types of cargoes. Follow-through will involve continued business development and collaboration with European counterparts including the Port of Antwerp. Port officials are also continuing to engage with our region as we develop smart shipping technologies to improve the safety, speed, efficiency, and environmental footprint of maritime trade.

Separately, and in order to grow a different segment of the maritime market, the Governors and Premiers launched the region's first consumer marketing initiative to boost passenger cruising on the Lakes. Cruise the Great Lakes now includes about two dozen different groups working together to bring more passengers to our region. The Governors and Premiers have also worked with the US federal government and others to deploy a strategy to smooth passenger customs procedures historically one of the biggest barriers to regional cruising. New cruise lines are now entering the region and passenger numbers are forecast to grow in coming years.

The Governors and Premiers continue to seek ways to capitalize on our Great Lakes system and increase our region's economic competitiveness. Thank you to everyone who has played a part in this important work.



Seaway Spotlight

The SLSDC continues its series of videos to highlight the binational system and its remarkable stakeholder community. This video features a conversation with Deputy Administrator Middlebrook and Nicole Trépanier, Director, External Relations for Fednav. Ms. Trépanier shares her thoughts on her new role with Fednav and how to effectively educate the public on the importance of the Seaway.

Via the following link, you can watch a condensed version of this "Seaway Spotlight": bit.ly/2TPXZZ5. Watch the extended version at bit.ly/2lyw7DK.

Any Great Lakes Seaway System stake-holders that will be in Washington, DC at

some point in 2020 are invited to participate in the "Seaway Spotlight" video features. Please contact Nancy Alcalde (Nancy.Alcalde@dot.gov) if you are interested in filming an interview with the Deputy Administrator while you are in DC.



DID YOU KNOW?

2019 Shipping Season Highlights

- In FY 2019, work began to replace the original hydraulic operating machinery of the ship arrestors. The ship arrestors are heavy arresting cable systems deployed across the locks during a transit to prevent vessels from striking the miter gates.
- SLSDC updated its crane fleet with a new "compact" mobile crane. The new crane's load
 rating is slightly less than the 24-year old crane it replaced, but its compact dimensions and
 state-of-the-art control system allow operators to perform similar lifts and more with a higher
 degree of safety and efficiency.



On the Horizon

- In FY20, construction began on a Glosten-designed 60' ice-classed tug to replace the tug *Performance*. The vessel will be the second tug specifically designed and constructed for the SLSDC and is expected to be delivered to Massena, NY in Spring 2021.
- Construction on the Seaway Guardian is 98 percent complete and is undergoing testing trials. The tug is expected to arrive in Massena, NY in Spring 2020.

Season Overview: Great Lakes Cruising 2019

The 2019 cruise season goes down in the record books with the most foreign-flagged cruise ships to sail the Great Lakes St. Lawrence Seaway System in a single navigation season. There were a total of 8 cruise ships, 5 foreign flags representing the Bahamas, Marshall Islands, Wallis & Futuna; 2 U.S.-flagged and one Canadian-flagged. The last time the Great Lakes had this many ships sailing in a single season was back in 2001, with a total of 9 cruise ships, and most of those were flying a U.S. flag. The 2019 season also demonstrated continued interest by the industry, with an increase of one cruise ship when compared to the prior season and the third consecutive year for growth. As depicted in the below chart, the growth will continue into 2020 with Hapag Lloyd's newest ship the Hanseatic Inspiration joining the fleet.



Victory Cruise Lines kicked off the season with the *Victory I* arriving in the U.S. locks on May 12, 2019, followed by the *Canadian Empress*, *Pearl Mist* and the *Victory II*. Having four cruise ships transit the Seaway System between the middle of May to the first of June certainly set the tone for what would be another record-breaking cruise season. The *Le Champlain*, the newest cruise ship to the Great Lakes, conducted her maiden voyage towards the end of the cruise season, followed by the *Hamburg*. Both ships sailed during the fall and provided passengers with the opportunity to experience fall foliage throughout the Great Lakes. The first ship in was also the last ship to leave — the *Victory I*, which wrapped up the 2019 season when it conducted a downbound transit through the Eisenhower lock on

It is estimated that a total of 92 itineraries were sailed between the six cruise lines, and as many as 13,900 passengers visited the Great Lakes on board the eight cruise ships. The increase is positive news for Great Lakes port cities as more cruise ships mean more passengers and a larger economic impact. The ports of Milwaukee, Muskegon, and Cleveland saw a significant increase in the number of port visits this year. Mackinac Island remained the number one port of call, with every cruise ship except the *Canadian Empress* making multiple calls throughout the season.

October 23, 2019.

SLSDC'S 2020 MAJOR WINTER WORK PROJECTS

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purpose of installing stop logs. The stop logs are single-skinned steel structures that span the width of the locks and are stacked in the water one on top of the other to create bulkhead walls. Without these bulkhead walls, the locks could not be dewatered for an emergency during the navigation season or for the winter work season.

Once again this year, there was significant concrete replacement work in the locks. The concrete rehabilitation work in the culvert valve recesses required the removal of damaged concrete surfaces,

which are located up to 100 feet below the top of the lock wall. The damaged concrete is cleaned out, and steel reinforcing is installed to support the newly placed concrete. The new concrete will be placed using a process called shotcreting, which uses compressed air to spray the concrete mixture on to the prepared surfaces.

Almost 10 years ago, prototype singleskinned culvert valves were installed at the upstream end of Snell Lock. An upstream and downstream pair of culvert valves control the flow of water into and out of the lock through the concrete culverts that run the length of the lock and are approximately 14 feet wide by 14 feet tall. These prototype valves were proven successful and are now installed at Eisenhower lock with only the original downstream valves at Snell Lock remaining to be replaced. The upstream valves at Snell Lock will be removed this winter, blast cleaned, inspected, repaired, repainted, and then, reinstalled after the concrete repair work is completed in those recesses.

For an inside look at a Day at the Locks, watch the <u>Winter Works</u> video narrated by Jeffrey Scharf, SLSDC's Director of the Office of Engineering and Maintenance.



2019 Navigation Season Review

The 2019 St. Lawrence Seaway navigation season had its share of strengths but could not quite measure up to 2018's breakout season (the strongest cargo volume in a decade). By comparison, 2019 posted a total of 38,304 million metric tons of cargo moved through the Seaway — a 6.6 percent decrease over the previous year. Even with this decline over 2018, Seaway volume kept pace with its five-year average.

The key cargo performers through the 2019 navigation season were in the dry bulk sector where an 8.5 percent gain in year-over-year cargo shipments took place. The key commodities leading to this growth were gypsum, coke, potash, cement, and salt. Liquid bulk was also strong, showing a 2 percent growth in year-to-year tonnage over 2018. And project cargo throughout the system was strong in both U.S. and Canadian ports. Of particular note was the volume of wind energy equipment delivered into the system. At least ten Great Lakes ports received vessel calls with blades, towers. or generators from 8 countries with Duluth, Johnstown, Ogdensburg, and Bay City seeing the most activity. Another cargo not seen in the system for a while, European lumber, was also visible during the 2019 season with vessel calls into Chicago, Milwaukee, and Duluth.

The positive gains in these sectors, however, could not overcome significant volume declines in the systems' traditionally strong commodity formula "steel in, grain out." Inbound steel for the manufacturing sector was impacted significantly throughout the system by U.S. tariffs on European steel. On the export side, United States agricultural products available for export were dramatically reduced due to Spring flooding that kept many Midwest fields from being planted on time, and in far too many cases, from being planted at all. Subsequently, the harvest season was both late and smaller



In October 2019, the *MV Happy Ranger* delivered a stator that will be used at DTE Energy's Fermi 2 Nuclear Power Plant. The ship visited the Port of Monroe before it departed for Peru. It was carrying wind tower segments retrofitted at Ventower Industries in Monroe. Photo credit: Paul LaMarre, Port of Monroe

in volume. This reduced yield, in combination with the European Union (EU) tariff on U.S. corn, simply left a decreased amount of U.S. agricultural products exportable out of the system in 2019. Other cargoes seeing year-over-year declines in volume were iron ore and coal.

The navigation season did have some highlights that will make 2019 a year to remember for ports. Port Monroe made history by handling the most valuable piece of cargo that may have moved through the system to date, a stator delivered by the M/V Happy Ranger from Rotterdam, Netherlands that was then railed on the port's new rail spur to the nearby DTE Energy power plant. Making it a tremendous example of the system's cargo diversity was the load of 42 wind tower segments manufactured at Ventower, a wind energy manufacturing company based in Monroe, and shipped to Peru.

The Port of Duluth-Superior had a record-setting season in wind energy project cargo with over 306,000 tons of cargo, the most in over a decade. With

a strong finish to the season, the Port also increased its export of grain in 2019 season by 15 percent over 2018.

Thanks to Canadian aluminum, the ports of Oswego and Toledo saw their volumes increase significantly through the remainder of the season.

Elsewhere in the system, the Port of Cleveland saw general cargo tonnage increase by 9 percent year over year, Port Milwaukee was able to maintain its inbound steel tonnage, in large part due to its water to rail connectivity and regional customer base, and Ports of Indiana-Burns Harbor saw an increase in its export grain shipments compared to 2018.

All in all, there were some silver linings to the 2019 navigation season, and the system showed resiliency to withstand some difficult challenges.

Seaway Guardian Update

Construction on the Seaway Guardian is 99 percent complete as final installations near completion in the wheelhouse. The vessel continues to undergo a rigorous set of owner dock trials. These dock trials are necessary and allow the shipyard and their sub-contractors to demonstrate to the SLSDC that all installed equipment starts and operates in accordance with the design specifications. Once dock trials are complete, the vessel will be drydocked for a final hull cleaning and to prepare to have it towed to Port Fourchon for sea trials, then delivery.

While dock trials continue, outfitting of all the interior spaces continues. All the crew living spaces are complete and undergoing inspection by representatives from MiNo Marine and ABS to ensure all construction was completed in accordance with the specifications.

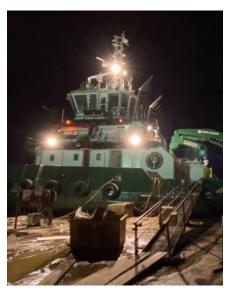
Following the successful completion of sea trials, the tug will be delivered and is expected to arrive in late Spring 2020.



Seaway Guardian on Transporters



Seaway Guardian



Seaway Guardian docked with crane installed

Maritime Industry Turns Out at Great Lakes Waterways Conference



The 2020 Great Lakes Waterways
Conference brought together over 150
leaders, experts, and influencers from
across the maritime industry on February
11 and 12 in Cleveland. The annual
meeting between the U.S. and Canada
focused on topics including new maritime technologies, trade development,
cruising in the Great Lakes, shipbuilding,

and ballast water management. Deputy Administrator Middlebrook shared the podium with Canadian Seaway Corporation President and CEO, Terry Bowles, to discuss technology innovations being developed for the Seaway System to keep the waterway safe and reliable. He provided an update on the new traffic flow management technology being developed jointly with experts at the Volpe Transportation Center. He also spoke about the latest Ballast Water Working Group report indicating that every tank of every ocean vessel

entering the Seaway was inspected or reviewed during the 2019 navigation season — a total of 9,167 tanks.

The Waterways Conference is one of the few annual events within the United States that brings together all the stakeholders in the Great Lakes St. Lawrence Seaway System to share developments affecting the Great Lakes maritime industry. Those who attend always come away with new information and an appreciation of other maritime industry perspectives.

USDOT Port Infrastructure Grant Funds Available

The U.S. Department of Transportation (DOT) announced on March 2, 2020 a Notice of Funding Opportunity (NOFO) to apply for Port Infrastructure Development Program grants, with \$225 million available this year. The minimum award size is \$1 million with a federal cost-share not to exceed 80 percent. The deadline to apply for these grants is May 18,



2020 at 8:00 pm EDT. To provide technical assistance, DOT will host a series of webinars during the grant application process. Details and registration information regarding these webinars will be made available at www.transportation.gov/portgrants. Additional information can be found at https://www.maritime.dot.gov/PIDPgrants.

Personnel News



Steve Lawrence

On January 16, Ogdensburg Bridge and Port Authority named **Steve Lawrence** interim executive director. Lawrence has served as Director of Operations at the authority for 19 years. He replaces Wade Davis, who announced his resignation from the executive director's position in December 2019.

The Ogdensburg Bridge & Port Authority is a New York State Public Benefit Corporation operating the Port of Ogdensburg, the Ogdensburg-Prescott International Bridge, the Ogdensburg International Airport, Commerce Park and the New York & Ogdensburg Railway.