

**Great Lakes Division**

**The Company of Master Mariners of Canada**



## **Guest Speakers' Presentations – Navigation Cadets**

**Erin Carey, Georgian College**

**Balaji Dhananjay, Georgian College**

**Cora Kehoe, Nova Scotia Community College**

**Caue Longhi, British Columbia Institute of Technology**

# **Great Lakes and Marine Industry News Update**

**(available to CMMC members for the purpose of education and information)**

**January and February 2024**

**Algoma Central Corporation  
continues to grow product tanker  
business with the acquisition of  
two additional vessels**

January 18, 2024

**St. Catharines, Ontario (January 18, 2024) — Algoma Central Corporation announced that the Company has acquired two 2009 built, 16,600 dwt product tankers from Norway’s Knutsen OAS Shipping. “We identified an opportunity to secure high-quality ice-class product tankers suitable for trading in Canada and in Northern Europe. The vessels will initially be on bareboat charters back to the sellers. Following completion of their bareboat charters later this year, Algoma plans to begin trading one vessel in the Company’s Canadian fleet and one in Europe.**



# CSL Recognized as Top Employer for Young People for Third Consecutive Year

Jan 23 2024



Canada's Top Employers for Young People recognize employers that offer the nation's best workplaces and programs for young people. Evaluation criteria include attraction and retention programs, mentorship and training programs and career management programs.

CSL is proud to announce its third consecutive recognition as one of Canada's Top Employers for Young People. This acknowledgment underscores CSL's ongoing commitment to offering a dynamic and rewarding workplace for young maritime professionals.

Guided by a culture that values excellence, diversity, and innovation, CSL continues to spearhead initiatives that empower the development and growth of individuals in the early stages of their careers. The company's progressive approach and workplace programs play a pivotal role in attracting and retaining top young talent, including cadets and interns who make up approximately 10% of CSL's workforce each year.

## **Port of Sept-Îles reclaims second place among Canadian ports with 2023 cargo record**

•Par Maritime Magazine 2024-01-23



**The Port of Sept-Îles revealed that it had reached an all-time high with 36.6 million metric tons of cargo handled at its facilities in 2023. The previous record was set in 1979 with 34.9 million metric tons.**



**YOUR** MARINE  
CARRIER OF CHOICE.™

**Algoma 125 year anniversary**



## **Congratulations!**

**Capt. Peter Burgess on his retirement  
as Senior Marine Officer for the St.  
Lawrence Seaway Management  
Corporation**

**45 years in the marine industry and  
27 years with the SLSMC**



## Winter Layup for Amy Lynn D and Sheri Lynn S Tugs

Picton Terminals and PT Times

**H. R. Doornekamp Construction Ltd. celebrates 45 years of construction and engineering excellence**





# Bayship Layup

Sturgeon  
Bay, Wisc.

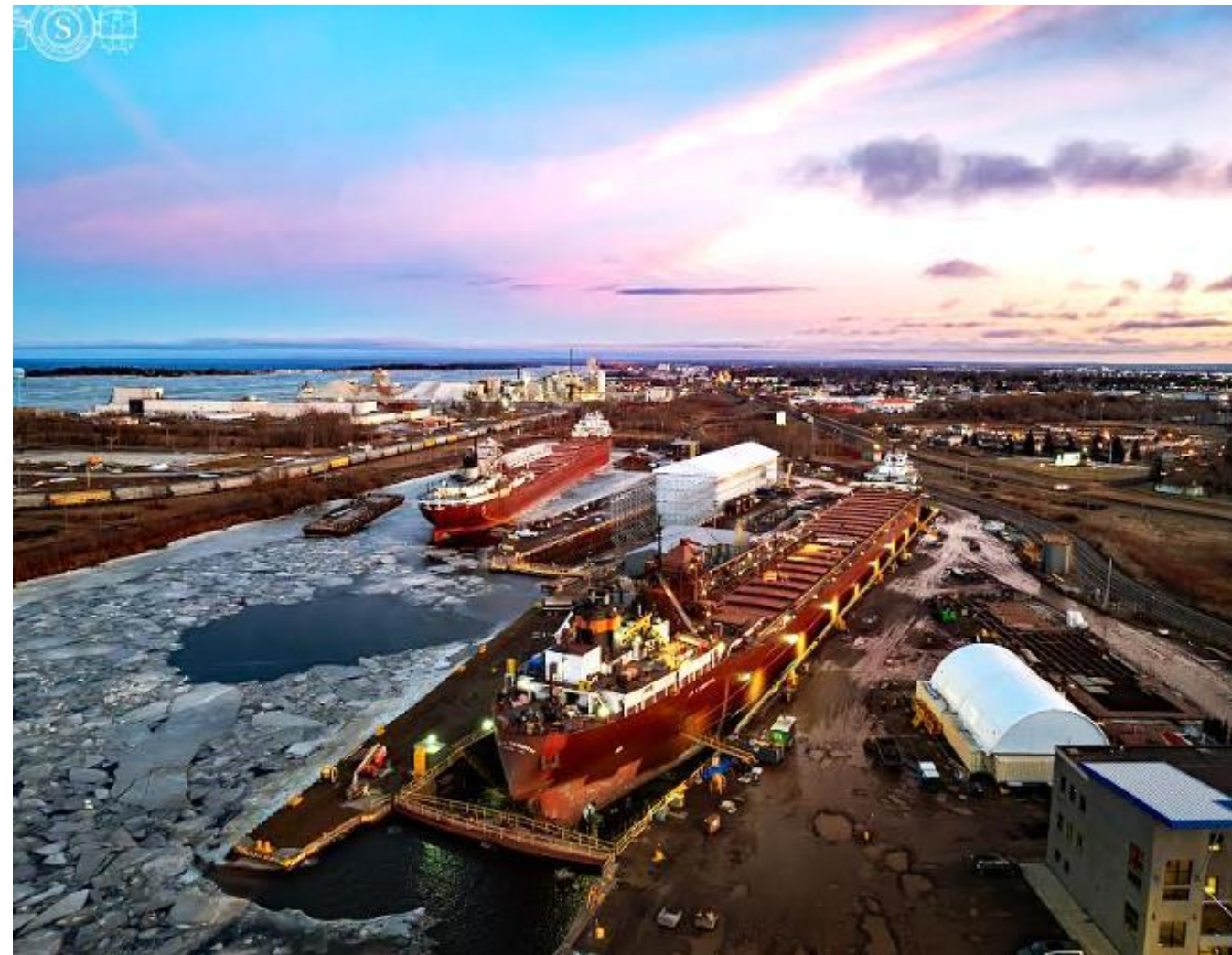
2023 -  
2024

[Door County  
Drone]

**U.S.-Flag Dry-Bulk Cargo Carriage on the Great Lakes**  
**2018-2023 and Long-Term Average**  
 (net tons)

<b>Commodity</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Average 2018-2022</b>
<b>Iron Ore</b>							
<i>Direct Shipments</i>	<i>41,711,804</i>	<i>46,004,805</i>	<i>33,422,404</i>	<i>37,960,232</i>	<i>35,370,648</i>	<i>39,008,635</i>	<i>38,893,979</i>
<i>Transshipments</i>	<i>4,092,629</i>	<i>3,678,669</i>	<i>3,637,614</i>	<i>3,690,957</i>	<i>2,017,176</i>	<i>3,375,654</i>	<i>3,423,409</i>
<b>Total - Iron Ore</b>	<b>45,804,433</b>	<b>49,683,474</b>	<b>37,060,018</b>	<b>41,651,189</b>	<b>37,387,824</b>	<b>42,384,289</b>	<b>42,317,388</b>
<b>Coal</b>							
<i>Lake Superior</i>	<i>8,697,702</i>	<i>7,952,133</i>	<i>4,930,728</i>	<i>7,268,985</i>	<i>6,160,250</i>	<i>5,367,531</i>	<i>7,001,960</i>
<i>Lake Michigan</i>	<i>390,438</i>	<i>723,841</i>	<i>560,057</i>	<i>827,962</i>	<i>878,467</i>	<i>803,237</i>	<i>676,153</i>
<i>Lake Erie</i>	<i>2,728,192</i>	<i>2,642,972</i>	<i>1,764,650</i>	<i>2,255,738</i>	<i>2,262,121</i>	<i>2,230,065</i>	<i>2,330,735</i>
<b>Total - Coal</b>	<b>11,816,332</b>	<b>11,318,946</b>	<b>7,255,435</b>	<b>10,352,685</b>	<b>9,300,838</b>	<b>8,400,833</b>	<b>10,008,847</b>
<i>Limestone</i>	<i>21,961,050</i>	<i>24,086,722</i>	<i>20,694,823</i>	<i>24,141,410</i>	<i>23,704,683</i>	<i>24,631,568</i>	<i>22,917,738</i>
<i>Cement</i>	<i>2,933,346</i>	<i>3,288,509</i>	<i>3,441,467</i>	<i>3,612,012</i>	<i>3,748,705</i>	<i>3,732,534</i>	<i>3,404,808</i>
<i>Salt</i>	<i>460,577</i>	<i>923,476</i>	<i>866,354</i>	<i>1,162,396</i>	<i>1,230,538</i>	<i>1,158,665</i>	<i>928,668</i>
<i>Sand</i>	<i>493,128</i>	<i>413,040</i>	<i>411,165</i>	<i>500,055</i>	<i>653,695</i>	<i>734,591</i>	<i>494,217</i>
<i>Grain</i>	<i>259,745</i>	<i>289,728</i>	<i>314,849</i>	<i>366,154</i>	<i>356,503</i>	<i>314,513</i>	<i>317,396</i>
<b>Totals</b>	<b>83,728,611</b>	<b>90,003,895</b>	<b>70,044,110</b>	<b>81,785,901</b>	<b>76,382,786</b>	<b>81,356,993</b>	<b>80,389,061</b>

**LCA  
Stats**



## **U.S. shipping companies pour \$120 million into Great Lakes states**

**CLEVELAND, OH – The annual process of maintaining the U.S.-flagged fleet of “lakers” on the Great Lakes began in mid-January after the navigational locks connecting Lake Superior to the lower lakes closed for repairs. U.S. companies will invest more than \$120 million into their vessels bringing skilled labor to shipyards and repair facilities around the Great Lakes states. The state receiving the largest sum was Wisconsin with \$55 million followed by Ohio with \$39 million, Pennsylvania at \$19 million, and \$7 million in Michigan.**

**Lee A Tregurtha getting fresh coat of paint [David Schauer]**

LCA

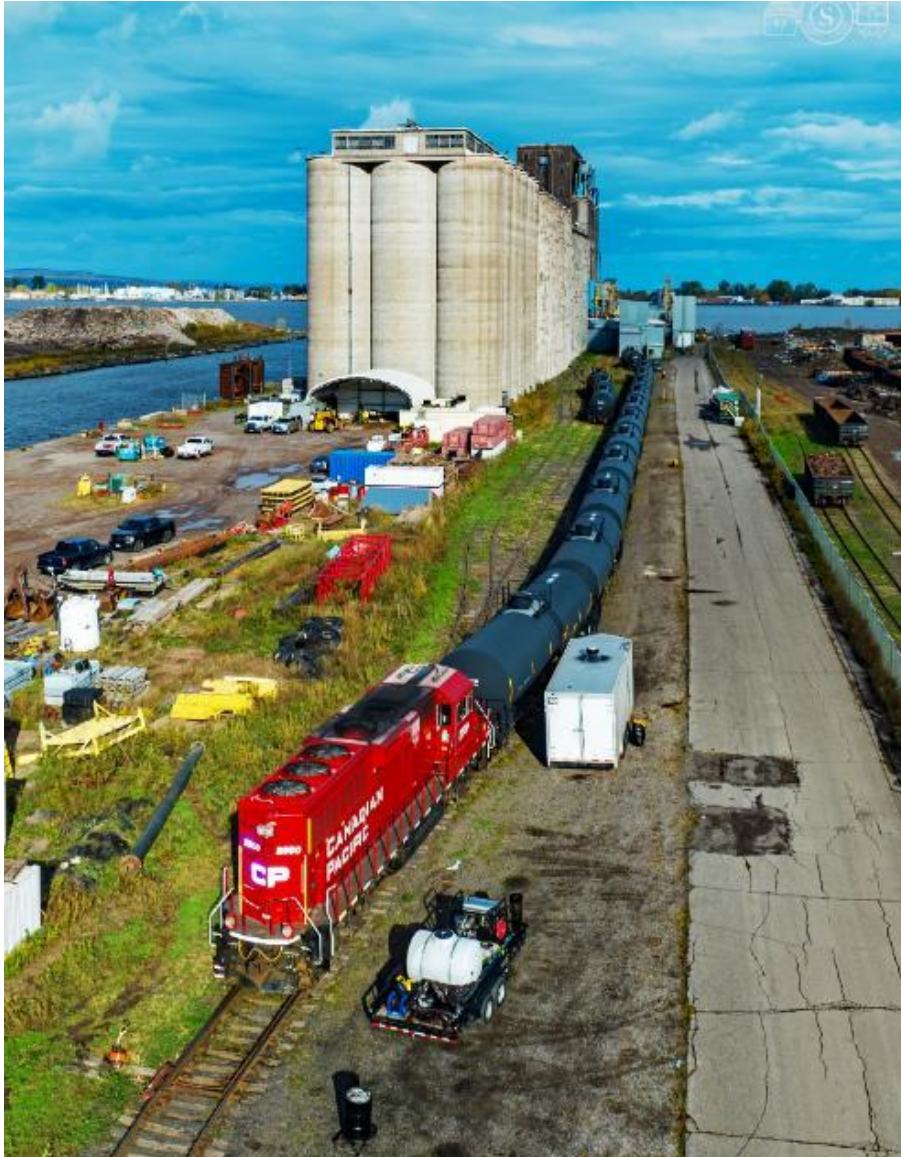
**Kathy McKeil arrives in China for conversion to bulk carrier**

**McKeil Marine's latest, Kathy McKeil, arrived at Jingjiang Ship Industry in Jingjiang. She will be converted from a tanker to a bulk carrier over the next several months. The vessel was the former Algosea of Algoma Central Corp.**

Boatnerd

**Kathy McKeil @ Sarnia last fall** [Bill Moran]





## Capitol [AGP] Elevator to be leveled

Get your shots of the old unused Capitol (AGP) elevator as the port was awarded money to level it and turn it into more storage space.

**“Duluth Seaway Port Authority (\$7.57 million) – Hazardous materials abatement; demolition of existing buildings, including dilapidated grain elevators; recycle concrete from demolition for reuse on-site; deck and access road restoration; installation of utilities to create four-acre laydown area. The total project cost is \$9.5 million.”**

David Schauer

**AGP elevator** [David Schauer]



The Seafarers' International Union of Canada (SIU) have published a report on workplace harassment and bullying within the Canadian marine sector, which indicates that 46% of seafarers have experienced harassment or bullying at some point in their career as a seafarer.

## Seafarers' Union Releases Report on Harassment in Canadian Marine Sector

February 5, 2024

SIU

## **Some of the key findings from the SIU survey are:**

- 46% of seafarers have experienced harassment at some point in their career.**
- 69% of female seafarers have experienced harassment at some point in their career.**
- 9% of seafarers have experienced sexual harassment at some point in their career.**
- 35% of female seafarers have experienced sexual harassment at some point in their career.**
- 67% of those who have been harassed at work were harassed by a superior.**
- 48% of those who have been harassed did not report inappropriate behaviour to their employer.**
- 60% of seafarers answered 'no' or 'not sure' when asked if they felt their employer is doing enough to protect them from harassment at work.**



QUÉBEC CITY, Feb. 6, 2024 /CNW/

**G3 Canada, which operates the grain elevator in Quebec City, is proud to announce the renewal of its long-term partnership with the Port of Québec. After more than 50 years, the close collaboration between G3 and the Port will continue for another 30 years, making Québec City a hub for agri-food exports in Eastern Canada.**

## **G3 Canada to operate at the Port of Québec for another 30 years**

(CNW Group/G3 Canada Limited)

CNW Group





2023  
**IMAGINE MARINE**  
WRAPPED

## Attracted the Participation of 43 Marine Sector Organizations

Working together from Coast to Coast to help attract and retain a new generation of marine workforce talent.

5  
federal government  
departments

6  
ports, terminals,  
and seaways  
operators

12  
vessel  
operators

6  
academic & training  
organizations

3  
unions & labour  
organizations

11  
marine suppliers,  
industry associations  
and student  
organizations





## **Tour of Ontario DryDocks**

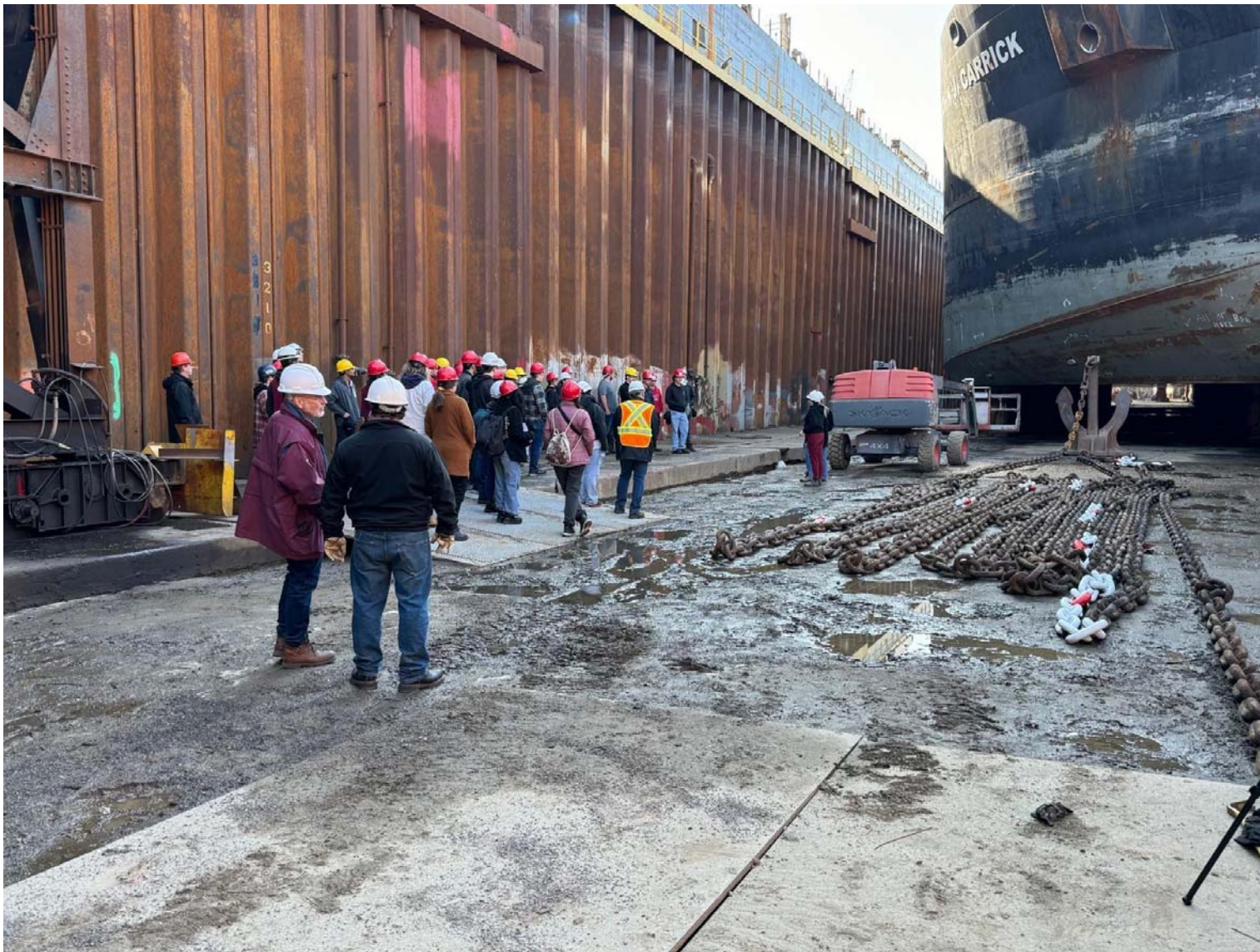
**Georgian  
College  
Navigation and  
Engineering  
Cadets**

**February 9,  
2023**

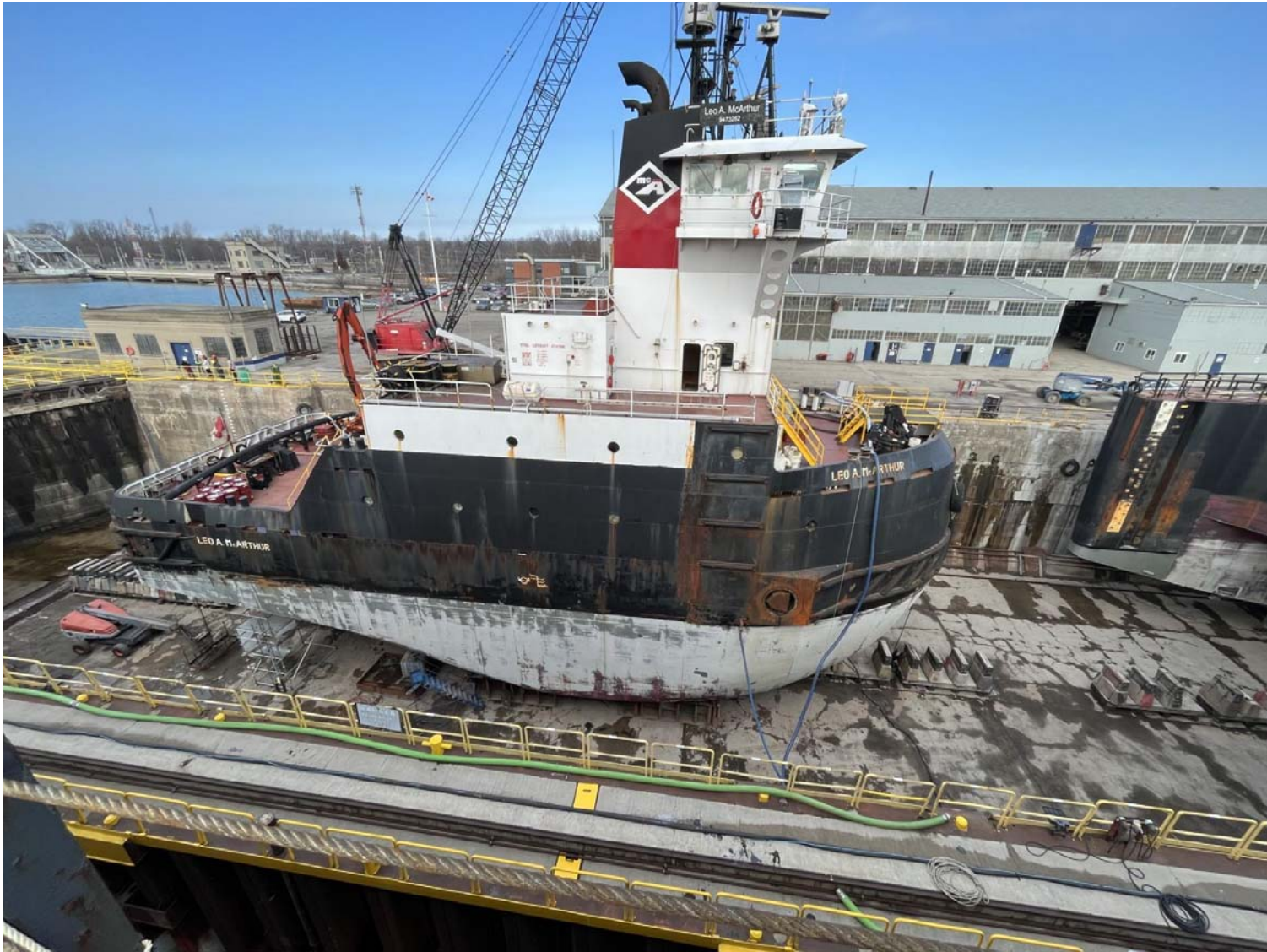


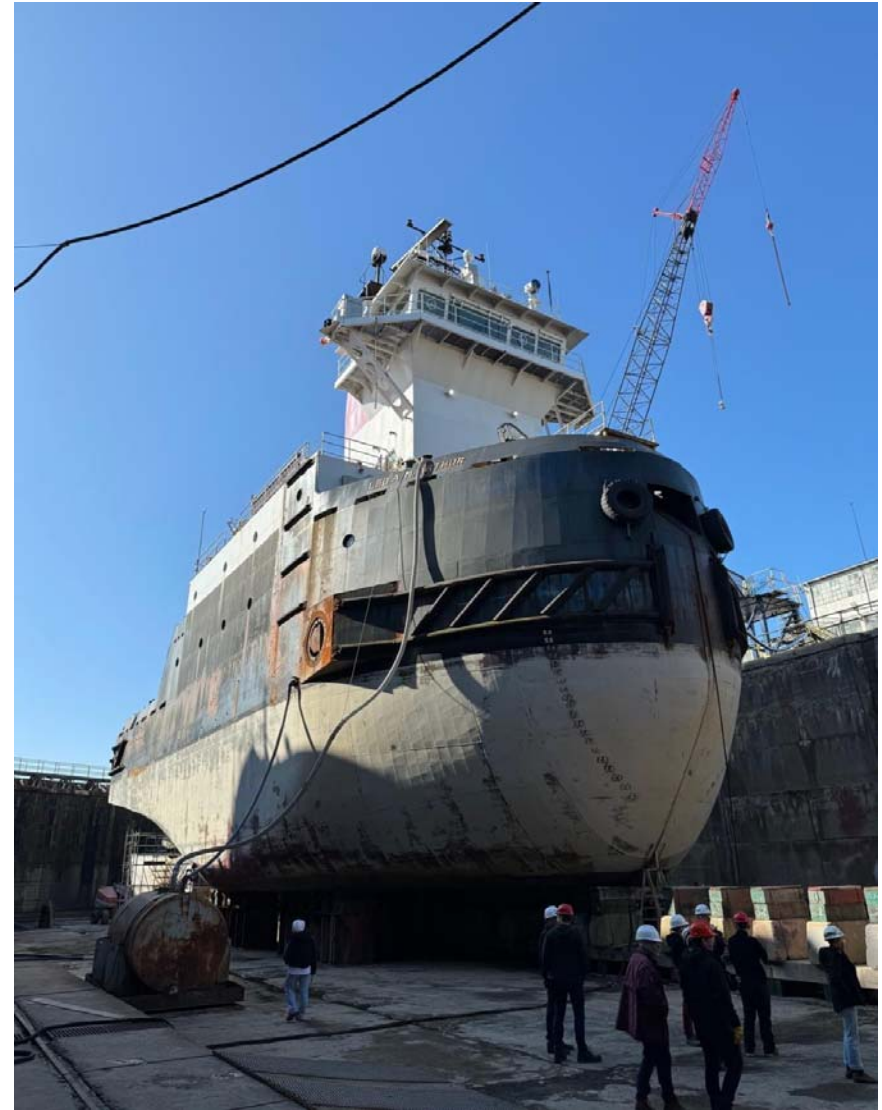
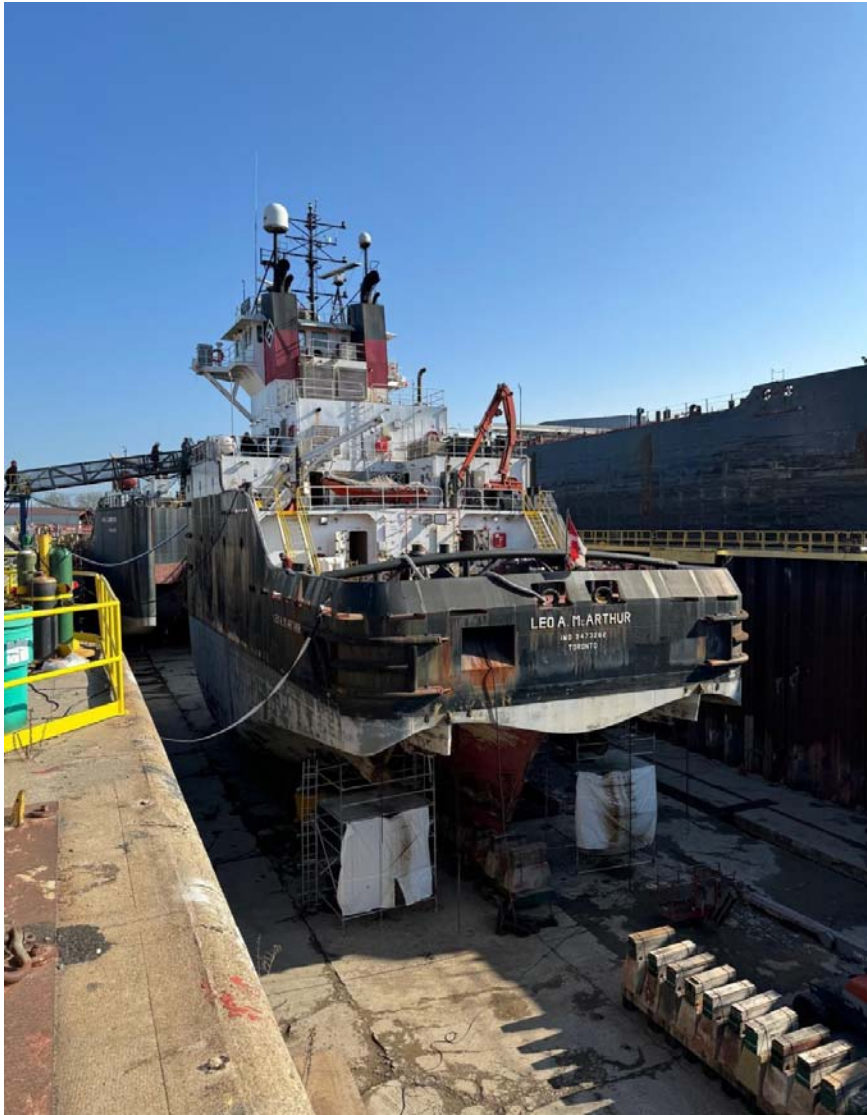
**Funding  
sponsors Great  
Lakes CMMC,  
ISMA Lodge 15,  
CIME, Marine  
Club**

**Tour enabled by  
Ontario Dry  
Docks,  
McAsphalt  
Marine, Sea  
Eagle II**



**Capt. Rick  
Whyte, GL CMMC  
and Capt. Seann  
O'Donoghue GL  
CMMC and ISMA  
Lodge 15  
...supervising!?!**









# Canadian Coast Guard Ship Griffon Vessel Life Extension Contract Awarded

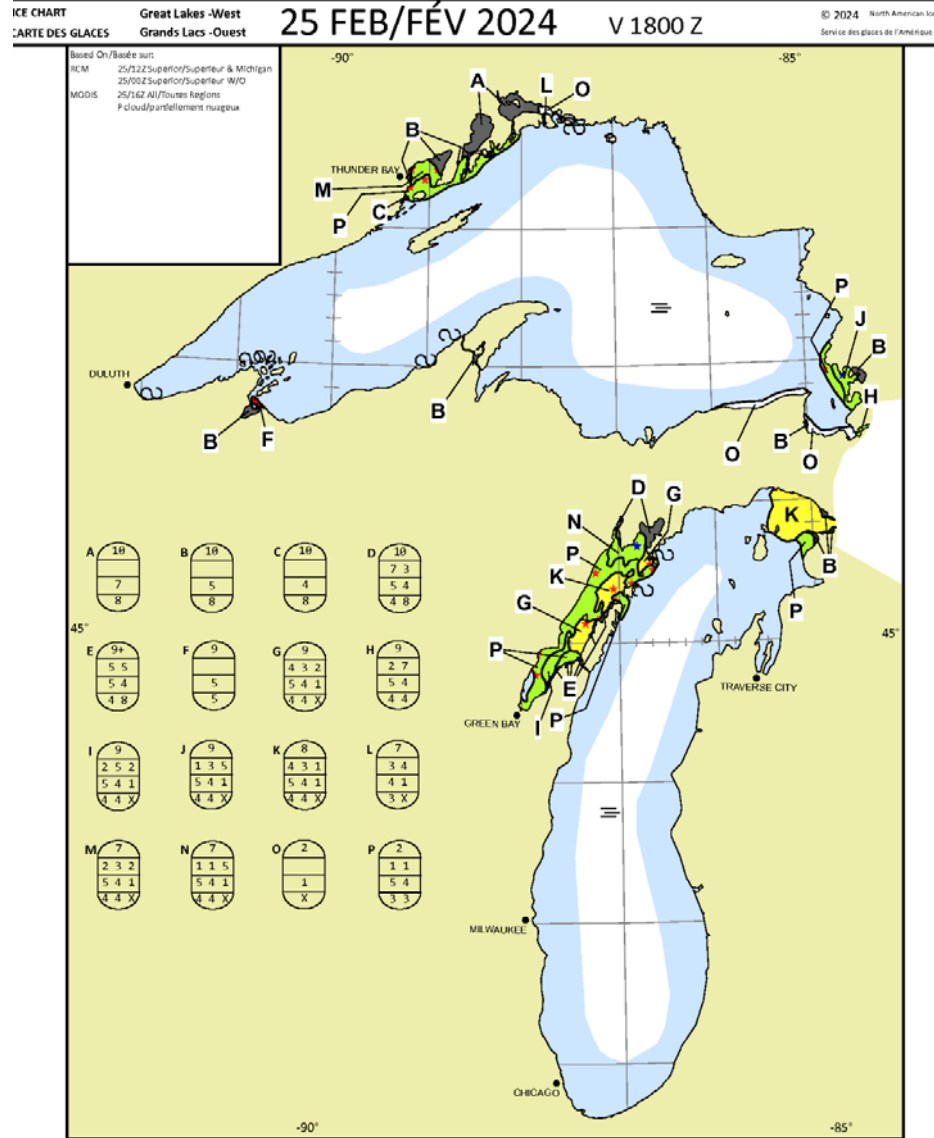
NEWS PROVIDED BY Fisheries and Oceans (DFO) Canada Feb 21, 2024, 11:15 ET

**The Minister of Public Services and Procurement, the Honourable Jean-Yves Duclos, on behalf of the Minister of Fisheries, Oceans and the Canadian Coast Guard, announced a contract award following a competitive process, valued at \$44 million to Ocean Industries Inc. for the vessel life extension of the CCGS Griffon.**

**Scheduled to take place from June 2025 to October 2026, the vessel life extension work entails refurbishing and repairing the main propulsion motors, the steering gear system, the four main propulsion generators, and the main emergency switchboards. New equipment installations include a new stores crane, mast, propulsion control system, set of propellers, oily water separator, boilers, HVAC units, sewage treatment plant, and various piping replacements, all of which will increase the vessel's operational life and maintain its safety and reliability**



# Ice Charts from ECCC



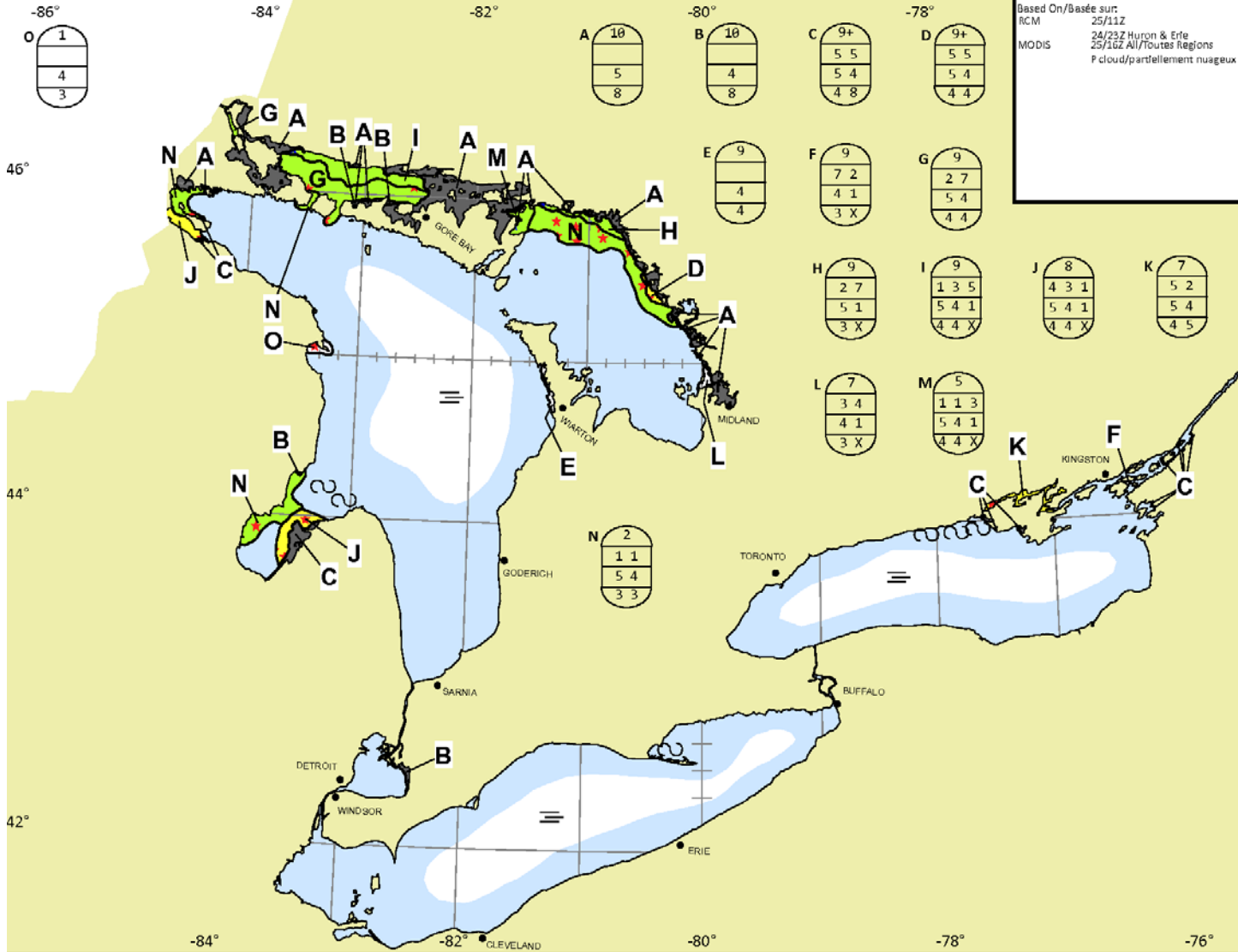
ICE CHART  
CARTE DES GLACES

Great Lakes -East  
Grands Lacs -Est

25 FEB/FÉV 2024

V 1800 Z

© 2024 North American Ice Serv  
Service des glaces de l'Amérique du Nc



Ice Charts  
from  
ECCC

# GREAT LAKES SURFACE ENVIRONMENTAL ANALYSIS (GLSEA)



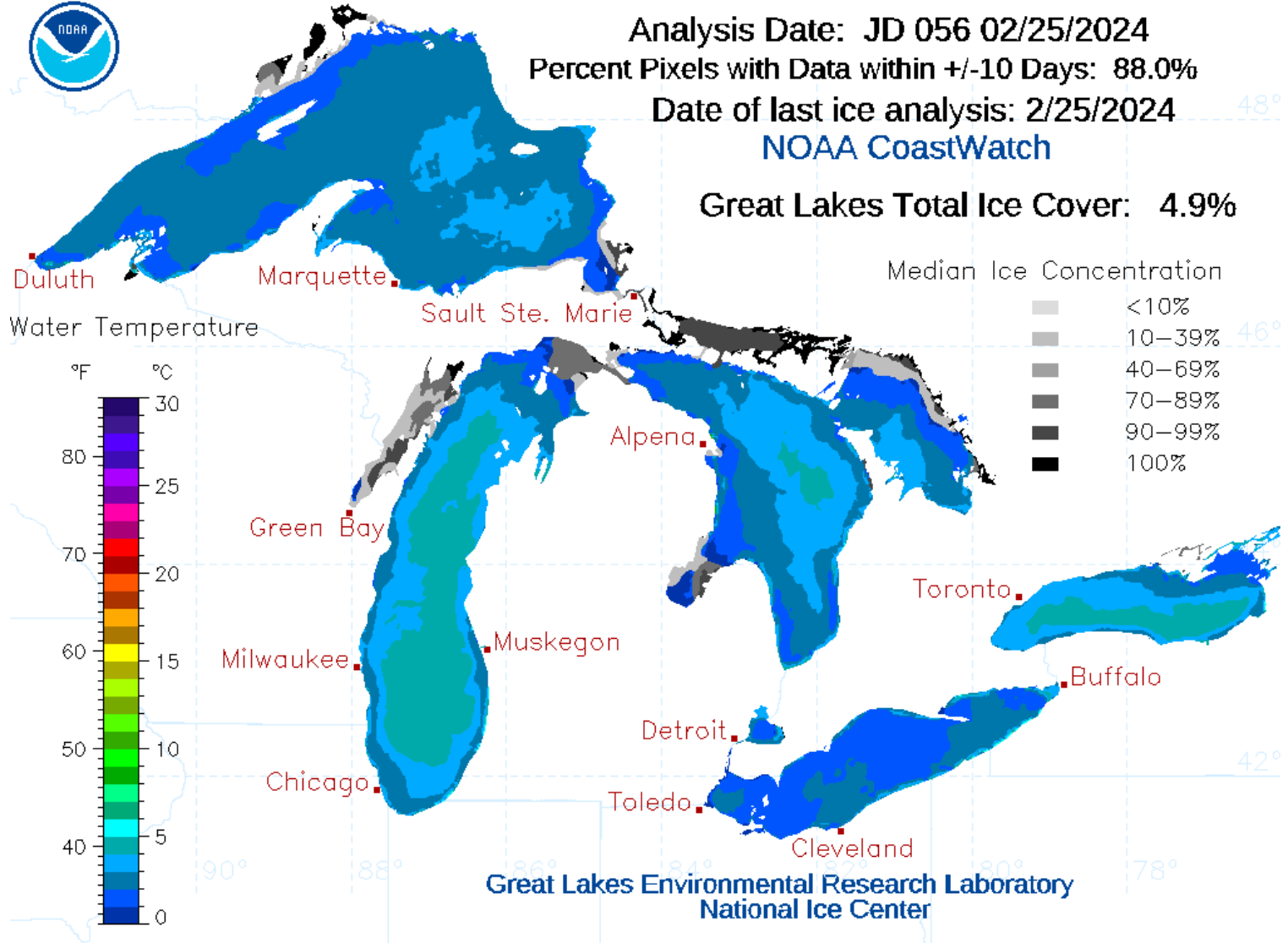
Analysis Date: JD 056 02/25/2024

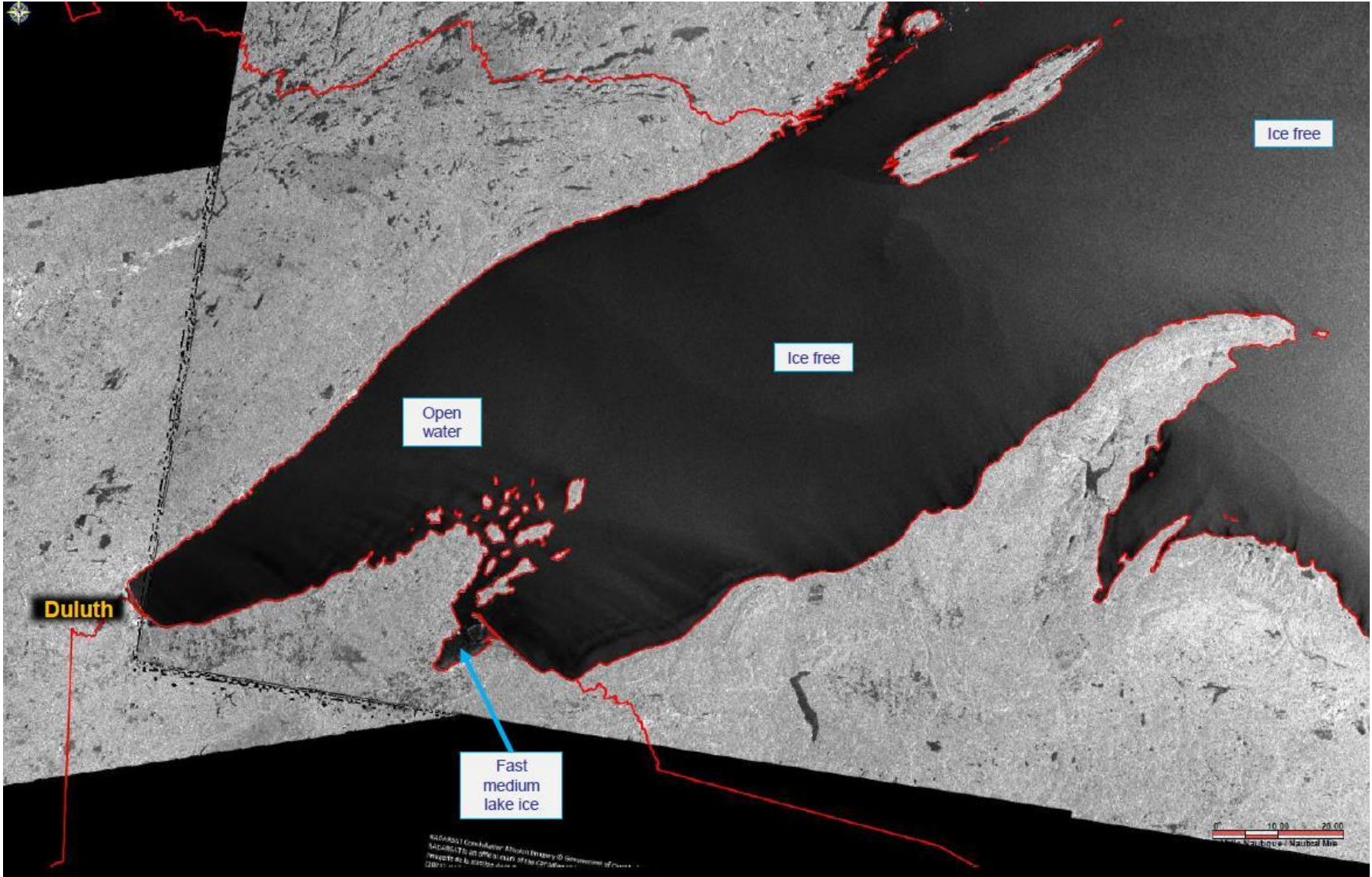
Percent Pixels with Data within +/-10 Days: 88.0%

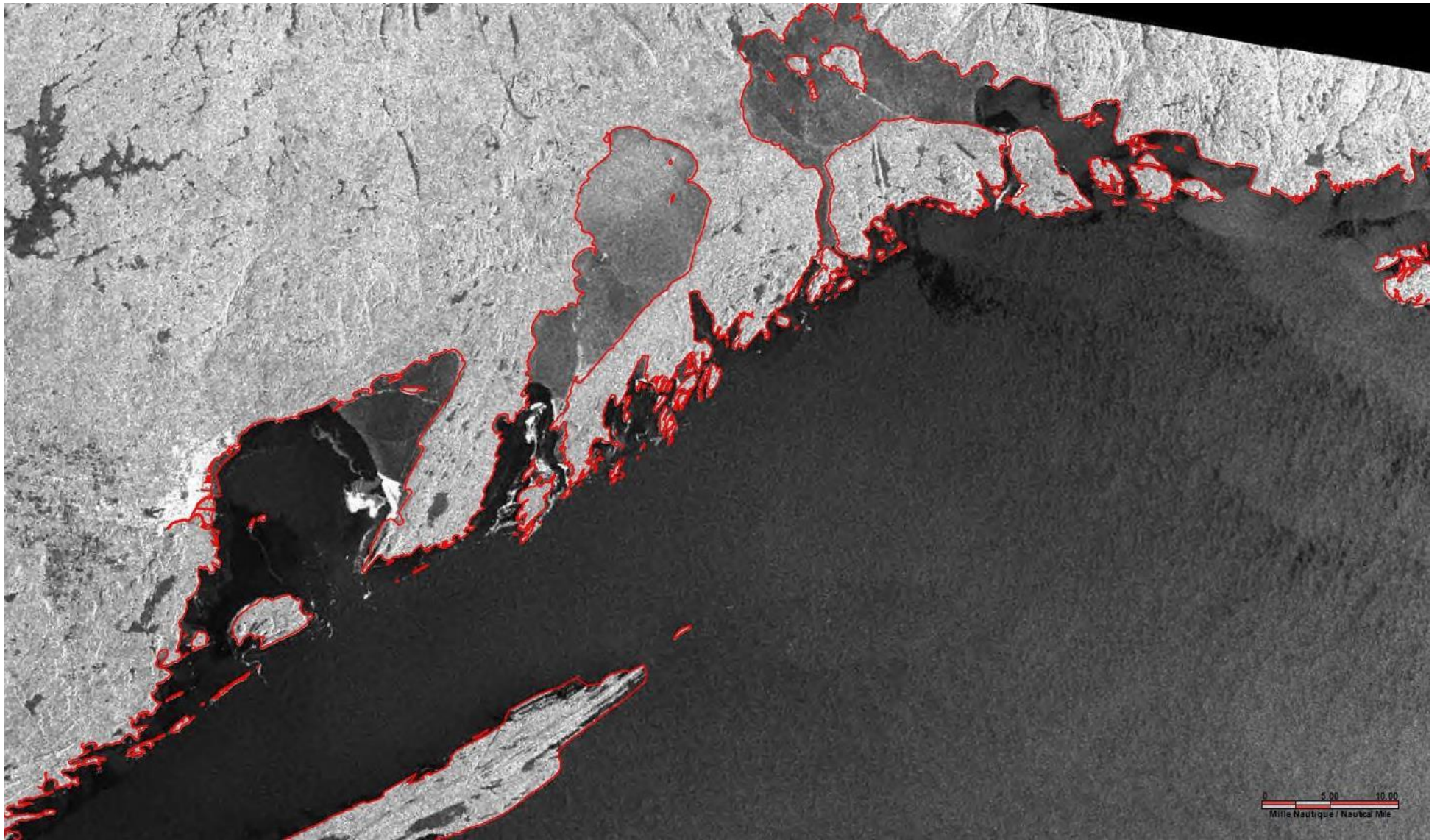
Date of last ice analysis: 2/25/2024

NOAA CoastWatch

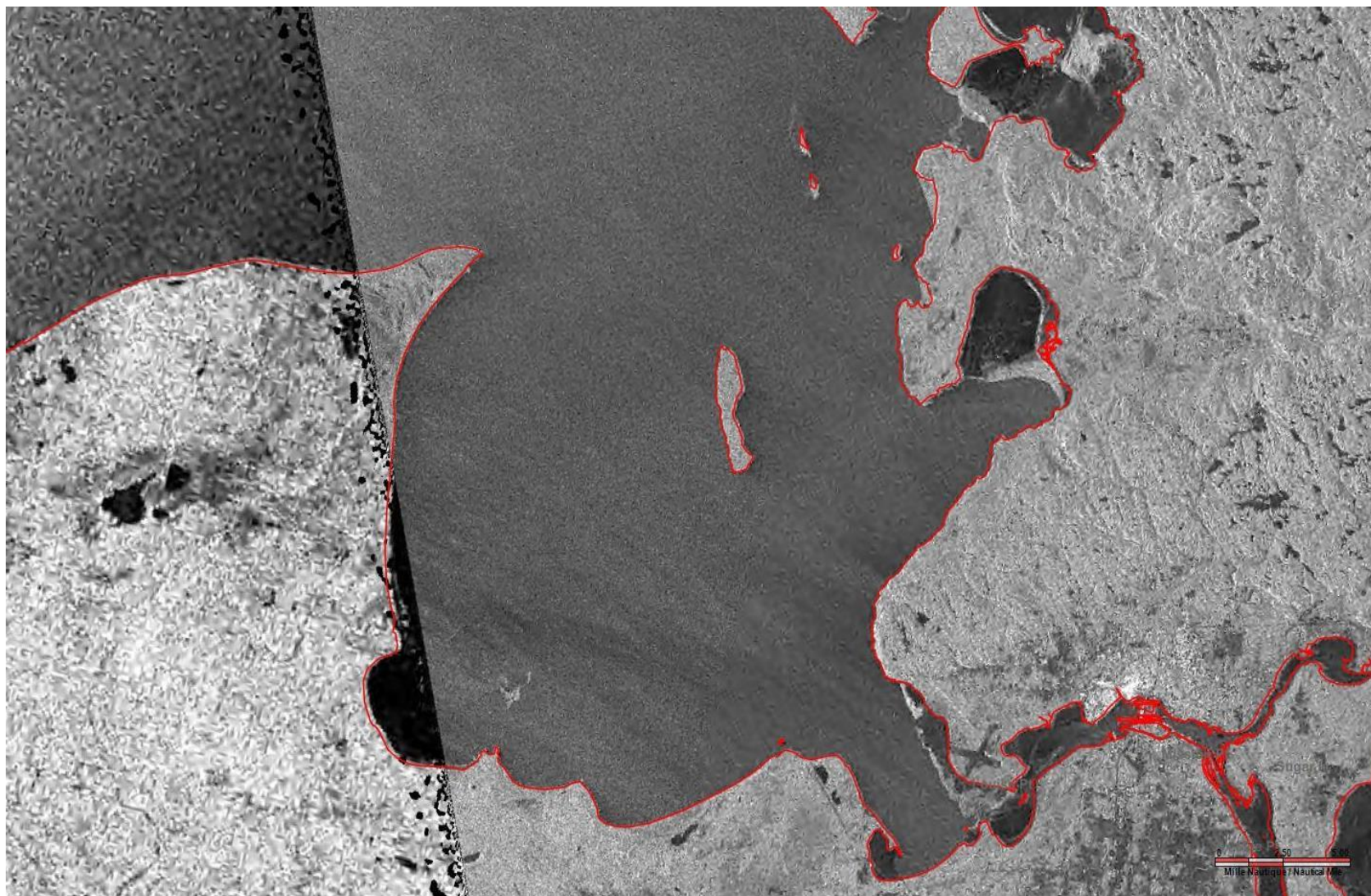
Great Lakes Total Ice Cover: 4.9%

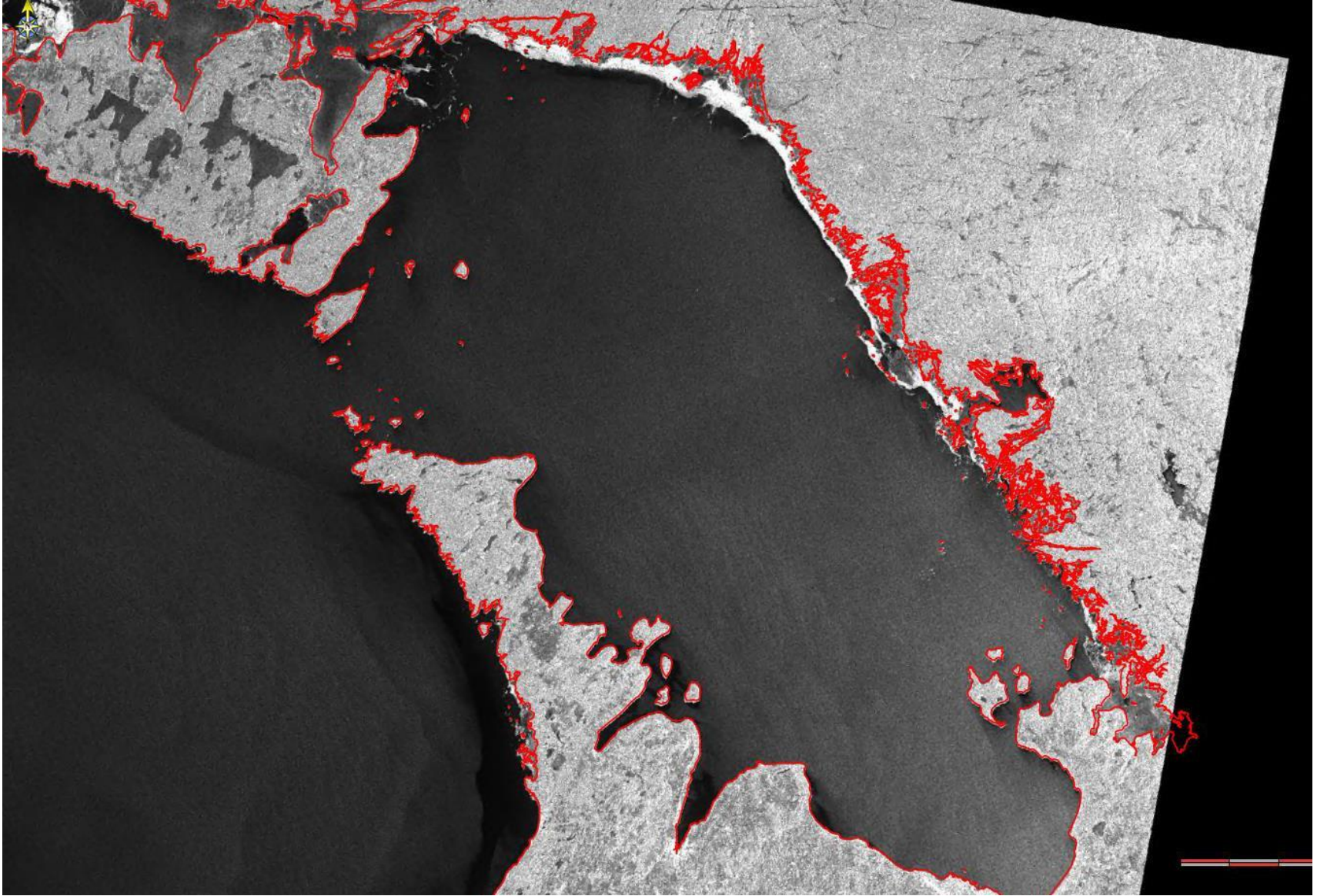






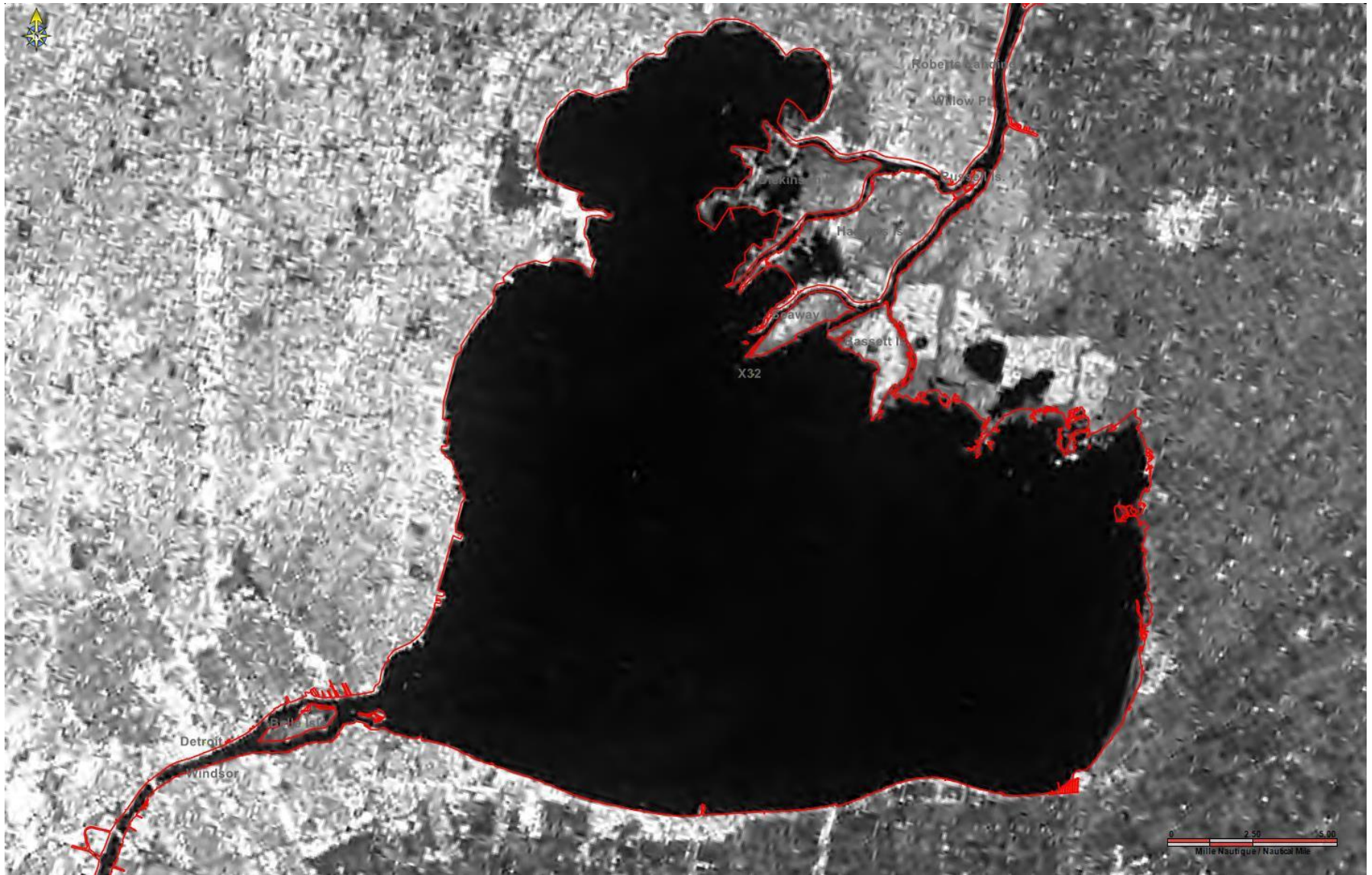
**All above  
RADARSAT  
Images from  
Constellation  
Mission  
Imagery and  
EC Daily Ice  
Charts  
Website for  
February 26,  
2024 and  
Canadian Ice  
Service**

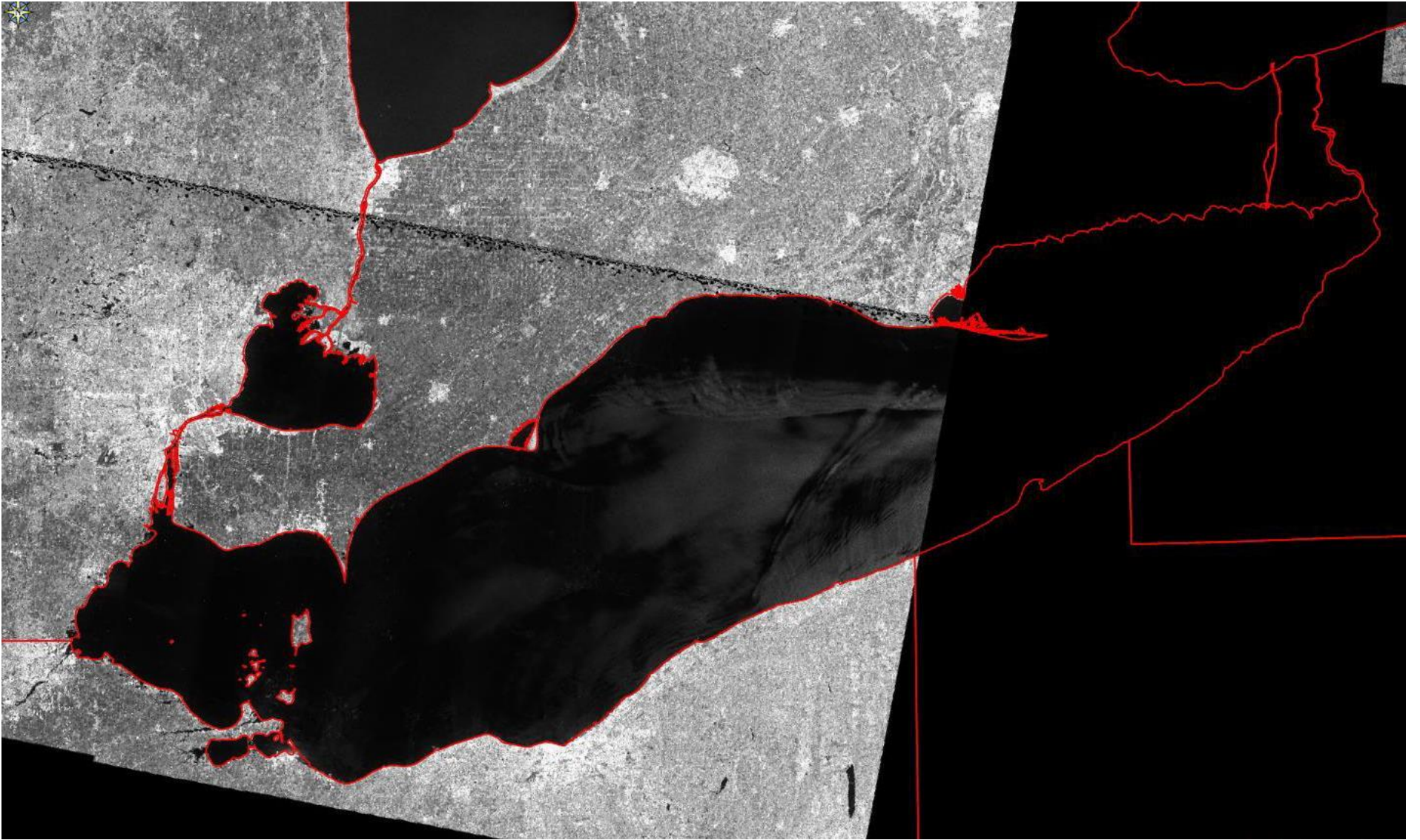


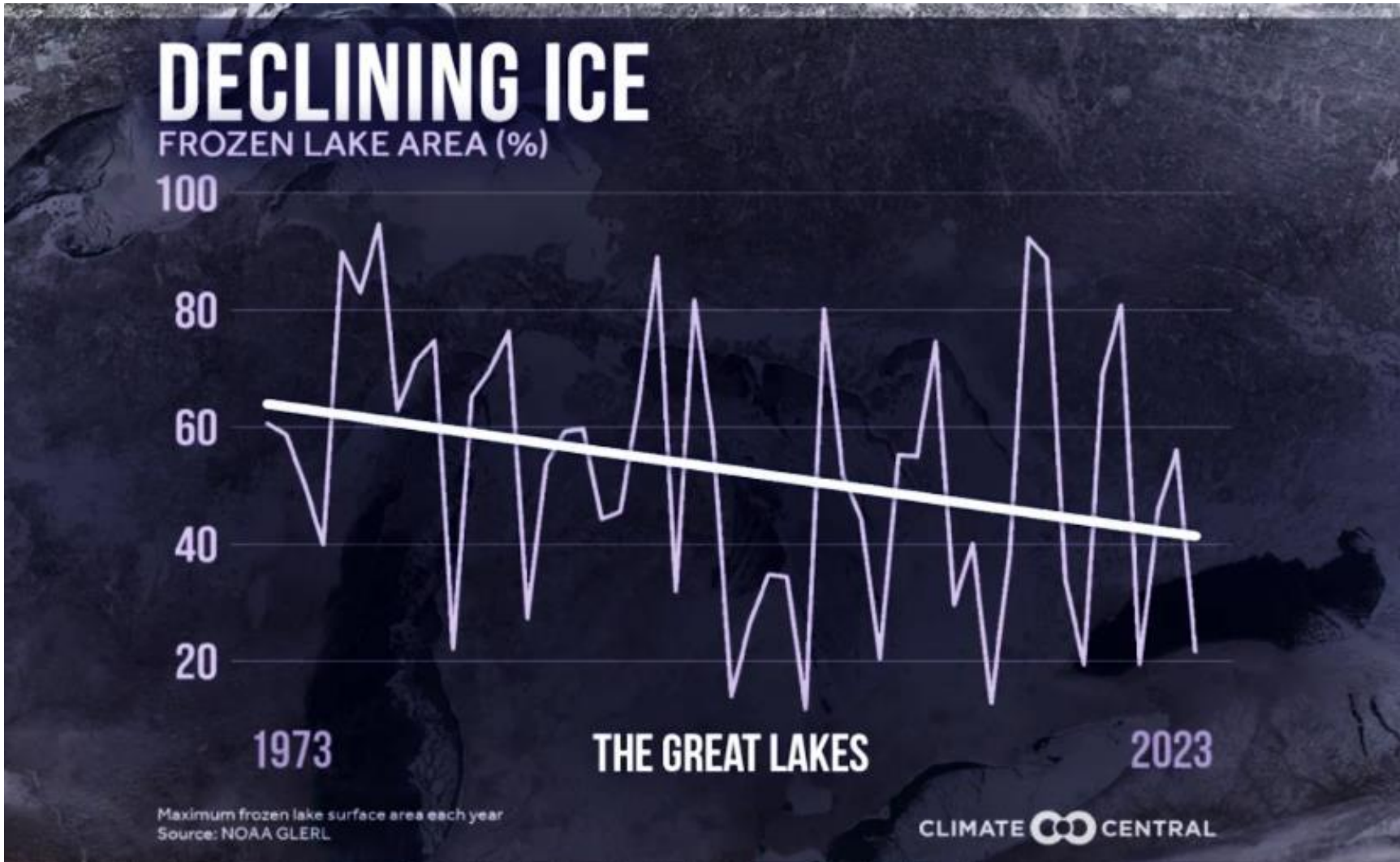












**Declining ice.** [CNN Chart]



**The Great Lakes - St. Lawrence Seaway System**  
***Le réseau Grands Lacs - Voie maritime du Saint-Laurent***

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## 2024 - SEAWAY NOTICE #1

### **Opening Date of the 2024 Navigation Season and Maximum Allowable Drafts**

The opening of the 2024 navigation season is scheduled to take place on the following dates and times:

- Montreal / Lake Ontario Section: March 22, 2024 - 0800 hours (D.S.T.)
- Welland Canal: March 22, 2024 - 0800 hours (D.S.T.)

Ship transits will be subject to weather and ice conditions. Restrictions may apply in some areas until lighted navigation aids have been installed.

#### **Sault Ste. Marie Locks and Canals**

Opening of the Sault Ste. Marie Locks (U.S.A.) is currently scheduled for March 25, 2024. Please note the Notice to Navigation Interests released by the U.S. Army Corps of Engineers for further information.



## SEAWAY MONTHLY TRAFFIC RESULTS

### 2023 End of Navigation Results\*

Traffic (in thousands of tonnes)	SLSMC - Combined Traffic			
	Year to Date		Change from 2022	
	2022	2023	Tonnes	%
Total Cargo	36 336	37 563	1227	3.38%
All Grain	9 996	10 483	487	4.88%
Iron Ore	6 201	6 348	146	2.36%
Coal	1 771	2 018	247	13.96%
Dry Bulk	11 686	12 298	612	5.24%
Liquid Bulk	3 516	3 634	118	3.37%
General Cargo	3 058	2 704	-353	-11.55%

Vessel Transits	2022	2023	Transits	%
Total Transits	4 008	3 931	-77	-1.92%

\*Estimates

The St. Lawrence Seaway Management Corporation

## 2023 Tonnage Increase Reflective of St. Lawrence Seaway Resilience

The Canadian St. Lawrence Seaway Management Corporation (SLSMC) and U.S. Great Lakes St. Lawrence Seaway Development Corporation (GLS) jointly announced that nearly **38 million tonnes of cargo transited the binational system in 2023, representing an overall increase of more than 3.4 percent.**

### 2023 Results Highlights

- **Grain:** Despite challenges posed by climate change and global issues, grain resulted in **an overall increase of nearly 5% compared to 2022 reaching 10.4 million tonnes.** Notably, Canadian grain experienced a significant year-over-year growth of more than 11%.
- **Dry Bulk:** **Agricultural and construction supply including potash, gypsum, cement and stone, exceeded 12 million tonnes, representing 5% growth compared to 2022.**
  - **Liquid bulk:** **3.6 million tonnes of liquid bulk transited the Seaway in 2023, representing a 3.4% increase** from the previous year. Petroleum products were the primary contributors with 2.6 million tonnes, followed by liquid chemicals, which increased 11%.
- **Cargo fluidity:** The Seaway system's efficiency contributed to fewer transits in ballast and an additional 1.2 million tonnes of cargo.

Transport Canada Marine Safety & Security would like to announce the upcoming launch of our Fatigue Management at Sea e-course, produced in association with the Canadian Centre for Occupational Health and Safety (CCOHS). **This online learning will be available at no cost to all Canadian seafarers with a valid Candidate Document Number (CDN), courtesy of Transport Canada. Enrolment will also be available for purchase by the general public.**

**The Fatigue Management at Sea e-course** is anticipated to launch the week of March 4, 2024, and will be accessible via the Managing fatigue at sea in Canada webpage.

A notification from the CMAC secretariat will be distributed once the course has been made available and communications from Transport Canada and CCOHS will be sent out to announce the launch.





ENVIRONMENTAL CONFERENCE

# GREENTECH

June 5 to 7, 2024 — Halifax, NS



## **Algoma Bear is on her way west**

**The new Algoma Central self-unloader Algoma Bear left Yamic Shipyard Feb 18 under the flag of Tuvalu for Canada. She'll have one stop at Batangus Philippines for fuel before heading across the Pacific. Travelling time is approximately 28 days to the Panama Canal, where she will then wait as a transit slot was not yet been secured. Janey Anderson**

## **Algoma Endeavour launched in Croatia**



**The Algoma Endeavour, the longest ship launched at the Rijeka shipyard, is 23.8 meters wide and has a carrying capacity of 29,300 tons and it will sail in the Canadian Great Lakes. ACC**

February 19, 2024

## **US, Canada sign MOU for icebreaking, maintaining aids to navigation**

WorkBoat Staff Coast Guard Government News Bluewater SHARE

**U.S. Coast Guard Rear Adm. Jon Hickey, commander, Ninth Coast Guard District and Assistant Commissioner Marc-André Meunier of the Canadian Coast Guard Central Region signed a Memorandum of Understanding (MOU) on Feb. 15 to renew the two coast guards' agreement for the coordination of icebreaking and buoy tending operations on the Great Lakes, including the main connecting navigable waterways, Georgian Bay, and the shared portion of the St. Lawrence River.**

**The agreement details how the agencies will tend a small portion of each other's floating aids to navigation that are located closer to each other's buoy tending resources. This will increase response times for aid outages or defects, reduce vessel transit times and cost, and decrease the expenditure of operational man-hours.**

# Top 10 ships that went through the Soo Locks the most in 2023

•By [Tanda Gmiter](mailto:tgmiter@mlive.com) | [tgmiter@mlive.com](mailto:tgmiter@mlive.com)

**SAULT STE. MARIE, MI** - An engineering marvel, the Soo Locks in Michigan's Upper Peninsula is one of the busiest maritime locking systems in the world. Each year, more than 4,500 vessels use the locks. And they carry through up to 80 million tons of cargo.

**5th place:** The tug **W.I. Scott Purvis**, built in 1938, gets the midway point honors on this list. The consort tug went through the locks 77 times in 2023. It's homeported in Soo, Ontario, Canada.





## CHI-CHEEMAUN IS 50!



## Call for stories & photos

To celebrate 50 years of service between Tobermory and Manitoulin Island, we'd like you to share your stories of travelling on the Big Canoe for possible inclusion in a book by Owen Sound historian & author Richard J. Thomas. Did you experience exemplary service? Did you get married on board? Is the crossing a family tradition? Is the Chi-Cheemaun muffin your favourite breakfast? Were you on the roughest trip ever? Send your photos and stories to [chicheemaun50@gmail.com](mailto:chicheemaun50@gmail.com) and be sure to include your contact information! Submission deadline: March 8, 2024

# Georgian College Marine Cadet Safety Training 2024



***Managing Risk with a Safety Mindset, Presented by Dan Fournier***

**FEBRUARY 28, 2024**

**GEORGIAN COLLEGE MARINE SPEAKERS DAY**

- **Wednesday, February 28, 2024 at Georgian College Owen Sound Campus**
- **Rooms C115, C123**
- **The Georgian Mariners Association student group is hosting a day of engagement with the wider marine industry.**
- **There will be four presentations in the morning – 2 each for navigation and engineering, an EDIB workshop after lunch culminating with a final presentation in the afternoon to all students.**
- **CMMC Great Lakes Division attending and participating – Capt. Phil Visser and Capt. Murray Helwig**





PONT INTERNATIONAL  
**GORDIE  
HOWE**  
INTERNATIONAL BRIDGE

ANNUAL MARITIME  
MEETING  
February 13, 2024



**The fixed contract value for the Gordie Howe International Bridge project is \$6.4 billion CDN (nominal)**

**Length of contract is 37 years**

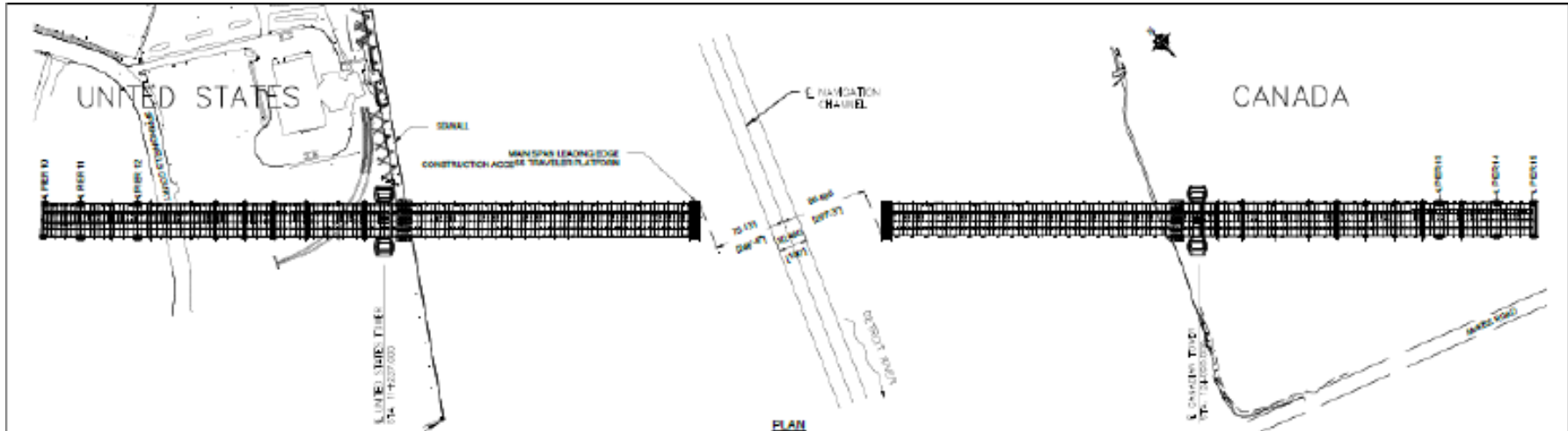
**Construction completion is planned for September 2025**

**1-year Community Benefits Plan extension with additional \$3 million**



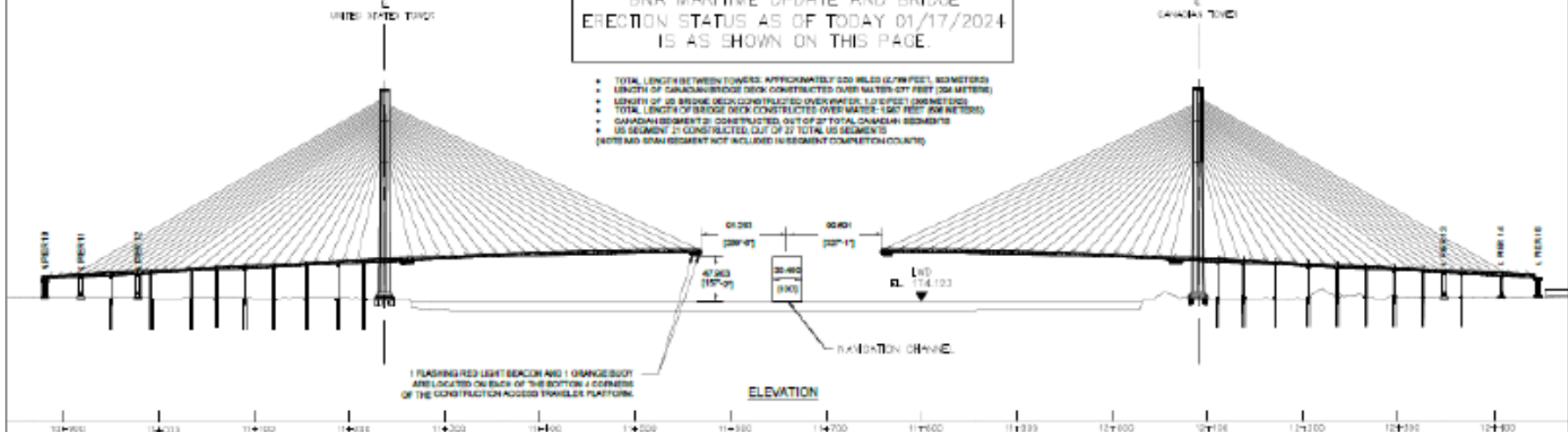
# BRIDGE CONSTRUCTION METHOD





BNA MARITIME UPDATE AND BRIDGE ERECTION STATUS AS OF TODAY 01/17/2024 IS AS SHOWN ON THIS PAGE.

- TOTAL LENGTH BETWEEN TOWERS: APPROXIMATELY 500 FEET (150 METERS)
- LENGTH OF CANADIAN BRIDGE DECK CONSTRUCTED OVER WATER: 157 FEET (48 METERS)
- LENGTH OF US BRIDGE DECK CONSTRUCTED OVER WATER: 110 FEET (34 METERS)
- TOTAL LENGTH OF BRIDGE DECK CONSTRUCTED OVER WATER: 167 FEET (51 METERS)
- CANADIAN SEGMENT 21: CONSTRUCTED, OUT OF 27 TOTAL CANADIAN SEGMENTS
- US SEGMENT 21: CONSTRUCTED, OUT OF 27 TOTAL US SEGMENTS
- (NOTE MID SPAN SEGMENT NOT INCLUDED IN SEGMENT COMPLETION COUNTS)



	<p>DISCLAIMER: THE USER OF THIS DRAWING OR ANY INFORMATION CONTAINED HEREIN IS SOLELY RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE INFORMATION AND DATA FURNISHED TO THEM BY ANY SOURCE, AND FOR THE RESULTS OF ANY USE THEREOF. THE USER OF THIS DRAWING OR ANY INFORMATION CONTAINED HEREIN IS SOLELY RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE INFORMATION AND DATA FURNISHED TO THEM BY ANY SOURCE, AND FOR THE RESULTS OF ANY USE THEREOF.</p>	<p>BRIDGE PROJECT</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION	1			2			3			4			5			<p>DESIGNED BY: _____</p> <p>DESIGN CHECK BY: _____</p> <p>DRAWN BY: J.MOLE</p> <p>DRAWING CHECK BY: A. BOGHI</p> <p>SUPERVISOR: J. EGUE</p>	<p>TITLE OF DRAWING</p> <p>THE BRIDGE</p> <p>MAIN SPAN ERECTION</p> <p>MARITIME COORDINATION</p> <p>01/17/2024 MONTHLY UPDATE</p>	<p>DATE</p> <p>01/17/2024</p> <p>DRAWING NO.</p> <p>018-MARITIME-2024-011</p> <p>REVISED</p> <p>0</p>
			NO.	DATE	DESCRIPTION																				
1																									
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	<p>BRIDGE PROJECT</p>																								

## HOPA Ports

reported a combined total cargo of 11,293,179 metric tonnes (MT) through the ports of Hamilton and Oshawa. The 2023 total was a 9% increase from 2022, marking the second-highest volume in the past decade. The season saw a total of 665 vessels, with 603 in Hamilton and 62 in Oshawa, taking advantage of the longest ever Seaway shipping season.

Commodity	2023 Tonnage – Hamilton & Oshawa (metric tonnes)
Steel products	819,280
Ore	3,369,249
Grain (including soybeans)	2,766,068
Fertilizer	560,287
Gen Cargo + Containers	2,368
Coal	1,725,213
Coke	308,792
Salt	280,446
Aggregates	917,542
Liquid & Petroleum products	382,107
Sugar	144,000
Other	17,828
<b>TOTAL</b>	<b>11,293,180</b>

## HOPA Port tonnage by category 2023



# **Great Lakes History**

## **January and February**

# Shipwreck Society finds Arlington deep in Lake Superior

WHITEFISH POINT, MICH. – The Great Lakes Shipwreck Historical Society (GLSHS) with shipwreck researcher Dan Fountain, are proud to announce the discovery of the 244-foot bulk carrier Arlington in over 600 feet of water around 35 miles north of Michigan’s Keweenaw Peninsula.



**Arlington hauling pulp wood** [Peter B. Worden collection-MHSD]



**Arlington's Wheel** — photos from Great Lakes Shipwreck Museum

On April 30th, 1940, the Arlington left Port Arthur, Ontario fully loaded with wheat en-route Owen Sound, Ontario

**Arlington's deck winch**







**Port of  
Cleveland  
seeks to  
remove,  
recycle,  
dismantled  
historic  
Hulett ore  
unloaders**

**Hulett's at the Pennsylvania Railroad ore docks at Cleveland unload E.A.S. Clarke.. [Roger LeLievre]**

# The Hulett's at Whiskey Island

Two of the four Hulett's at Whiskey Island unload ore from a freighter. After filling the scoops with 17 tons of ore from the ship, the ore is dropped into a hopper which then moves along a track to discharge the iron ore into a waiting rail car.

Source: Cleveland Press Collection



**Hullet clam  
turned and  
unloading  
coal from  
cargo hold.**

The New York Public  
Library Digital  
Collections

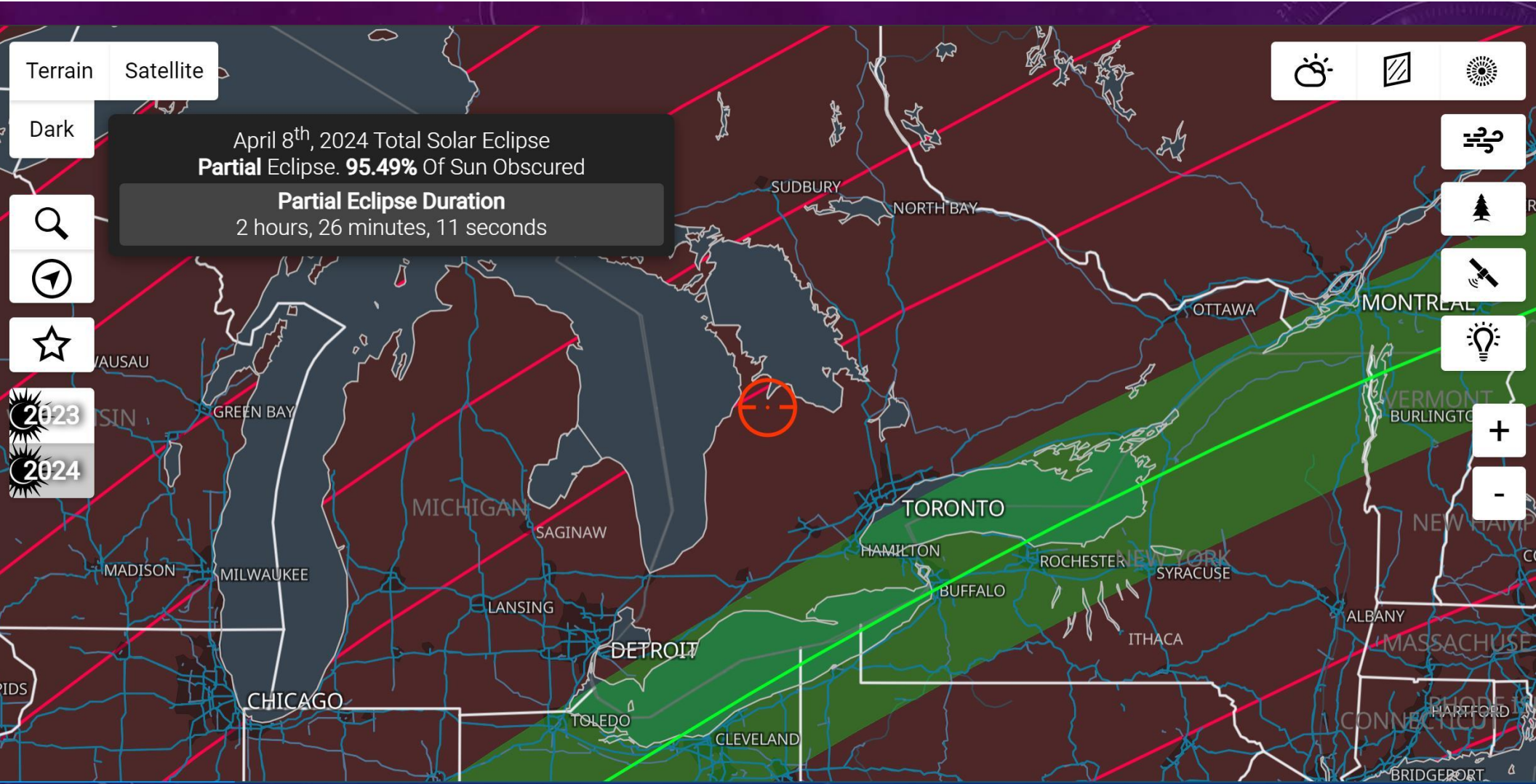


**For your Future Viewing Planning**

**Courtesy of ISMA Lodge 15 and Capt.  
Seann O'Donoghue**

# TOTAL ECLIPSE OF THE SUN 08 APRIL, 2024, 1520 HRS





<https://www.astrospheric.com/?latitude=43.39028&longitude=-79.9225&loc=forecast>

**Thank you for viewing our February 2024 monthly Industry Update.**

**Hope you enjoy and find the information useful.**

***Master Mariners of Canada – Great Lakes Division***

