

## Great Lakes Icebreaking The Problem and the Solution

Jim Weakley
President, Lake Carriers' Association
Green Bay Port Symposium
April 14, 2022

#### GREAT LAKES HARBORS INTERCONNECTIVITY AKE SUPERIOR Two Harbors Duluth-Superior Ashland Ontonagon Gladstone O LAKE ONTARIO Milwaukee Buffalo >10M Ton Harbor 1-10M Ton Harbor Waukegan ( <1M Ton Harbor Chicago Harbor St. Joseph, MI Monroe, MI Sandusky, OH Duluth-Superior, MN Calumet, IL Toledo, OH Cleveland, OH Alpena, MI Fairport, OH

## WELCOME TO THE "WINTER RUN."



### **SHIPPING DURING ICE SEASON**

Mid-December to late April

Reduces stockpiling costs for customers

U.S.-flag fleet can move 20% of its annual total during ice season.



#### **Problem**

- Inadequate icebreaking capacity (1979 had 9 more icebreakers)
  - USCG 14 to 9 icebreakers
    - East Coast has 25 USCG icebreaking vessels (New Jersey to Maine)
    - Lake MI coastline = Maine to Miami 1,640 miles
  - CCG 6 to 2 icebreakers

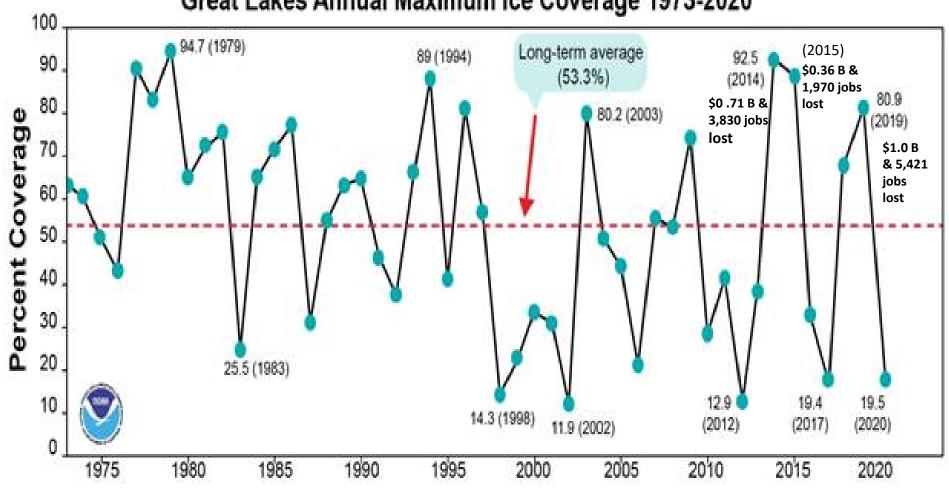
#### Metrics

- USCG only reports to Congress restrictions in 4 GL "Tier 1 Waterways"
  - Only recently separated GL from East Coast performance metrics
  - Only recently began measuring GL Tier 2 waterway closures but
  - Tier 2 numbers are <u>not</u> reported to Congress, used to determine resource levels or mission success.
- "Closed" requires 2 vessels stuck for 24 hours to start the clock
- East Coast has 35 "tier 1" waterways based on handling of heating oil or food.
  - All vessels receive "tier 1" service regardless of cargo carried on the East Coast
  - No GL vessels or ports receive "tier 1" service based on cargo
  - Canadian ports and vessels are advantaged by CCG metrics 8 hours

#### **Problem**

- Economic impact
  - \$2 billion and 10,540 jobs in 3 winters over 5-year period (14-19)
- Flooding from Ice Dams
  - St. Clair River Feb 21, MACKINAW out for maintenance
  - Corps responsible for flood control but requires CG resources
- Icebreakers are less reliable
  - "New MACKINAW" is 15 years old
  - 140s are 40-plus years old with original powerplants
- CG's solution
  - No new GLIB
  - Replace the 140s in 2040 timeframe
    - probably with fewer hulls

#### Great Lakes Annual Maximum Ice Coverage 1973-2020



# WINTER OF 2013/2014 WORST IN 40 YEARS

Winter arrived early and in full force.

U.S. Coast Guard started breaking ice on Lake Superior on December 6, the earliest on record.

Fleet suffered major delays.

Iron ore cargos down 20% in December; 37% in January.



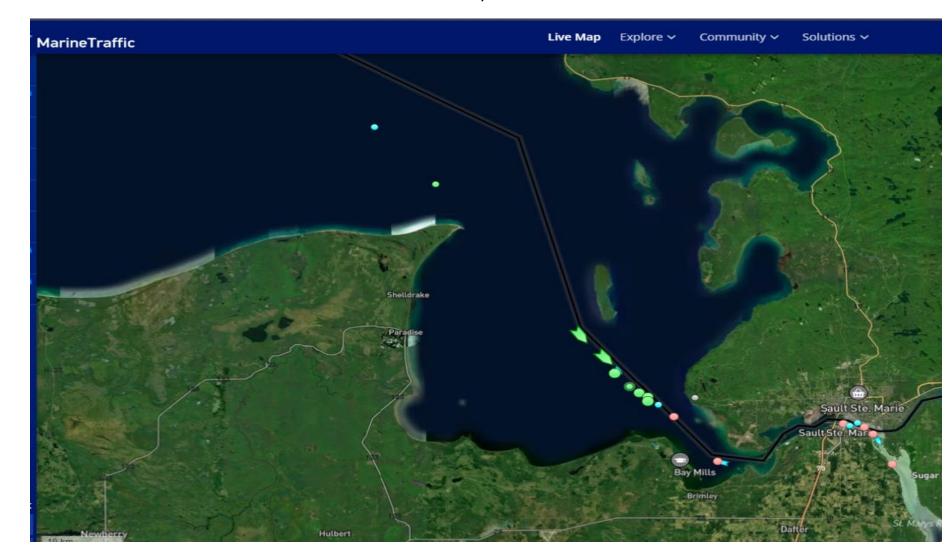
THE ICE WAS SO THICK IN MARCH IT TOOK TWO ICEBREAKERS, ONE CANADIAN AND ONE U.S., TO GET FREIGHTERS ACROSS LAKE SUPERIOR. THE 28-HOUR TRIP TOOK 11 DAYS! IN FACT, THE U.S. COAST GUARD DID NOT ALLOW VESSELS TO TRANSIT LAKE SUPERIOR UNESCORTED UNTIL MAY 2.

Lakers beset in Whitefish Bay, Lake Superior for 4 days did not impact USCG performance metrics.

April 5-9, 2015



## Lakers beset in Whitefish Bay, Lake Superior – Tier 2 Waterway March 28, 2022



#### March 2022



#### East China Township, Feb 3, 2021

Photo: Todd McInturf, The Detroit news



## Loretta St. near Point Drive in East China, February 3, 2021

David Guralnick, The Detroit News



#### East China Township, February 3, 2021

Todd McInturf, The Detroit News



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#### **The Detroit News**

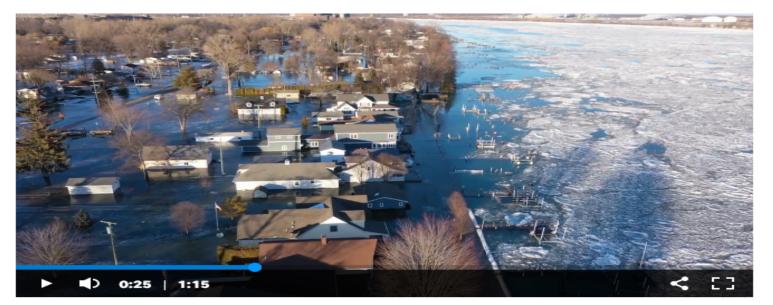
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Kathy Beaton of East China Township and her husband Lorne experienced flooding issues.

"Last year's flooding was worse," Kathy Beaton told The Detroit News. "We have the highest house on the block, so our deck is still two inches above the flood water.



Ice on the St. Clair River causes flooding

The U.S. Coast Guard has deployed four ice breakers to clear ice build-up in the St. Clair River that has caused coastal flooding David Guralnick, The Detroit News

#### <u>Solution</u>

- 1. Level the playing field between American and Canadian vessels
- 2. Level the playing field between American and Canadian ports
- 3. Level the playing field between GL and East Coast waterways
- Improve short term quality of icebreaking on GL safety and efficiency
- 5. Improve quality and quantity of icebreaking services:
  - 1. Build another MACKINAW
  - 2. Accelerate the replacement of the 140 fleet 2030s not 2040s

#### **Solution**

- Great Lakes Winter Commerce Act (Rep. Gallagher and Senator Baldwin)
  - Increases authorized amount for heavy Great Lakes icebreaker
  - Calls for GAO report on CG metrics
  - Part of Coast Guard Authorization Bill
- Reconciliation Bill (Senator Baldwin and Rep. Kaptur)
  - Fully funds new Great Lakes icebreaker and infrastructure support
  - Must be at least as capable as MACKINAW
- FY23 Congressional Add
  - \$40 million for long lead time material for new icebreaker (GL Delegation)



SINCE ENTERING SERVICE IN 2006, THE MACKINAW HAS PROVED ITSELF VERY EFFECTIVE, BUT THE LAKES NEED A SECOND HEAVY ICEBREAKER.

