

GREAT LAKES NAVIGATION UPDATE

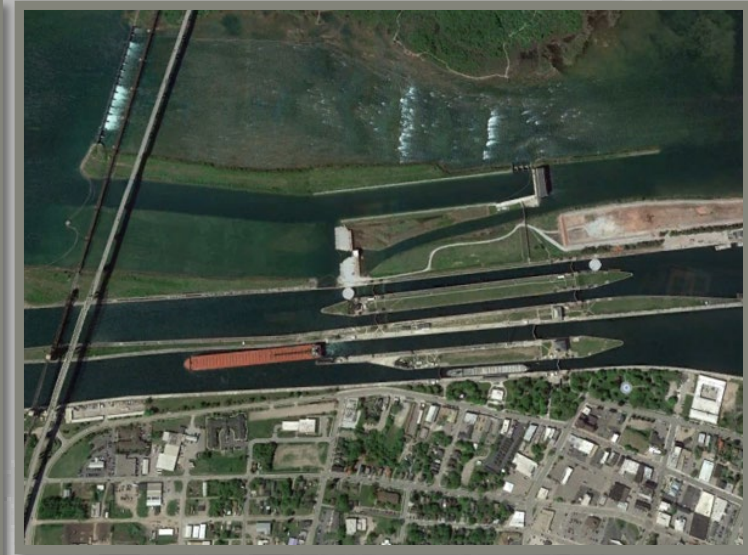
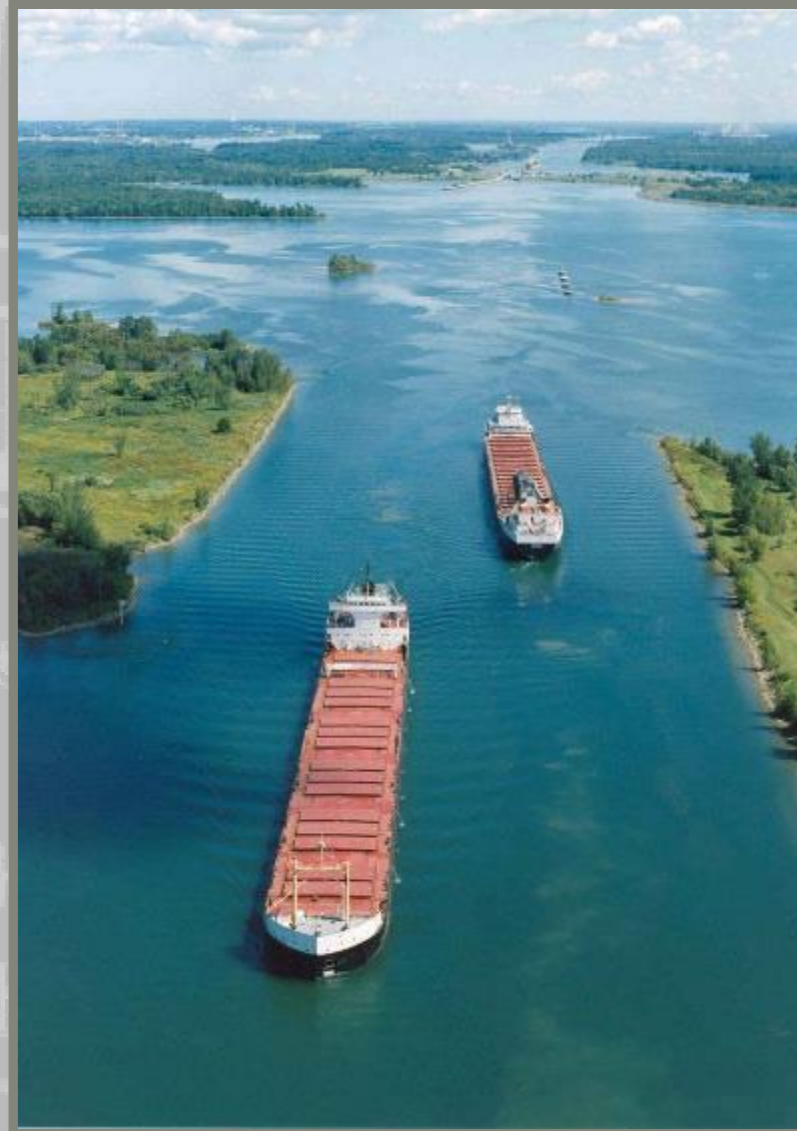
Marie Strum
Great Lakes Navigation
Team Lead

Great Lakes Dredging Team
Meeting
September 6, 2023

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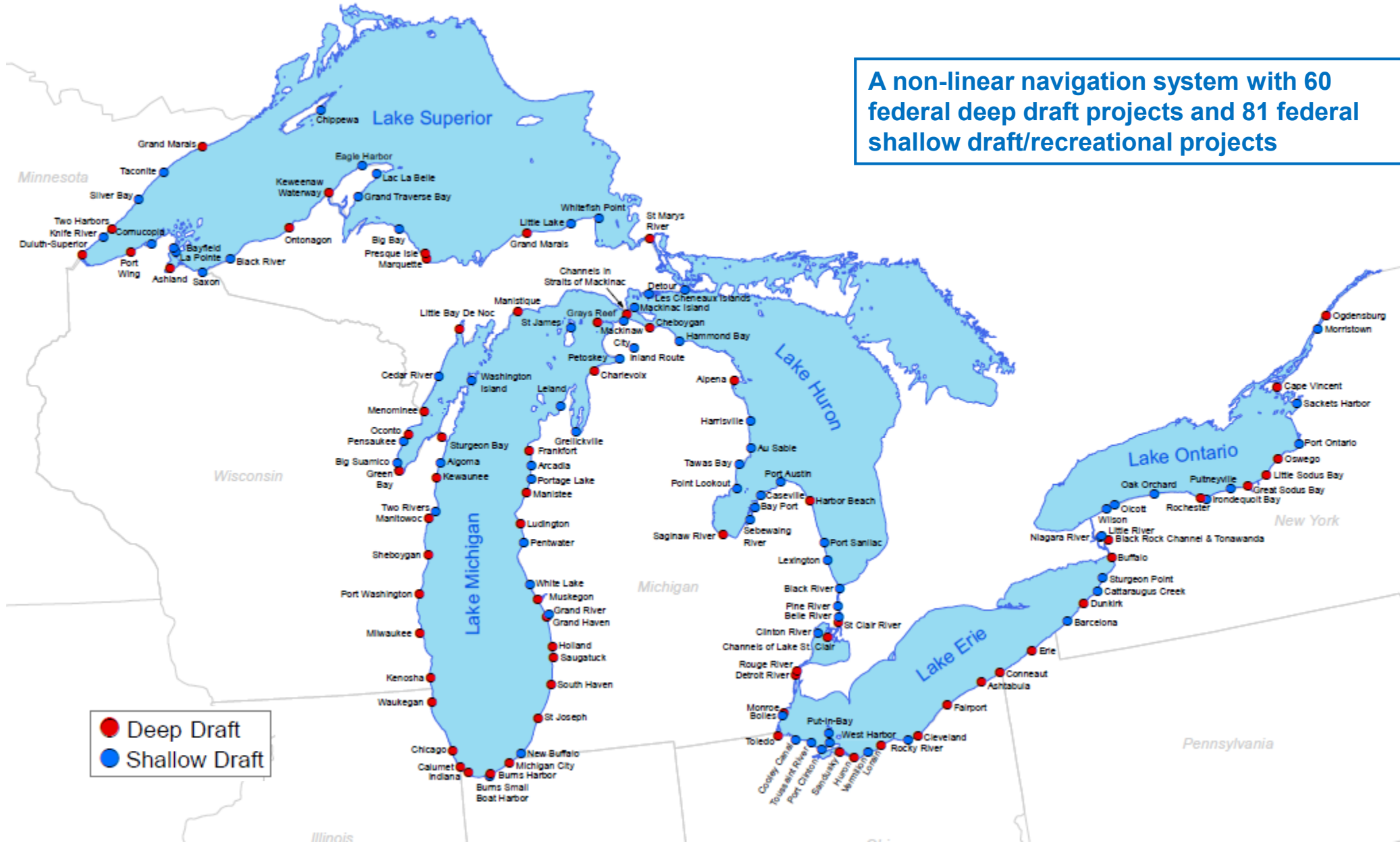
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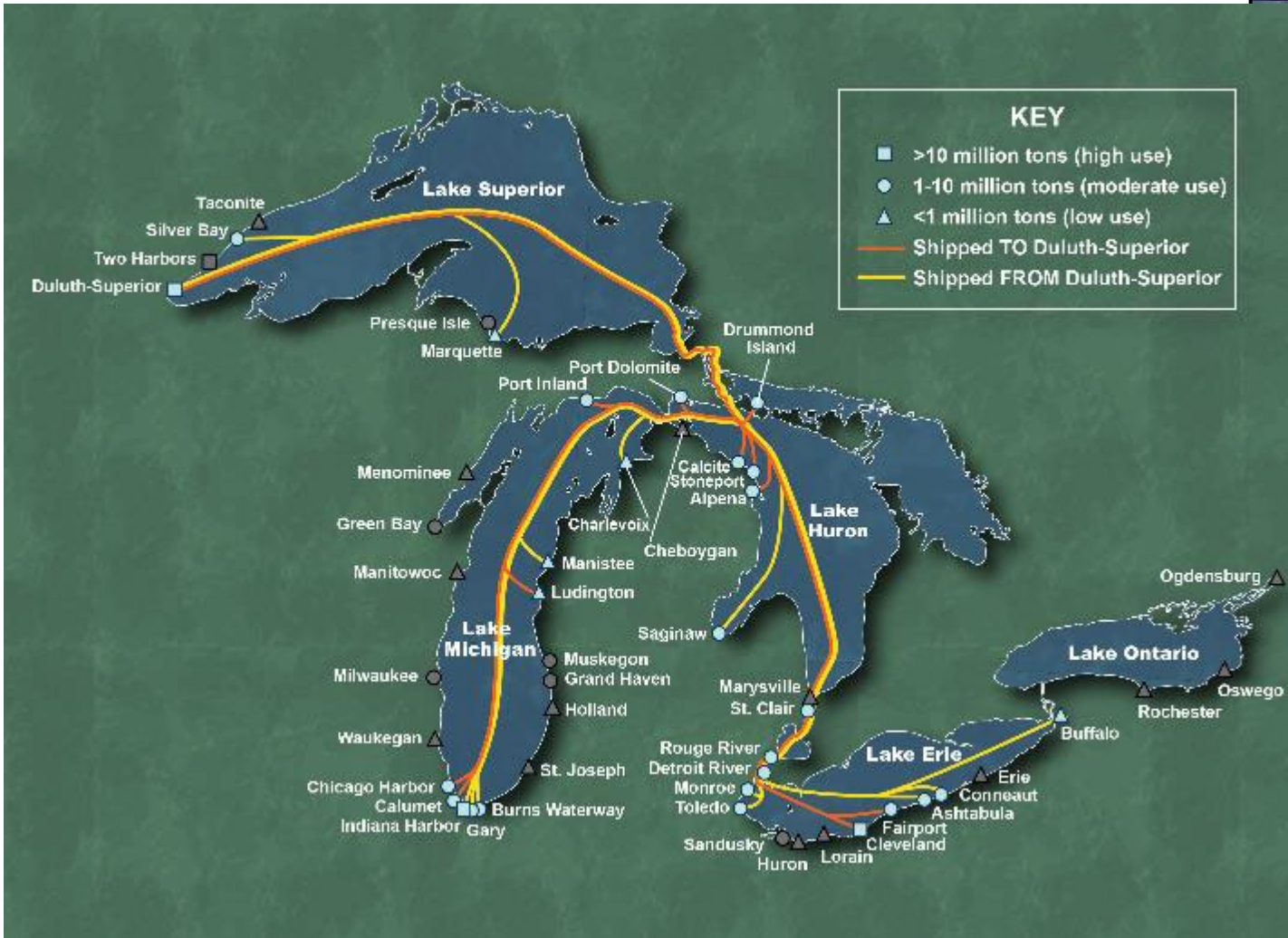




FEDERAL HARBORS ON THE GREAT LAKES

A non-linear navigation system with 60 federal deep draft projects and 81 federal shallow draft/recreational projects





- Non-linear interdependent system
- Commercial ports dependent on each other
- 95% of traffic is internal to the Great Lakes
- System saves **\$3.9 Billion per year** over next mode of transportation
- Ports/harbors located at manufacturing sites/centers
- Ports compete with other modes of transportation rather than each other



HARBOR MAINTENANCE TRUST FUND BACKGROUND

- Prior to 1986, Great Lakes O&M was conducted at full federal expense
- WRDA 1986 established the Harbor Maintenance Trust Fund: a fee collected from coastal maritime users (owners of cargo) to fund Army Corps operation and maintenance of federal navigation projects
 - 1986: Tax imposed of 0.04% of cargo value
 - 1990: Tax changed to 0.125% of cargo value
 - In 1998, Supreme Court removed export tax, now the tax is paid only on domestic cargo and imports.
 - The fee is typically passed on to U.S. tax payers through the cost of goods and services.

HMTF funds O&M costs for all coastal navigation (locks, dredging, dredged material management, nav structure repair, including all recreational projects) and a few inland systems.



WRDA 2020 – SIGNIFICANT HMTF CHANGES



Significant changes in Water Resources Development Act (WRDA) 2020 related to Harbor Maintenance Trust Fund (HMTF)

- HMTF “off budget” – CARES Act March 2020
- No less than 13% of annual expenditures from HMTF to GL
- Not less than 15% for emerging harbors (<1M tons)
- For the first time, direction to spend the HMTF “surplus”
- Directs appropriation from HMTF = HMTF deposits two year prior plus:
 - \$500M for fiscal year 2021
 - \$600M for fiscal year 2022
 - \$700M for fiscal year 2023
 -
 -
 - Continuing up to 2030 to spend down the \$10B surplus

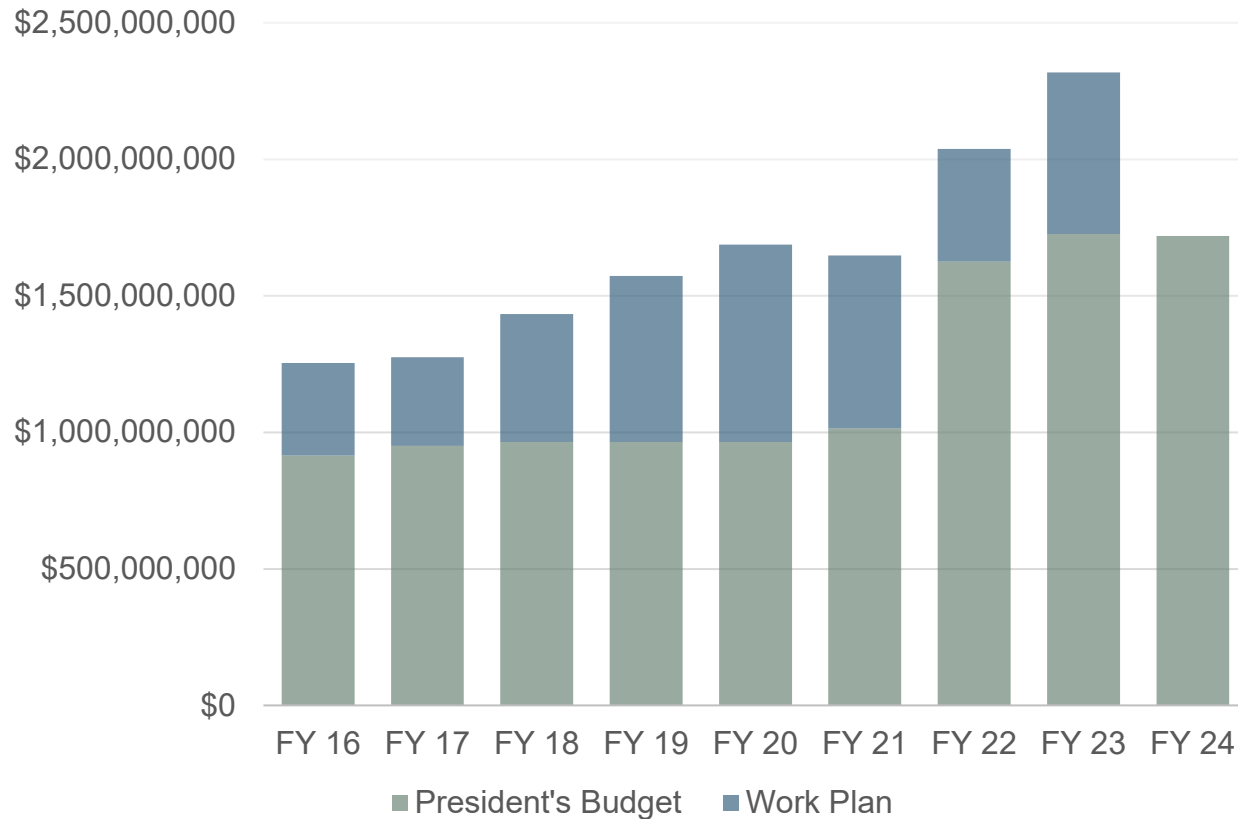




HARBOR MAINTENANCE TRUST FUND



HMTF Allocation Trends



-FY 22 EOY Balance- \$9.5B

-FY23 bill directed \$2.318B in funding

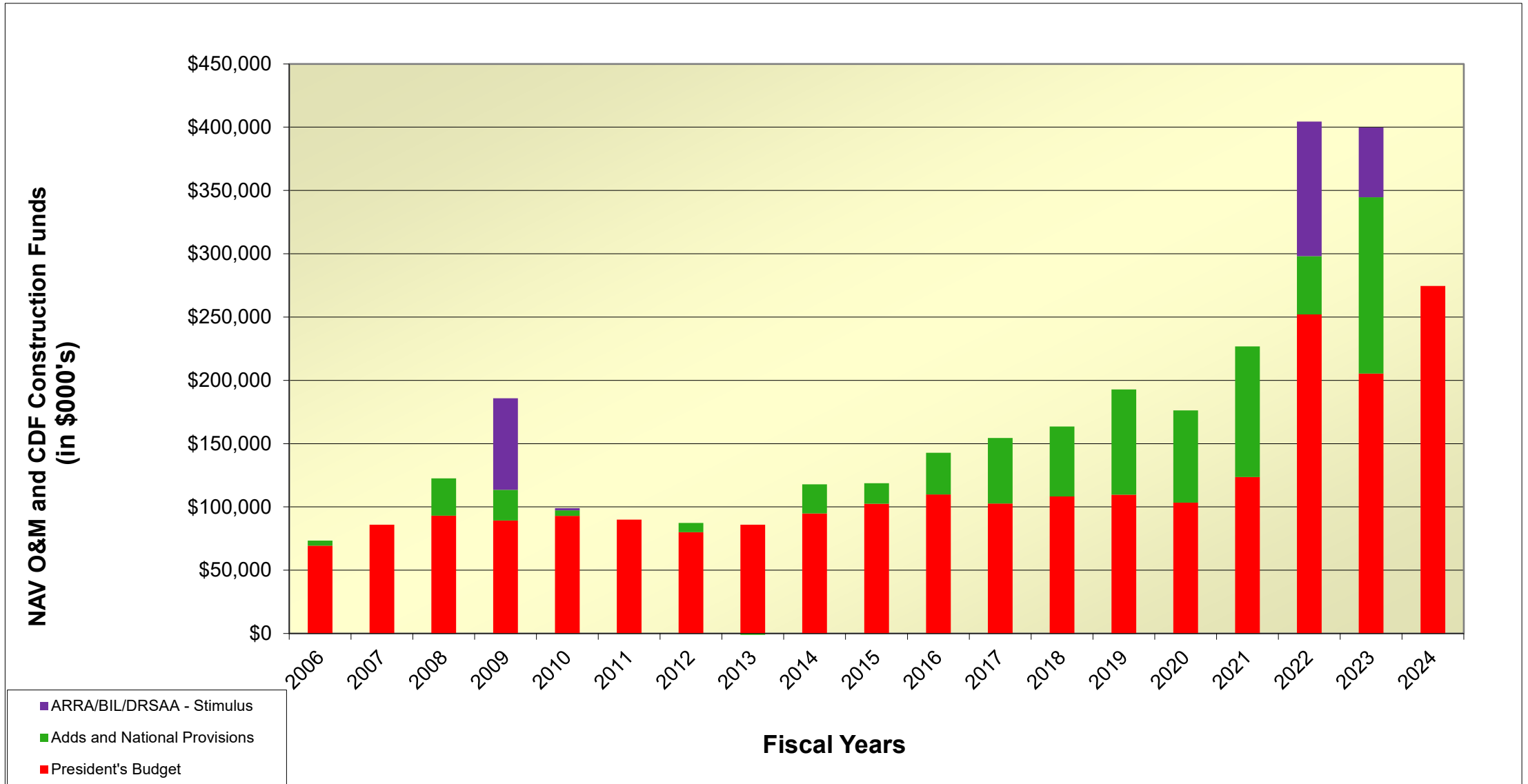
-With the exception of a minor dip in FY 20 collections have remained at about \$1.5B/year

-The additional HMTF investments have allowed us to:

- maintain further into the portfolio those low use projects
- address breakwater and jetty maintenance
- consider advanced maintenance activities at critical harbors



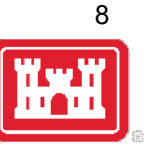
GL NAVIGATION FUNDING HISTORY





FY23 GREAT LAKES NAVIGATION FUNDING

PRESIDENT'S BUDGET + WORKPLAN



Great Lakes Navigation Operation & Maintenance
\$205.4M + \$136.7M = \$342.1M

Key O&M Items

\$67.9M in Dredging (36 projects; 4.0M cy) (\$56.1M + **\$11.8M**)

\$9.7M in Dredged Material Management (8.1M + **\$1.6M**)

\$52.9M in Soo Locks Maintenance (\$38.3M + **\$14.6M**)

\$1.4M in Chicago Lock Maintenance

\$9.1M in Black Rock Lock Maintenance (\$0.1M + **\$8.95M**)

\$0.7M Alanson Lock Maintenance and Repairs

\$126.3M in Navigation Structure Maint/Repair (\$31.9M + **\$94.4M**)

\$2.5M in Section 111 Beach Nourishment

\$4.3M in Sediment Sampling for Dredging



FY23 CONGRESSIONALLY DIRECTED SPENDING



Beginning in FY22, Congress began allowing specific additions to appropriation. In FY23, these were called “Congressionally Directed Spending”.

FY23 Appropriation – Congressionally Directed Spending - \$49.6M

\$1.9M Dredging – Burns Small Boat Harbor, Michigan City

\$37.3M Structures

- \$0.25M Conneaut Harbor
- \$4.75M Dunkirk Harbor
- \$0.25M Fairport Harbor
- \$20.0M Great Sodus Bay Harbor
- \$12.0M Oswego Harbor

\$10.0M Locks – Black Rock Lock

\$0.4M Dredged Material Management, Breakwater Safety

For comparison, FY22 Community Funded Projects on GL Nav O&M - \$9.7M



FY23 GREAT LAKES NAVIGATION FUNDING

BIPARTISAN INFRASTRUCTURE LAW - BIL



FY23 Bipartisan Infrastructure Law - \$55.2M

\$1.2M Dredging – Big Suamico

\$0.45M Structures – Minor repairs

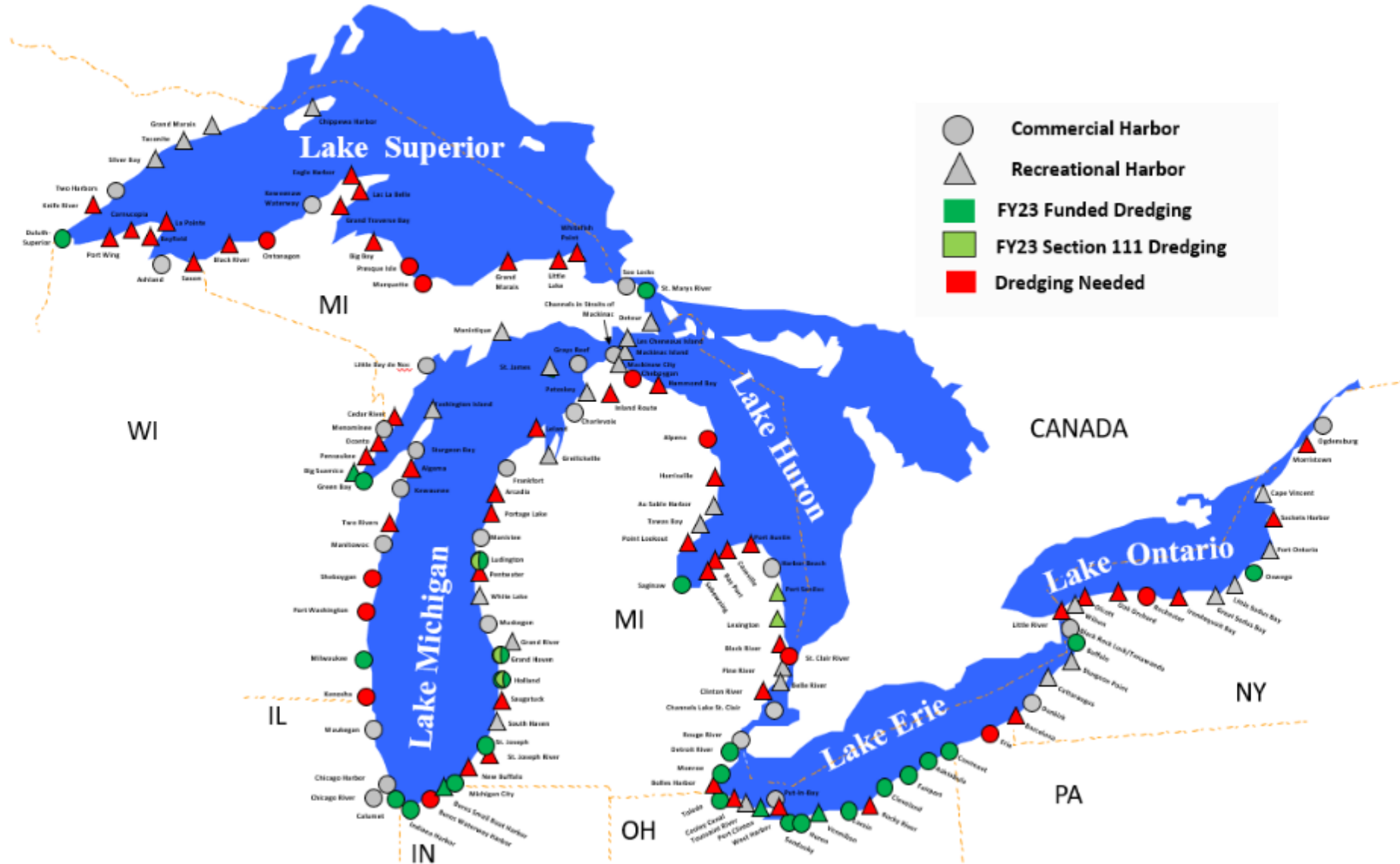
- \$0.20M Grand Haven
- \$0.25M Ashtabula

\$53.5M Lock Repairs

- \$14.9M Chicago Lock
- \$38.6M Soo Locks



FY23 DREDGING FUNDING AND DREDGING REQUIREMENTS





FY24 GREAT LAKES NAVIGATION PRESIDENT'S BUDGET

RELEASED MARCH 9, 2023



Great Lakes Navigation Operations & Maintenance - \$274.5M

Key O&M Items

\$67.2M - Dredging (26 projects; 3.05M cy)

\$8.2M - Dredged Material Management

\$68.2M - Soo Locks Maintenance

\$2.7M - Chicago Lock Maintenance

\$51.3M - Navigation Structure Maintenance/Repair

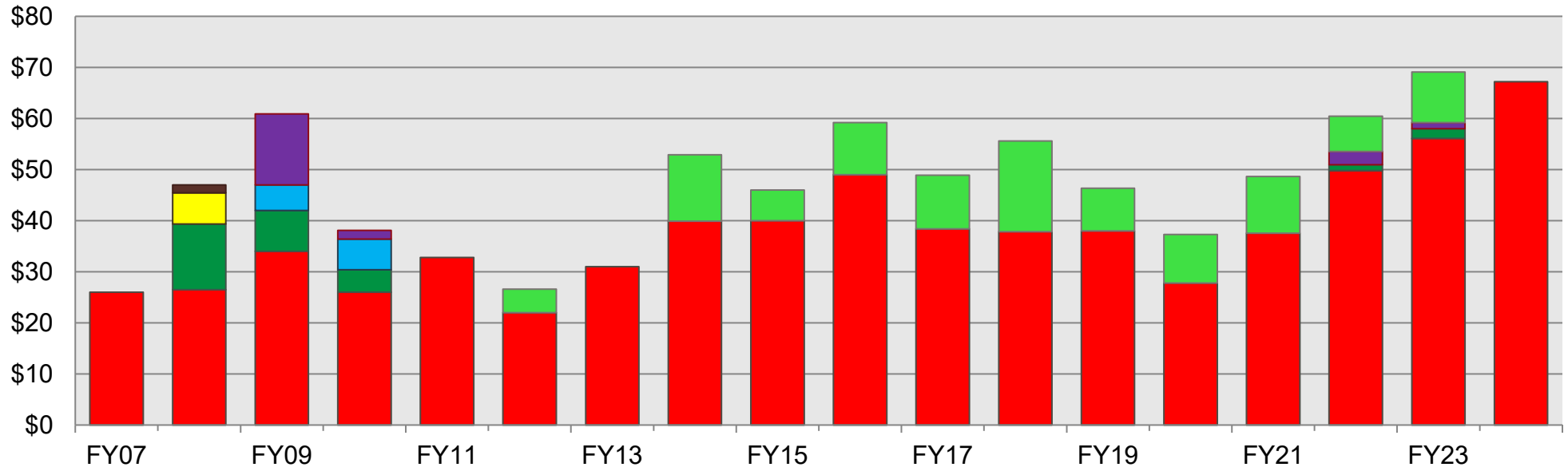
\$0.96M - Real Estate Management

Awaiting FY 24
Workplan, Adds



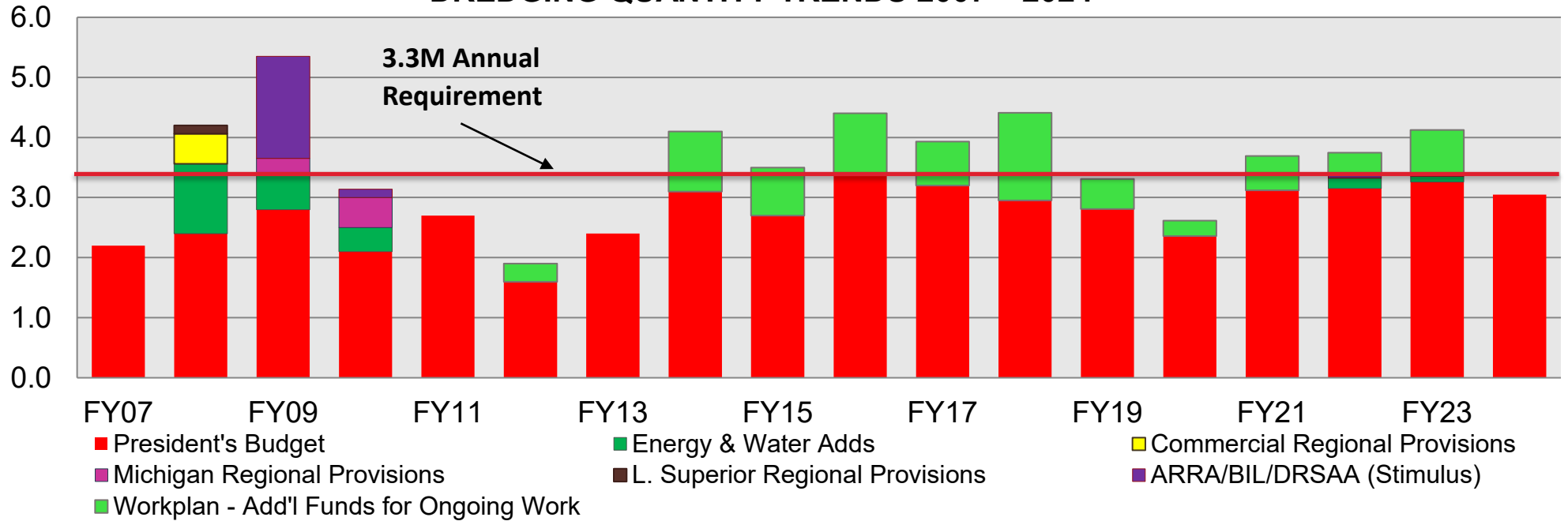
Dredging Funding (millions of dollars)

DREDGING FUNDING TRENDS 2007 - 2024



Quantity Dredged (millions of cubic yards)

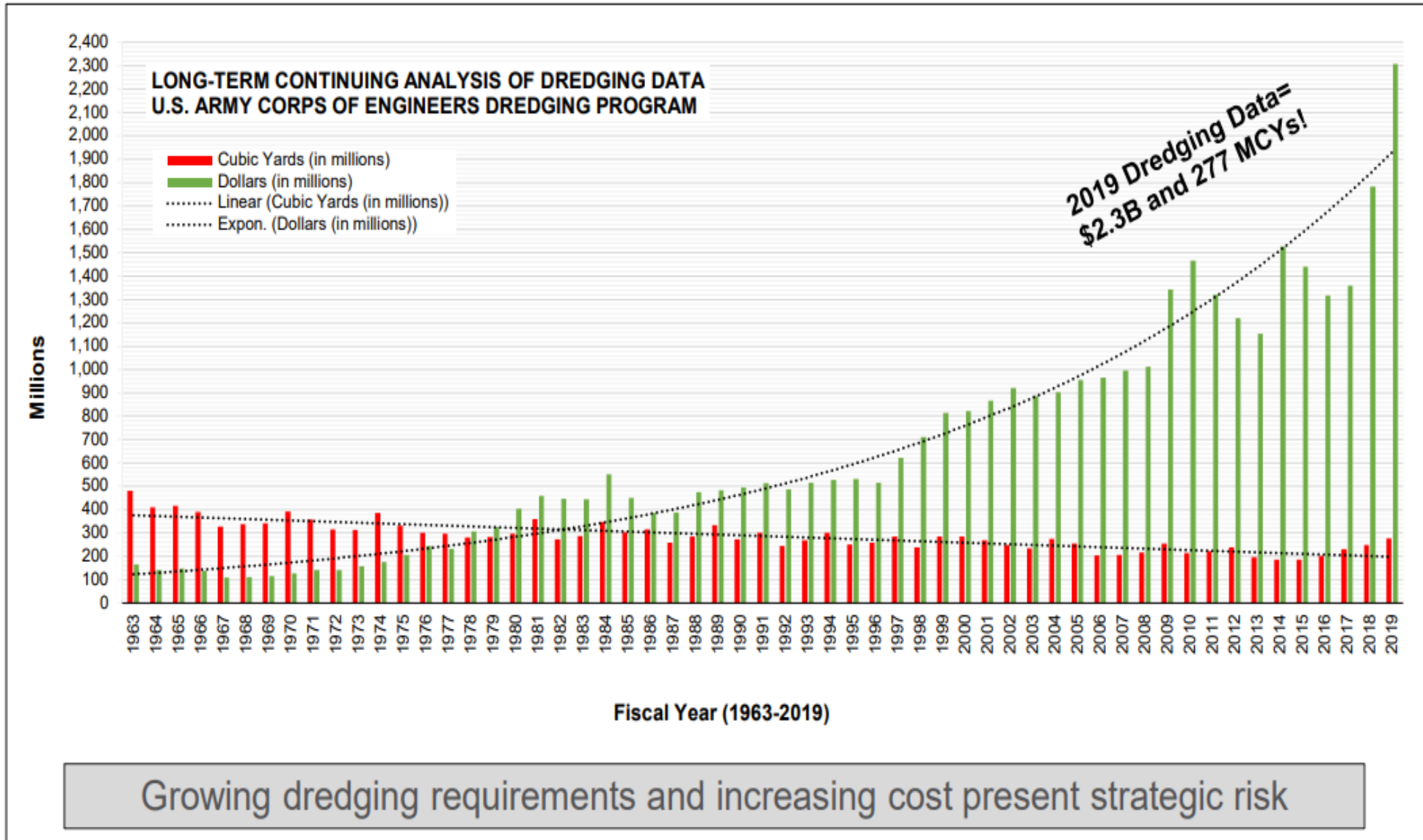
DREDGING QUANTITY TRENDS 2007 - 2024



- President's Budget
- Energy & Water Adds
- Commercial Regional Provisions
- Michigan Regional Provisions
- L. Superior Regional Provisions
- ARRA/BIL/DRSAA (Stimulus)
- Workplan - Add'l Funds for Ongoing Work

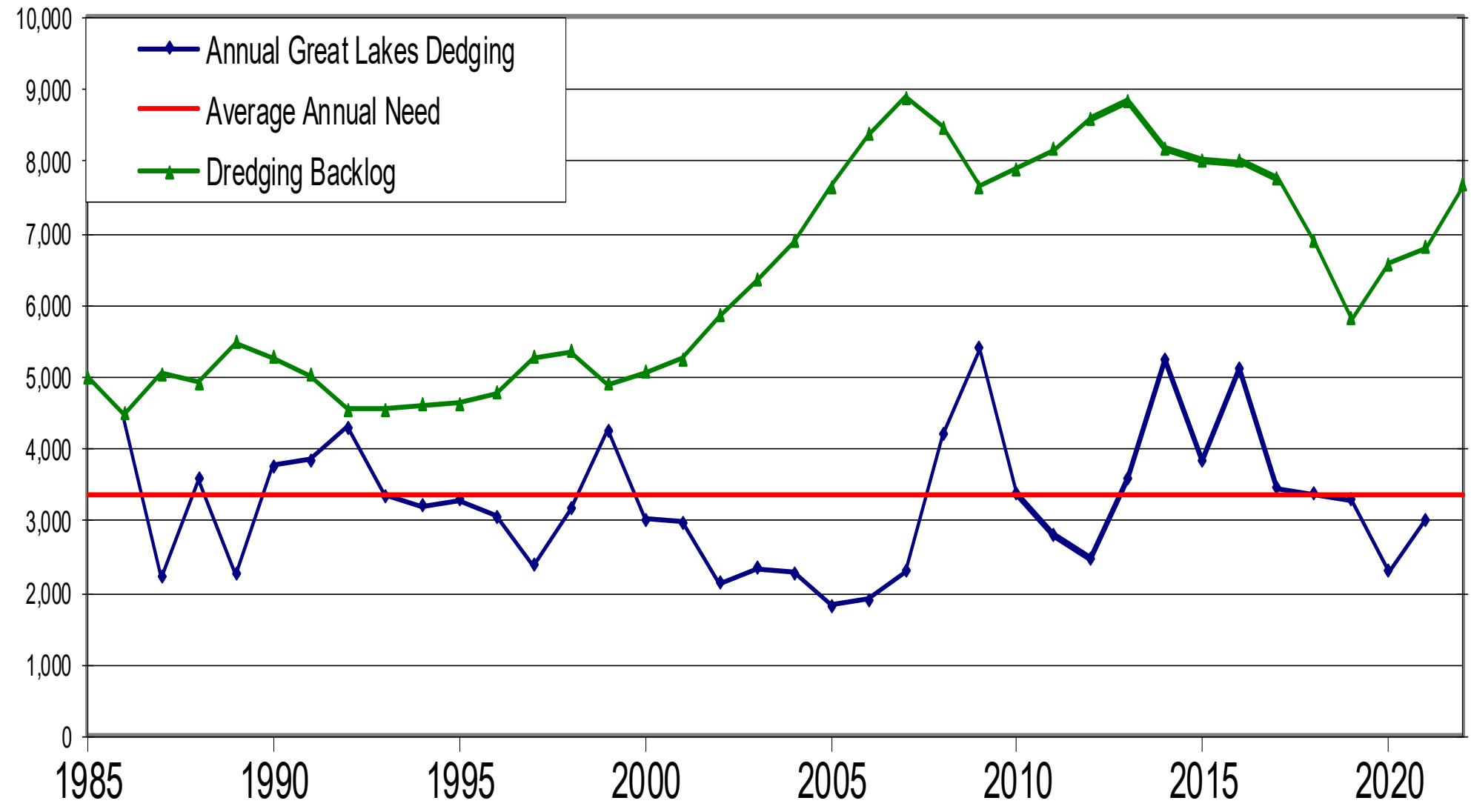


CONTINUING COST ANALYSIS



Great Lakes Dredging Backlog 1985-2022

Cubic Yards Dredged (1,000 cu yds) - Blue Line



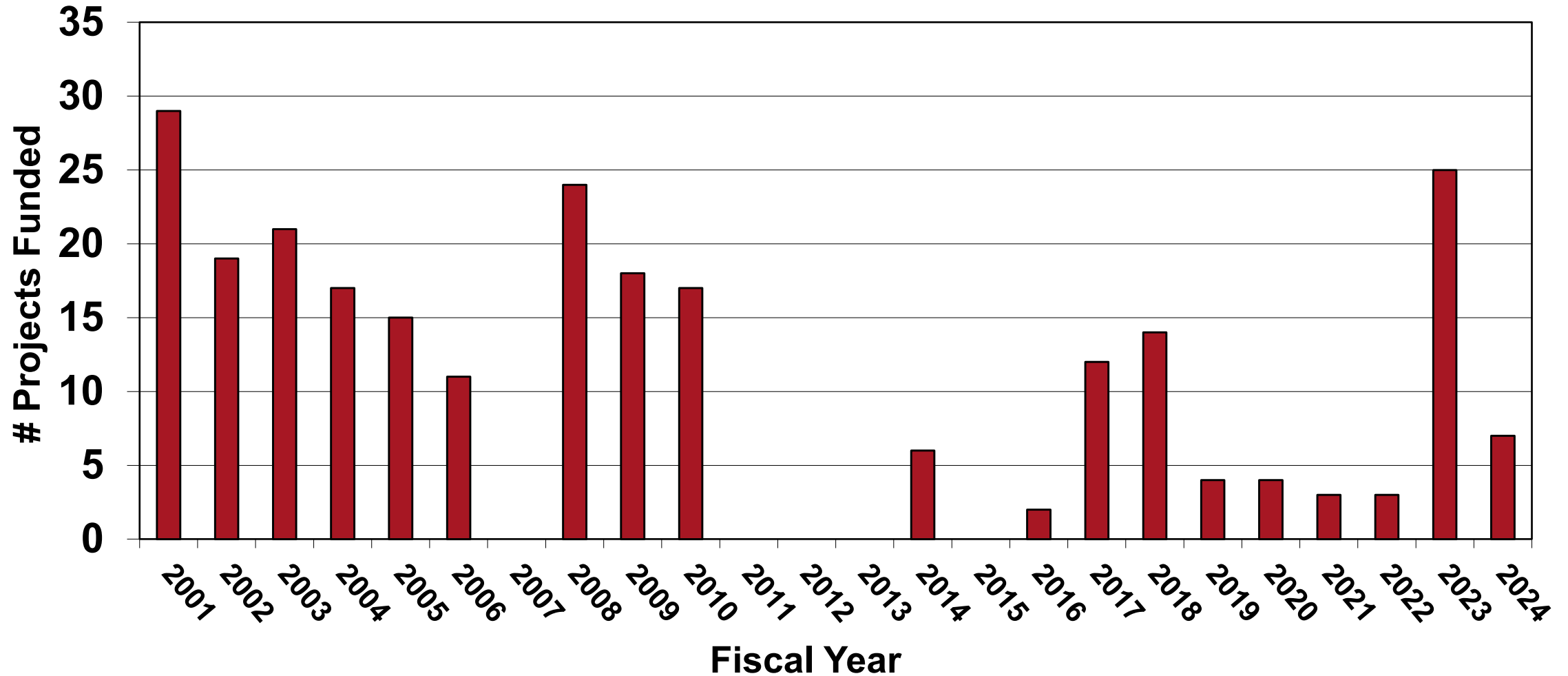
Cumulative Backlog (1,000 cu yds) - Green Line



HISTORICAL SHALLOW DRAFT/ RECREATIONAL HARBOR FUNDING



Dredging & Structure Repairs



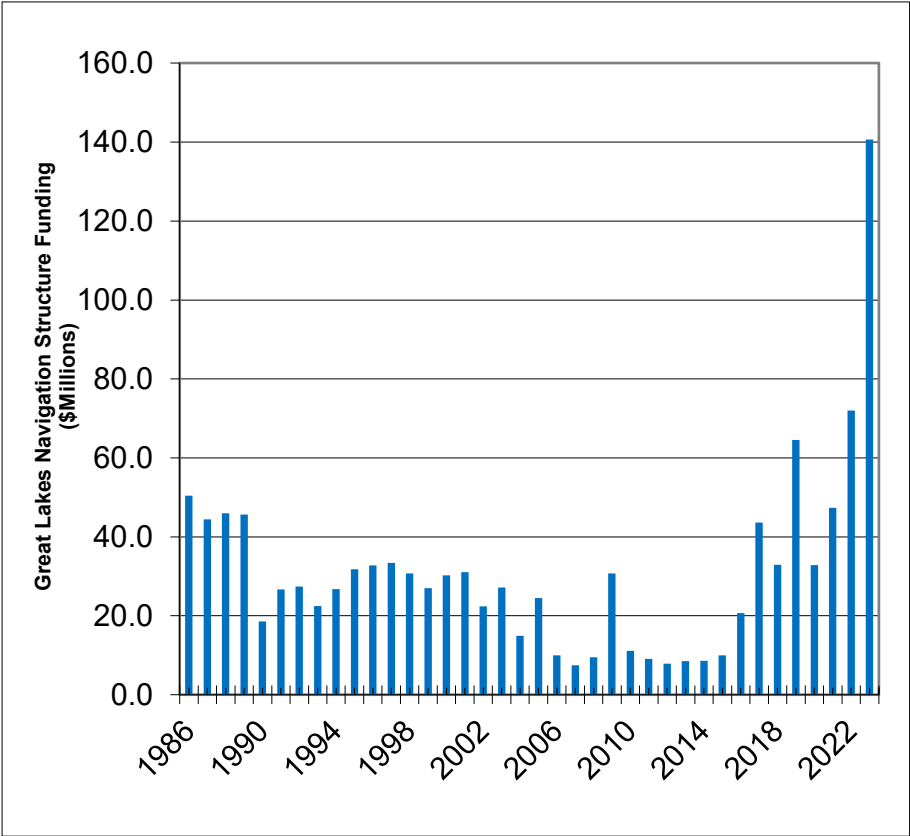


GREAT LAKES NAVIGATION STRUCTURES



- 104+ miles of navigation structures on the Great Lakes
- Structures include piers, jetties, revetments, and breakwaters
- Most were built between 1860 and 1940
- Jetties and piers were constructed perpendicular to shore to keep the channel open for navigation
- Off-shore breakwaters were constructed to allow safe navigation entry to harbors and channels

- 60% of GL coastal structures were built before WWI
- Over 90% of all coastal structures exceed 60 years of age
- Over 30% of structures have timber crib core sections; past low water levels have accelerated deterioration of the wood
- Over 40% of structure segments are rated C - F; backlog funding need is estimated at \$320M





FOCUS AREAS AND TRENDS

- Dredging Sampling and Analysis (preliminary work for dredging)
- Dredged Material Management Preliminary Analysis, Dredged Material Management Plans
- Structure Design and Repair
- Lock Design and Repair
- Critical Breakwater Safety Maintenance (signs, ladders, tripping hazards, etc.)


Trends: For some projects, inability to dredge due to lack of placement site
Need for sampling and analysis year prior to dredging
Significant increase in dredging unit costs



WEBSITE HAS DETAILS ON CONTRACTS AND FUNDING



www.lre.usace.army.mil/missions/great-lakes-navigation

 Great Lakes and Ohio River Division <i>Construction Contracts Scheduled for Advertisement in FY22</i> <small>Last updated 09/09/2022 Advertise dates subject to change</small>					
BUFFALO DISTRICT PROJECTS (W912P4)		District Contracting Chief: Jeffrey Ernest - (716) 879-4173 Email: Jeffrey.G.Ernest@usace.army.mil		Deputy for Small Business: Lynn Jennings - (412) 395-7127 Email: Lennela.R.Jennings@usace.army.mil	
CHICAGO DISTRICT PROJECTS (W912P6)		District Contracting Chief: April Judd - (502) 315-7403 Email: April.C.Judd@usace.army.mil		Deputy for Small Business: Scott Vincent - (313) 460-5066 Email: Scott.H.Vincent@usace.army.mil	
DETROIT DISTRICT PROJECTS (W911XK)		District Contracting Chief: Travis Specht - (313) 643-0993 Email: Travis.J.Specht@usace.army.mil		Deputy for Small Business: Scott Vincent - (313) 460-5066 Email: Scott.H.Vincent@usace.army.mil	
Project Description/Location	District	Scheduled Advertise Date (MON-YY)	Magnitude of Construction (Range per DFAR 236.204)	Work Description	Anticipated Acquisition Type, Strategy
Detroit River Pointe Mouillee CDF	LRE	Sep-22	Between \$1,000,000 and \$5,000,000.	Pointe Mouillee CDF Repairs and material management	IFB
Monroe Harbor Advanced Maintenance Dredging	LRE	Oct-22	Between \$1,000,000 and \$5,000,000.	Advanced Maintenance Dredging	IFB
Grand Haven - Repair of North Pier and Wave Attenuator	LRE	Dec-22	Between \$5,000,000 and \$10,000,000.	Repair of North Pier and Wave Attenuator	IFB
BIL Algoma Harbor, WI	LRC	Mar-23	Between \$10,000,000 and \$25,000,000	Repair of the South Breakwater	TBD
Charlevoix Maintenance Dredging	LRE	Feb-23	Between \$250,000 and \$500,000.	Maintenance Dredging	Task Order Under an Existing MATOC
D MDF Construction of Dock - Calumet Harbor	LRC	Feb-23	Between \$5,000,000 and \$10,000,000.	Construction of Dock for handling Dredged Material	IFB

US Army Corps of Engineers
 Great Lakes Navigation Business Line
 FY23 President's Budget
 March 28, 2022

Navigation O&M \$205.4M

\$56.1M	Primary Dredging 3.26M cu yds
\$1.09M	Ashtabula Harbor
\$1.40M	Buffalo Harbor
\$3.36M	Calumet Harbor and River
\$8.52M	Cleveland Harbor
\$2.01M	Conneaut Harbor
\$3.15M	Detroit River
\$2.66M	Duluth-Superior Harbor
\$2.34M	Fairport Harbor
\$0.75M	Grand Haven Harbor
\$2.90M	Green Bay Harbor
\$0.80M	Holland Harbor
\$1.50M	Huron Harbor
\$3.44M	Indiana Harbor
\$0.95M	Lorain Harbor
\$0.65M	Ludington Harbor
\$2.41M	Milwaukee Harbor
\$1.13M	Monroe Harbor
\$0.97M	Oswego Harbor
\$1.00M	Port Clinton Harbor
\$2.63M	Saginaw River
\$1.00M	Sandusky Harbor
\$1.89M	St. Joseph Harbor
\$2.66M	St. Marys River
\$5.87M	Toledo Harbor
\$1.00M	Vermilion Harbor



UPCOMING STAKEHOLDER MEETINGS

November 8 – Great Lakes Construction Roundtable (Contractor Focused)

November 9 – Great Lakes Navigation Stakeholder Meeting
Detroit Wayne County Port Authority

~ April 2024 Virtual Shallow Draft Stakeholder Meeting

www.lre.usace.army.mil/missions/great-lakes-navigation



Questions?

