

Great Lakes Navigation Stakeholder Meeting

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U.S. Army Corps of Engineers
Chief of Operations – Detroit District

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US Army Corps of Engineers
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Agenda

- FY14 Maintenance Dredging
- Key FY14 O&M Activities
 - ▶ Dredging
 - ▶ Soo Locks Asset Renewal
- FY15 President's Budget



FY14 Appropriation

Deep Draft Dredging – Detroit District

Duluth-Superior
Green Bay
Holland
Grand Haven
Saginaw River
Detroit River
Monroe
St. Marys River

Cheboygan
St. Joseph
Manitowoc
Menominee
Kewaunee

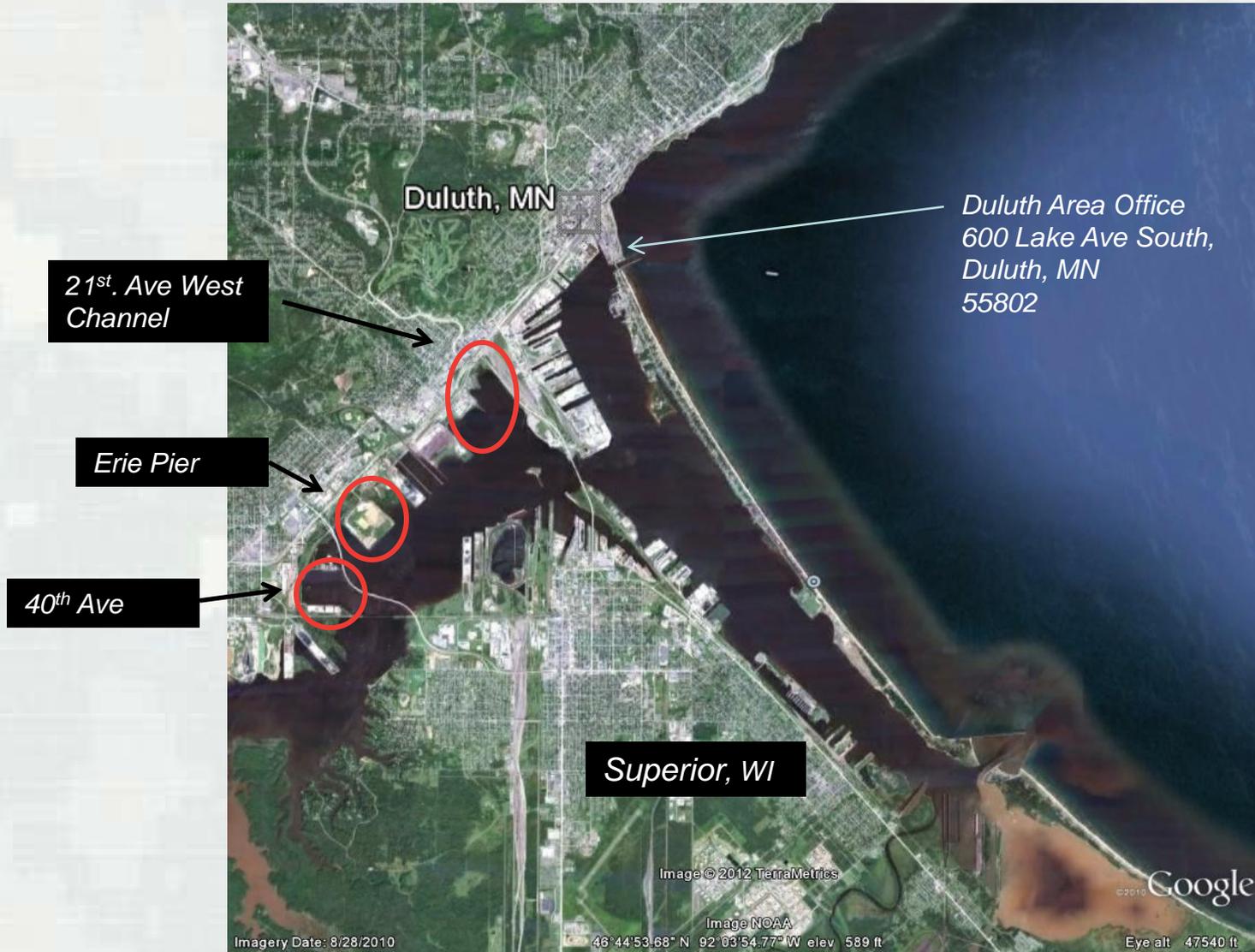


Key FY14 Detroit District O&M Activities

- Duluth Maintenance Dredging w/ 2nd Year of Pilot Project for Disposal at 21st Avenue
- Green Bay Maintenance Dredging and Use of Cat Island Dredged Material Disposal Facility
- Soo Locks Asset Renewal:
 - ▶ Installation of New Poe Lock Hydraulics
 - ▶ Installation of New MacArthur Lock Gate Anchorages
 - ▶ Replacement of Poe Lock Dewatering Pump Controls
 - ▶ Poe Lock Gate 3 Repairs/Recoating
- St. Marys River – Rock Cut Repairs



Duluth- Superior Harbor





Duluth-Superior Hbr 21st Avenue Pilot Project:

Year 2 of pilot under
which dredged material
will be placed in 21st
ave embayment

Will require control
and/or monitoring



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21st Ave. W. View South



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Discharge Line to Area 1



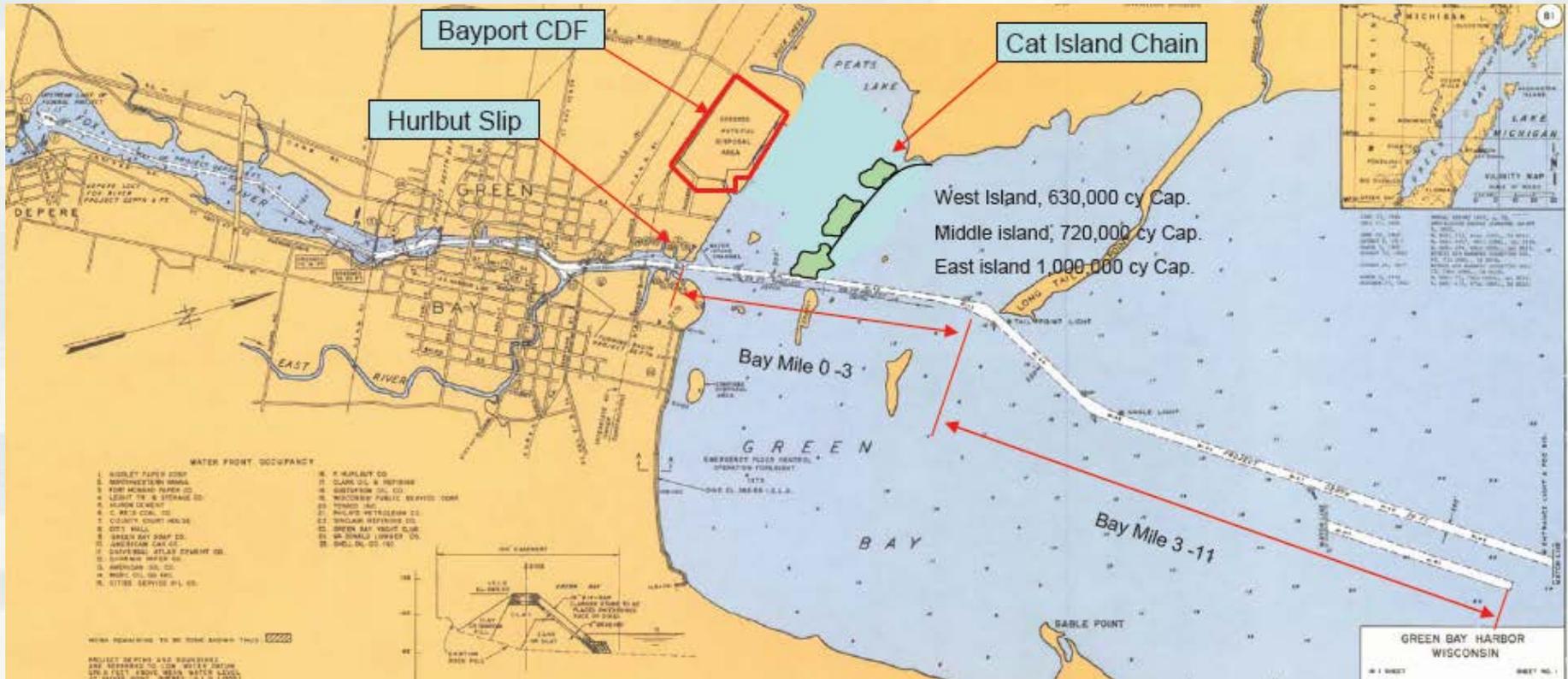
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Agency Sampling-Monitoring

- Barr Engineering (Pete Kero) / MPCA - Bathymetric surveys (4) to monitor stability of sediment cap.
- UMD (Nate Johnson) - Contaminants / mercury.
- UMD-NRRI (Carol Reschke) - Benthic macroinvertebrates and aquatic vegetation sampling.
- USACE-ERDC (Joe Kreitinger) - Particle size analysis / modeling.
- USACE-LRE (Pam Horner) - Turbidity levels and suspended solids.
- WDNR (Joe Graham) - Water sampling events (3) for mercury analysis.



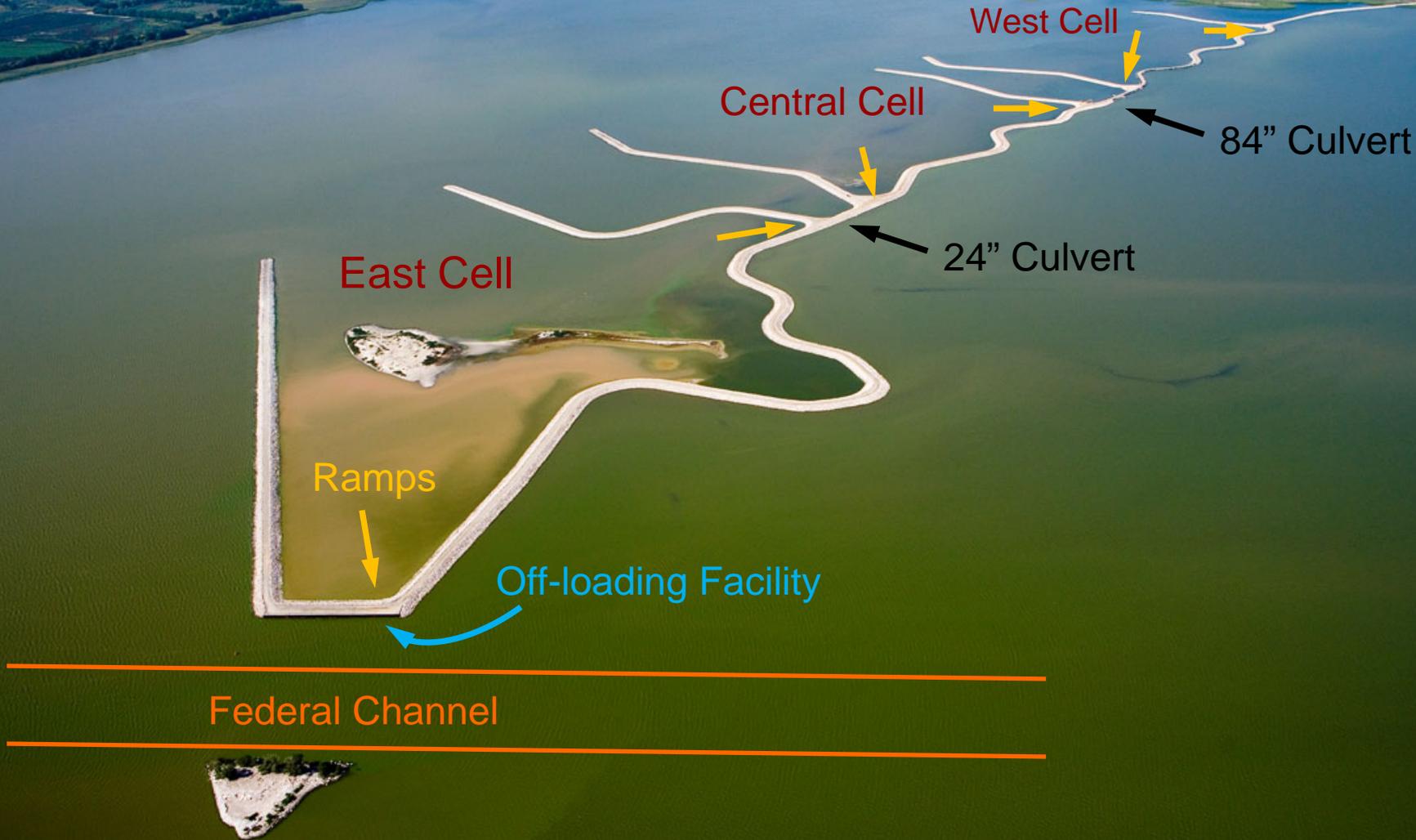
Project Area in Green Bay



Cat Island Restoration

- Project for navigation:
 - ▶ Provides for at least 20 years of disposal capacity for maintenance dredging for the Federal channel
- Environmental benefits:
 - ▶ Re-creates the Cat Island chain (274 acres)
 - ▶ Restoration of Pete's Marsh and Duck Creek Delta Wetland, providing 1,440 acres of wetland wildlife refuge



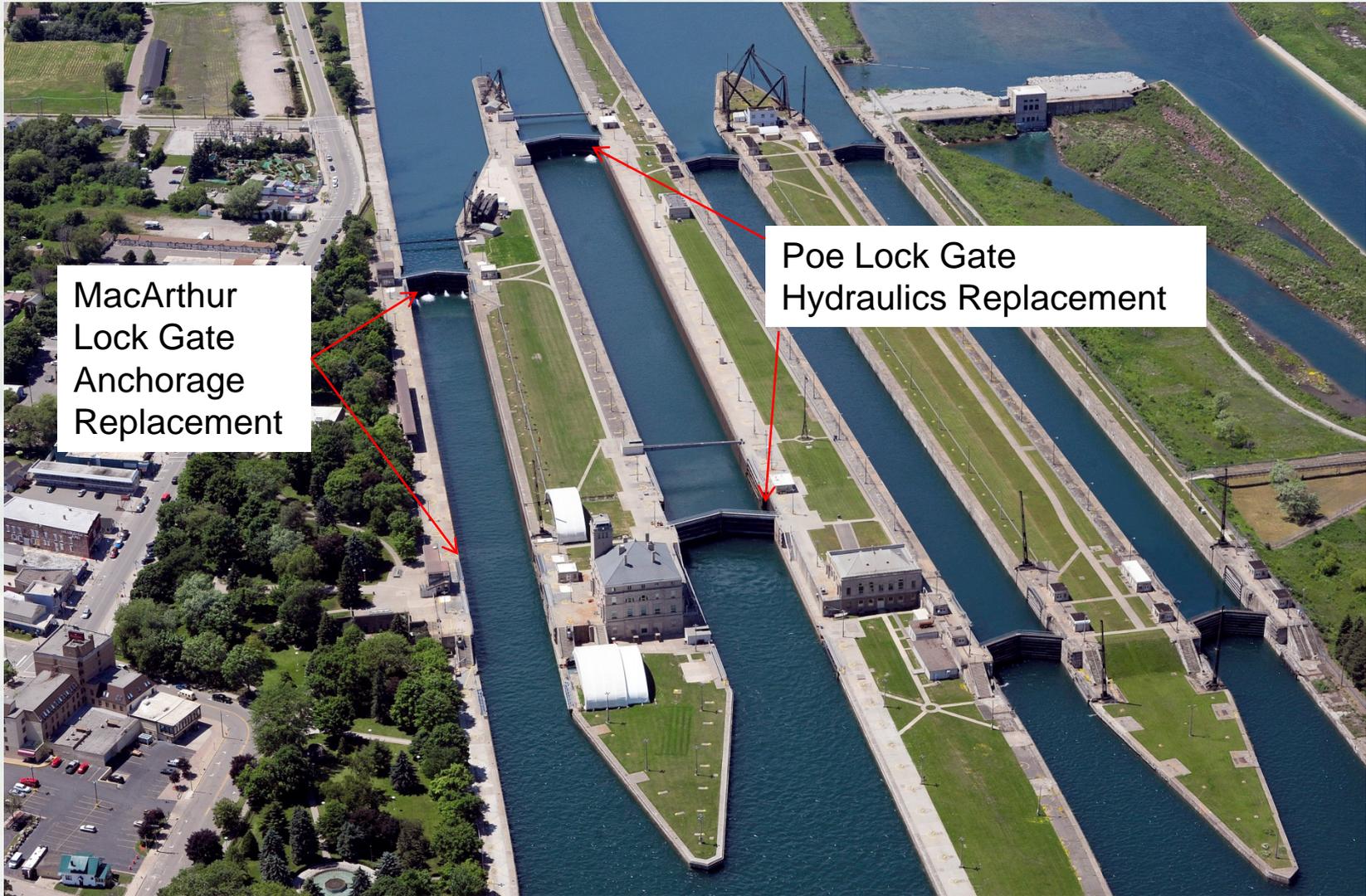


Detroit FY14 Construction- non-Dredging

Project	Scheduled Advertise Date	Estimated Award Amount	Work Description	Est. Quantity (cy)	Expected Dredging Period	Expected Dredge Type	Anticipated Contracting Method
Soo - Poe Lock Gate 3 Coating Replacement	Jul-14	\$1M - \$5M	Replace coating on Poe Lock gate 3.	n/a	n/a	n/a	IFB/TBD
Soo - Unit 10 / NPP Station Service Switchgear	Jul-14	\$500k - \$1M	Update AC/DC Station Service	n/a	n/a	n/a	LPTA
Soo - Replace Unit 10 Approach Apron	Jun-14	\$500k - \$1M	Removal of structure and slope stabilization with USACE provided stone	n/a	n/a	n/a	Design-Build/LPTA
Soo - New Power Plant Protective Relays Replacement	Jul-14	\$500k - \$1M	Provide and install new protective relays	n/a	n/a	n/a	LPTA
Soo - MacArthur Lock Controls Upgrade	Jul-14	\$5M-\$10M	Replace all MacArthur Lock gate/Valve Controls	n/a	n/a	n/a	IFB



Soo Locks Asset Renewal - Ongoing



MacArthur
Lock Gate
Anchorage
Replacement

Poe Lock Gate
Hydraulics Replacement



Poe Lock Hydraulics



New Cylinder at Gate 2N

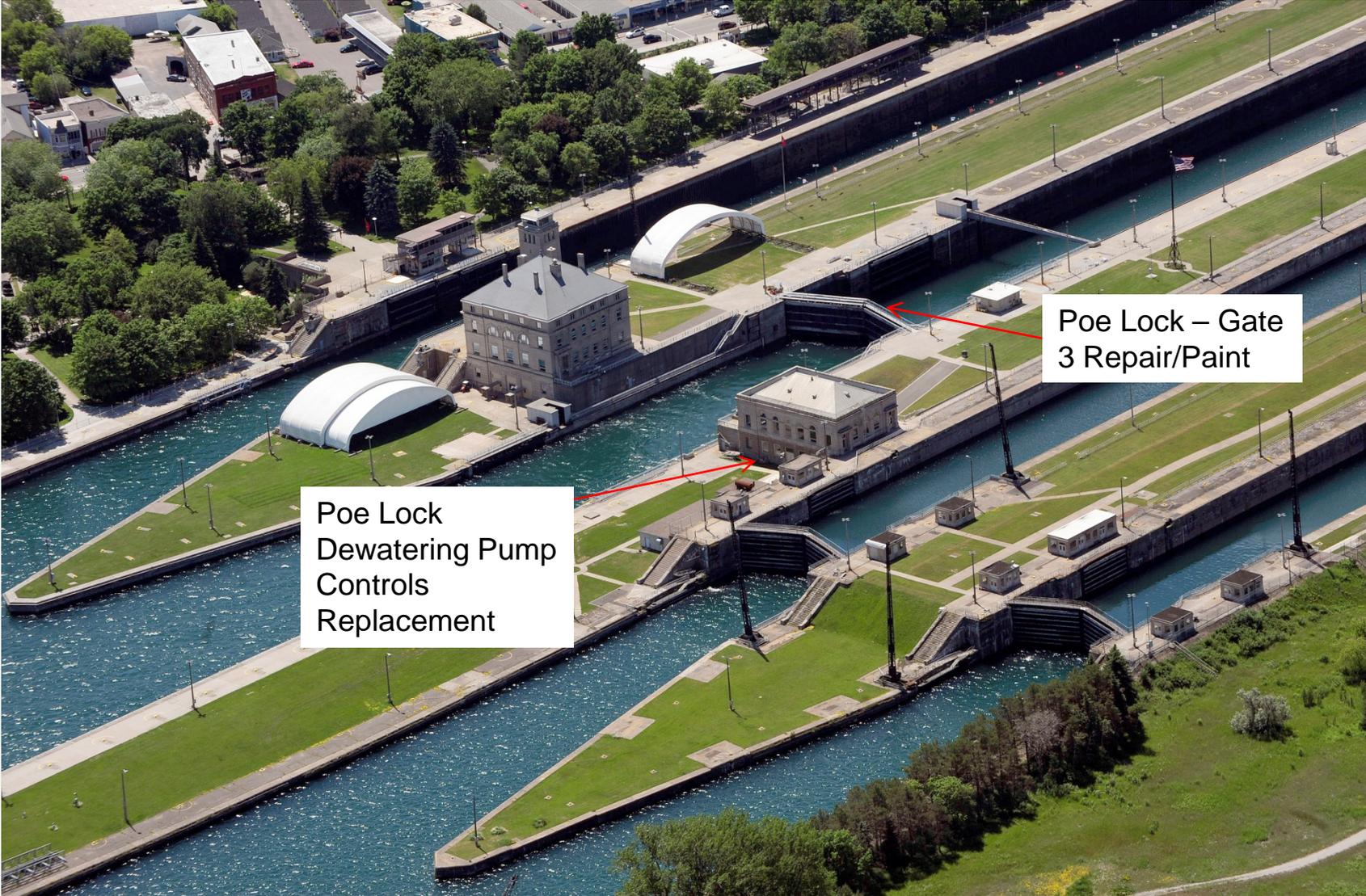


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MacArthur Lock Gate Anchorages



Soo Locks Asset Renewal - FY14 Appropriation

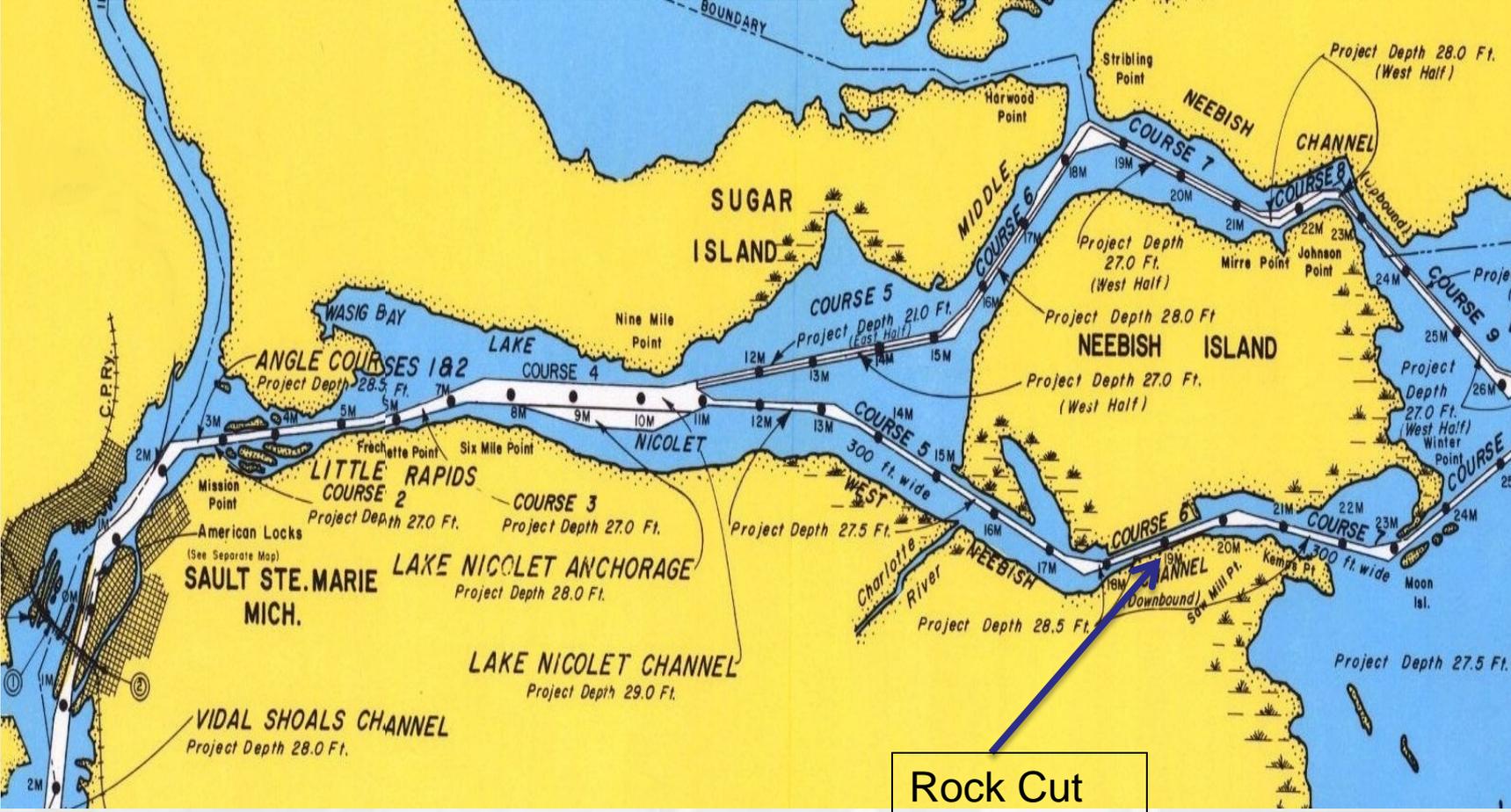


Poe Lock
Dewatering Pump
Controls
Replacement

Poe Lock - Gate
3 Repair/Paint



West Neebish Island Rock Cut



West Neebish Island Rock Cut



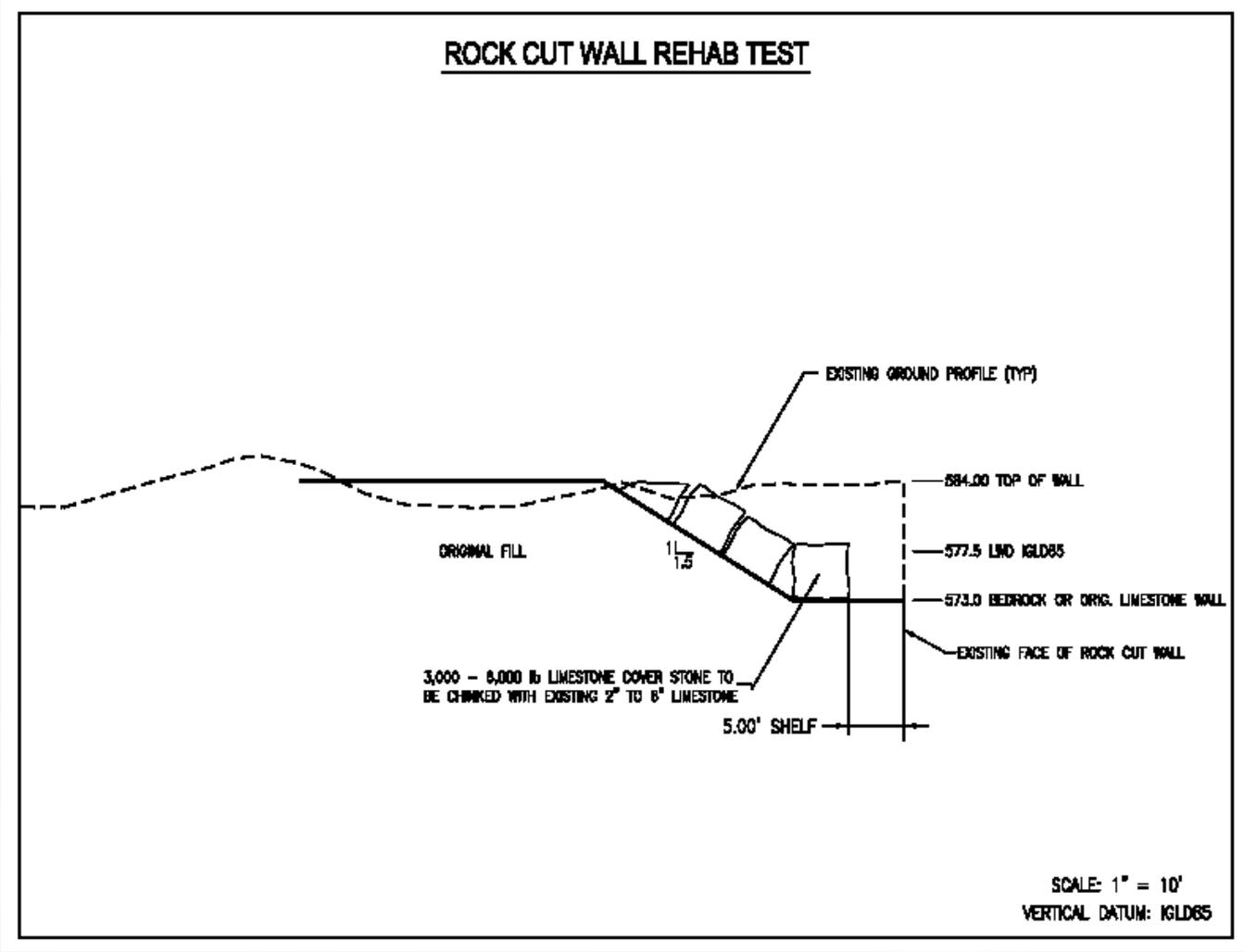
West Neebish Island Rock Cut



West Neebish Island Rock Cut



West Neebish Island Rock Cut



West Neebish Island Rock Cut



2013 Aerial View and Work Area ~ Approximately 1,000 Feet



2013 Aerial View and Work Area ~ Approximately 1,000 Feet



Key FY15 President's Budget O&M Projects

- Maintenance Dredging
- St. Marys River Dredging
- Continuing Soo Locks asset Renewal:
 - ▶ Complete MacArthur Lock Controls Replacement
 - ▶ Design of Poe Lock Controls Upgrades
 - ▶ Replacement of Lock Dewatering Valves & Discharge Piping



FY15 President's Budget

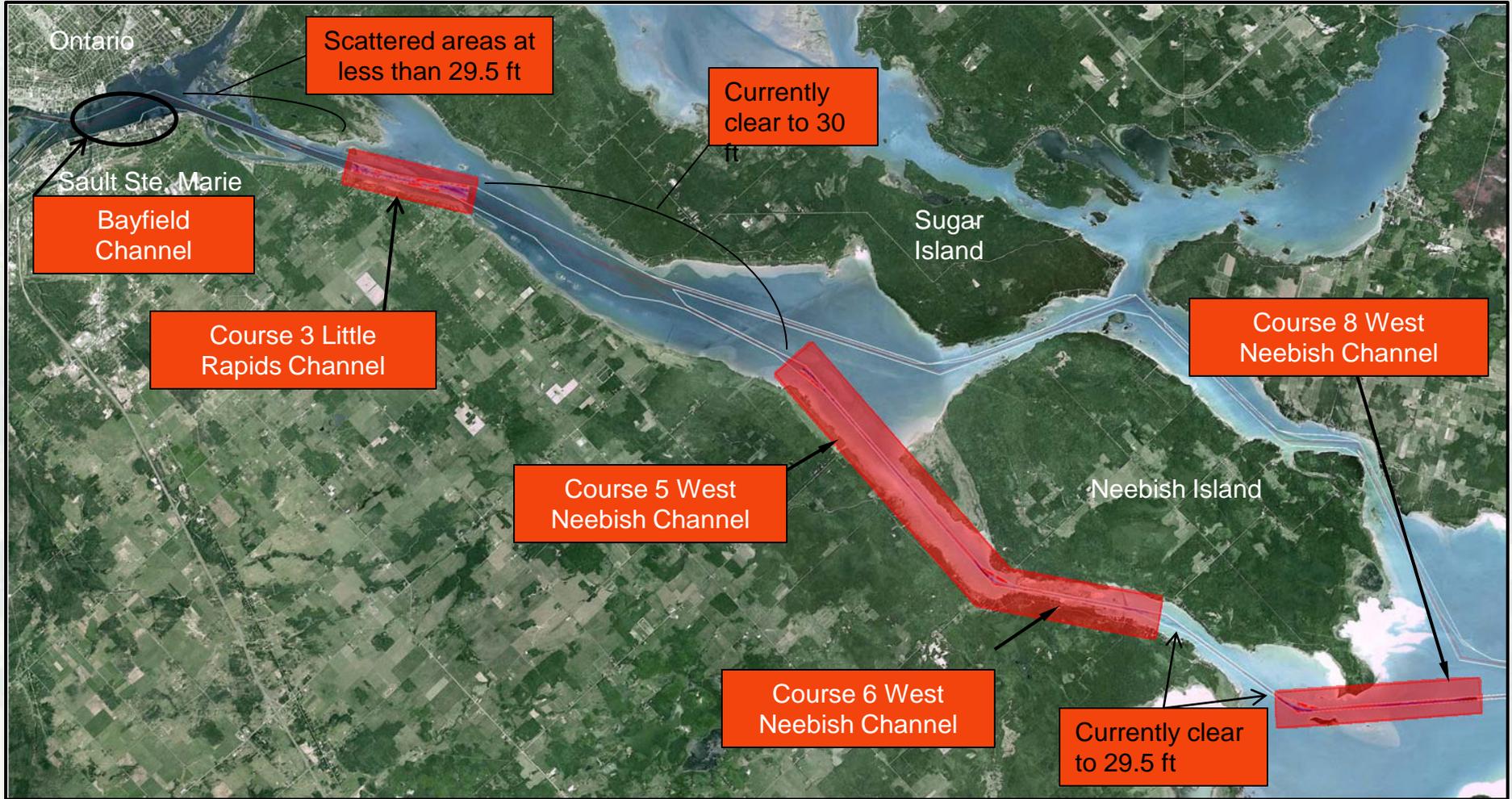
Deep Draft Dredging – Detroit District

Duluth-Superior
Green Bay
St. Clair River
Grand Haven
Saginaw River

Detroit River
Monroe
St. Marys River
Milwaukee



LOWER ST. MARYS RIVER CHANNEL CONDITIONS



Key Great Lakes Contacts

GL Navigation Business Line Manager

Mike O'Bryan – (313) 226-6444

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Dave Wright - Detroit Operations Chief
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www.lre.usace.army.mil/greatlakes/navigation



Questions?



Great Lakes Navigation Stakeholder Meeting

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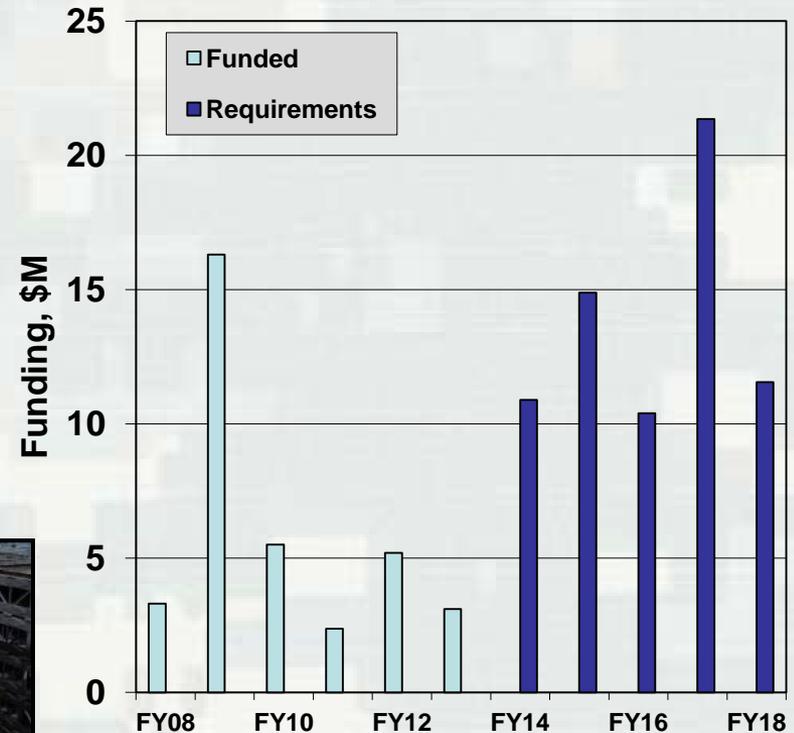
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Soo Locks Asset Renewal Long-Term Plan

Asset Renewal Plan will maximize reliability and reduce risk through 2035

- \$35.9M funded to date through FY13
 - New hydraulics, stop logs, utilities
 - Crib Dam construction
 - Compressed Air System
 - Mac Lock modernization design
- Remaining funding required \$69 million over 5 years
 - Poe and Davis Pump Well Valves
 - Poe Electrical Rehabilitation
 - MacArthur Interlocks and Controls Upgrade



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Detroit FY14 O&M Construction-Dredging

Project	Scheduled Advertise Date	Estimated Award Amount	Work Description	Est. Quantity (cy)	Expected Dredging Period	Expected Dredge Type	Anticipated Contracting Method
Grand Haven Maintenance Dredging	Awarded	\$250k - \$500k	Maintenance Dredging	64,000	Apr	HYD	MATOC
Holland Harbor (Outer) Maintenance Dredging	Awarded	\$250k - \$500k	Maintenance Dredging	38,000	May	HYD	MATOC
Kenosha Harbor Maintenance Dredging	Awarded	\$250k - \$500k	Maintenance Dredging	25,000	Apr-May	MECH	MATOC
Holland Harbor (Inner) Maintenance Dredging	Awarded	\$500k - \$1M	Maintenance Dredging	54,000	Apr-May	HYD	MATOC
Point Lookout Harbor Maintenance Dredging	Advertised	\$1M - \$5M	Maintenance Dredging	55,000	Apr-May	MECH	MATOC
Green Bay Maintenance Dredging	Apr-14	\$1M - \$5M	Maintenance Dredging	200,000	Aug-Oct	HYD/MECH	IFB / SB
Sebewaing River Maintenance Dredging	Apr-14	\$250k - \$500k	Maintenance Dredging	70,000	May-Jun	HYD	IFB / SB
St Marys River Maintenance Dredging	Jun-14	\$1M - \$5M	Maintenance Dredging	110,000	Sep-Oct	HYD/MECH	MATOC
Detroit River Maintenance Dredging	May-14	\$1M - \$5M	Maintenance Dredging	260,000	Jul-Oct	HYD/MECH	MATOC
Saginaw Maintenance Dredging	May-14	\$1M - \$5M	Maintenance Dredging	230,000	Jul-Oct	HYD/MECH	MATOC



Detroit FY14 O&M Construction-Dredging

Project	Scheduled Advertise Date	Estimated Award Amount	Work Description	Est. Quantity (cy)	Expected Dredging Period	Expected Dredge Type	Anticipated Contracting Method
St. Joseph (Inner) Maintenance Dredging	Apr-14	\$500k - \$1M	Maintenance Dredging	35,000	May-Jul	MECH	MATOC
St. Joseph (Outer) Maintenance Dredging	Apr-14	\$250k - \$500k	Maintenance Dredging	60,000	May-Jul	HYD/MECH	MATOC
Leland Harbor Maintenance Dredging	Apr-14	\$250k - \$500k	Maintenance Dredging	17,000	May-Jun	HYD?MECH	MATOC
Duluth-Superior Maintenance Dredging	May-14	\$1M-\$5M	Maintenance Dredging	120,000	Jul-Sep	HYD/MECH	IFB/SB
Monroe Harbor Maintenance Dredging	May-14	\$500K-\$1M	Maintenance Dredging	140,000	Jun-Sep	HYD	IFB/SB
Kewaunee Maintenance Dredging	May-14	\$500K-\$1M	Maintenance Dredging	40,000	Jul-Sep	MECH	IFB / SB
Manitowoc Maintenance Dredging	May-14	\$500k - \$1M	Maintenance Dredging	30,000	Jul-Sep	MECH	IFB/SB
Black River Maintenance Dredging	Jul-14	\$500k-\$1M	Maintenance Dredging	35,000	Aug-Oct	TBD	IFB / SB
La Pointe Maintenance Dredging	Jul-14	\$250K-500K	Maintenance Dredging	1200	Jul-Sep	TBD	IFB/SB
Menominee Maintenance Dredging	Jul-14	\$250K-500K	Maintenance Dredging	25,000	Sep-Oct	TBD	IFB/SB
Cheboygan Maintenance Dredging	Jul-14	\$500K-\$1M	Maintenance Dredging	30,000	Jul-Aug	TBD	IFB/SB

