

USACE – ST PAUL DISTRICT CHANNELS & HARBORS PROJECT

Presentation for

MISSISSIPPI MANAGERS MEETING

By Dan Cottrell

8 February 2022



US Army Corps
of Engineers®

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MISSISSIPPI VALLEY DIVISION
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OUTLINE



- Staff
- 2021 Channel Activities
- 2021 Projects
- 2022 Projects
- Impacts to Navigation





CHANNELS & HARBORS STAFF



Robert Stanick

Chief, Channels & Harbors

Dan Cottrell

Dredging Manager

- * Channel & Harbor Management
- * Dredge Cut Layout

Paul Machajewski

Dredged Material Manager

- * Long-term Placement Site Planning
- * Placement Site Excavations

Dan DeVaney

Channel Maintenance Coordinator

- * Placement Site Implementation/Management
- * Beneficial Use Coordination

Al VanGuilder

Chief, Hydro-Survey Unit

- * Hydrographic Surveys
- * Topographic Surveys



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2021 CHANNEL ACTIVITIES



- **“New” Normal for start of Dredging Season**
 - Continued cleaning up areas that were affected by 2019 and 2020 high water.
 - APR 12: HREP Mechanical Dredging Plant 4 (McMillan in Pool 10)
 - APR 19: Contract Mechanical Plant 2 (Pine Bend in Pool 2)
 - APR 21: Contract Mechanical Plant 1 (Beef Slough in Pool 4)
 - MAY 04: Dredge Goetz (Crats Island in Pool 4)
 - JUN 5: Government Mechanical (Grand Encampment in Pool 4)
 - Consistent progress all season with several plants (7 different plants)
- We made consistent progress all season with several plants; the Dredge Goetz left the district July 17th.
- Conditions held well as we dredged locations and seemed to holding even to the end of the season. We will see what winter and spring high water brings.



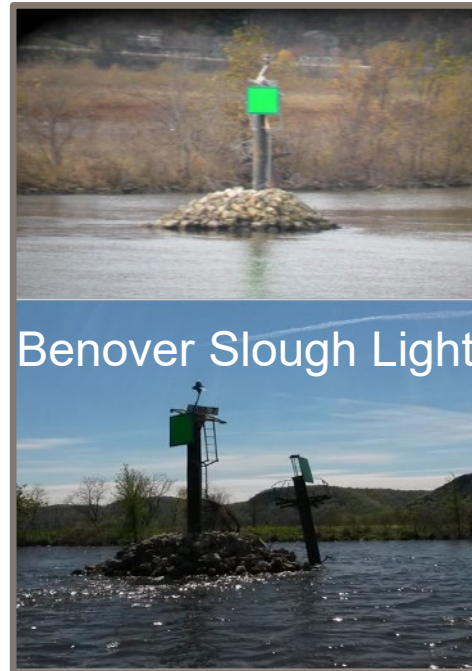
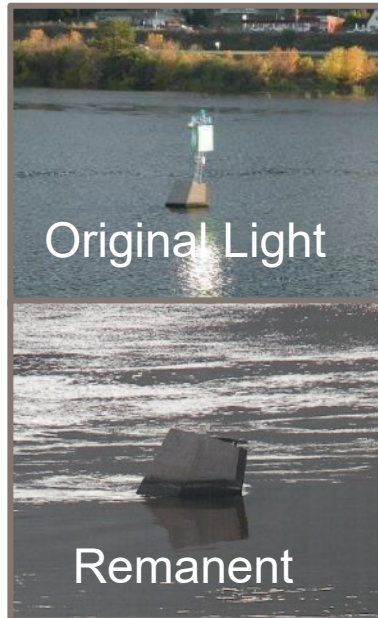
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2021 CHANNEL ACTIVITIES



- USCG requested and funded removal of a remnant light in Pool 5 and Benover Light in Pool 8
 - Corps Maintenance & Repair did all the work
 - Island 49 light base was a hazard to recreation boaters, Benover Slough Light was hard to maintain.
 - Channels & Harbors supported with hydrographic surveys before, during and after removal
 - Work dates: JUL 27 – AUG 11, the process went better this year using bigger equipment.



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2021 CHANNEL ACTIVITIES

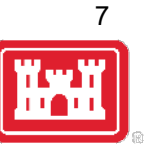


- **Upper Pool 4 – Some dredging completed in 2021 at Head of Lake Pepin**
 - Core samples taken farther down stream for future potential dredging. Placement site capacities still largest limiting factor.
- **Pool 7 – Upper Approach to LD7 Outdraft**
 - No specific concerns reported, significantly reduced flows in 2021 compared to two previous years.
- **Pool 8 – Sand Slough**
 - Shoaling during the last few years
 - Dredged in 2020 after completing sediment sampling and mussel surveys in 2019
 - Exploring restoring wing dams in this area as a project to reduce future dredging, increase navigation safety.



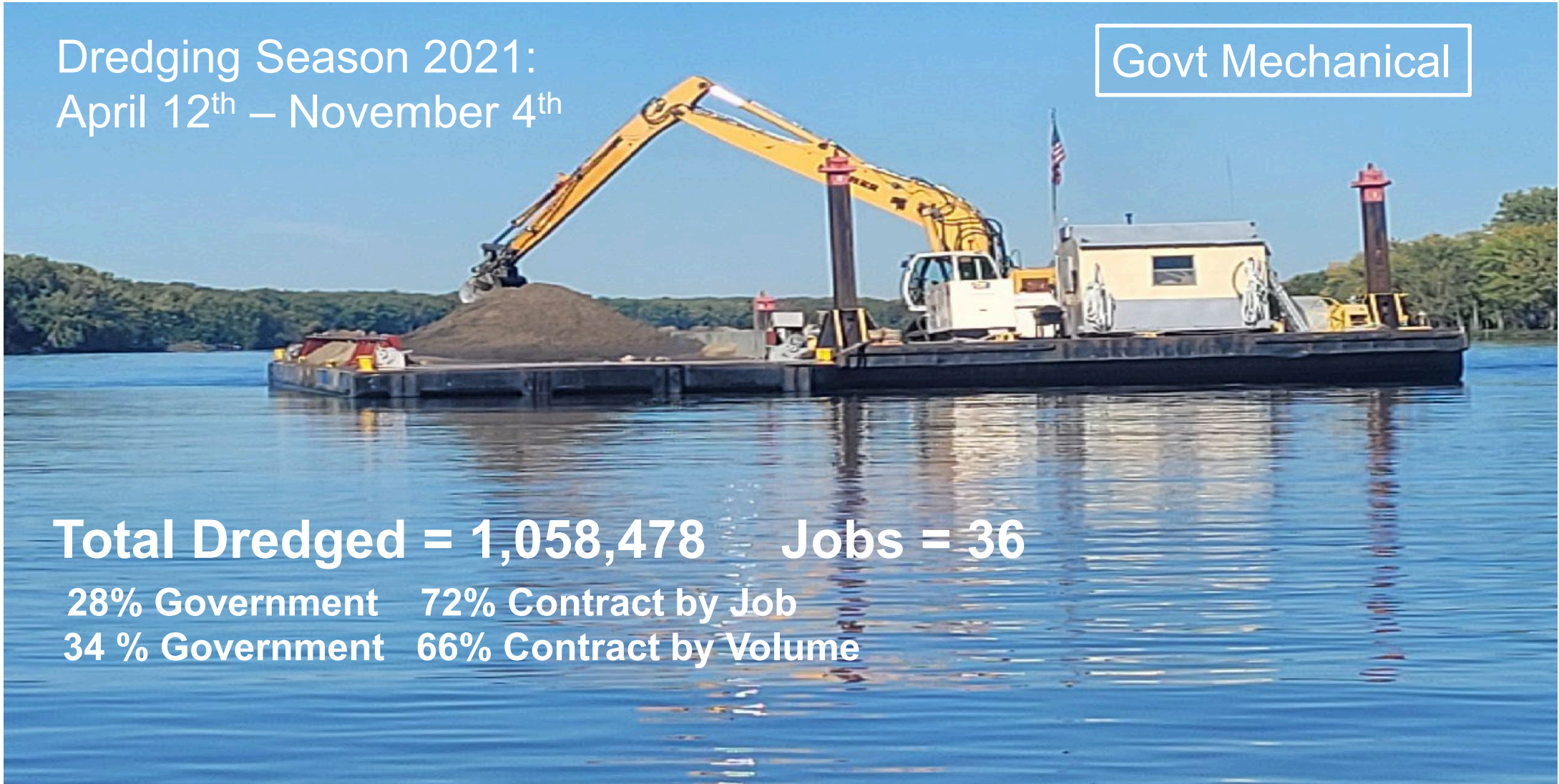


2021 CHANNEL ACTIVITIES



Dredging Season 2021:
April 12th – November 4th

Govt Mechanical



Total Dredged = 1,058,478 Jobs = 36

28% Government 72% Contract by Job
34 % Government 66% Contract by Volume



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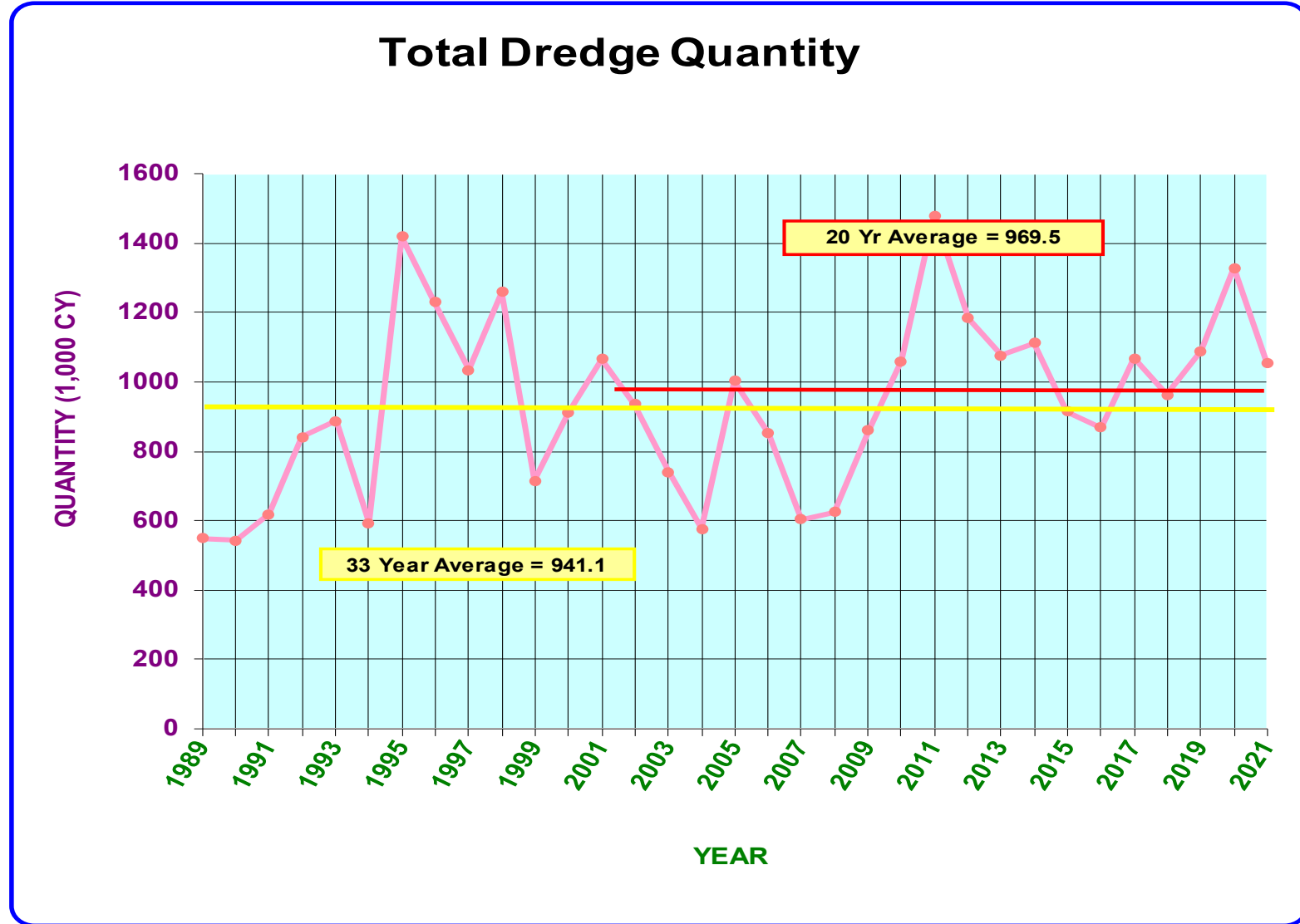


2021 CHANNEL ACTIVITIES



YEAR	QUANTITY (1,000 CY)
1989	548.6
1990	542.0
1991	618.1
1992	841.5
1993	888.0
1994	593.2
1995	1,417.4
1996	1,230.0
1997	1,033.9
1998	1,258.9
1999	715.3
2000	911.9
2001	1,066.5
2002	936.3
2003	740.2
2004	577.0
2005	1,003.2
2006	851.1
2007	604.1
2008	625.7
2009	860.9
2010	1,058.8
2011	1,479.0
2012	1,182.1
2013	1,075.2
2014	1,112.3
2015	915.5
2016	867.8
2017	1068.1
2018	962.2
2019	1,087.7
2020	1,328.2
2021	1,055.2

Average 941.1
 20 yr Avg 969.5



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2021 PROJECTS



- **Land Acquisition for Dredged Material Placement**
 - Pool 4: Began negotiating use and/or acquisition of ~330 acres
 - Pool 6: Negotiating use of 5 acres
- **Placement Site Capacity Restored**
 - Pool 4: ~20K CY at Red Wing
 - Pool 6: ~55K CY from Homer
 - Pool 7: ~50K CY from Dakota Island
 - Pool 8: ~200k CY from Brownsville
- **Dredged Material Management Plans**
 - Pool 2: Working Implementation
 - Pool 4: Developing DRAFT Plan
 - Pool 6: Developing DRAFT Plan
 - Pools 9 & 10: Initiated plans, held public scoping





2022 PROJECTS

- **Land Acquisition for Dredged Material Placement**
 - Pool 4: Continue negotiating use and/or acquisition of ~330 acres
 - Pool 6: Negotiating use of ~125 acres
- **Planned Placement Site Unloading**
 - Pool 2: Pigs Eye Lake Section 204 Habitat Project ~400K CY of material from Pine Bend, Upper Boulanger, and Lower Boulanger (2022-2025)
 - Pool 5, Above West Newton: ~100K CY via Mechanical Unloading Contract
- **Dredged Material Management Plans**
 - Pool 2: Working Implementation
 - Pool 4: DRAFT Plan Public Review
 - Pool 6: DRAFT Plan Public Review
 - Pool 9: Developing Alternatives
 - Pool 10: Developing Alternatives





2022 PROJECTS



- **Dredging Related**

- Continue to regain channel width and depth lost in 2019, most locations have been restored to prior than 2019 widths.
- Do environmental work in order to dredge downstream of Head of Lake Pepin dredge cuts.
- Pool 10: McGregor Lake HREP contract, Original option 2 will be broken out into a separate contract may utilize more channel or placement site material.

- **AIS AtoNs**

- Continue use where appropriate
- Coast Guard is exploring more ways to integrate.

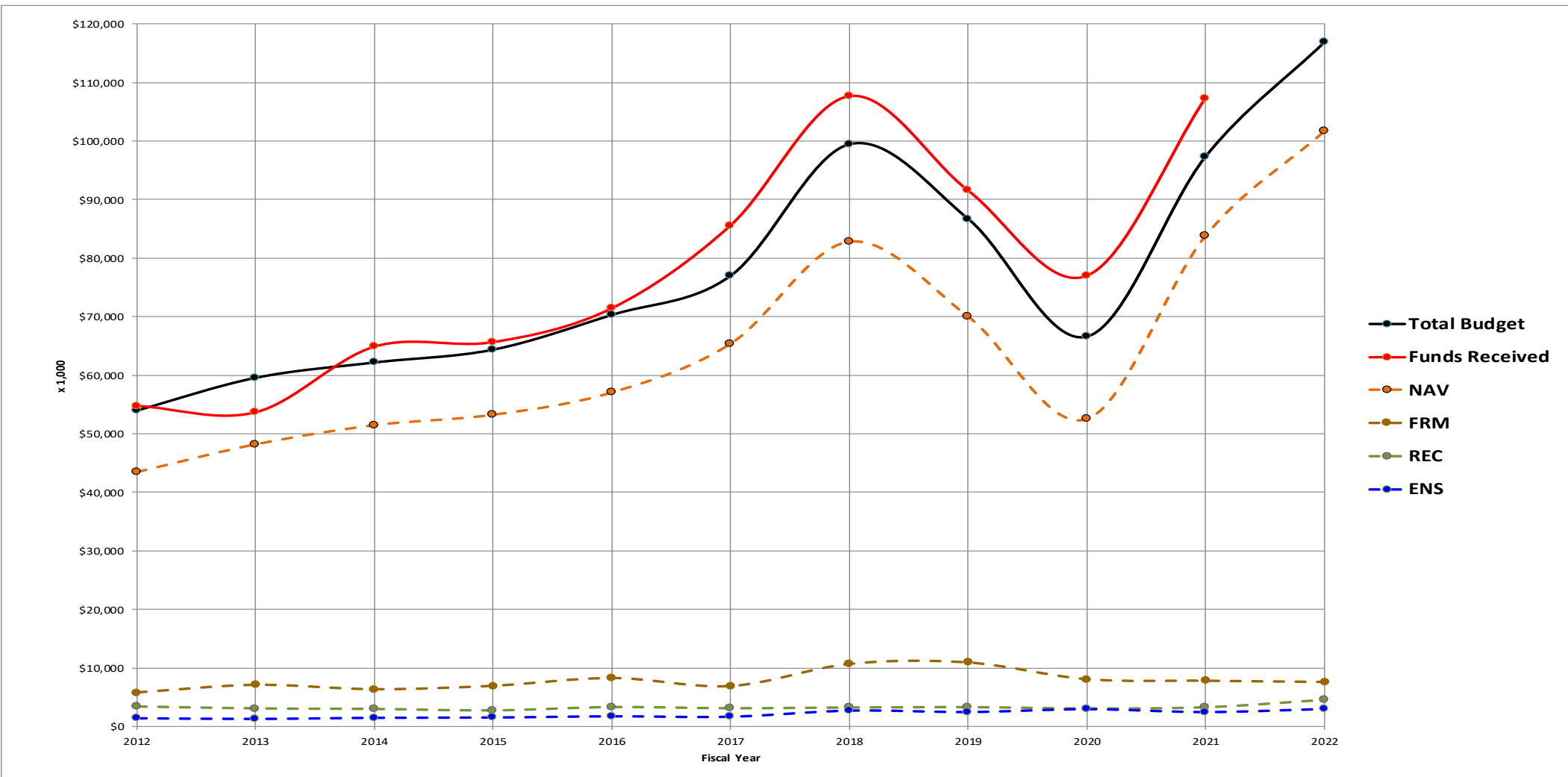
- **Channel Management Study**

- Pool 3 Upper Pool 4: Was kicked off 5 October 2021, Study will kickoff this winter to evaluate ways to reduce dredging in Pool 3





O&M BUDGET OVERVIEW



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IMPACTS TO NAVIGATION



- Budget
 - FY22 Navigation Funding
 - Presidents Budget has yet to be approved
 - Currently under Continuing Resolution Act through FEB 18
 - Supplemental funding anticipated through Infrastructure Investment and Jobs Act
 - FY24 Navigation Funding Request Underway
- Pool 2 Channel Improvement
 - Phase 2 Dredging – Still needs to occur, need placement capacity to accomplish
- Contracts Moving Dredged Material
 - Pool 2, Pigs Eye – Section 204 project will begin this year and will continue for several seasons.
 - Pool 5, Above West Newton to West Newton Chute, potential use of Unload IDIQ
 - Pool 10, McGregor Lake HREP– Potential more material for Option 2
- General Channel Conditions
 - Normal Flows in end of 2020 and all of 2021 = Good Channel conditions at Ice up 2021





RESILIENT NAVIGATION: PARTNERSHIPS



River Resources Forum

An interagency partnership on the Upper Mississippi River

The River Resources Forum, or RRF, is a state and federal agency partnership for addressing resource issues concerning the Upper Mississippi River system within the St. Paul District jurisdiction. Participating agencies include: the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the U.S. Coast Guard, the Environmental Protection Agency, the Natural Resources Conservation Service, the National Park Service, the Minnesota Pollution Control Agency and the departments of natural resources and transportation from Minnesota, Wisconsin and Iowa.



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The End

