

20 CAPITAL 23 IMPROVEMENTS PLAN

DRAFT July 14, 2022



Presentation of 2023 Draft Capital Improvements Plan

July 14, 2022

Madison Metropolitan Sewerage District



Topics

- Introduction
- 2023 CIP Drivers
- Capital Projects Fund Financials
 - Revenues Overview
 - Expenditures Overview
- Summary of Capital Projects
- Financing



Introduction to Draft CIP

- Plan is required by Commission policy ID ATT-2

“Commission action on the capital improvements plan approves the plan for incurrence of debt obligations and servicing for the budget year and the next five years required to support the district’s capital projects plan”

- Draft CIP presented in summer
- Capital Budget and Debt Service Budget approved in fall

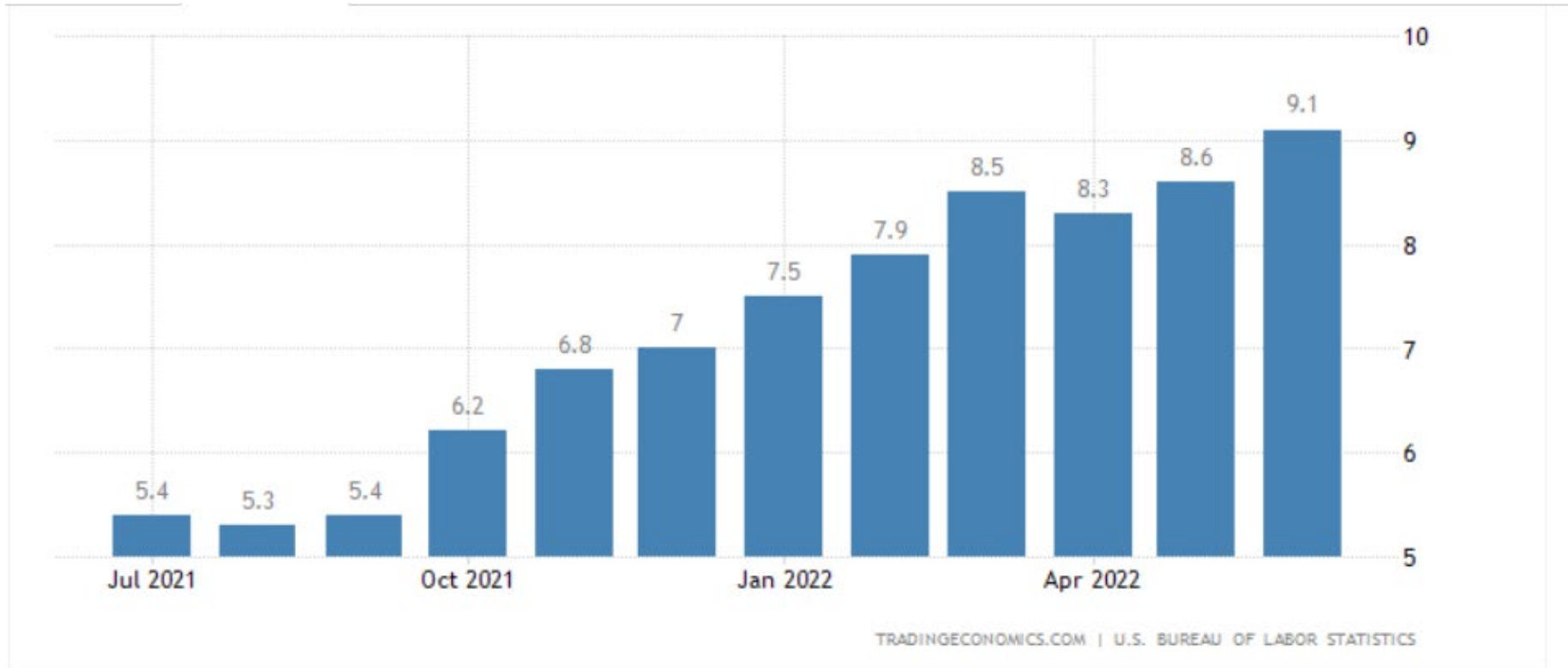


2023 CIP Drivers

1. Inflationary pressures
2. Clean Water Fund Program
3. Staffing



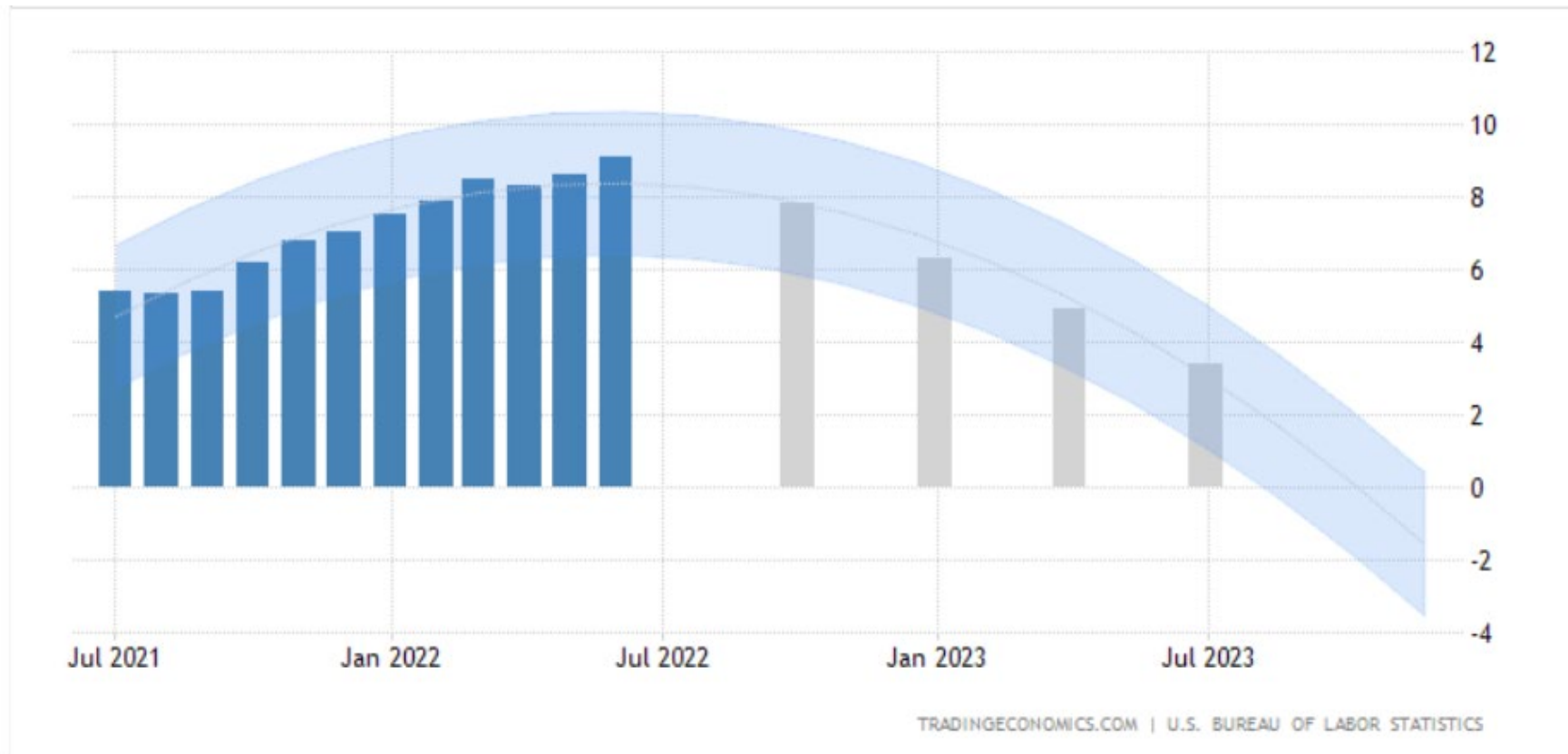
2021-2022 Monthly Inflation



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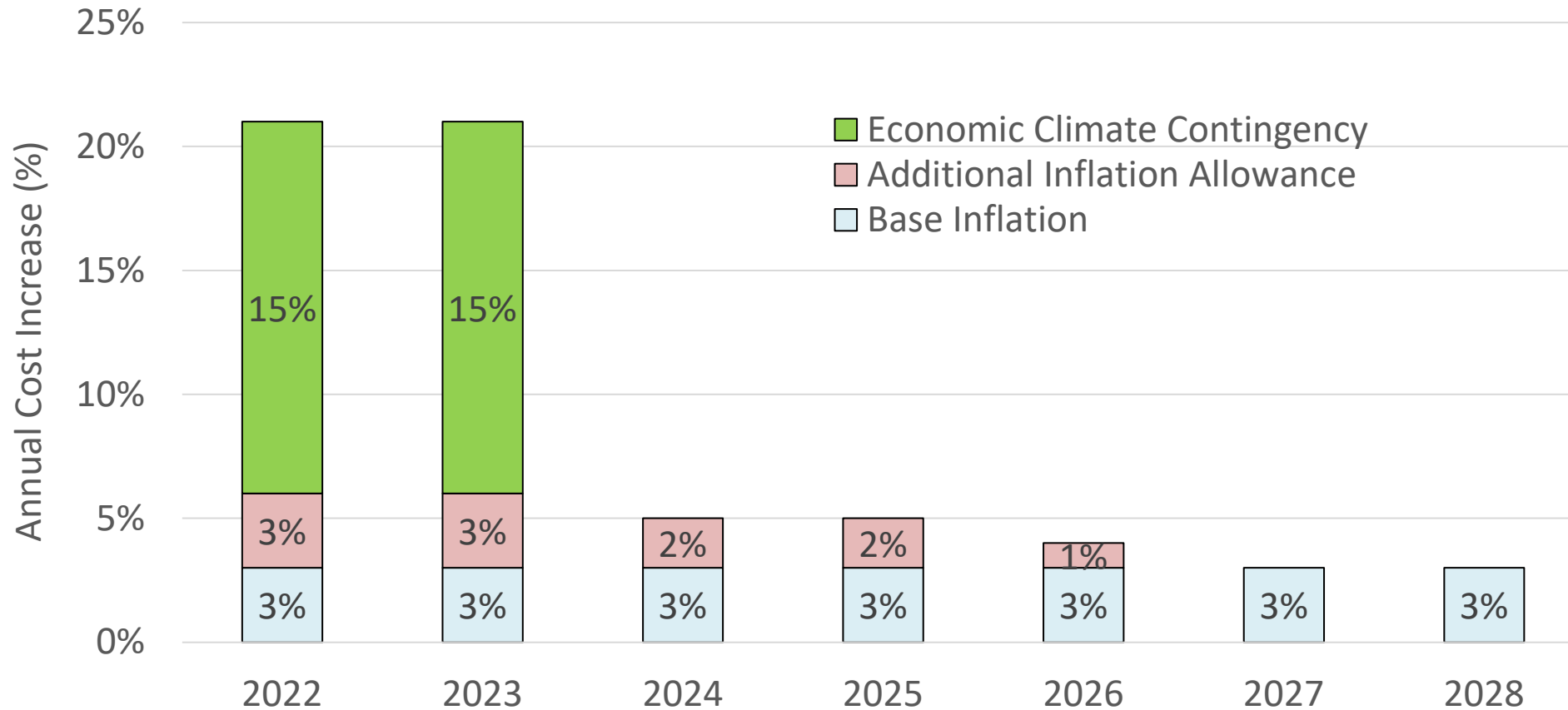
2022-2023 Inflation Forecast



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Project Cost Adjustments



Clean Water Fund

- **Bipartisan Infrastructure Law (BIL)**
 - \$700 million in federal funds to CWF and SDWLP from 2022-2026
 - Requires additional federal requirements
- **Build America Buy America Act (BABA)**
 - Expands existing American Iron and Steel requirements
 - Applicable to all funding sources
- **Rising interest rates**
 - Subsidized rate currently 2.145%
 - Subsidized rate for last loan was 1.611%



Capital Projects Fund – Revenue Sources

	2021	2022	2023	2024	2025	2026	2027	2028
<i>Revenues</i>								
Clean Water Fund Loans	13,053,000	19,072,000	22,285,000	23,567,000	30,833,000	15,243,000	36,263,000	20,818,000
Connection Charges	3,814,000	4,000,000	4,550,000	5,100,000	5,625,000	6,175,000	6,375,000	6,550,000
Interest Revenues	4,000	6,000	83,000	88,000	79,000	116,000	214,000	204,000
Transfers From Operating Fund 	1,486,000	3,501,000	5,006,000	7,821,000	8,312,000	9,410,000	10,111,000	10,936,000
Total Revenues	18,357,000	26,579,000	31,924,000	36,576,000	44,849,000	30,944,000	52,963,000	38,508,000

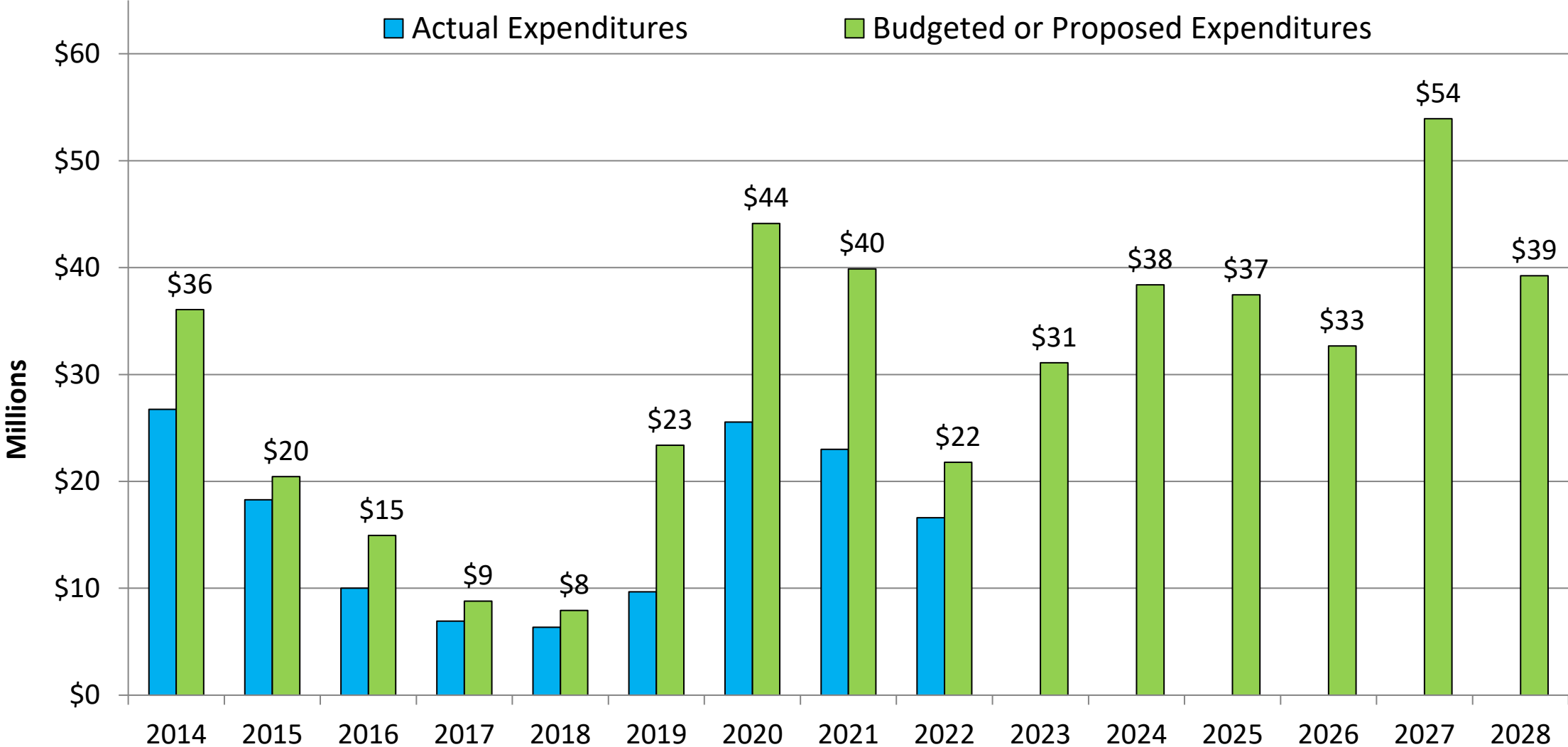


Cash Spending in 2023

Project	2023 Spending (\$)
Maintenance, Financial & HR Systems	\$689,000
West Interceptor – Shorewood Relief (Phase 3)	\$5,346,000
Lower Badger Mill Creek Interceptor - Phase 5	\$1,283,000
Capital Budget Expenses	\$405,000
Project Design Costs*	\$4,222,000
TOTAL	\$11,945,000
* Design costs to be reimbursed at later date through Clean Water Fund loan	

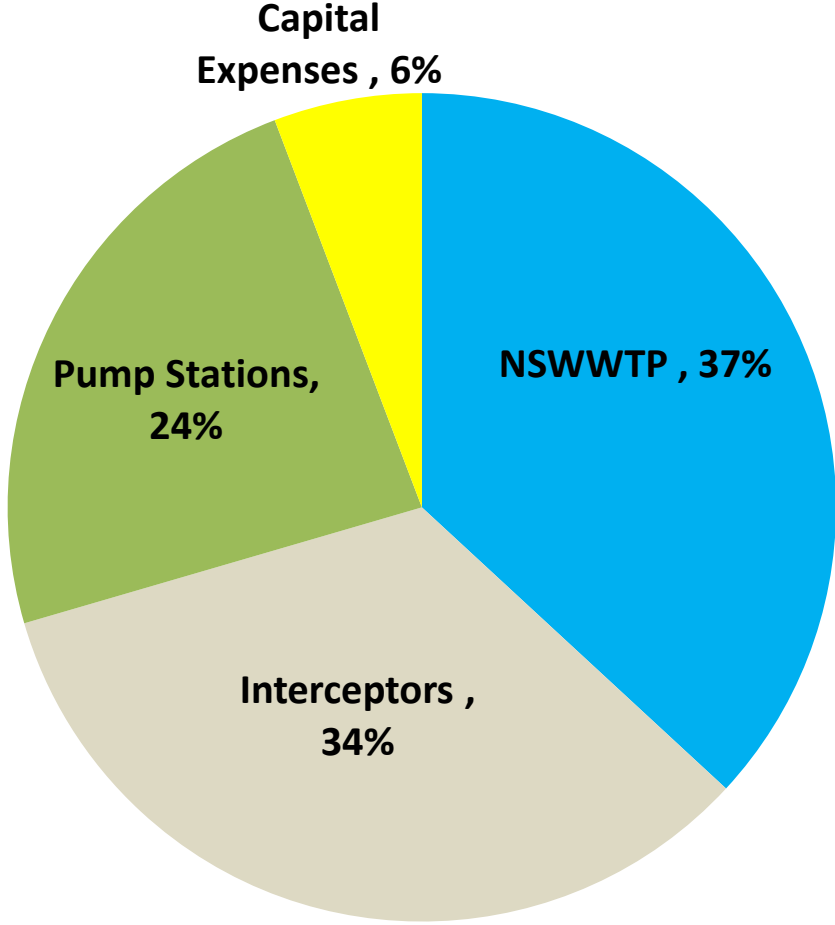


Annual Expenditures

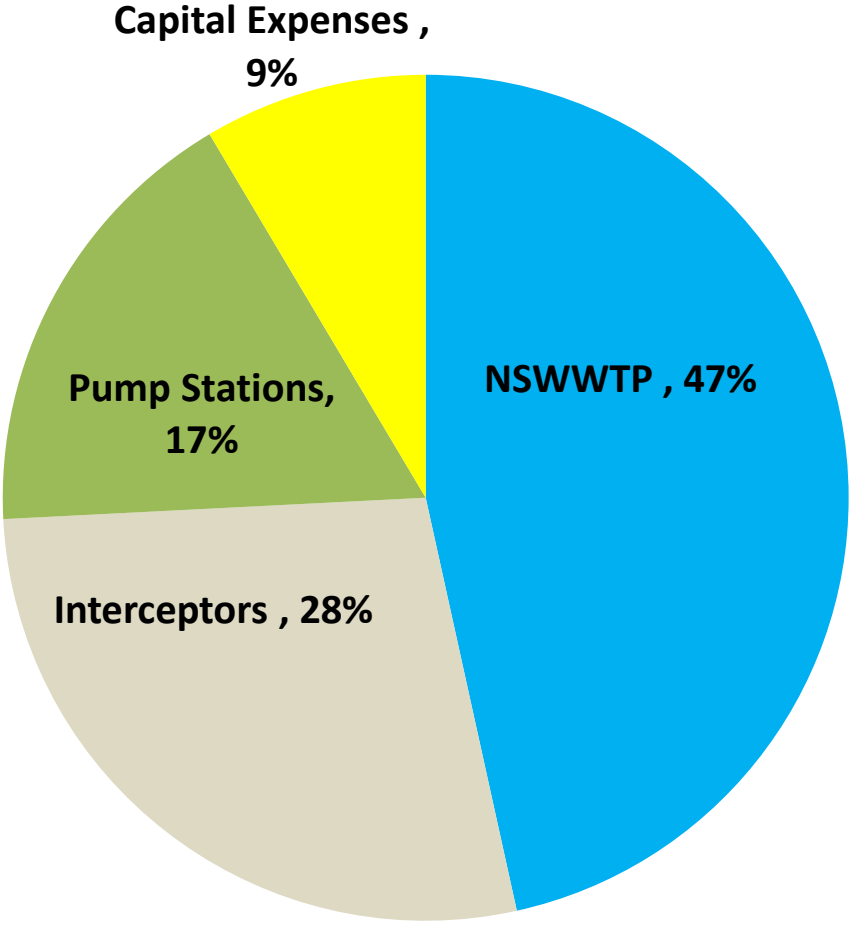


Total Six-Year Expenditures (2023-2028)

- NSWWTP
- Interceptors
- Pump Stations
- Capital Expenses



2023 CIP = \$232.8 million



2022 CIP = \$225.8 million

Total Project Cost Authorizations

		Has Subprojects	Authorization in 2022 Plan	Proposed Authorization in 2023 Plan	Change in Authorization	
Pumping Stations a			\$ 45,289,000	\$ 61,773,000	\$ 16,484,000	36%
C01	Grass Lake Dike Stabilization		905,000	905,000	-	0%
C02	PS 4 Rehabilitation		5,481,000	7,069,000	1,588,000	29%
C03	PS 17 Firm Capacity Improvements		5,224,000	6,790,000	1,566,000	30%
C04	PS 17 Force Main Relief - Phase 2		4,961,000	10,500,000	5,539,000	112%
C05	Emergency Power Generation at District Pumping Stations		8,429,000	9,271,000	842,000	10%
C06	Miscellaneous Collection System Improvements		90,000	103,000	13,000	14%
C07	Force Main Condition Assessment		3,534,000	3,684,000	150,000	4%
C08	Pumping Station 16 Projects			-		n/a
C08.1	PS 16 Rehabilitation			6,370,000		n/a
C08.2	PS 16 Force Main Rehabilitation		1,652,000	2,068,000	416,000	25%
N/A	Automated Power Transfer at Pump Stations 10 and 11		268,000	268,000	-	0%
	PS 13 & PS 14 Rehabilitation	*	10,755,000	10,755,000	-	0%
	PS 17 Force Main Relief - Phase 1		3,490,000	3,490,000	-	0%
	Pump Station 7 Force Main Emergency Repair		500,000	500,000	-	0%
Capital Budget Exp			\$ 20,310,000	\$ 14,026,000	\$ (6,284,000)	-31%
D01	Capital Budget Expenses		52,000	53,000	1,000	2%
D02	Collection System Facilities Plan Update		230,000	290,000	60,000	26%
D03	Badger Mill Creek Phosphorus Compliance		19,345,000	13,000,000	(6,345,000)	-33%
D04	Plan for District Properties		360,000	360,000	-	0%
N/A	Plant Asset Management Plan Implementation		323,000	323,000	-	0%
Grand Total			\$ 279,901,000	\$ 332,163,000	\$ 52,262,000	19%



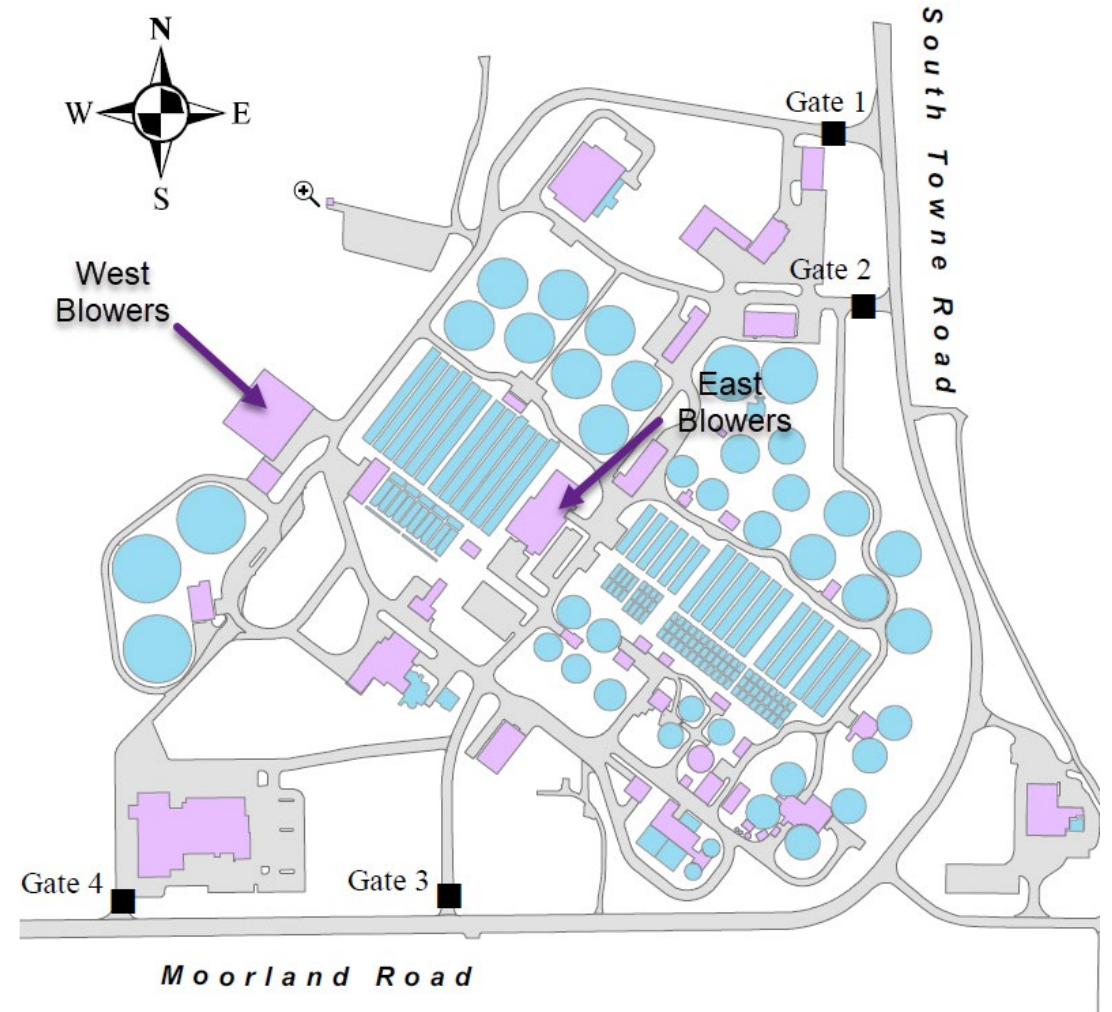
Partial Scale

- Total Project Budget: \$3.9 M
- 2023 Spending: \$207,000
- Construction in 2024
- Testing in 2025-2026

Full Scale

- Total Project Budget: \$21.6 M
- 2023 Spending: \$498,000

Low Dissolved Oxygen Projects



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West Blowers & Switchgear Replacement



- Total Project Budget: \$10.1 M
- 2023 Spending: \$822,000
- Construction in 2024-26

East Blowers & Switchgear Replacement

- Total Project Budget: \$11.2 M
- 2023 Spending: \$822,000
- Construction in 2026-28



Treatment Plant HVAC Projects

2021 Treatment Plant HVAC

- Total Project Budget: \$2.0 M
- 2023 Spending: \$1,011,000
- Construction in 2022-23



Other Treatment Plant HVAC Projects

- Total Project Budget: \$3.3 M
- Construction in 2024-25

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NSWWTP Electrical Service Equipment Replacement



- Total Project Budget: \$4.7 M
- 2023 Spending: \$175,000
- Includes high voltage and medium voltage switchgear
- Installed in 1984; life expectancy = 40 years
- Construction in 2025-26



Plant Energy Projects



Heat & Power Improvements

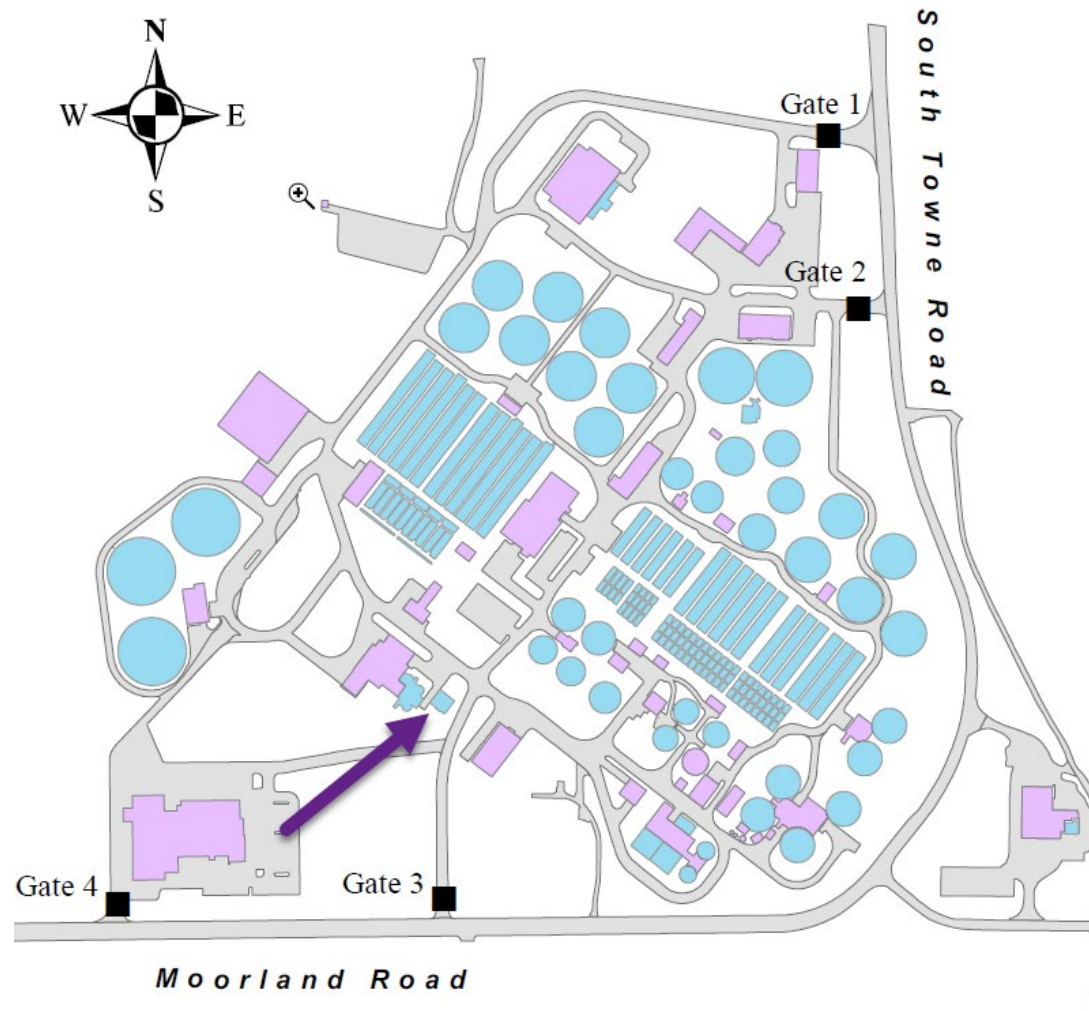
- Total Project Budget: \$50.9 M
- 2023 Spending: \$0
- Facility Planning in 2025-26
- Design in 2027-2028
- Construction in 2029-31

Miscellaneous Energy Projects

- Total Project Budget: \$10.4 M
- 2023 Spending: \$233,000
- Solar at Maintenance Facility – 2023-24
- Effluent pump modifications – 2028-30



Flow Splitter Improvements

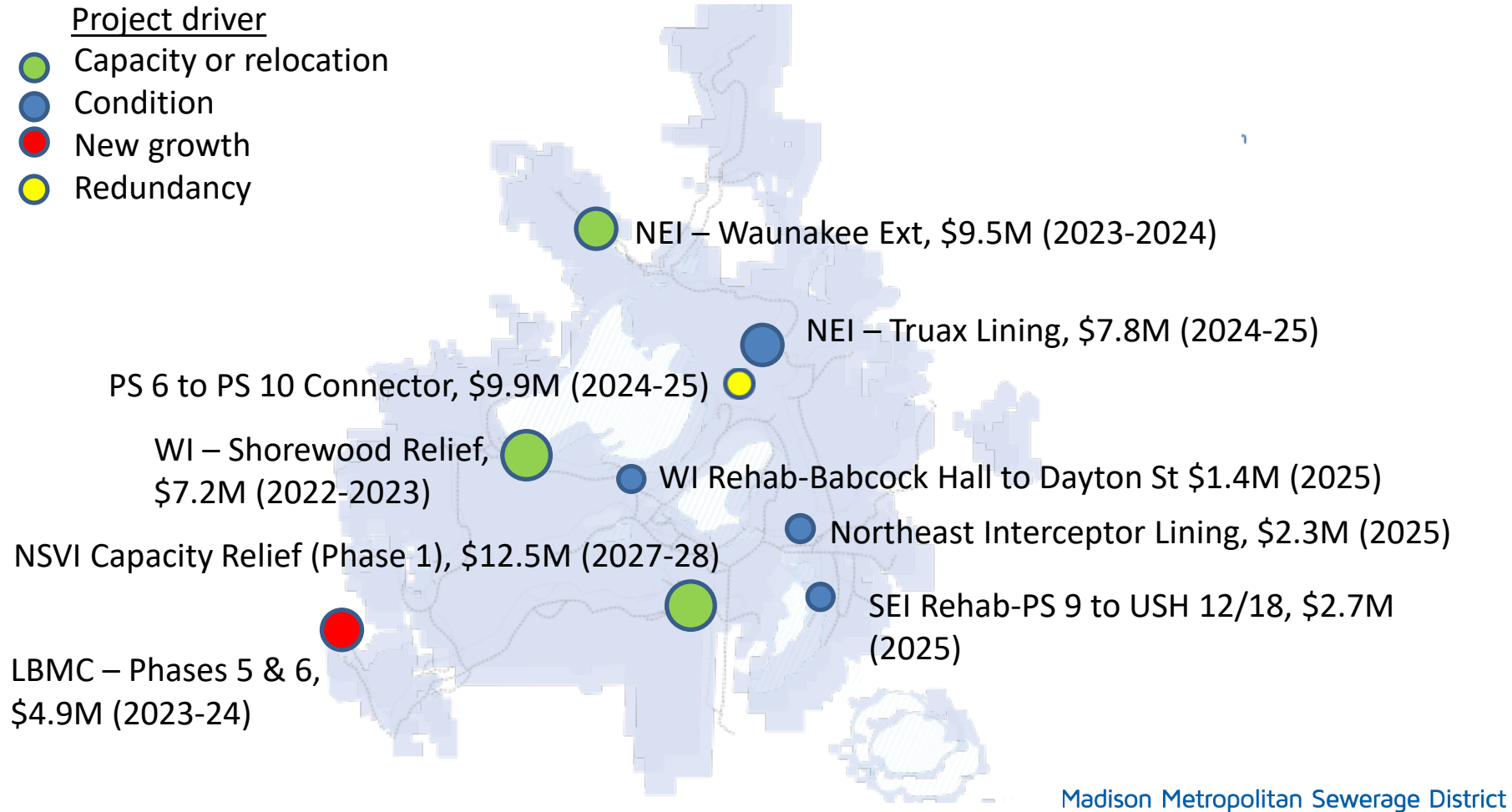


- Total Project Budget: \$2.5 M
- 2023 Spending: \$551,000
- Design in 2022
- Construction in 2023-2024

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Interceptor Projects



West Interceptor (Shorewood Relief) Projects

Phase 2

- Total Project Budget: \$1.75 M
- 2023 Spending: \$0
- Construction in 2022



Phase 3

- Total Project Budget: \$5.5 M
- 2023 Spending: \$5.3 M
- Construction in 2023

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Lower Badger Mill Creek Interceptor Projects

Phase 5

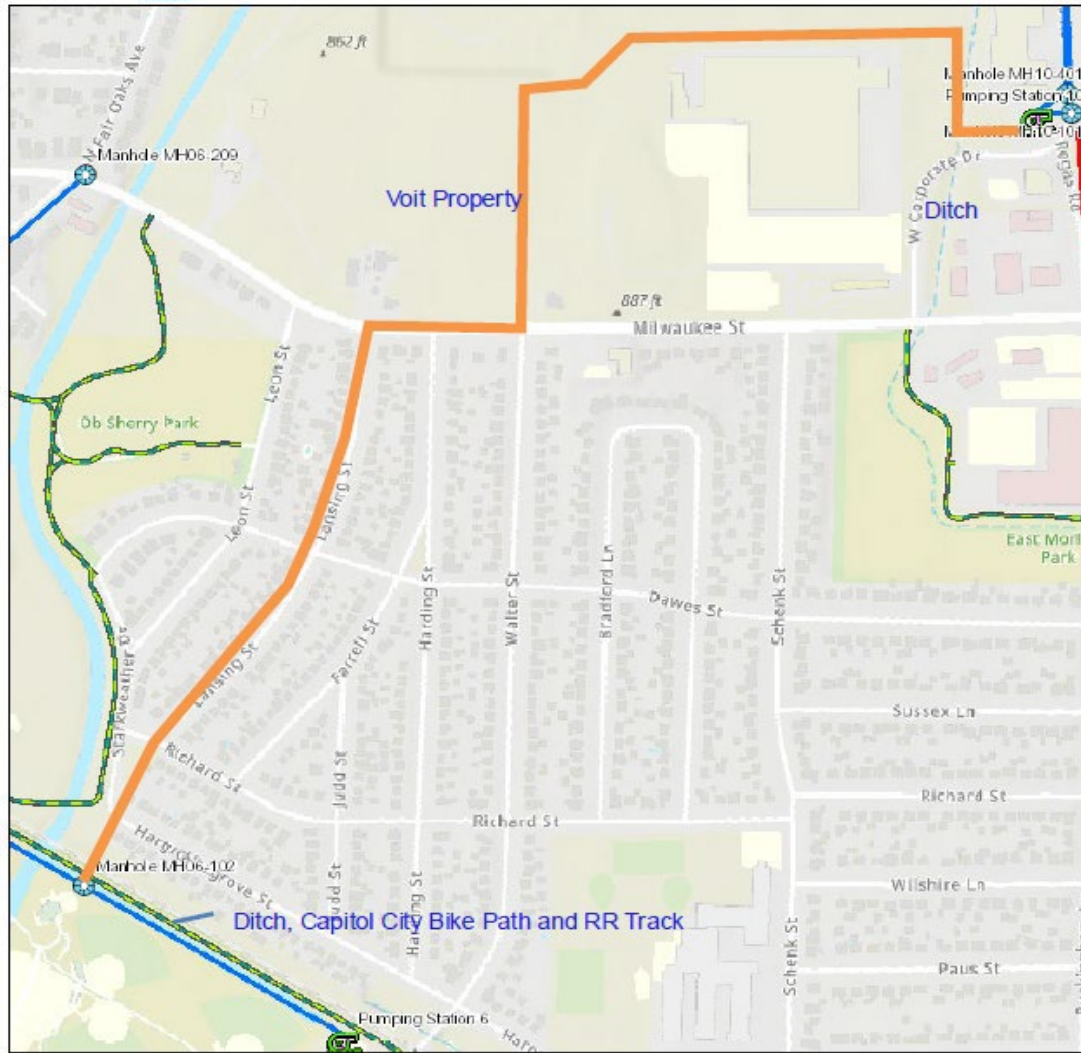
- Total Project Budget: \$1.4 M
- 2023 Spending: \$1,283,000
- Construction in 2023

Phase 6

- Total Project Budget: \$3.6 M
- 2023 Spending: \$127,000
- Construction in 2024



Pump Station 6 to Pump Station 10 Connector



May 11, 2022

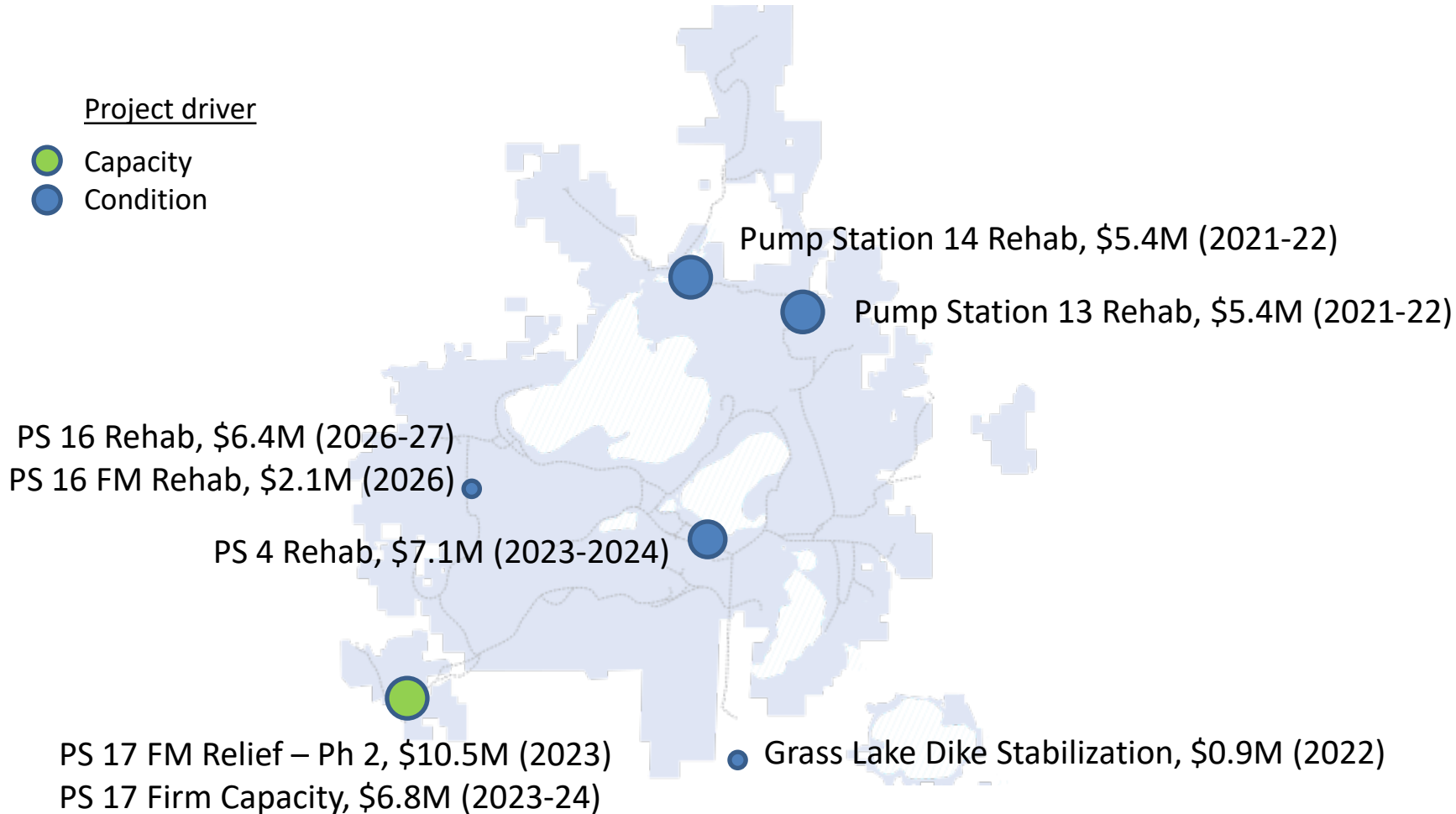


- Total Project Budget: \$9.9 M
- 2023 Spending: \$440,000
- Construction in 2024-25

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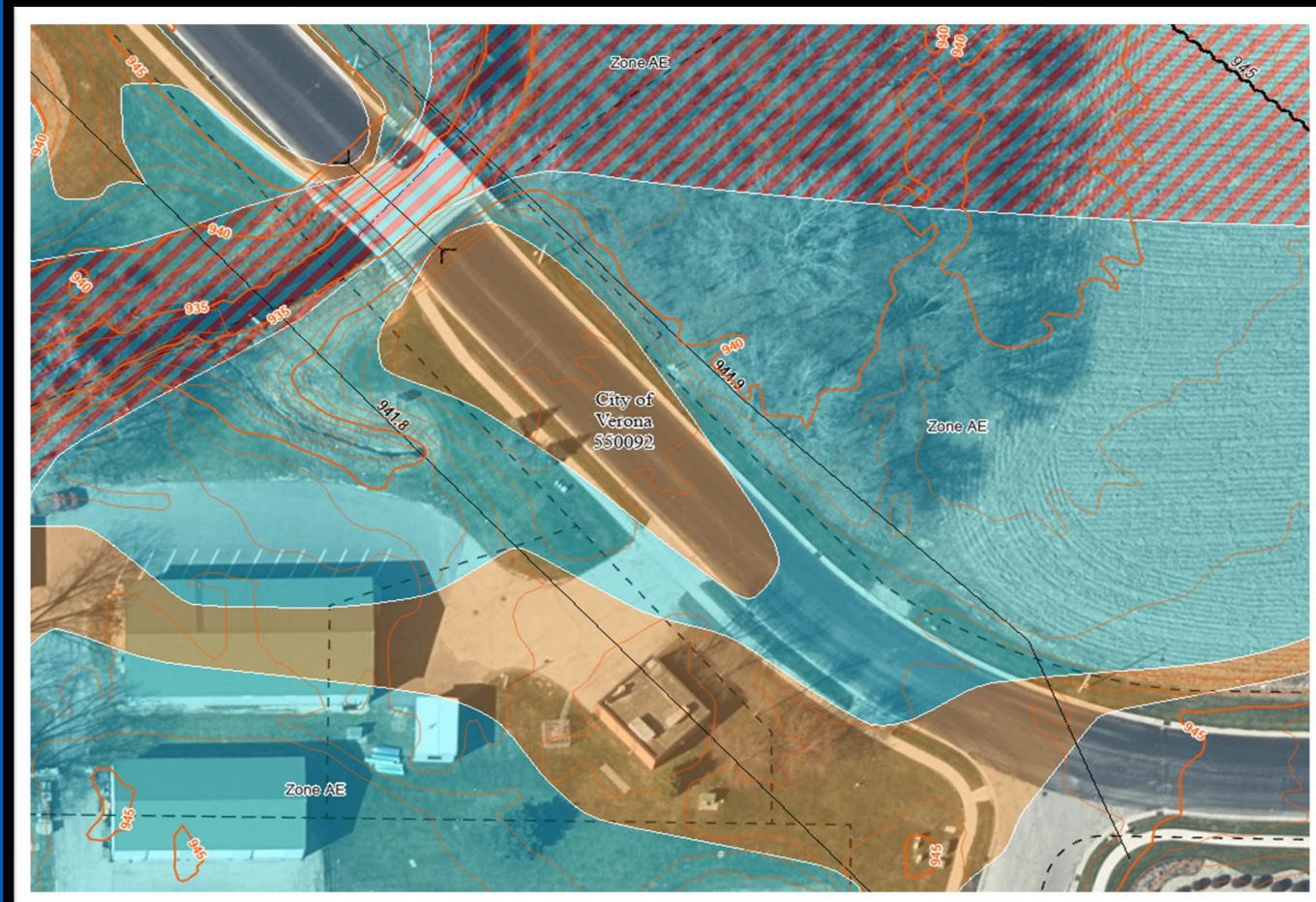
Pump Station & Force Main Projects



Pumping Station 17 Firm Capacity Improvements

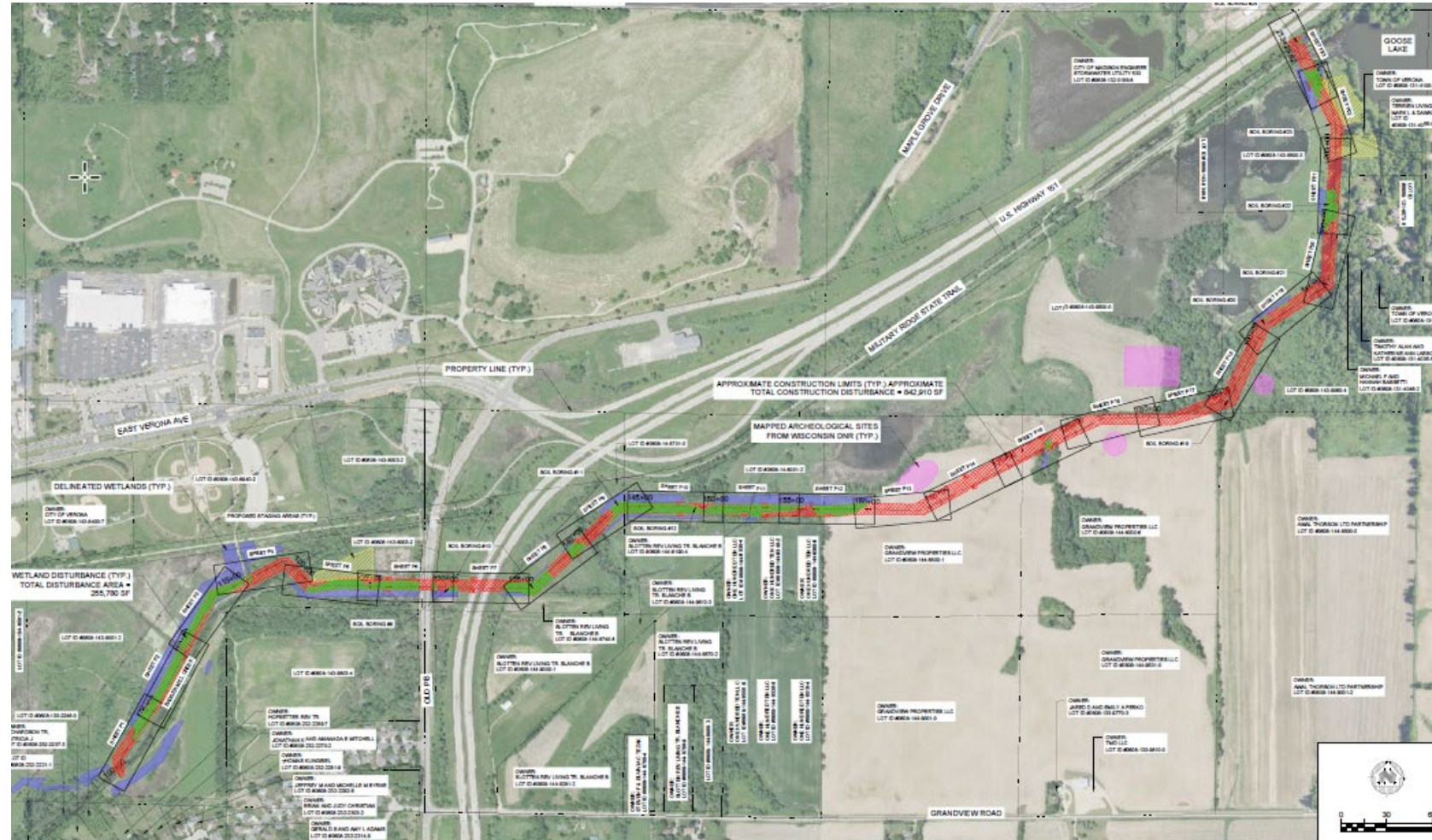


- Total Project Budget: \$6.8 M
- 2023 Spending: \$2.4 M
- Construction in 2023-24



Pumping Station 17 Force Main Relief – Phase 2

- Total Project Budget: \$10.5 M
- 2023 Spending: \$8.8 M
- Construction in 2023



Badger Mill Creek Phosphorus Compliance

- Total Project Budget: \$13.0 M
- 2023 Spending: \$106,000
- Prelim compliance plan: 2022
- Final compliance plan: 2023
- Final plans & specs: 2025
- Construction: 2027
- Achieve compliance: 2028

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Questions?

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