

Presentation of the 2024 Draft Capital Improvements Plan

July 13, 2023

2024
Capital Improvements Plan

DRAFT July 13, 2023

Madison Metropolitan Sewerage District

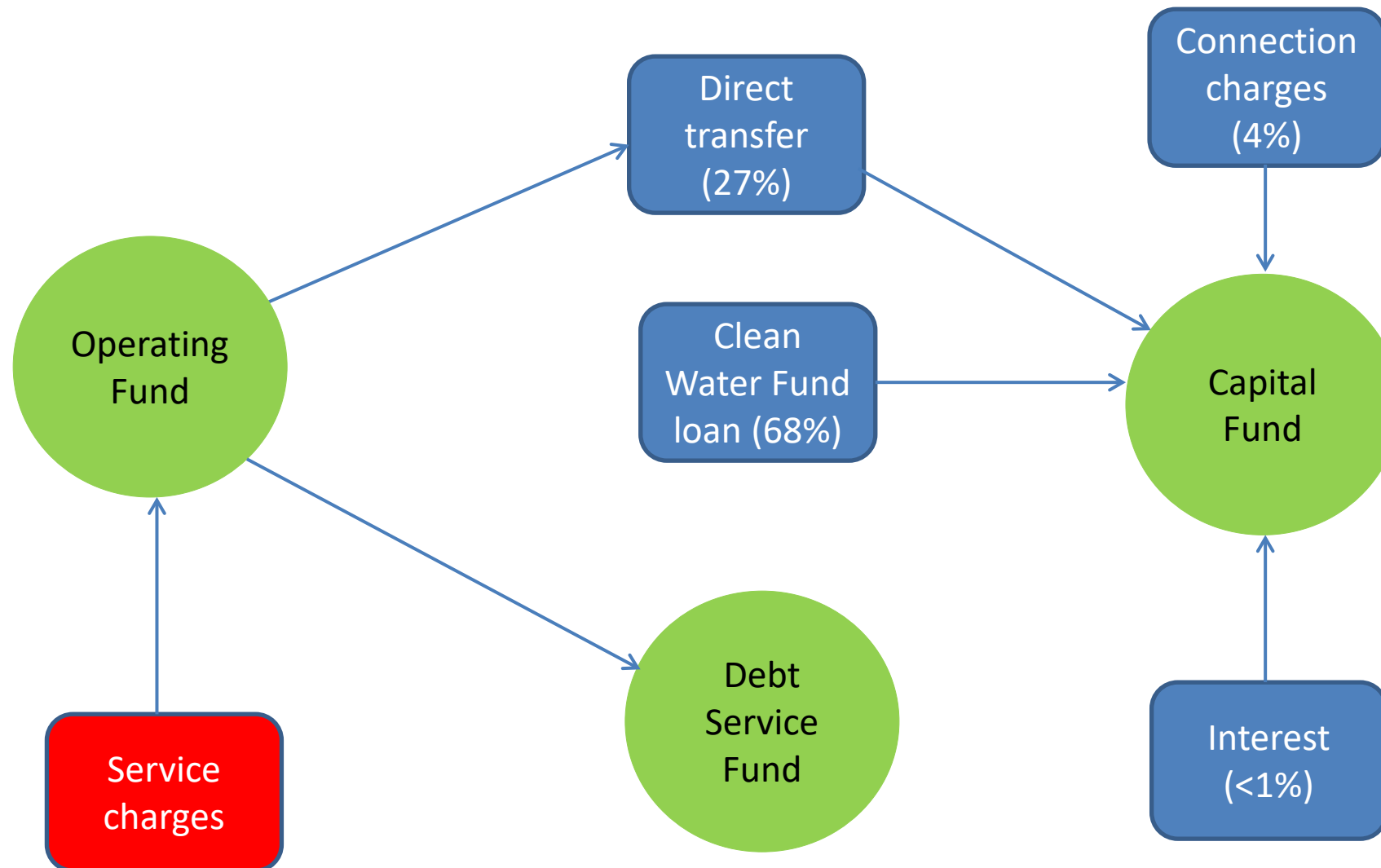


Topics

- Introduction
- 2024 CIP Highlights
- Summary of Capital Projects
- Financing



Introduction to Draft Capital Improvements Plan



- Draft CIP introduced to Commission each summer for review and input
- Draft CIP does not authorize spending

Madison Metropolitan Sewerage District

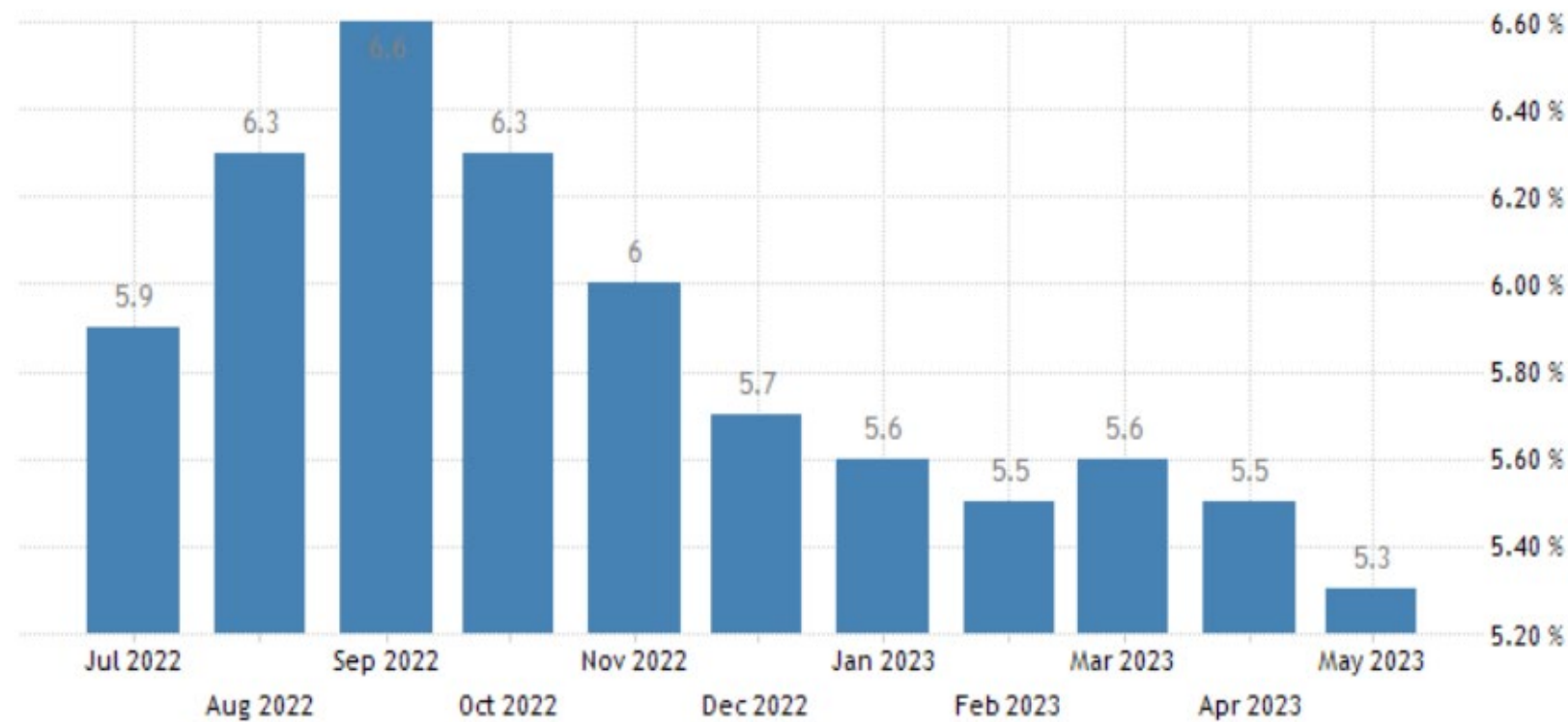


2024 CIP Highlights

1. Project costs
2. Staffing
3. Borrowing



Annual Inflation



TRADINGECONOMICS.COM | U.S. BUREAU OF LABOR STATISTICS

Engineering News Record
increase (2022-2023) = 1.95%

Year	Rate used in 2024 CIP
2024	5%
2025	5%
2026	4%
2027-2029	3%

Madison Metropolitan Sewerage District

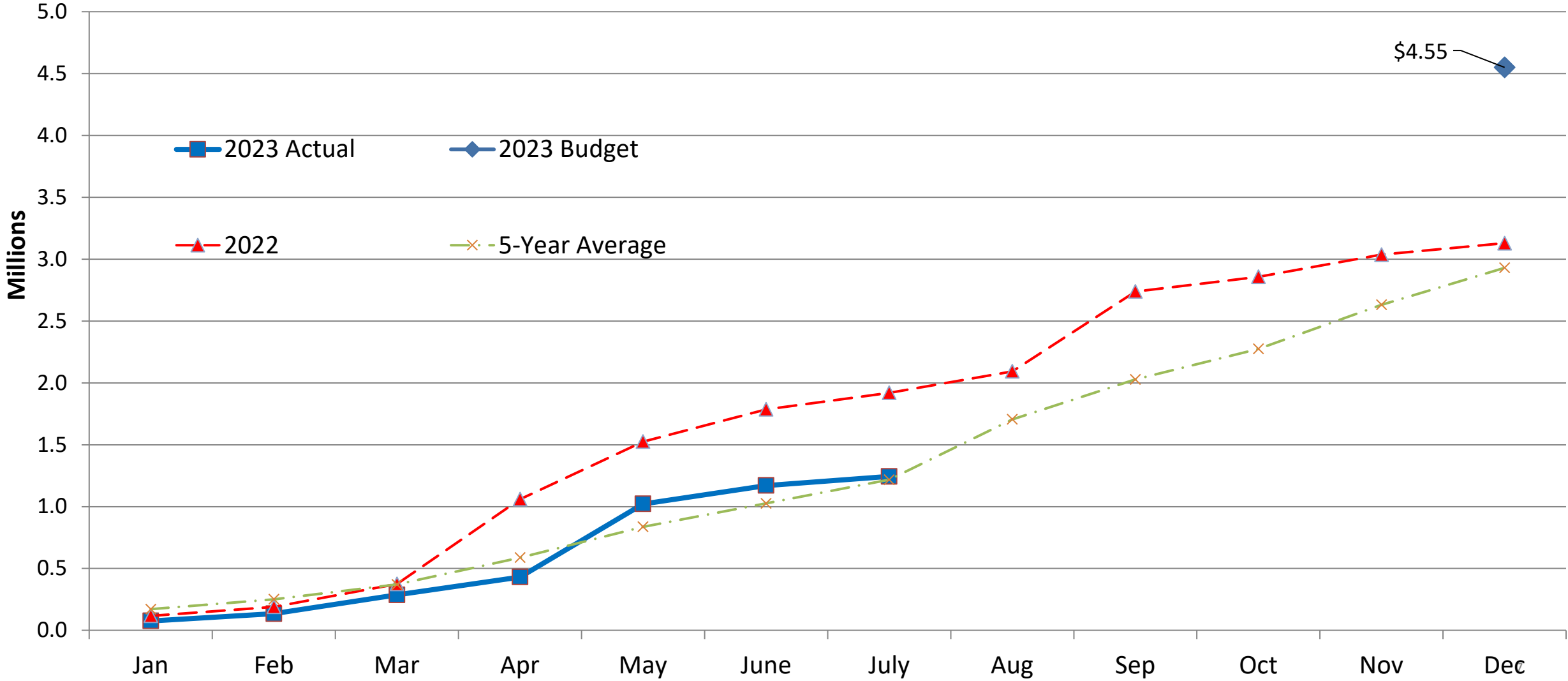


Cost Increases

Project (Year)	Cost for 30" Pipe (2023 \$)
Lower Badger Mill Creek Interceptor – Phase 5 (2023)	\$650 per foot
Lower Badger Mill Creek Interceptor – Phase 4 (2017-2018)	\$145 per foot



Connection Charge Revenue

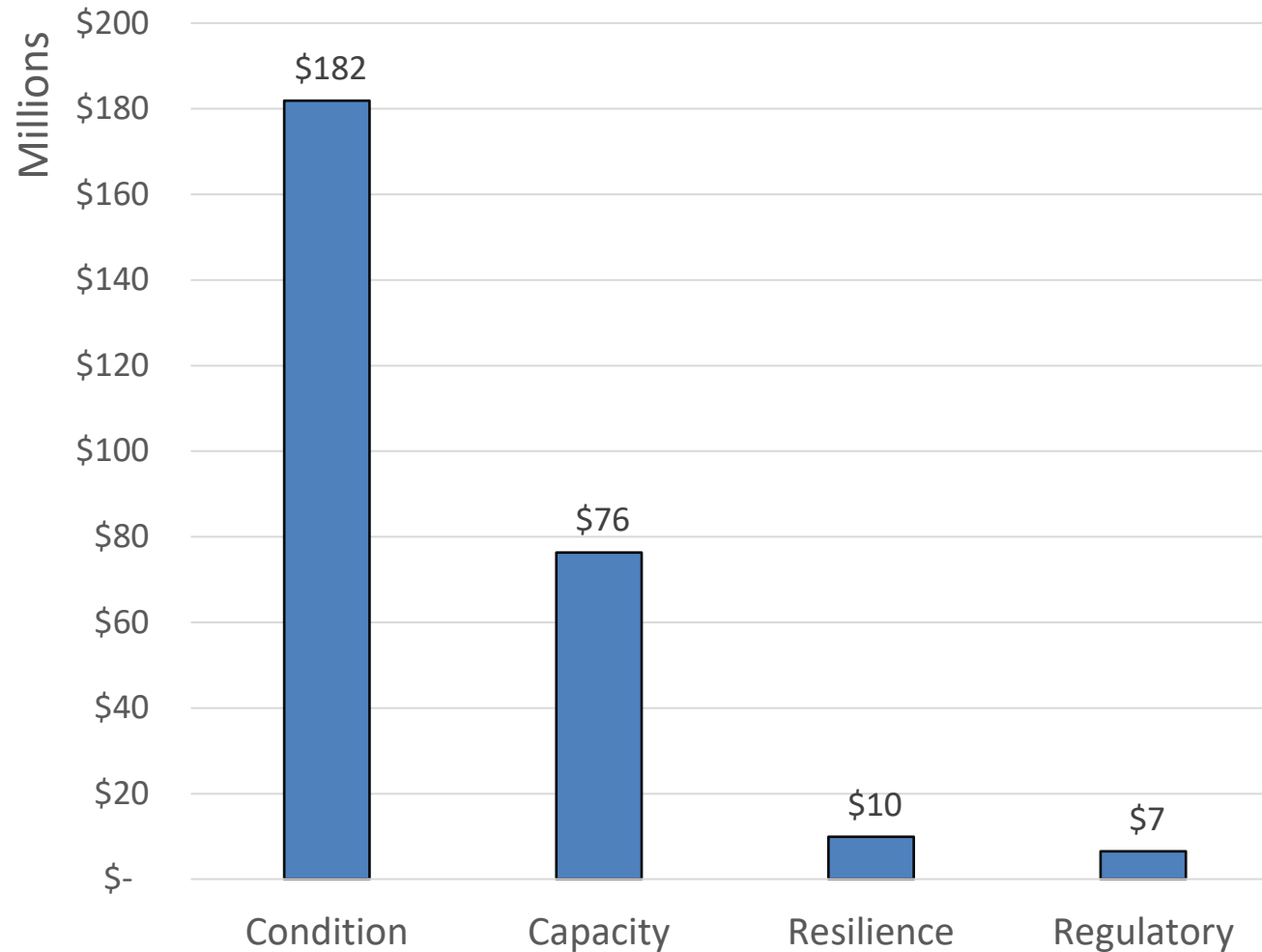


Clean Water Fund

- Bipartisan Infrastructure Law (BIL)
 - \$900 million in additional federal funds to CWFP and SDWLP from 2022-2026
- Build America Buy America Act (BABA)
 - Iron, steel, manufactured products, and construction materials must be produced in United States



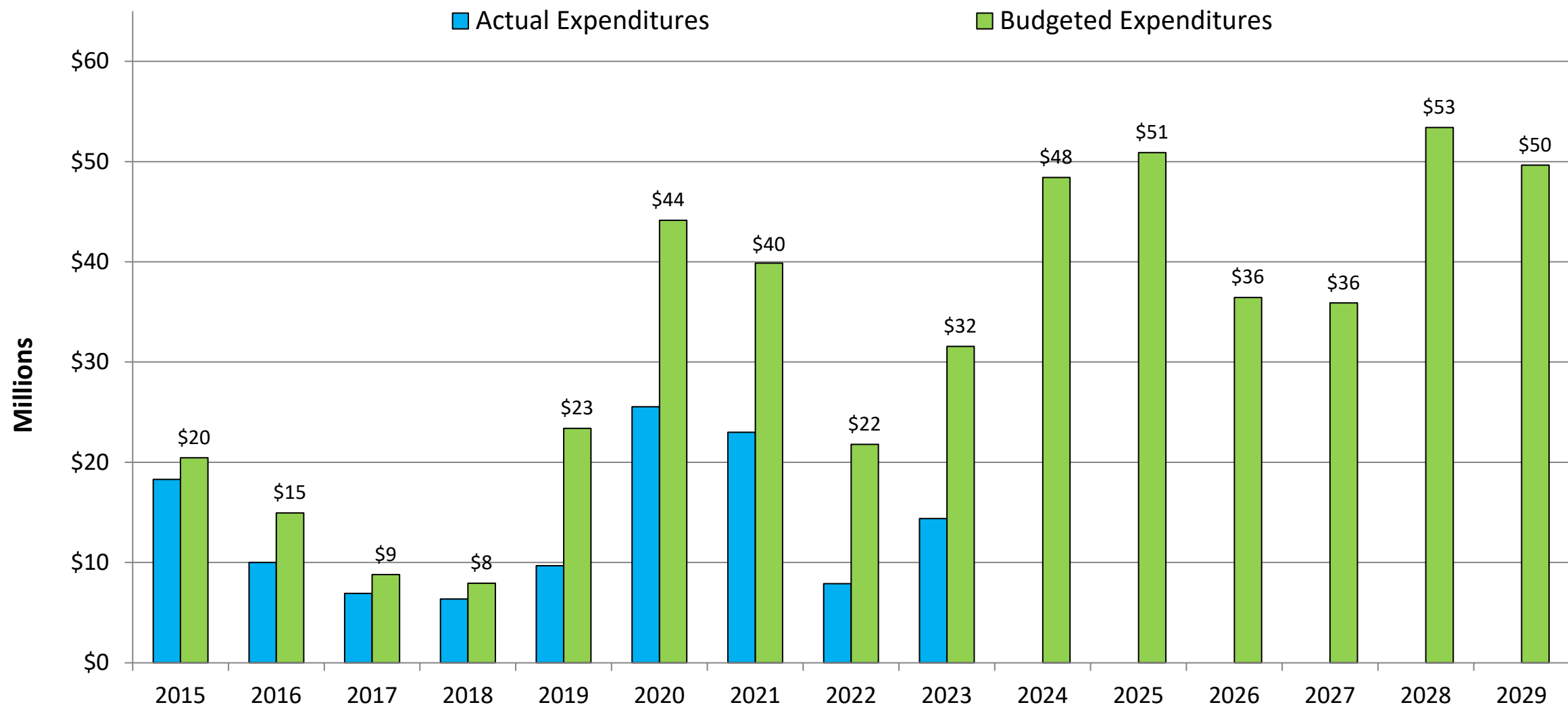
Project Drivers for 2024 CIP



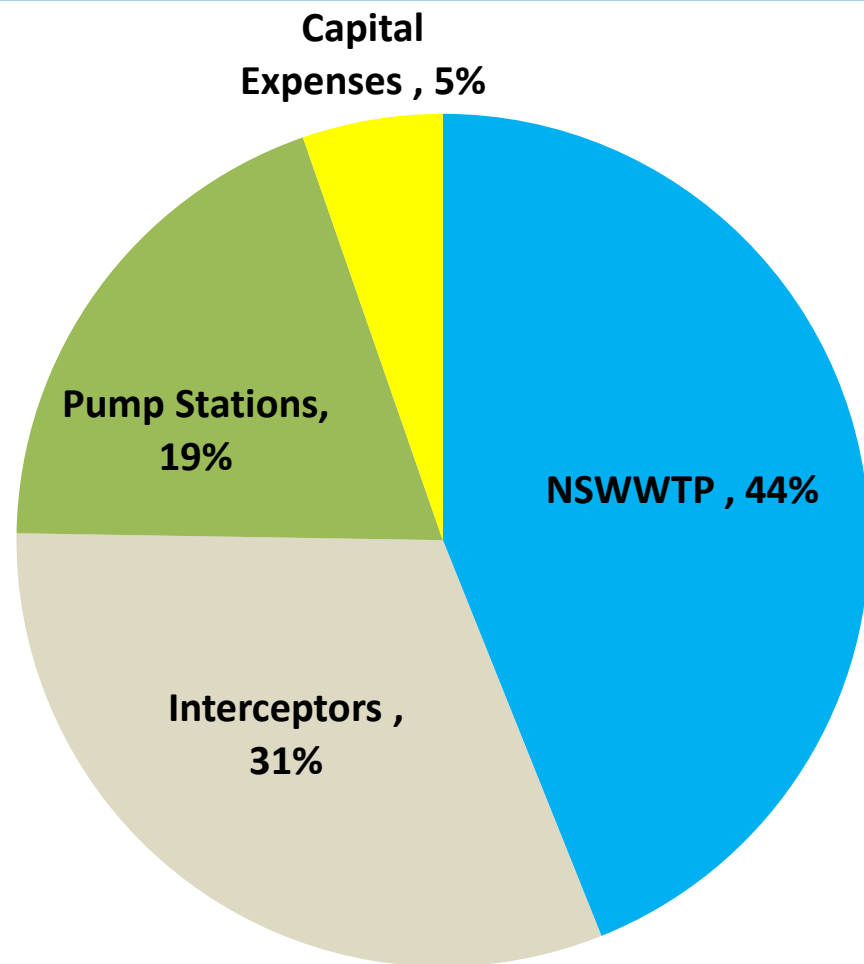
Madison Metropolitan Sewerage District



Annual Expenditures

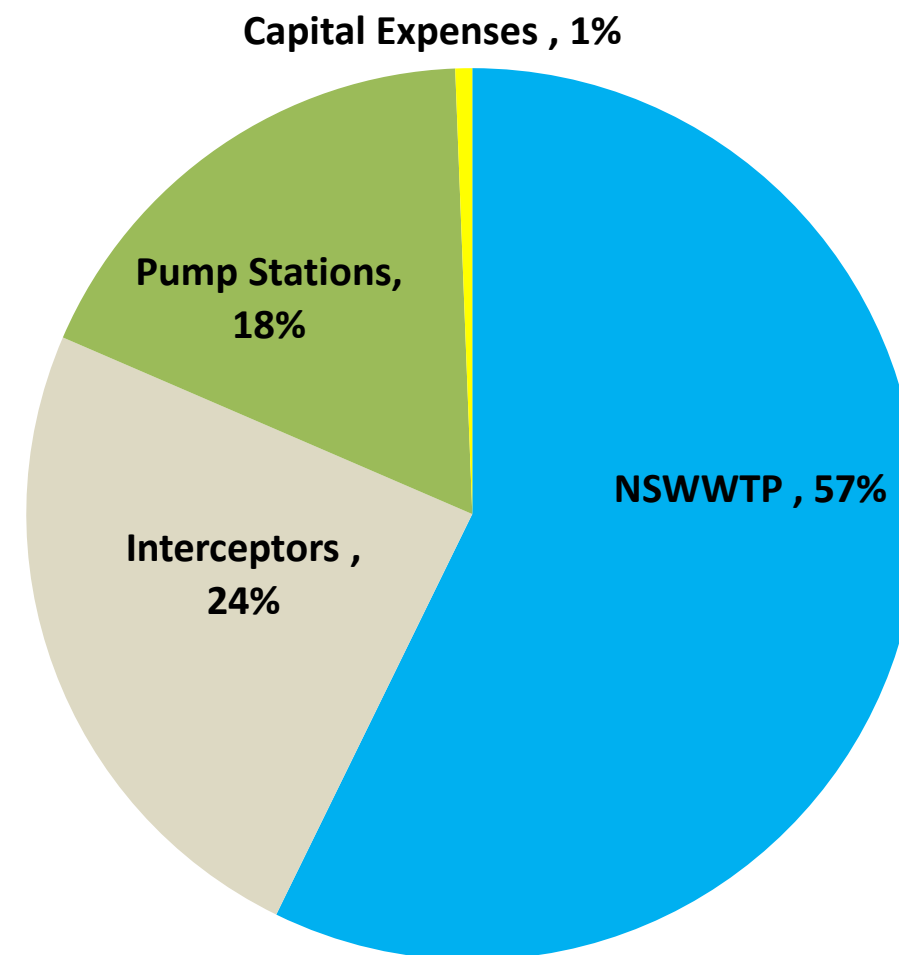


Total Six-Year Expenditures (2024-2029)



2023 Capital Budget = \$247 million

- NSWWTP
- Interceptors
- Pump Stations
- Capital Expenses



2024 CIP = \$275 million

Liquid Processing Facilities Plan

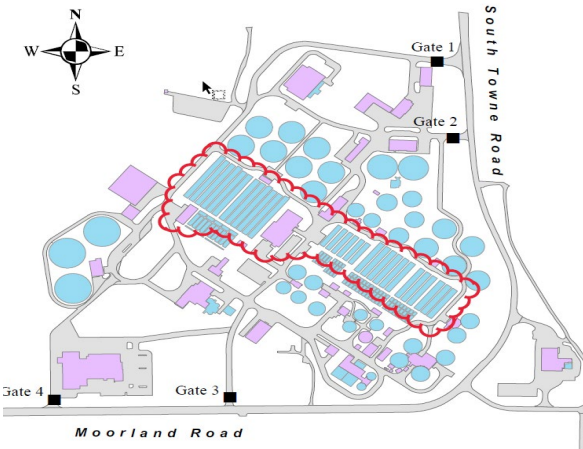
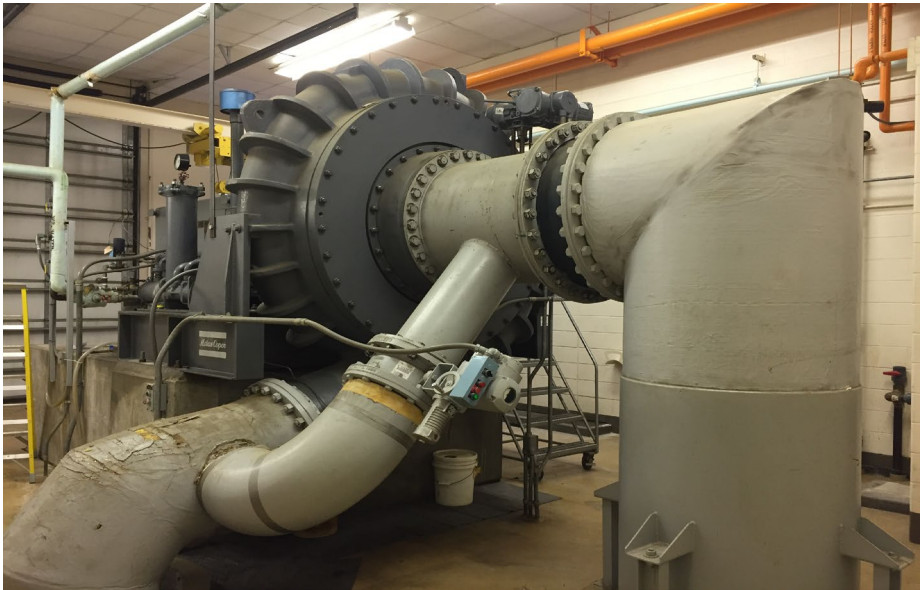


- Completed in 2017
- Recommended 24 separate projects
- Projects packaged in three phases
 - Near Term (2017-2022)
 - Mid Term (2020-2025)
 - Future (2024+)



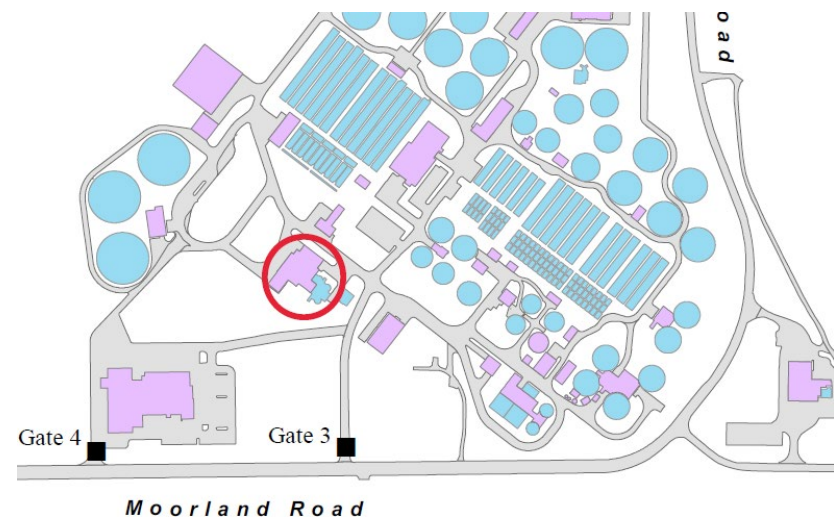
Liquid Processing Improvements – Phase 2

Project	Total Project Cost	Construction
East Primary Air Piping	\$1.5 million	2025-26
Low DO (Partial Plant)	\$4.0 million	2025
Low DO (Full Plant)	\$23.3 million	2028-29
West Blowers Replacement	\$11.2 million	2025-26
East Blowers Replacement	\$11.4 million	2026-27



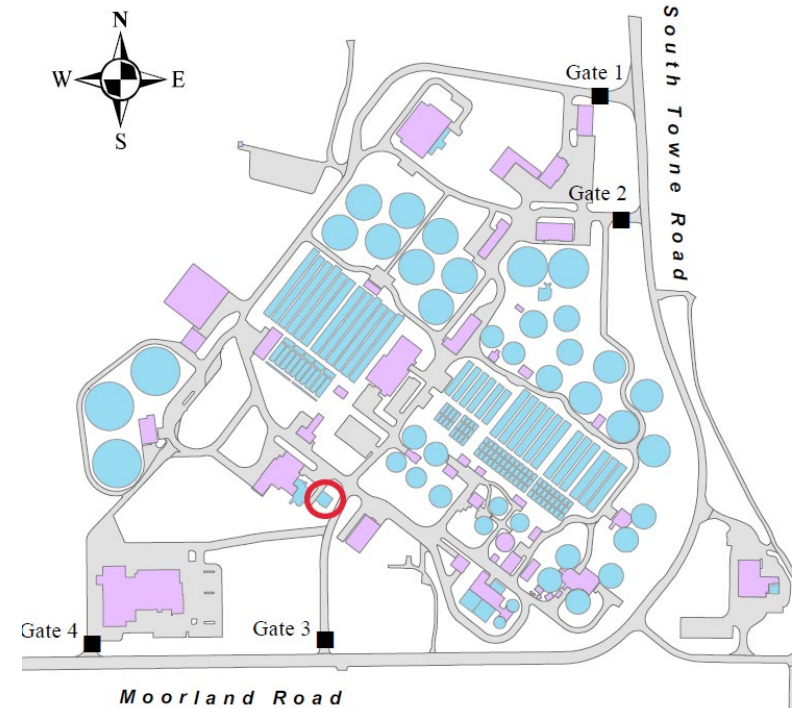
Liquid Processing Improvements – Phase 3

Project	Total Project Cost	Construction
Headworks Screening	\$5.2 million	2028-29
Grit Processing	\$2.7 million	2028-29
Septage Receiving	\$4.0 million	2028-29



Flow Splitter Improvements

- Total Project Budget: \$5.0 M
- Design in 2023
- Construction in 2024-25



Heat & Power Improvements



Madison Metropolitan Sewerage District

2020 ENERGY MANAGEMENT
MASTER PLAN

FINAL | December 2021

carollo
in association with:

SA
STRAND
ASSOCIATES

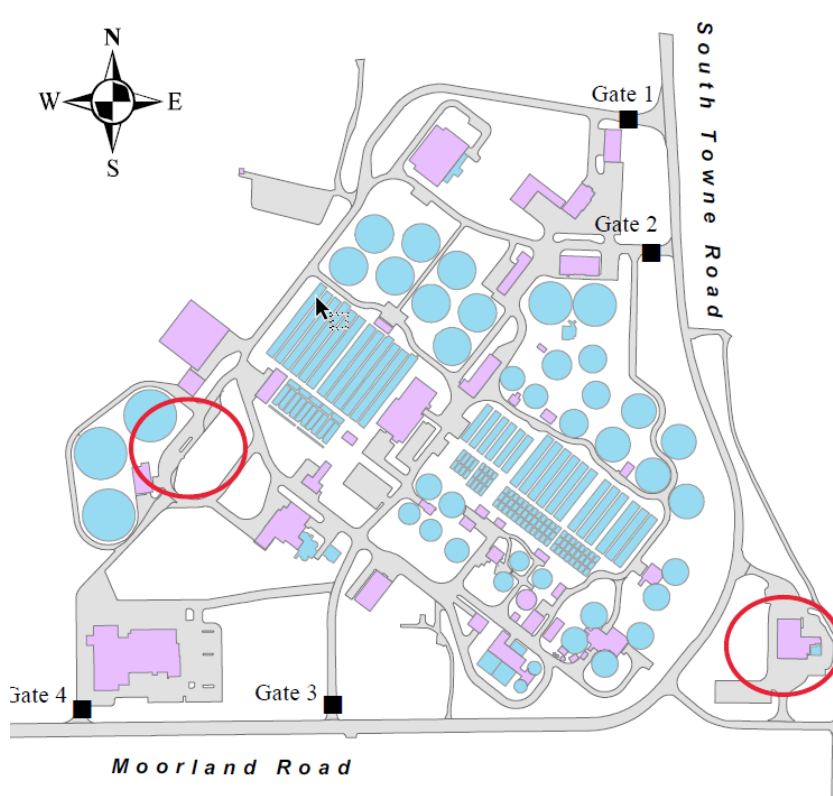
BAXTER & WOODMAN
Engineering & Construction

- Total Project Budget: \$50.9 M
- Facility Planning in 2024-25
- Design in 2026-27
- Construction in 2028-29

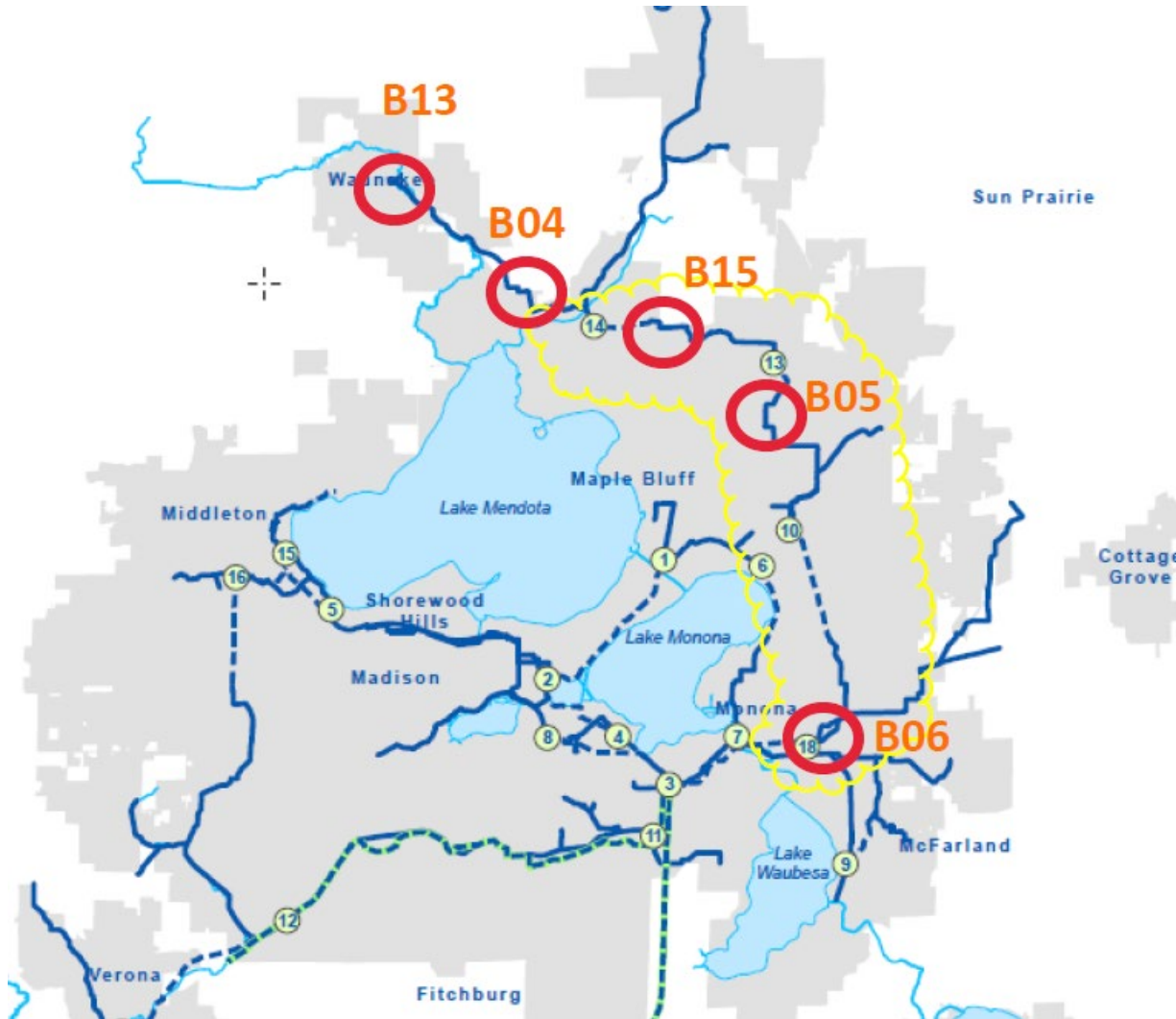


Metrogro Operations Improvements

- Total Project Budget: \$24.1 M
- Planning/design in 2025-2027
- Construction in 2028-29



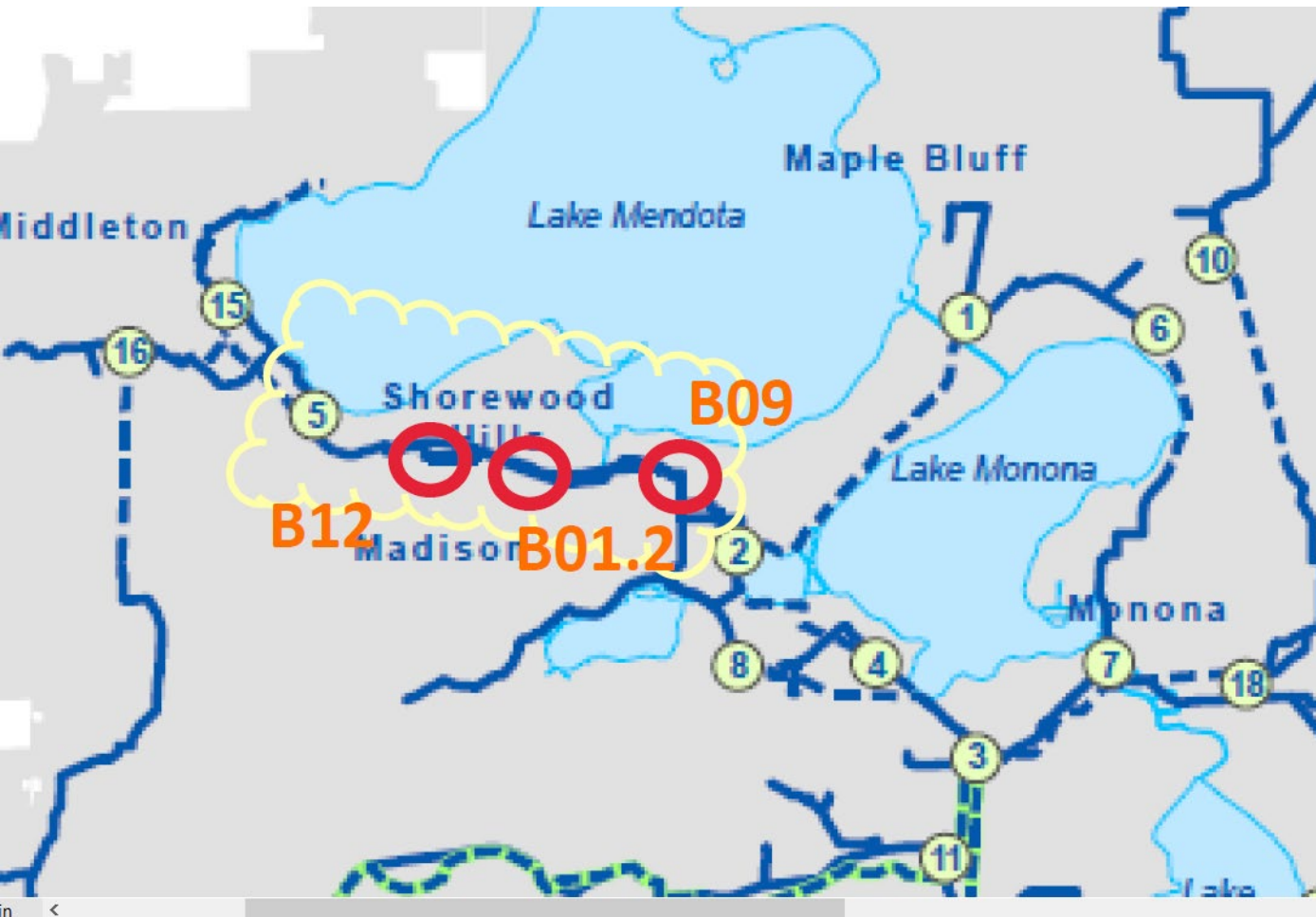
Northeast Interceptor System Projects



Project	Project ID	Total Project Cost	Construction
NEI – Waunakee Extension (Phase 1)	B04	\$12.0 M	2024-25
NEI – Truax Extension Rehab	B05	\$8.2 M	2024-25
NEI – FEI to SEI Rehab	B06	\$2.4 M	2026
NEI – Waunakee Extension Rehab	B13	\$0.7 M	2027
NEI – Rehab West of Airport (Phase 2)	B15	\$4.0 M	2027



West Interceptor System Projects



Project	Project ID	Total Project Cost	Construction
WI – Shorewood Relief (Phase 3)	B01.2	\$7.6 M	2024-25
WI Rehab – Babcock Hall to Dayton St	B09	\$1.4 M	2026
WI Rehab – Segoe Rd to Shorewood Blvd	B12	\$1.1 M	2024-25
WI on Regent Street	B13	\$0.6 M	2026



Lower Badger Mill Creek Interceptor Projects

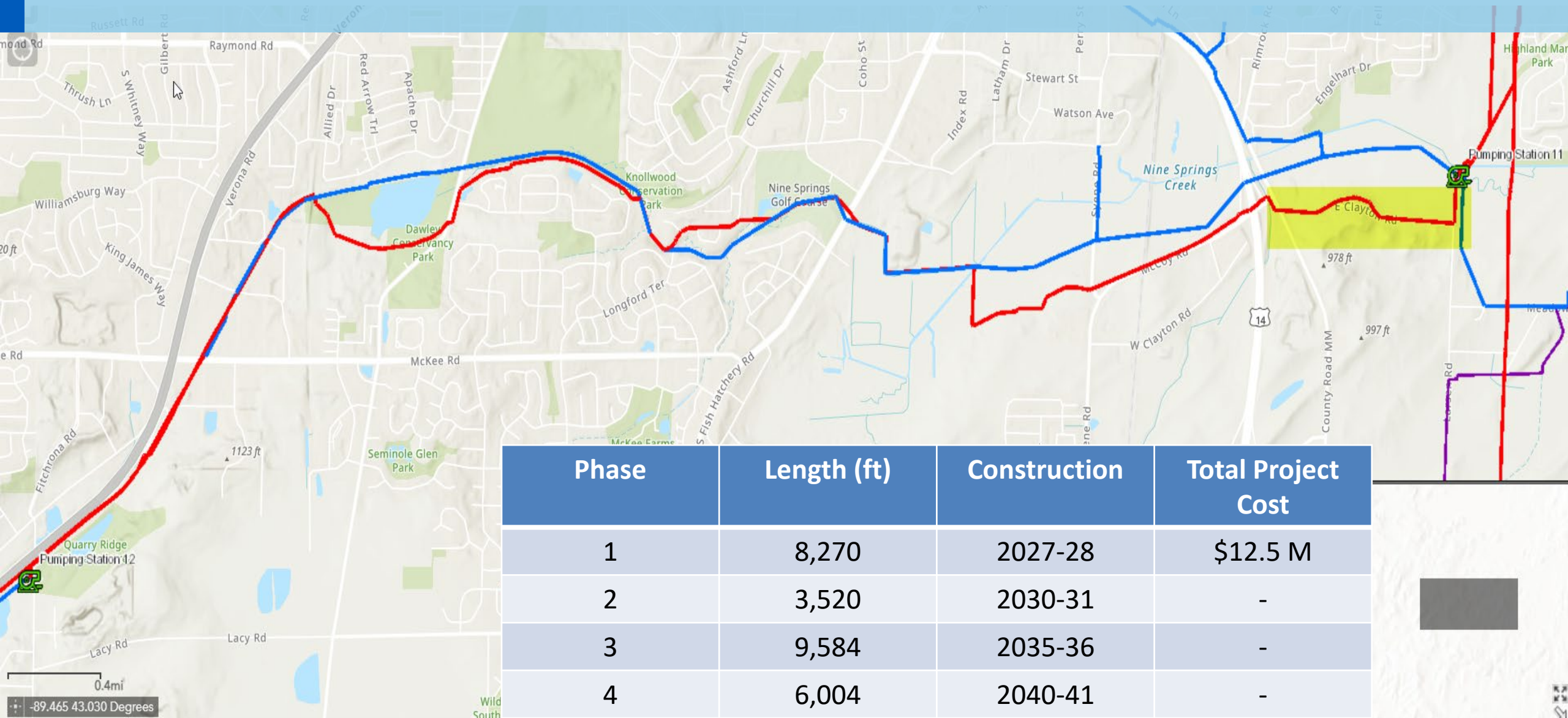


Project	Project ID	Total Project Cost	Construction
LBMC Interceptor (Phase 5)	B02.1	\$3.1 M	2023-24
LBMC Interceptor (Phase 6)	B02.2	\$4.9 M	2024-25
PS 17 Firm Capacity Improvements	C03	\$7.4 M	2024-25
PS 17 Force Main Relief (Phase 2)	C04	\$12.0 M	2023-25

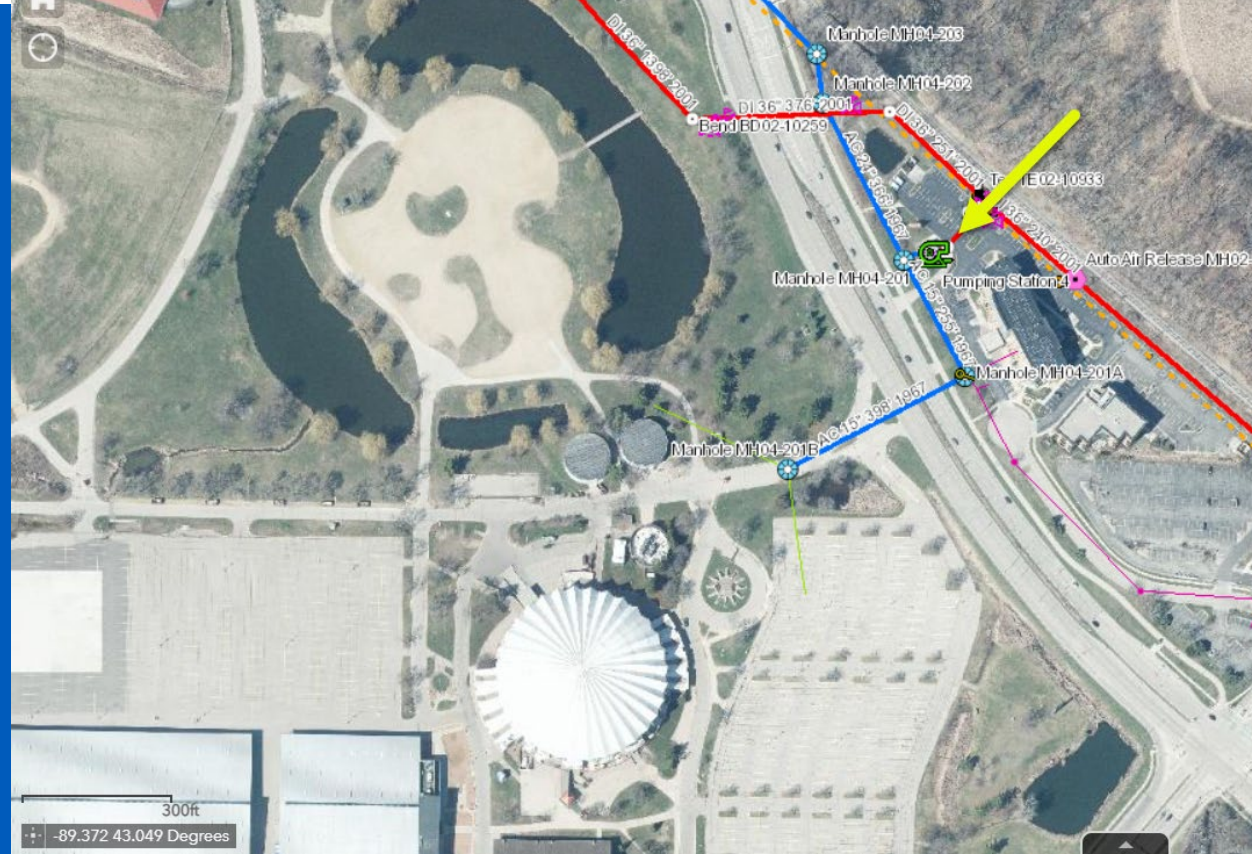
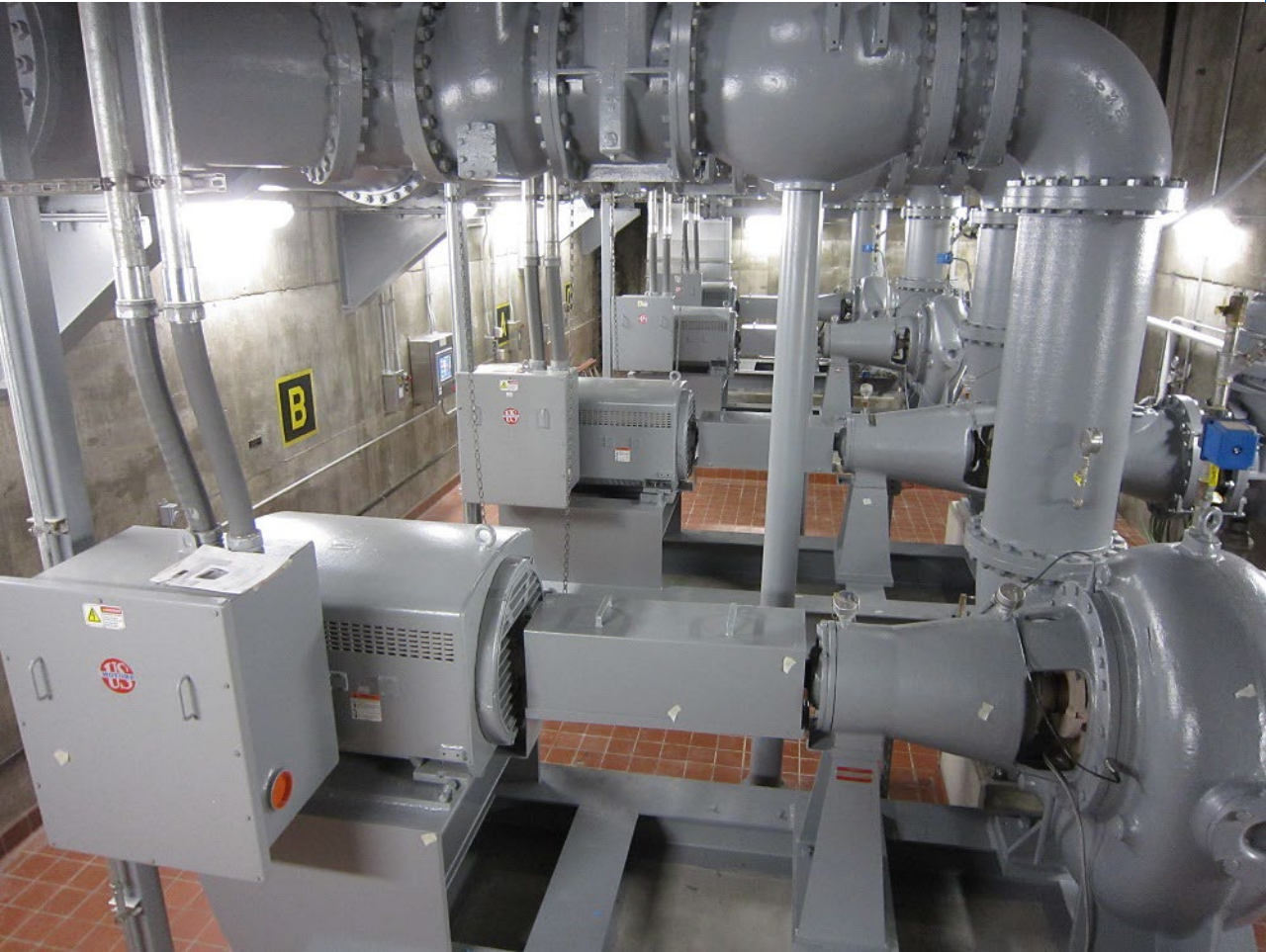
Madison Metropolitan Sewerage District



Nine Springs Valley Intercepting System Projects



Pumping Station 4 Rehabilitation



- Total Project Budget: \$7.1 M
- Construction in 2023-24



Pumping Station 16 Projects



Project	Project ID	Total Project Cost	Construction
PS 16 Rehab	C08.1	\$6.4 M	2026-27
PS 16 Force Main Rehab	C08.2	\$2.1 M	2027



Emergency Power Generation at District Pumping Stations

- Total Project Budget: \$10.0 M
- Installation of 13 generators at pumping stations from 2026 to 2032



Badger Mill Creek Phosphorus Compliance

- Total Project Budget: \$1.8 M
- Spending for stream habitat and stakeholder engagement in 2024-2028



Questions?

Madison Metropolitan Sewerage District

Madison Metropolitan Sewerage District



Draft Financing Plan 2024–2029

July 13, 2023

Madison Metropolitan Sewerage District



The Lede

High spending needs mean...

- Reliance on debt
- Lower fund reserves
- 8.5%–10% annual increases in service charges

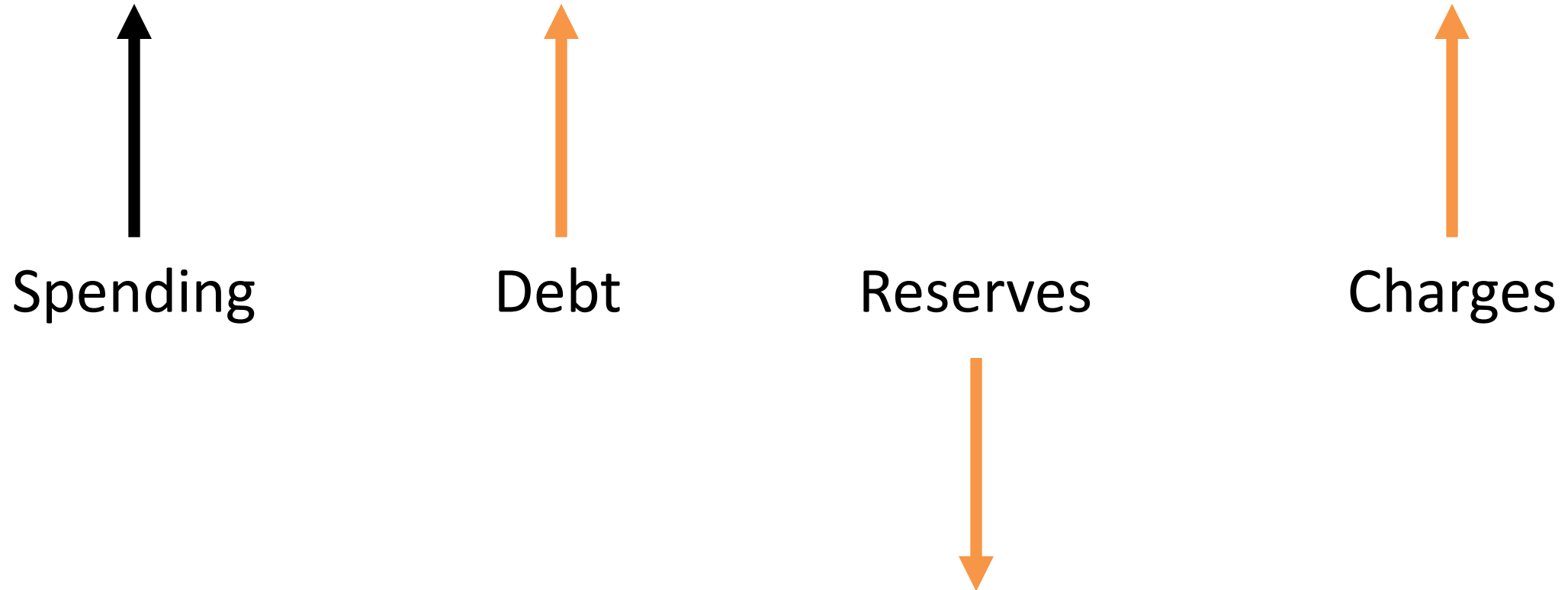


Outline

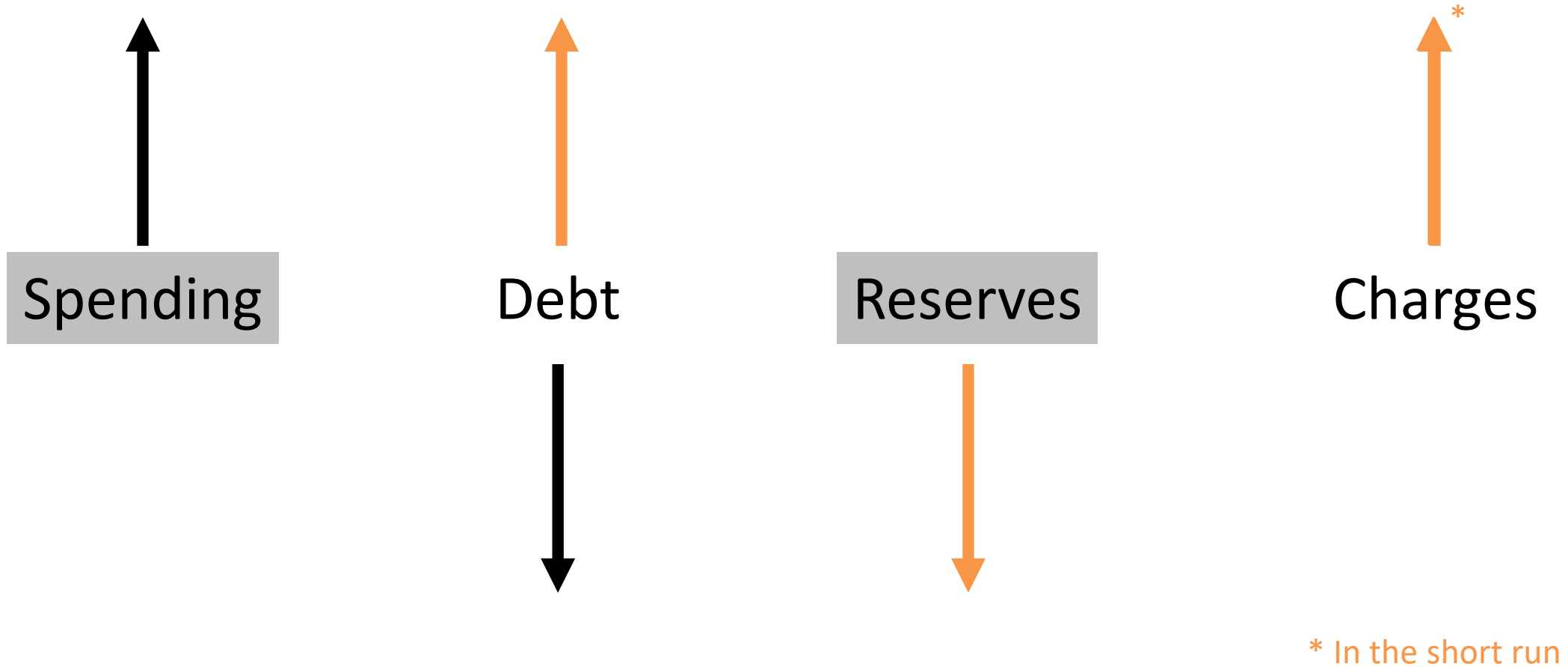
- Method
- Assumptions
- Debt
- Reserves
- Service charges



Method — Four Factors in Tension



Method — Four Factors in Tension



Assumptions

- Headwinds
 - Inflation 5% —> 3%
 - Interest 2.5% —> 2.145%
 - Connection charges lower
- Workload manageable
- Spending continues year 7...



Debt Levels

Consider three factors

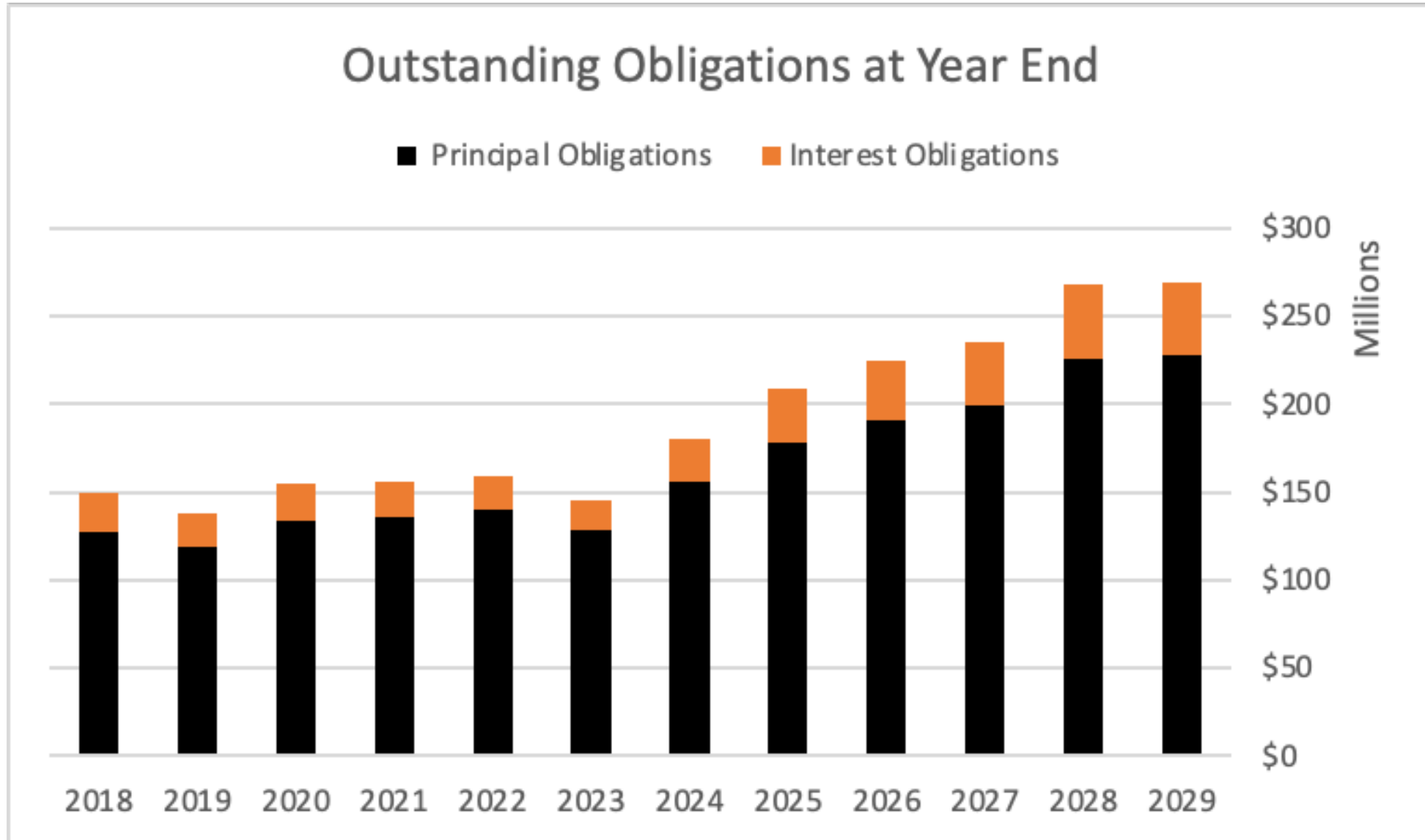
Interest

Short-run service charges

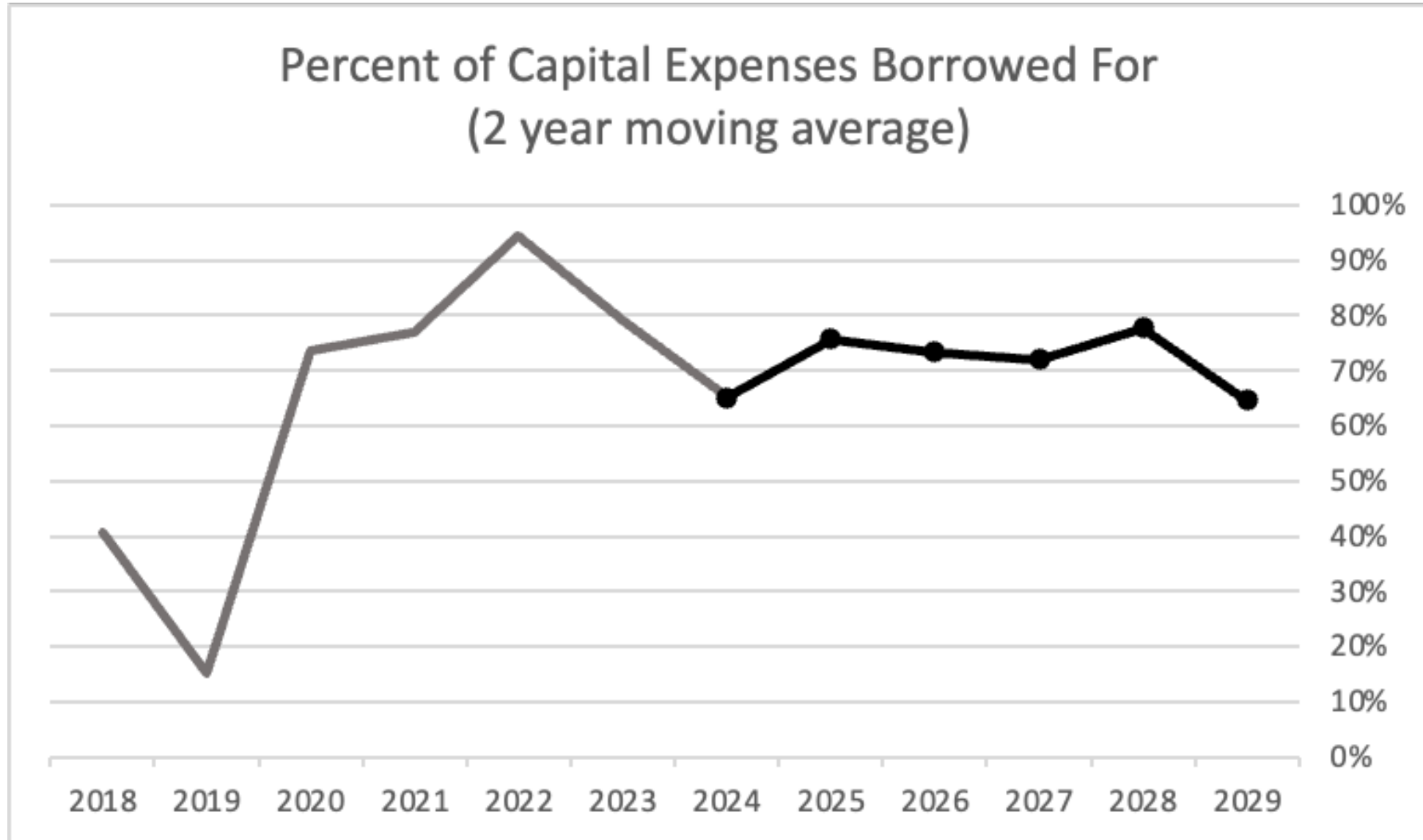
Ability to repay



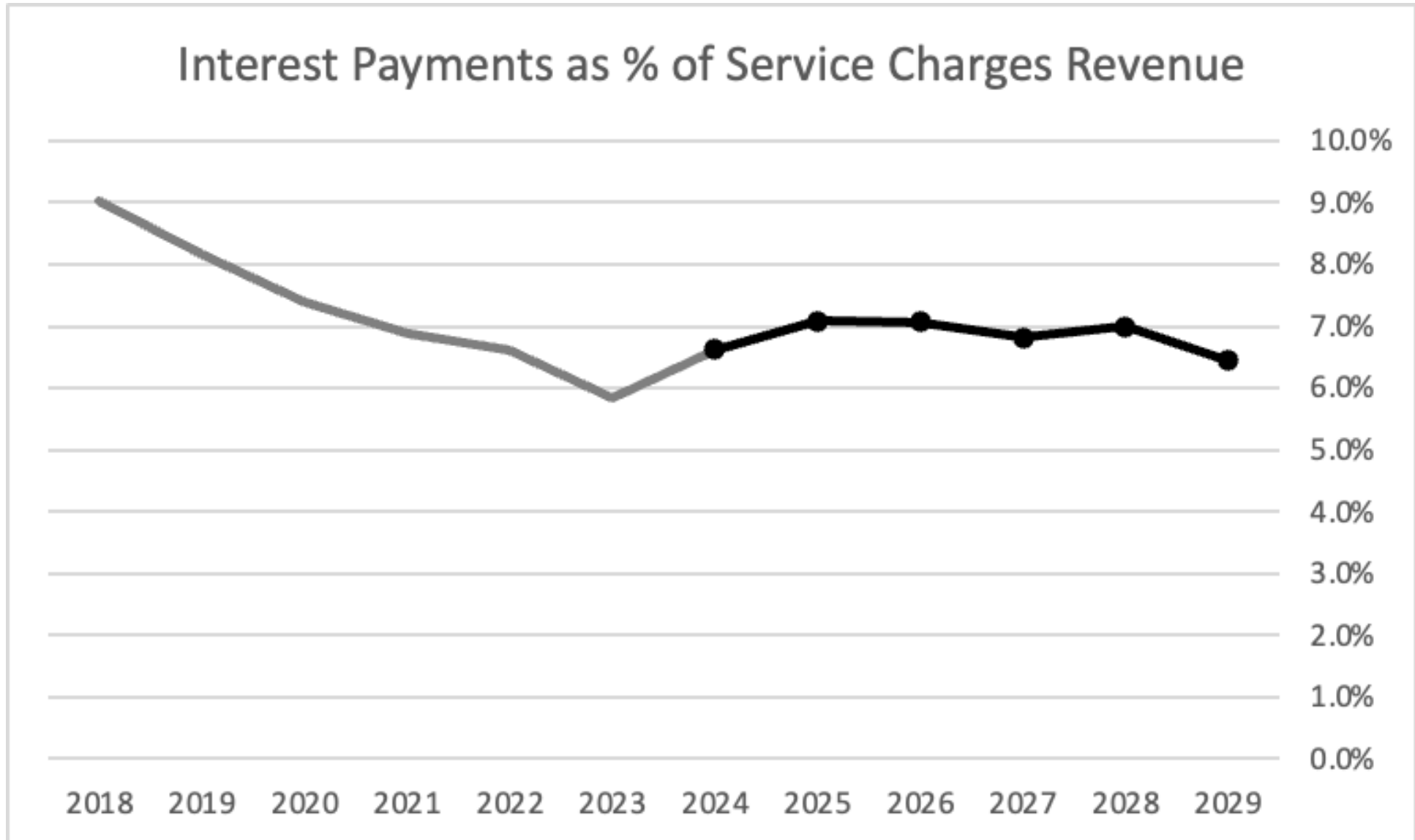
Debt — Obligations



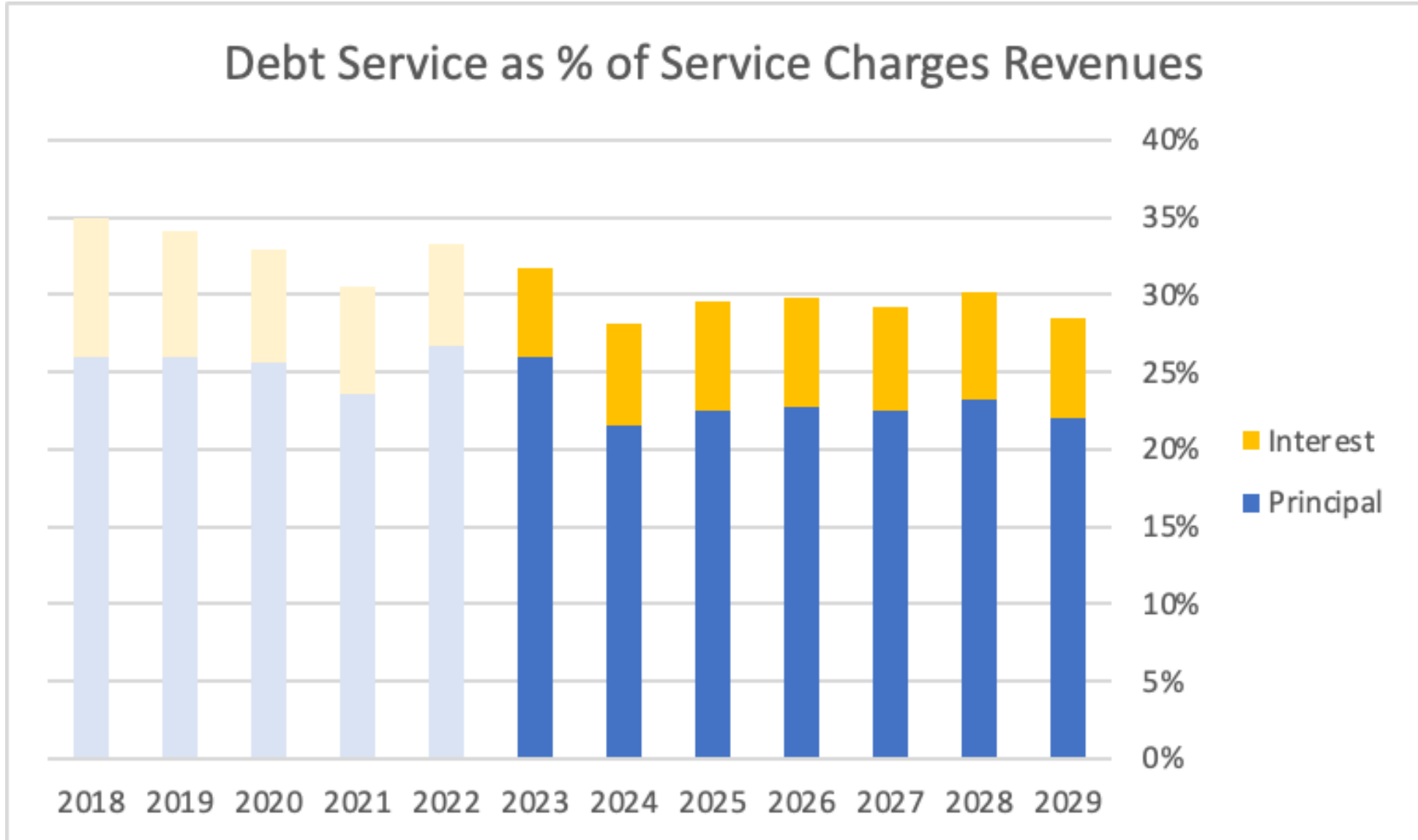
Debt — Percent Borrowed For



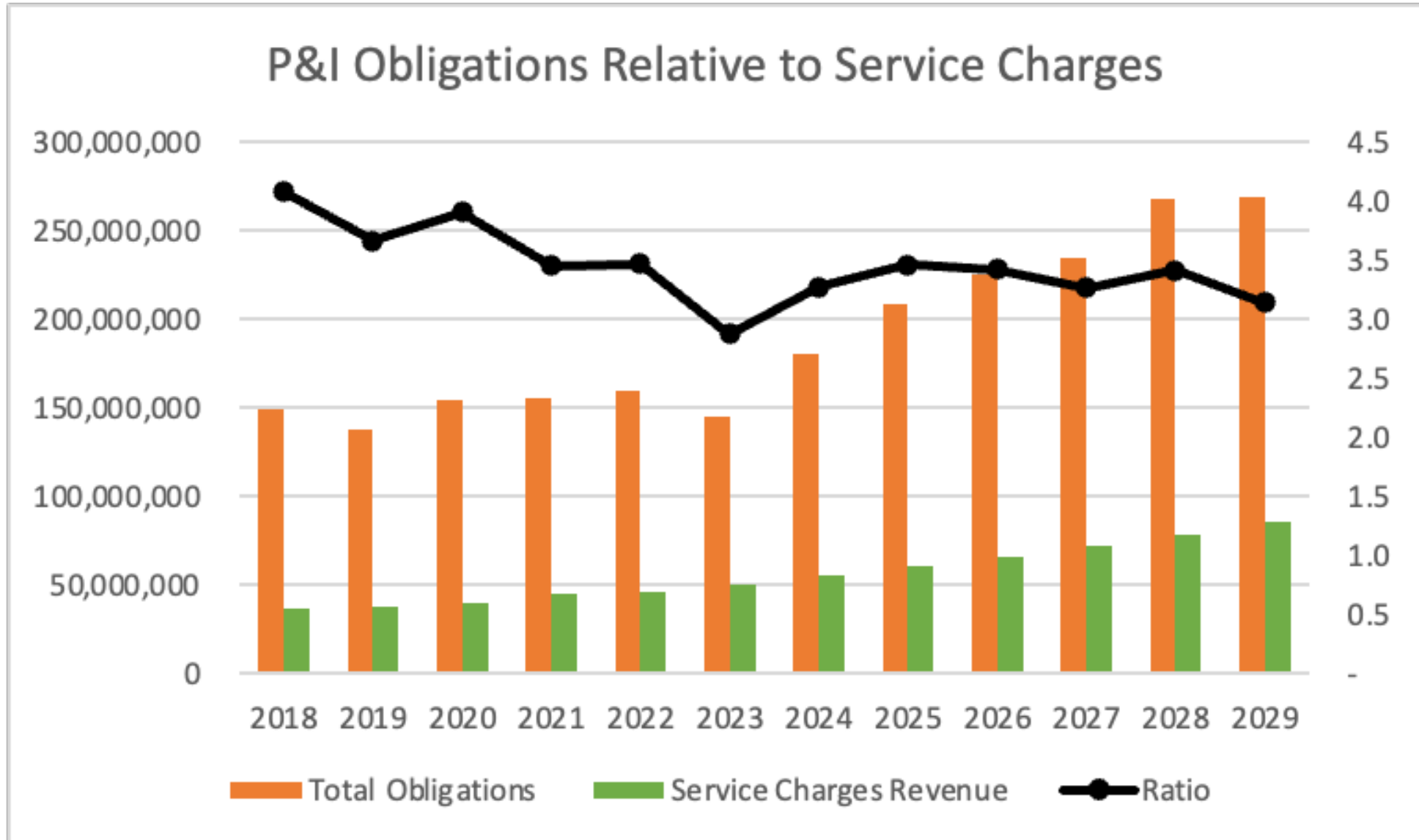
Debt — Interest Burden



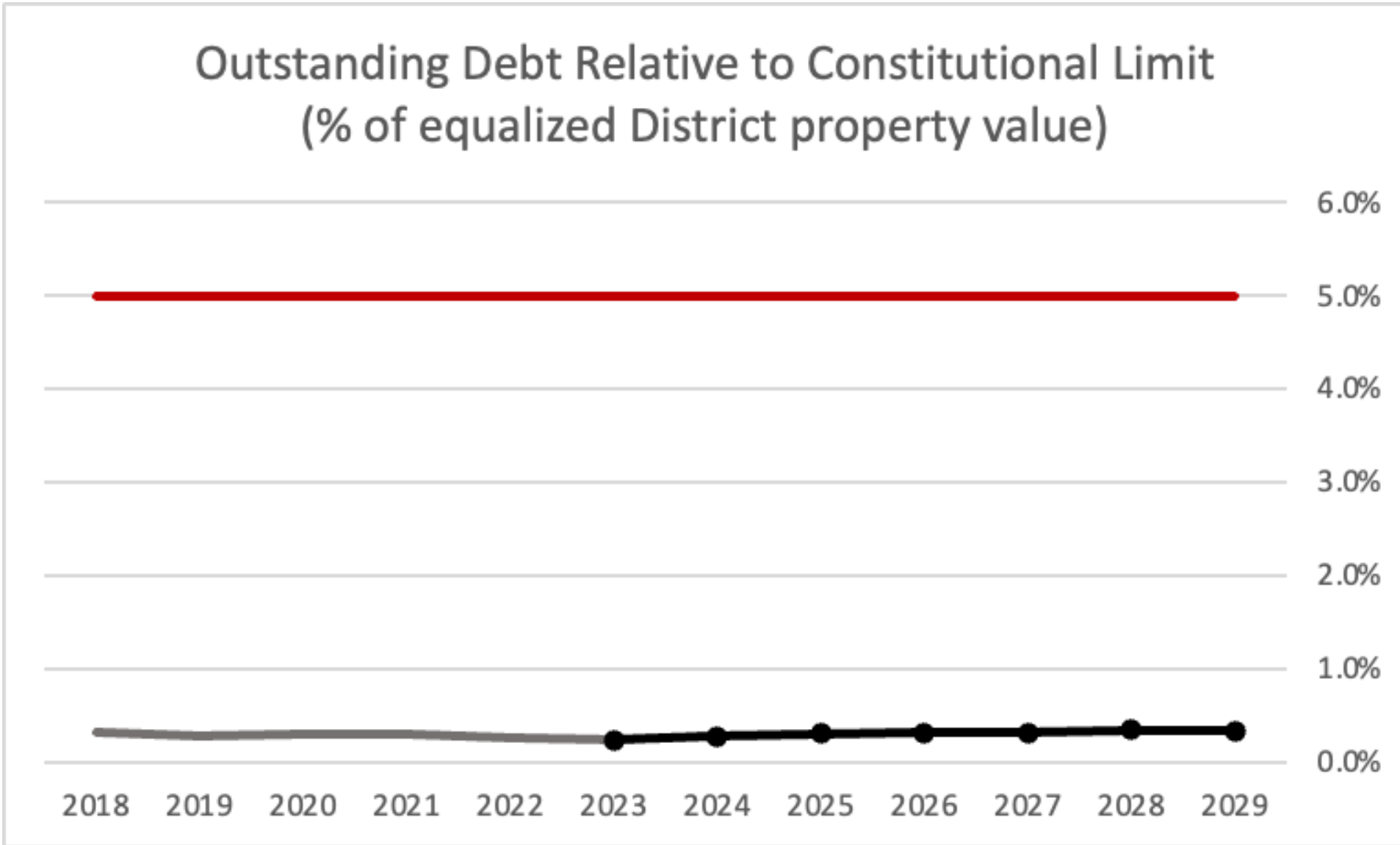
Debt — Short-Term Service Charges



Debt — Ability to Repay: Service Charges



Debt — Ability to Repay: Property Tax



Capital Fund Reserves

Do not run out of money

Risk: *delayed* loan proceeds

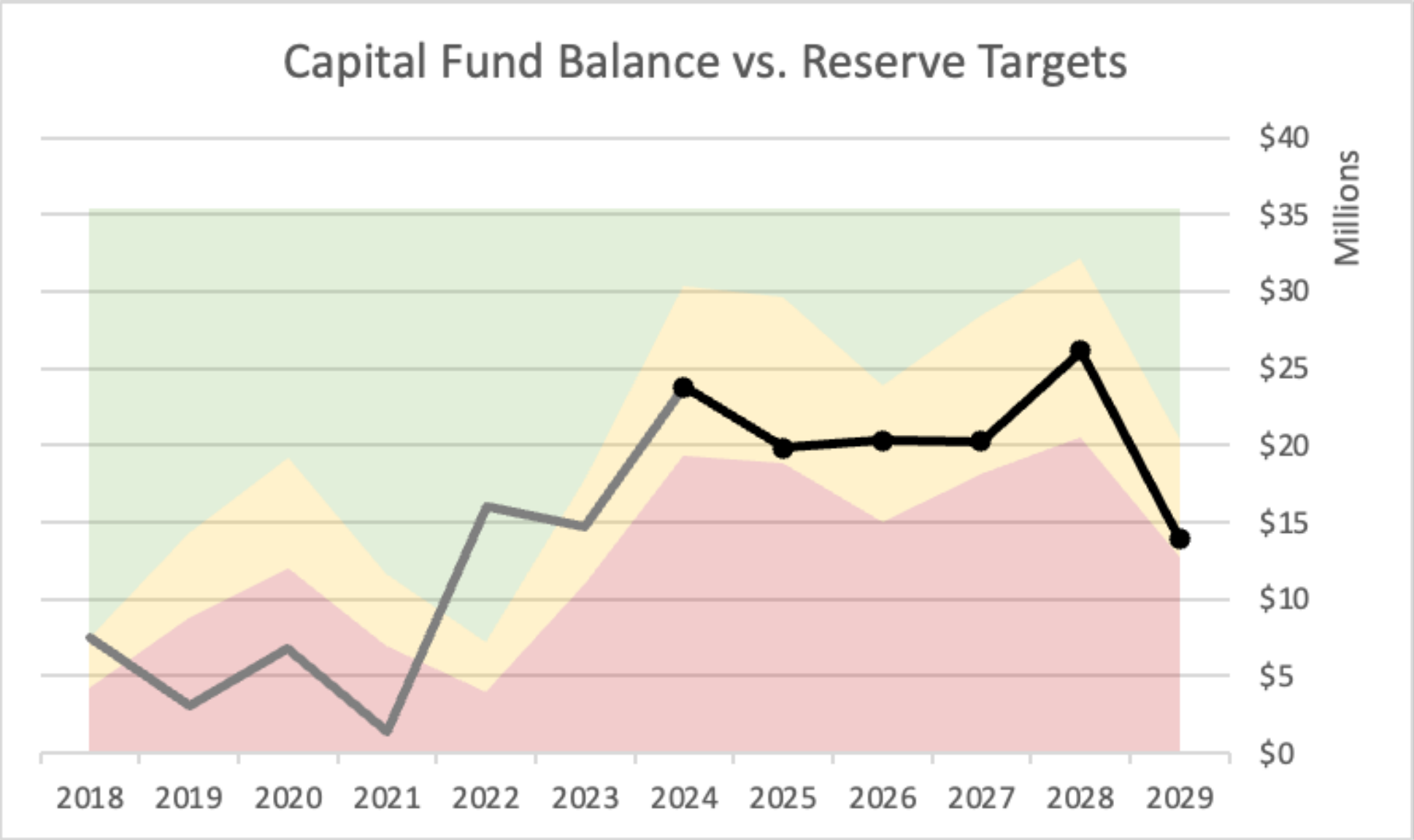
- 50% of non-cash spending

Risk: *unplanned* expenses

- \$0.5m



Capital Fund Reserves



Debt Fund Reserves

Do not run out of money

Risk: *violate* CWF rule

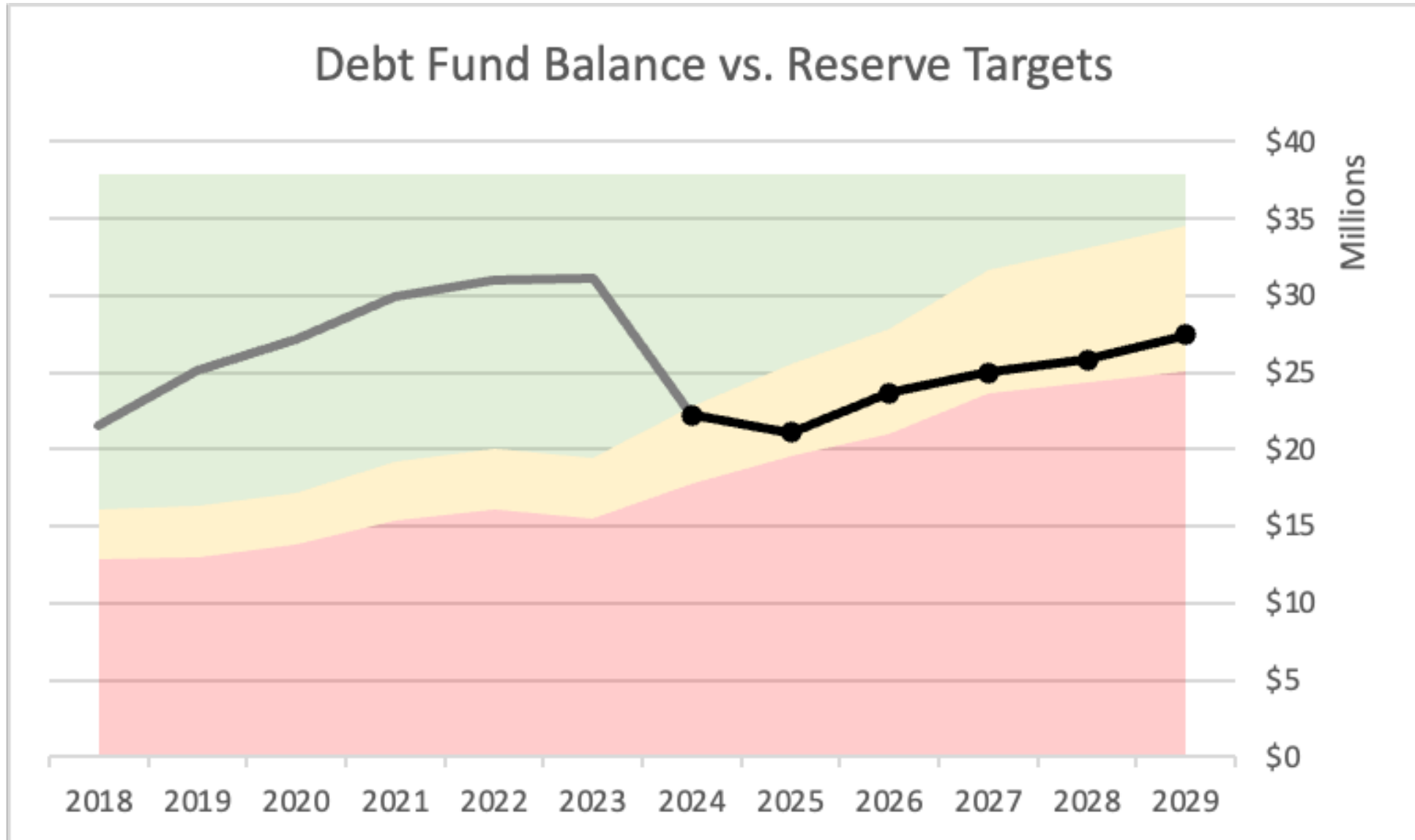
- 100% of next year spending

Risk: large *future* borrowing

- \$3.1m reserves
- Covers 1 year of \$50m loan



Debt Fund Reserves



Service Charges

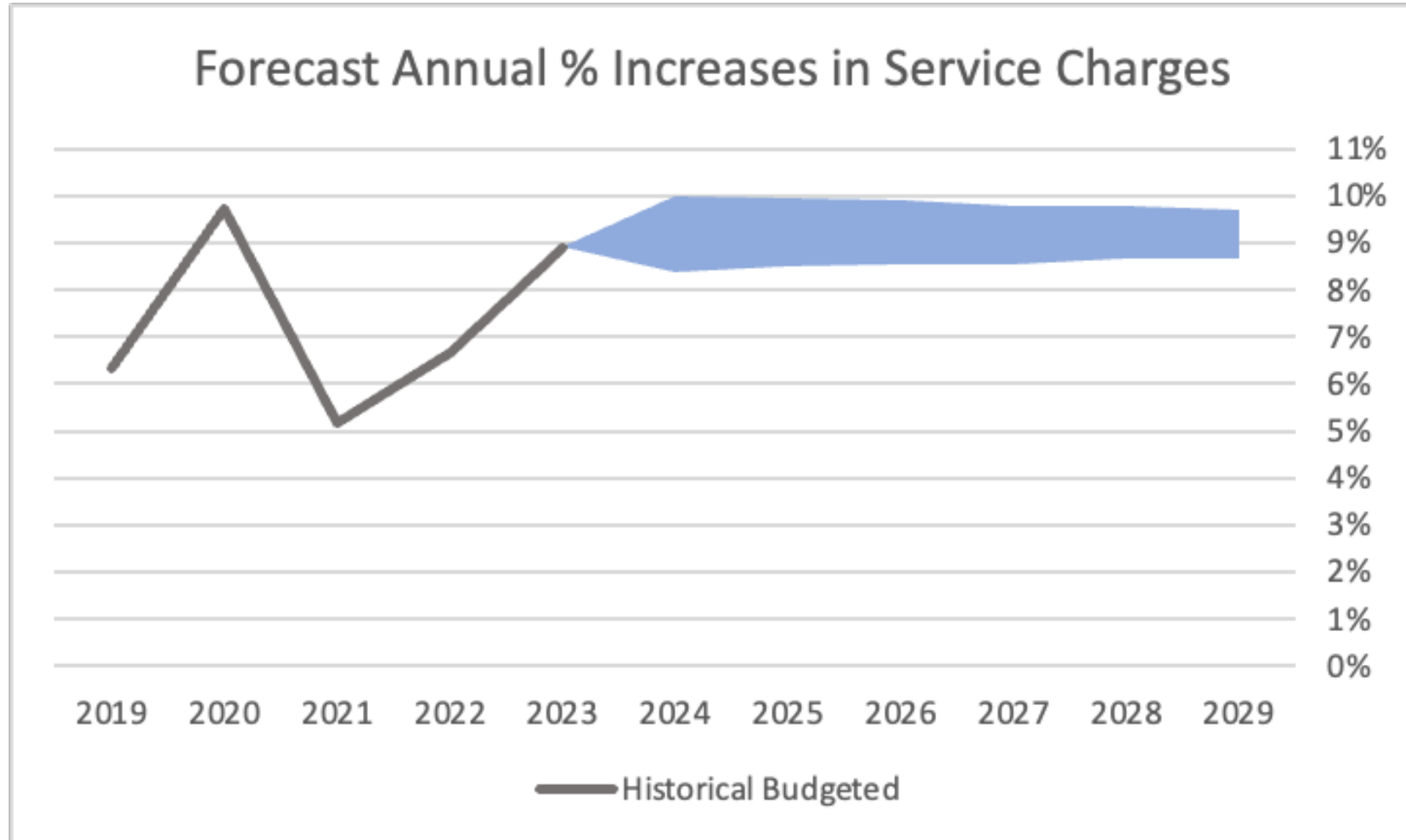
Meet needs

Capital expenditures
+ Debt service
+ Reserves
+ Operating budget forecast
= Service charges path; smooth

+/- Margin of error

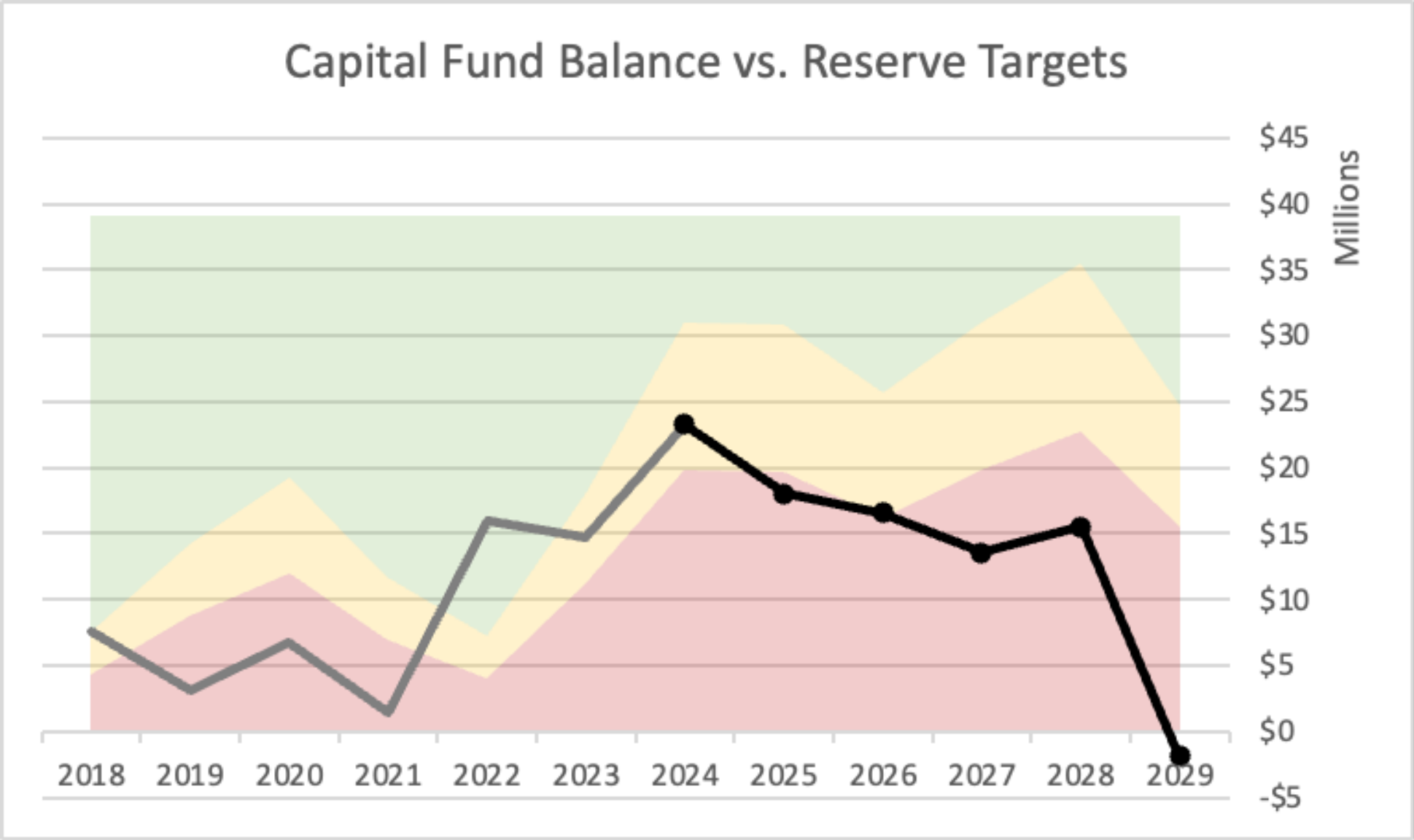


Service Charges



Service Charges – To Lower 1 Percentage Point

\$15.6m Less
Over the
Period



Next Steps

- Today: Questions
- July 27:
 1. Plan acceptance
 2. Policy Guidance for 2024 Budget
 - Projects
 - Reserves
 - Debt
- Sep. 14: Budget introduction





Thank you

Madison Metropolitan Sewerage District

