

The background of the slide is a photograph of a group of people in a meeting, overlaid with a semi-transparent blue filter. In the foreground, a person's hand is visible holding a dark-colored mug. The mug has the words "Metropolitan District" printed on it in a light color. The overall scene suggests a professional gathering or conference.

Welcome

Commission Meeting
August 13, 2026

Madison Metropolitan
Sewerage District

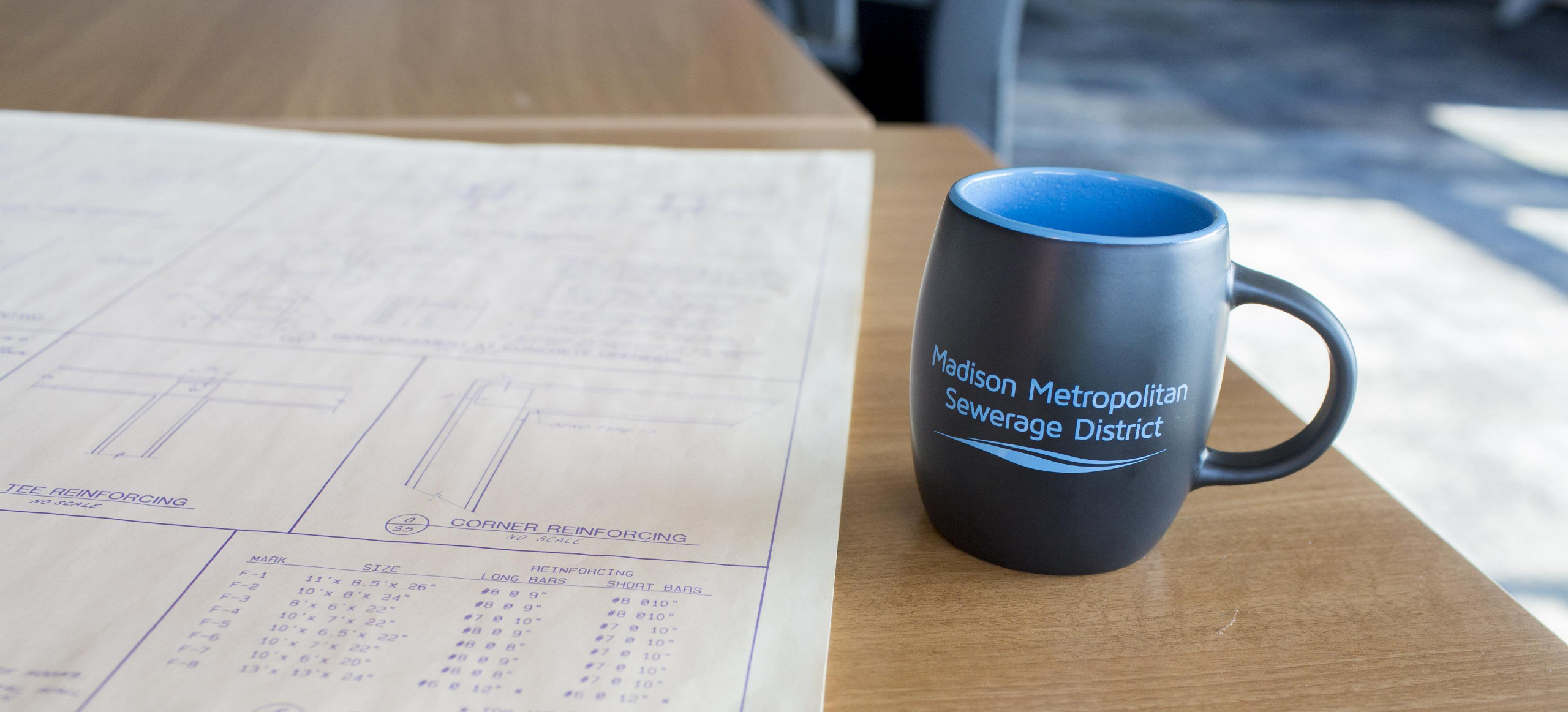


Welcome

Steven Girard
IT Operations Lead

Madison Metropolitan
Sewerage District





Consent Calendar

Madison Metropolitan
Sewerage District





Madison Metropolitan
Sewerage District

Project Update: Biosolids Facilities Plan

Presented by Ana Uroic Stefanko, Planning Engineer



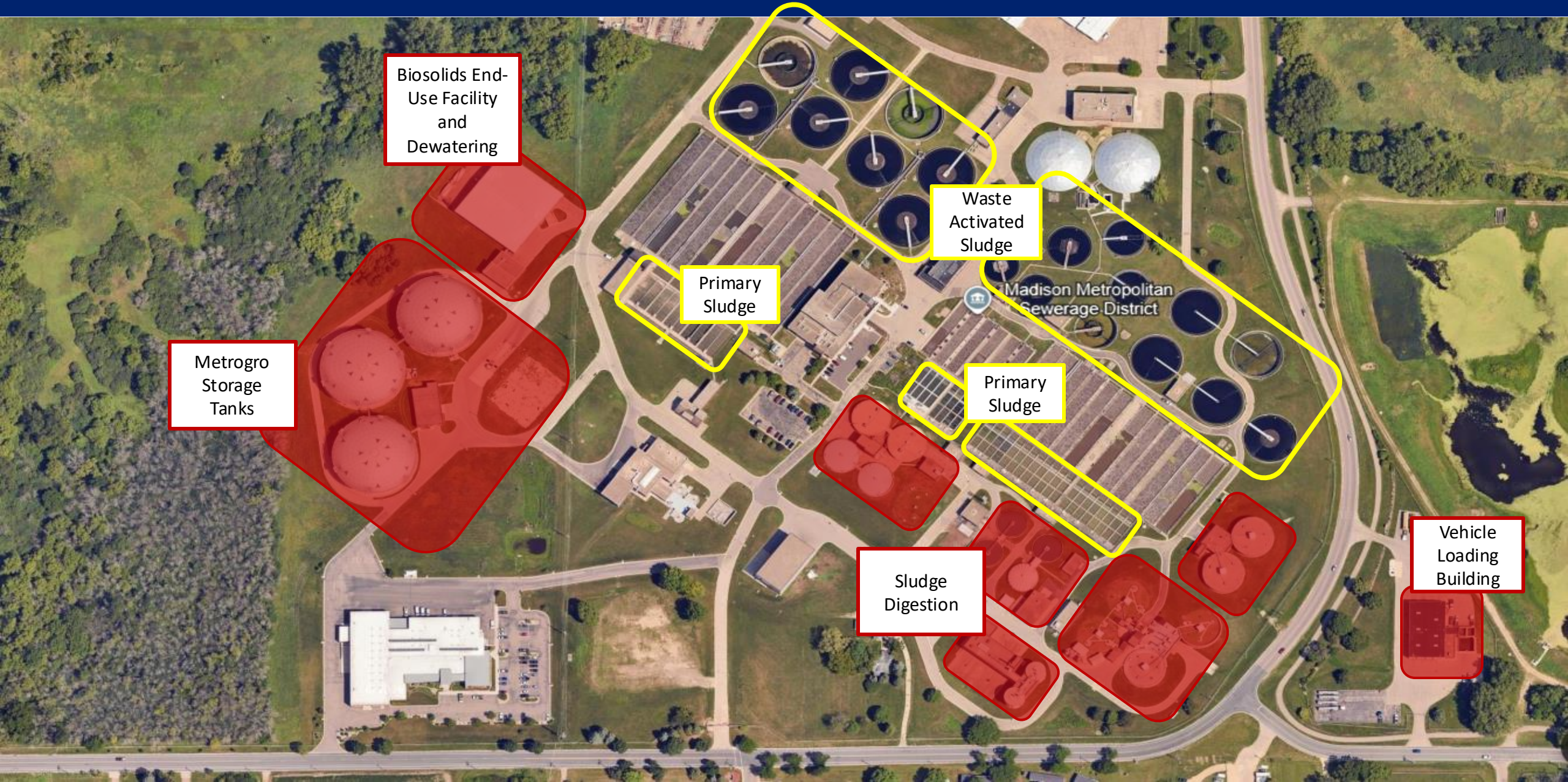


Agenda

1. Background
2. Project Drivers
3. Project Scope
4. Recommendation
5. Benefits
6. Biosolids and Heat & Power
Project Consolidation
7. Next Steps



Background – Solids Management Overview



Background

- 2010 - Solids Handling Facilities Plan (11th Addition to the NSWTP)
 - Evaluate the solids handling system alternatives over the period of 20 years
- 2021 – Biosolids Management Plan
 - Assessment of management strategies and identify next steps



Project Drivers

STORAGE CAPACITY



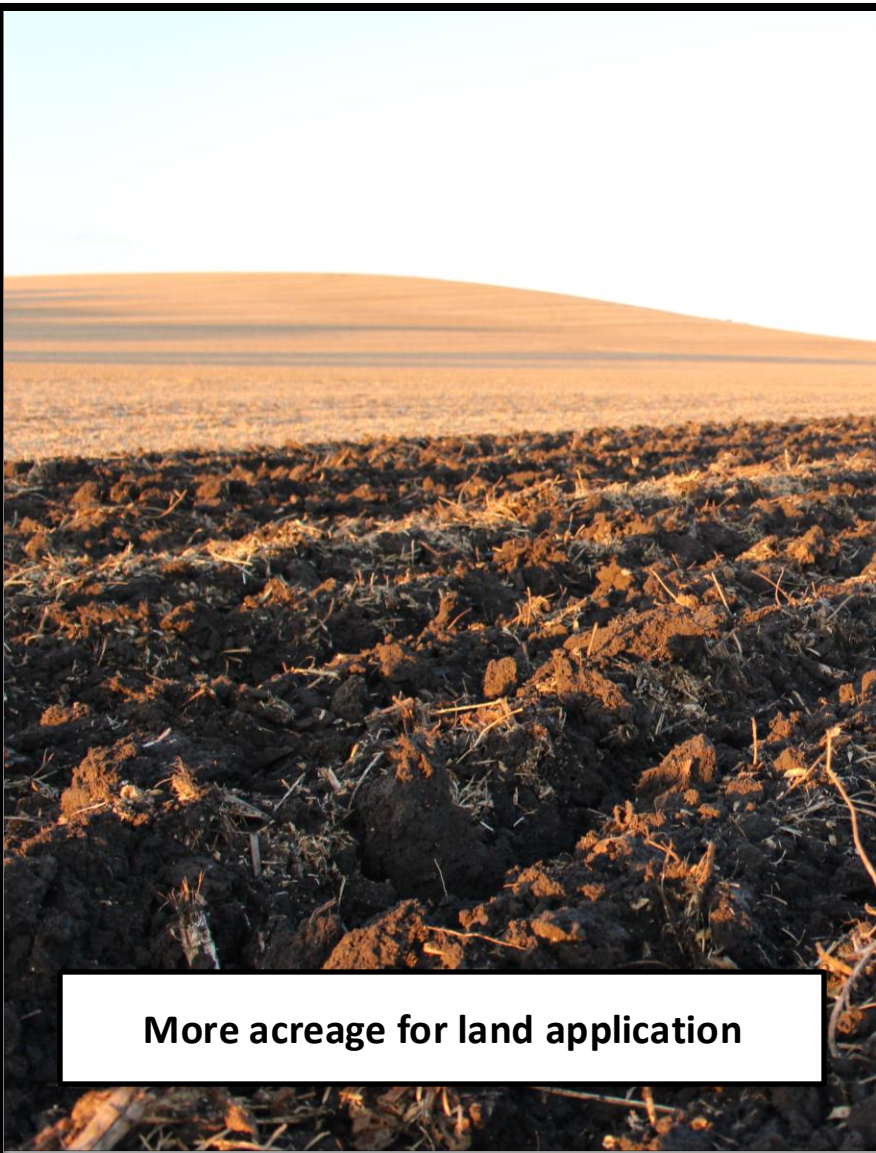
	Storage (days)	
	2025 Baseline	Year 2050
Average Conditions ^a	175	136
WAC NR 110	180	180

LOADOUT AND HAULING



Greater loadout and hauling capacity

AGRICULTURAL LAND



More acreage for land application

Project Drivers

- In 2019, extended wet fall weather and early winter created the need for additional storage
- Biosolids were dewatered and landfilled at the Dane County landfill to meet 2020 storage needs

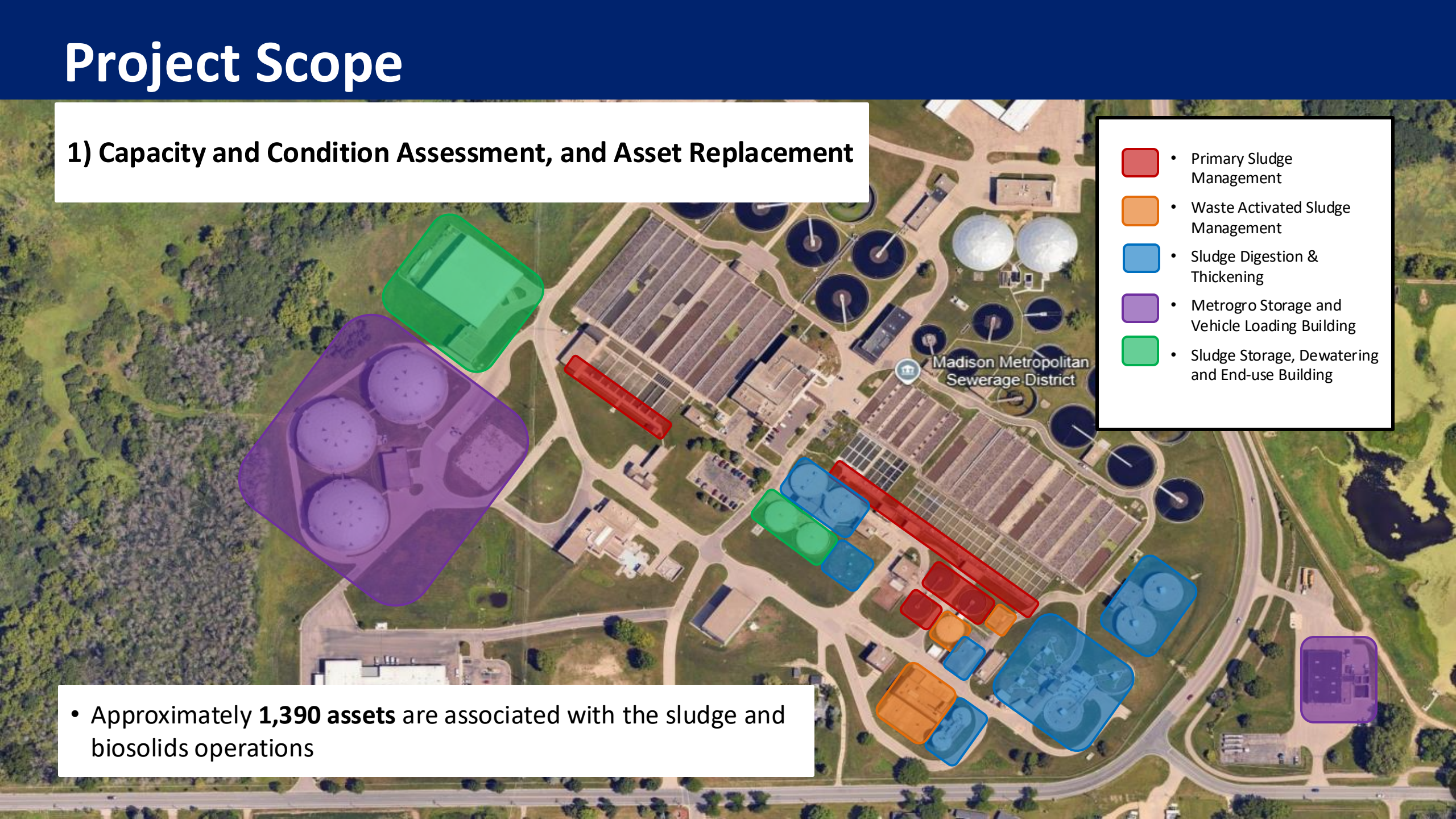


Image Source: Dane County Department of
Waste and Renewables

Project Scope

1) Capacity and Condition Assessment, and Asset Replacement

- Approximately **1,390 assets** are associated with the sludge and biosolids operations

- 
- The aerial map shows the Madison Metropolitan Sewerage District facility. Various assets are highlighted with colored overlays: red for Primary Sludge Management, orange for Waste Activated Sludge Management, blue for Sludge Digestion & Thickening, purple for Metrogro Storage and Vehicle Loading Building, and green for Sludge Storage, Dewatering and End-use Building. The facility includes several large circular tanks, rectangular buildings, and a large storage area on the left.
- Primary Sludge Management
 - Waste Activated Sludge Management
 - Sludge Digestion & Thickening
 - Metrogro Storage and Vehicle Loading Building
 - Sludge Storage, Dewatering and End-use Building

Project Scope

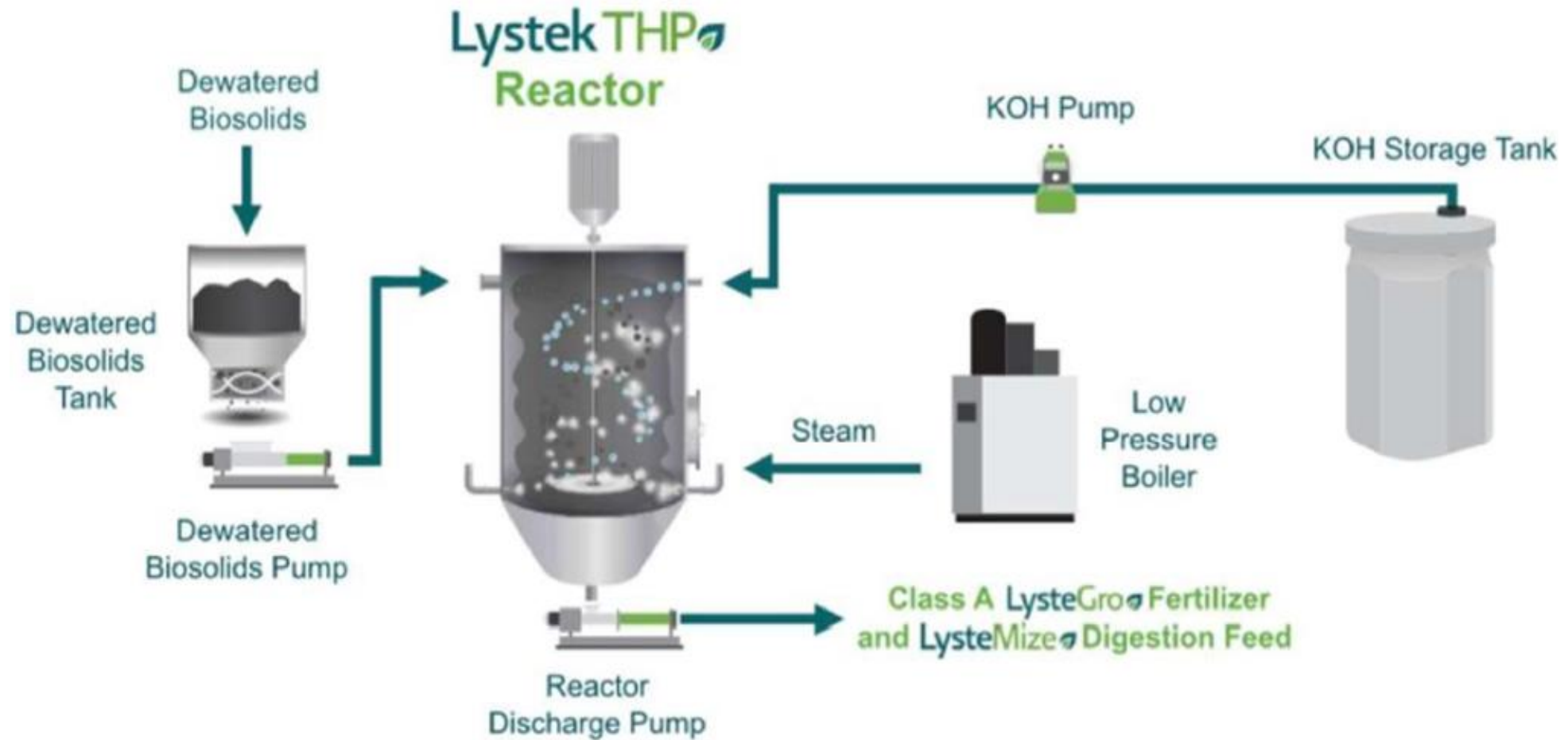
2) Sludge Management Alternatives Evaluation

- **Solids management Alternatives:**
 - 6 alternatives
 - ✓ Technical and process analysis
 - ✓ Cost estimates
 - ✓ Non-monetary drivers
- The estimated capital costs for the six alternatives range from **\$88 million to \$215 million**
- **Class A Liquid Biosolids** had the highest overall ranking of nonmonetary and other project drivers with an estimated **capital cost of \$107 million**



Digester No.2 Corrosion and Potential Sulfur Deposits

Recommendation – Class A Liquid Biosolids



Benefits - Class A Liquid Biosolids



350 to 400 days of storage capacity



Class A Liquid – less pathogens, lower nitrogen



Highest potassium



Hauling and land application cost reduction

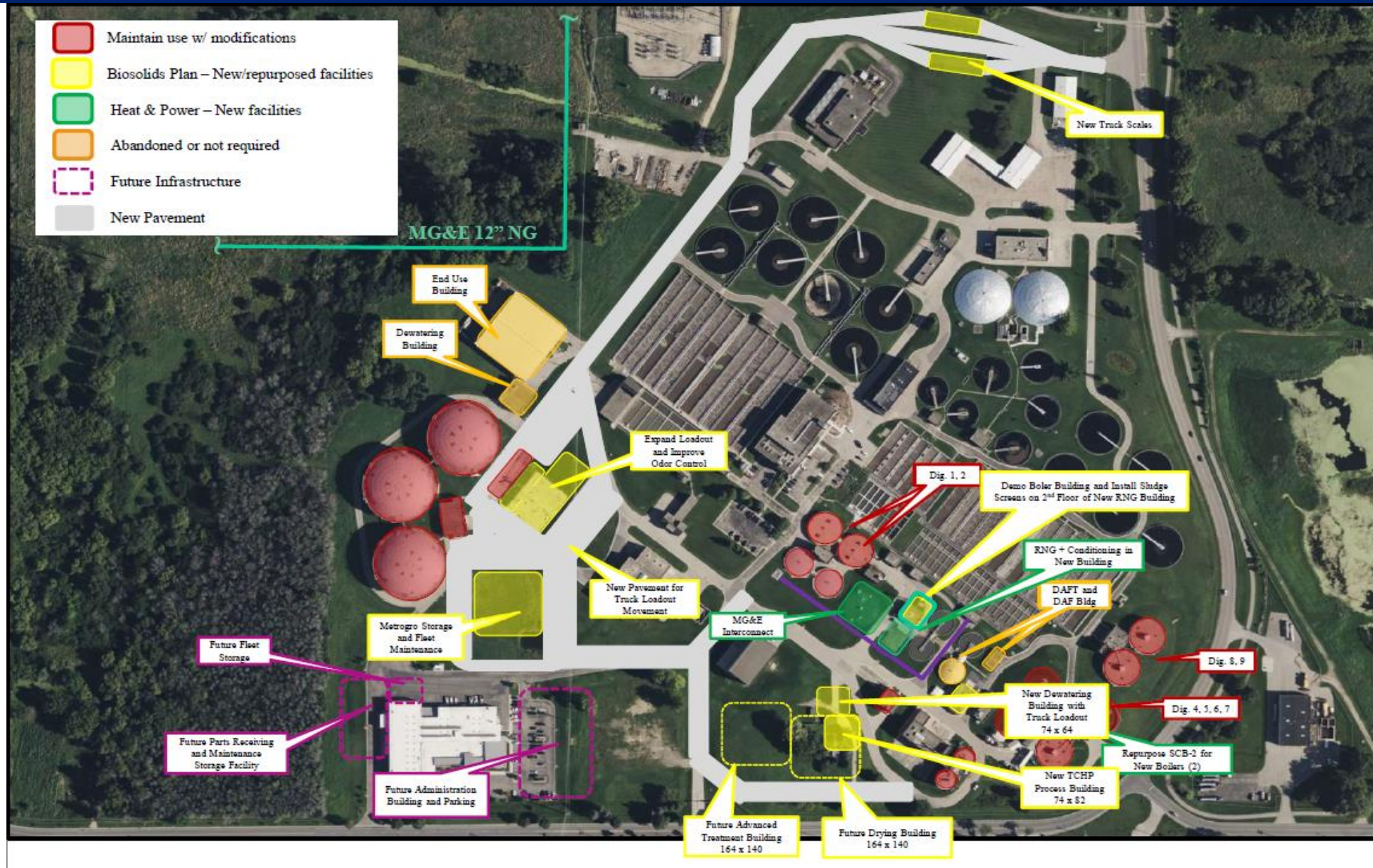


Hauling trips decreased



Use of existing hauling, transfer and application equipment

Biosolids and Heat & Power Project Consolidation



Biosolids and Heat & Power Project Consolidation

Table 5.1 Cost Estimates from the Draft Biosolids Facilities Plan

Description	Cost Estimate
Primary Sludge (PRS) Management	\$ 8,041,000
Primary Sludge (PRS) Screening	\$ 5,815,000
Waste Activated Sludge (WAS) Pre-Thickening	\$ 3,615,000
Digestion, Storage, and Land Application	\$ 107,328,000
Asset Replacement	\$ 31,987,000
Site and Access Improvements; Truck Scales	\$ 10,000,000
Metrogro Storage and Maintenance Facility	\$ 17,333,000
Total Biosolids Cost Estimate (2026 \$)	\$ 184,119,000
Heat and Power Improvements	\$ 38,588,000
Total Biosolids + Heat and Power Cost Estimate (2026 \$)	\$ 222,707,000

Next Steps

- Hold a public hearing in September 2026, as required under s. NR 110.09(4), Wis. Adm. Code.
- Submit the Facilities Plan to the Wisconsin Department of Natural Resources (WDNR) for approval.
- Request formal acceptance of the Biosolids Facilities Plan from the Commission.
- The Draft 2027 Capital Improvements Plan shows design of the consolidated Biosolids and Heat & Power projects beginning in 2027 and continuing through 2029, with construction scheduled for 2030-32.



An aerial photograph of Madison, Wisconsin, featuring the Wisconsin State Capitol building with its prominent dome. The city is situated along the shores of Lake Monona, with various urban buildings and green spaces visible. The entire image is overlaid with a semi-transparent blue filter.

Thank you

Madison Metropolitan
Sewerage District





Executive Director Update

Presented by Eric Dundee, Executive Director



National Association of Clean Water Agencies (NACWA) 2025 Peak Performance Award



- **Gold: One year of perfect (100%) compliance with their NPDES permits.**
- **Platinum: Reached in the 5th year of achieving consecutive Gold.**

"For excellence in wastewater treatment as measured by compliance with their NPDES permit, as well as those facilities that operate under a federal or state equivalent NPDES permit, an underground injection control permit, or a state control mechanism that regulates effluent quality and reuse of reclaimed flows. This award program offers national recognition for the hard work and commitment to excellence NACWA members put forth every day on behalf of the environment and their communities."

This is a Regulatory Compliance KPI

Capital Projects Update

August 13, 2026

Madison Metropolitan
Sewerage District

Presented by Lisa Coleman, Engineering Manager



Preview

- Overview of projects in planning, design and construction
- Projects completed and bids received
- Project highlights

Legend:

-  = Project on track
-  = Project schedule or cost impacted
-  = Major issue with a project
-  = Project not started

Italics = Project new to category (shows progress)



Planning

Treatment Plant

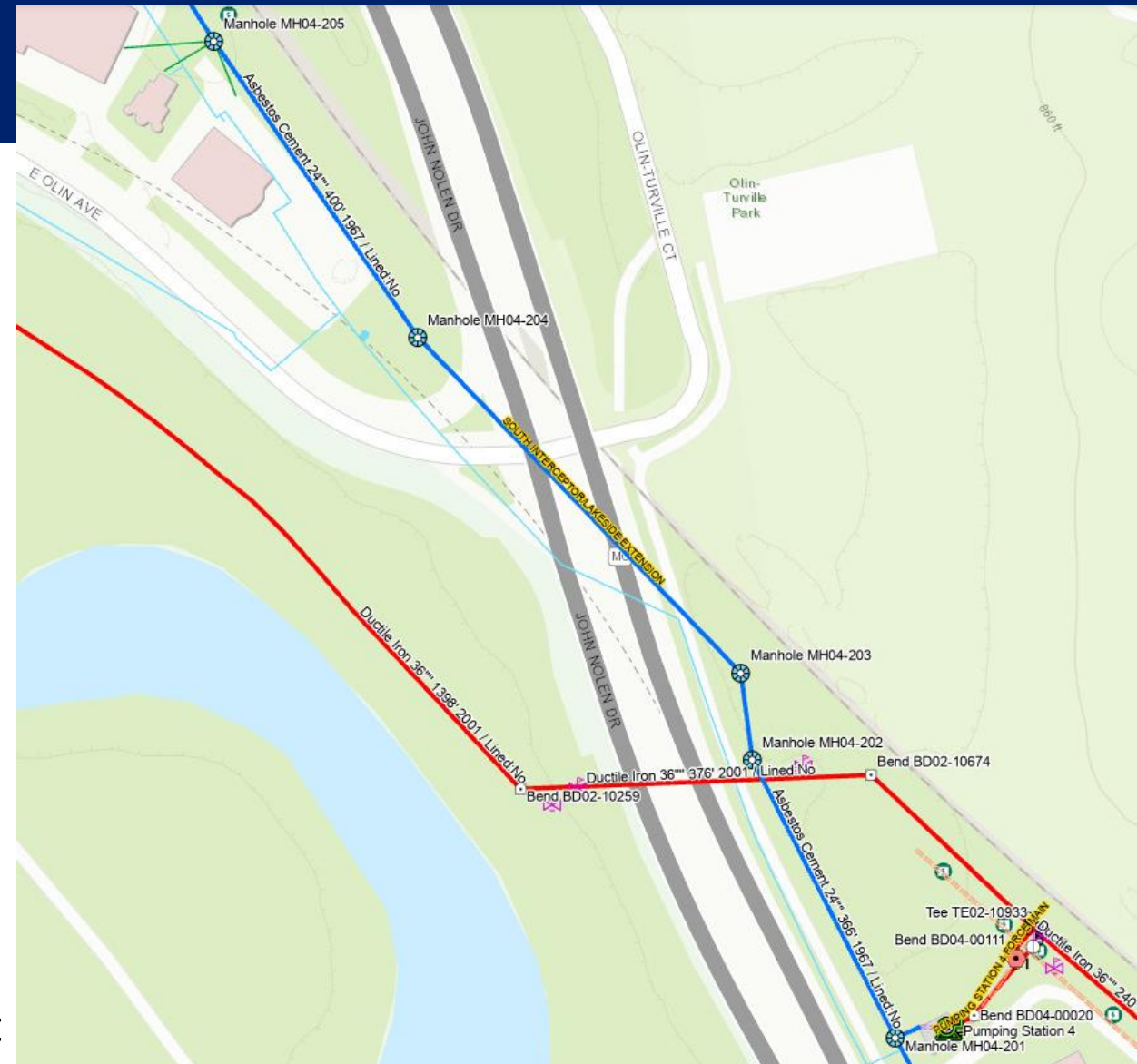
- Laboratory Remodel
- Biosolids Facility Plan

Interceptors

- SEI McFarland Relief Rehabilitation
- *South Interceptor Replacement at John Nolen Drive*

Pumping Stations & Force Mains

- PS 11 and PS 12 Surge Valve Access Platforms
- Pumping Station 2 Force Main Condition Assessment



In Design

Treatment Plant

■ Dryer and Seeding Modifications

Interceptors

■ *MH Rehab on Old West Interceptor*

■ East Interceptor Rehab PS07 to MH07-103

■ NEI – Truax Extension Rehab

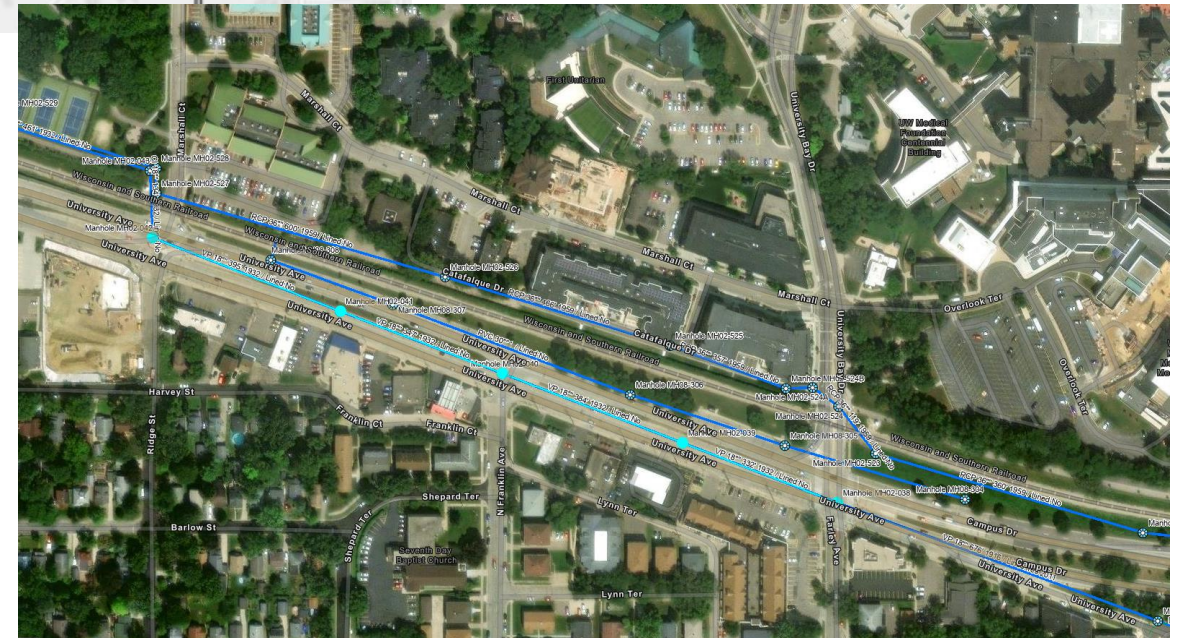
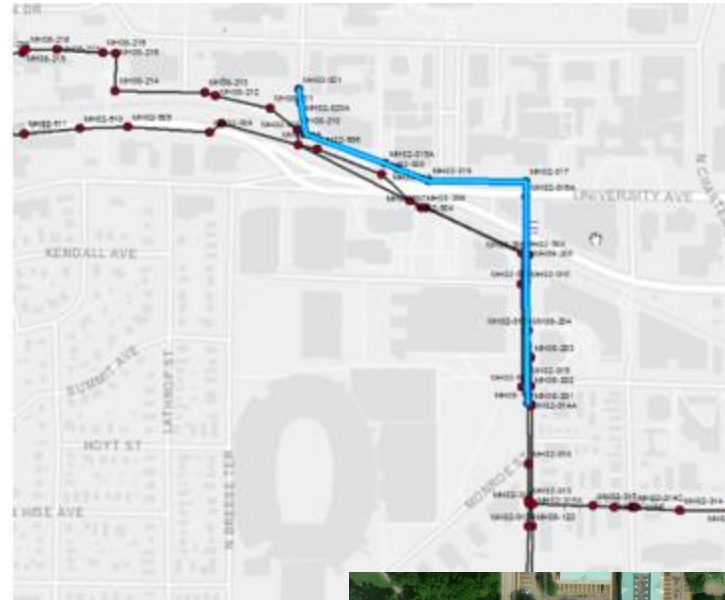
■ NSVI Capacity Improvements (Phase 1)

■ NSVI Capacity Improvements (Phase 2)

■ West Interceptor Rehab (2 projects)

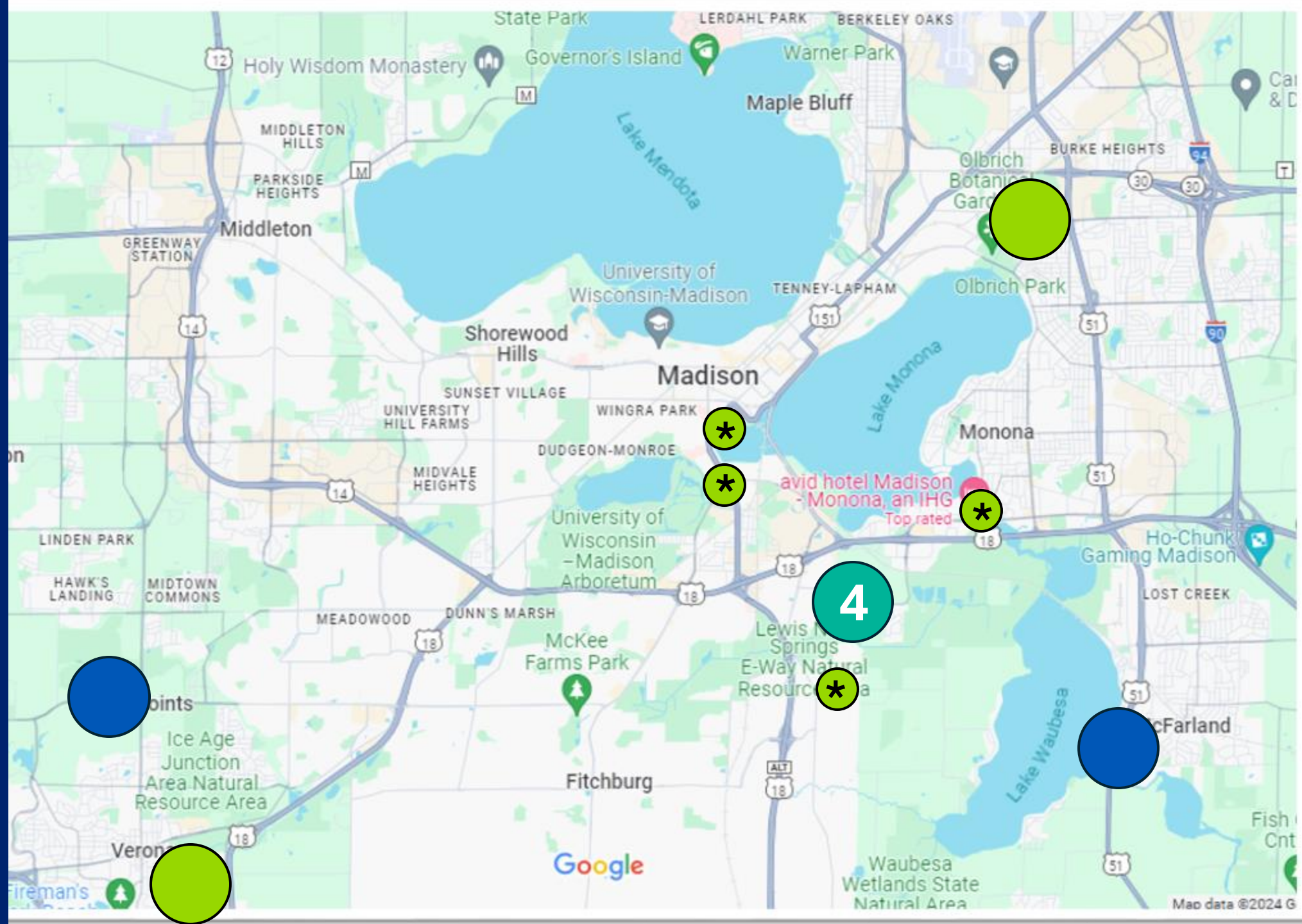
Pumping Stations & Force Mains

■ PS 2 VFD Replacements



Legend:

- ## Legend:
-  Treatment Plant
 - 4 projects
 -  Interceptors
 - 2 projects
 -  Pumping Stations & Force Mains
 - 3 projects
- * Denotes that these 4 pumping stations are part of one project



Under Construction

Treatment Plant

Liquid Processing Phase 2

W4 System Improvements

Lagoon Dikes Improvements

NSWWTP Electrical Service Equipment Repl.

Interceptors

Southeast Interceptor Relo at Yahara River

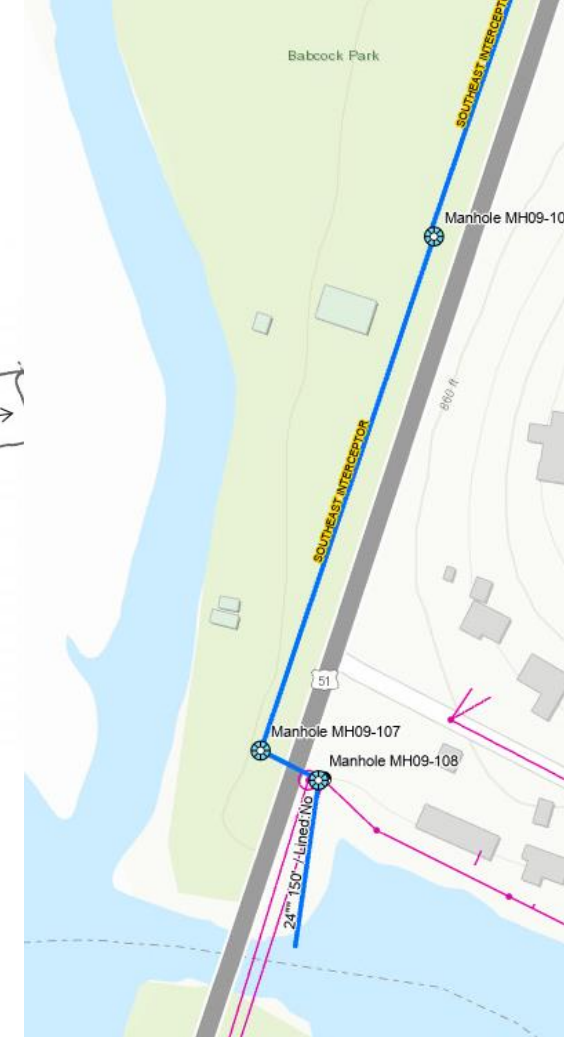
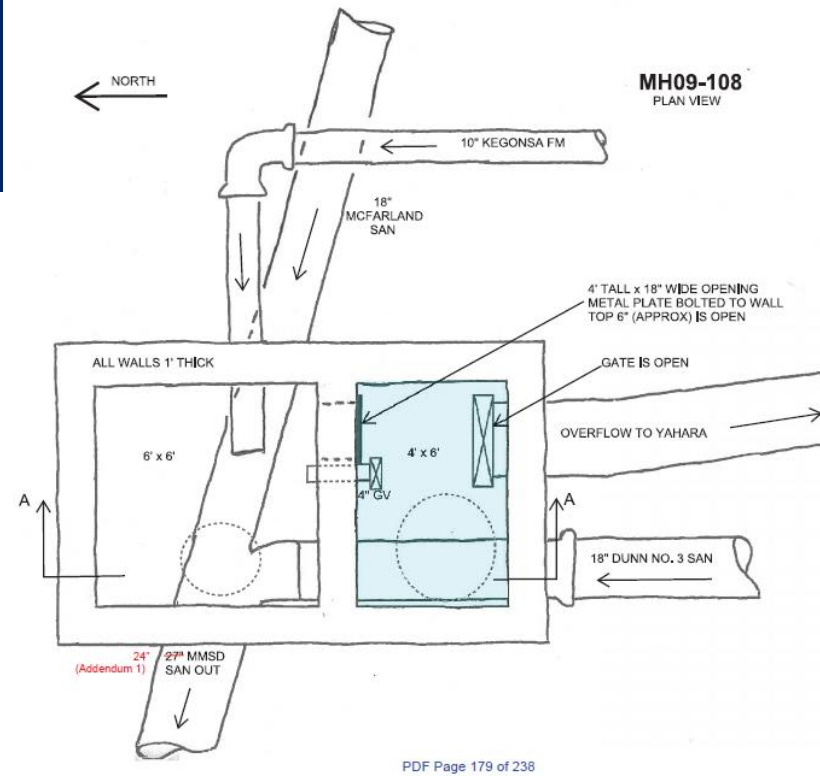
Lower Badger Mill Creek Interceptor – Phase 6

Pumping Stations and Force Mains

Pumping Station 10 Force Main Repairs/FM Assessment

Pumping Station Bar Screens

Pumping Station 17 Firm Capacity



Projects Completed to Date - 2026

Treatment Plant

- Flow Splitter Improvements
- *Sludge Thickeners No. 1 and No. 2 Drive & Mechanical Replacement*

Interceptors

- Southeast Interceptor Rehab on USH 51 (Phase 1)
- NEI –Waunakee Extension Capacity Improvements (Phase 1) - substantially complete

Pumping Stations and Force Mains

- Pumping Station 17 Force Main Relief Phase 2
- *Cross Town Force Main Air Release Valve Saddle Tap Replacement*



Bids to Date - 2026

Liquid Processing Improvements Phase 2

- Bid Cost \$90,905,427

Lagoon Dikes Improvements (Phase 1)

- Bid Cost \$637,000 (RG Huston Co.)

Southeast Interceptor Relocation at Yahara River

- Bid by WisDOT, District portion \$707,000 (WisDOT \$593K)

Pumping Station Bar Screens

- Bid Cost \$7,172,500 (August Winter and Sons)





Project Highlights

Madison Metropolitan
Sewerage District

Lagoon Dikes Improvements

Scope: Flood resiliency for Lagoon 2

- Phase 1: Sheet pile wall
- Phase 2: Soil/woodchip fill

Schedule and Status:

- 2021: Began survey/investigation
- Early 2026: Bid
- May 2026: Began construction - Phase 1
- Aug. 2026: Substantial completion (delayed to Oct. 2026)
- Oct. 2026: Final completion (delay Dec. 2026)
- 2027: Phase 2 anticipated construction

Contractor: RG Huston

Budget:

Total Project Cost: \$4 million

Ph 1 Construction Contract: \$637,000

Change order #1 \$9K; Change order #2 \$101K



Dryer and Seeding Modifications

Scope: Struvite harvesting system: replace dryers & associated fans, heaters, cyclones, and ductwork, and improve seeding system

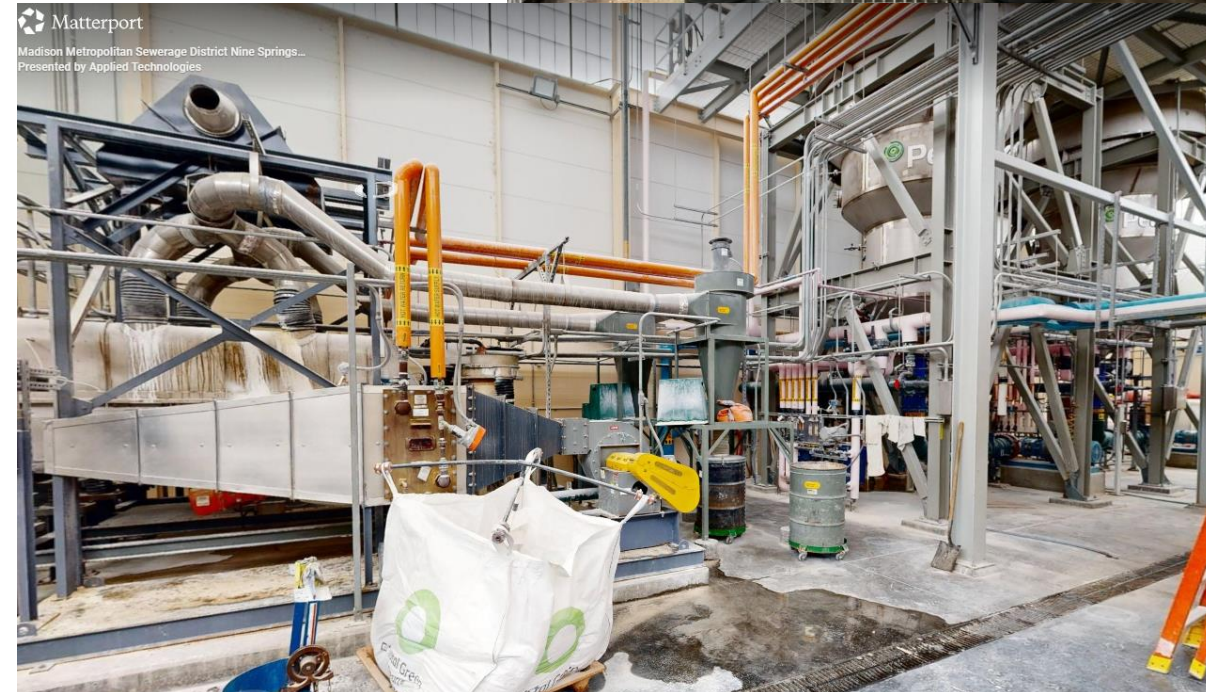
Schedule and Status

- Consulting engineer hired Aug 2025
- Design at ~90%
- Bidding anticipated late 2026

Consultant: Applied Technologies

Budget

- Total Project Cost: \$2.67 M



Questions?



Thank you

Madison Metropolitan
Sewerage District





Committee Reports

Presented by Commissioner Meyer & Commissioner Fries





Regulatory and Legal Report

Presented by Paul Kent

