



2024 Compliance Maintenance Annual Report

June 12, 2025

Madison Metropolitan
Sewerage District



Legal Requirements

Wisconsin State Legislature

Department of Natural Resources (NR)

Statute Ch. 283- Pollution Discharge Elimination

Implemented by NR 208

Wisconsin Pollution Discharge Elimination System (WPDES) Permit Requirement

Approval of report and resolution by governing body



Purpose

Protects Public Health and the Environment

Initiates action to avoid water quality degradation

Serves as an Educational Tool

Promotes owner awareness and responsibility for treatment needs

Identifies Improvement Areas

Maximizes useful life and performance through improved operations and maintenance

Initiates New Projects

Promotes formal planning, design and construction

NR 208.01 Purpose. This chapter implements ch. 283, Stats., encourages and, where necessary, requires owners of publicly and privately owned domestic wastewater treatment works to take necessary actions to avoid water quality degradation, and prevent violations of WPDES permit effluent limits and conditions. This chapter promotes an owner's awareness and responsibility for wastewater conveyance and treatment needs; maximizes the useful life and performance of treatment works through improved operation and maintenance; and initiates formal planning, design and construction to prevent WPDES permit violations.

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Report Content

(5) CONTENT. The CMAR shall include an evaluation of the following sections and information, as it applies to a specific treatment works and as determined by the department under s. NR 208.05 (1):

- (a) Influent flow and loading.
- (b) Effluent quality and plant performance (BOD/CBOD).
- (c) Effluent quality and plant performance (total suspended solids-TSS).
- (d) Effluent quality and plant performance (ammonia-NH₃).
- (e) Effluent quality and plant performance (phosphorus-P).
- (f) Effluent quality and plant performance (total nitrogen-total N).
- (g) Groundwater quality.
- (h) Ponds and lagoon leakage.
- (i) Biosolids quality and management.
- (j) Staffing and preventative maintenance.
- (k) Operator certification and education.
- (L) Financial management.
- (m) Sanitary sewer collection systems.
- (n) Grading summary.
- (o) Resolution or owner statement.

SCORE	GRADE	GRADE POINTS	GRADE MEANING	RESPONSE RANGE
91–100	A	4	Good	Voluntary
81–90	B	3	Satisfactory	Voluntary
71–80	C	2	Marginal	Recommendation
61–70	D	1	Poor	Action
<61	F	0	Fail	Action

*NSWWTP omits total nitrogen, groundwater quality, and ponds and lagoon leakage sections

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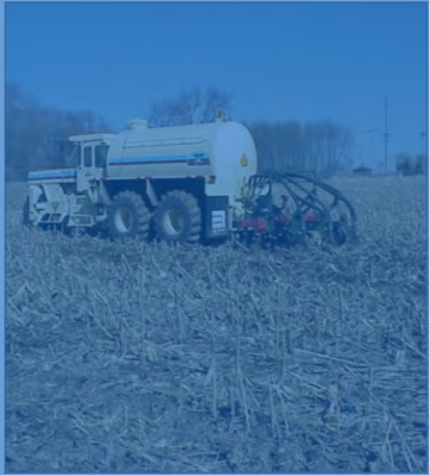


2024 Grade Summary

Grade	Section
B	Influent Flow and Loadings
A	Effluent Quality: Biochemical Oxygen Demand
A	Effluent Quality: Total Suspended Solids
A	Effluent Quality: Ammonia
A	Effluent Quality: Phosphorus
D	Biosolids Quality and Management
A	Staffing and Preventative Maintenance
A	Operator Certification and Education
A	Financial Management
A	Collection Systems

GPA: 3.51





Biosolids Management



One Instance of Nitrogen Over Application

Lost 30 points, dropped score down to a D.

Cause of Over Application

Application rate calculation methodology limitations

New QA/QC Procedures

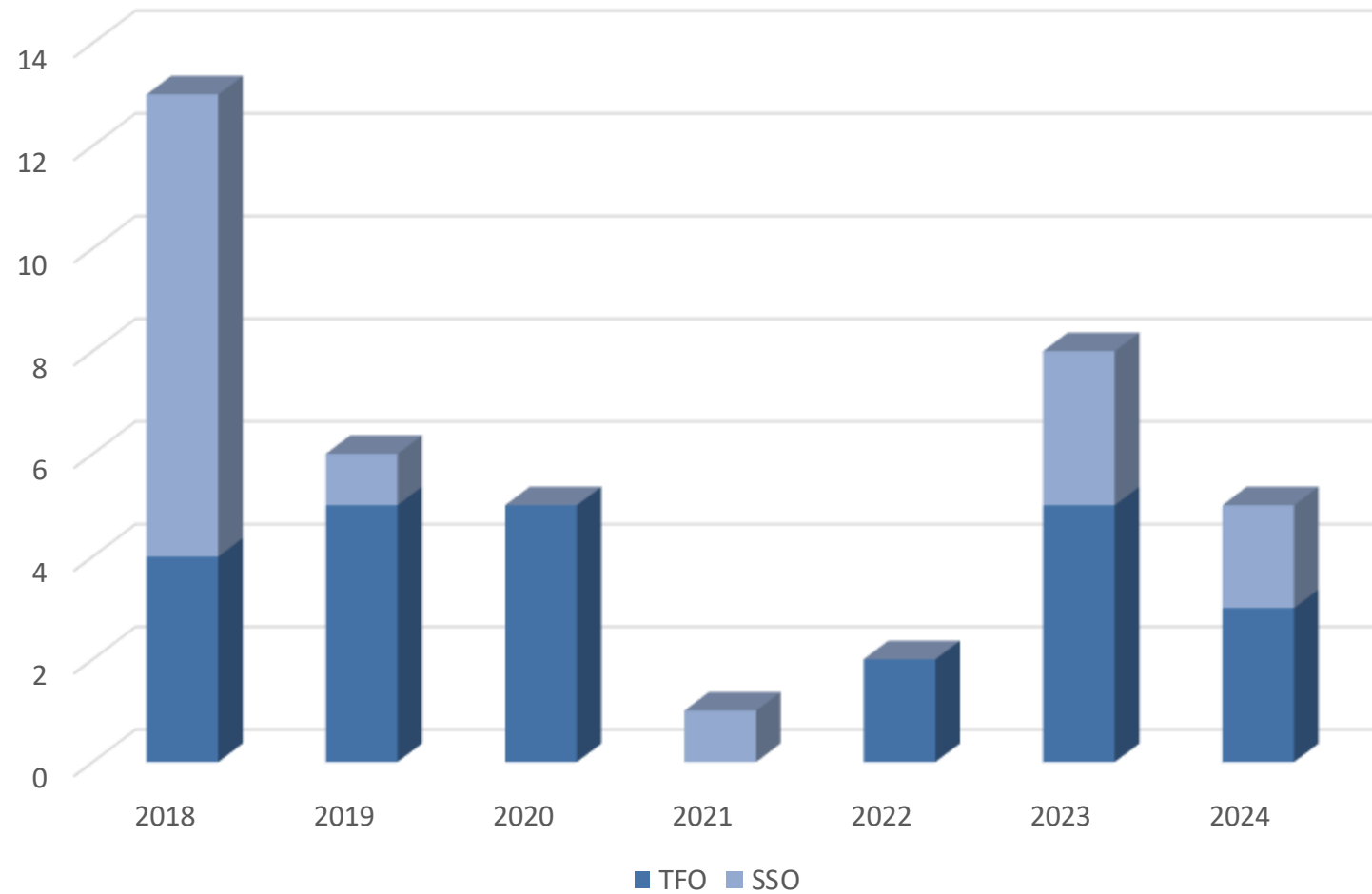
The approved QA/QC procedure continues to be used and refined to properly calculate biosolids application rates

New Database

New database under development to help fix data management challenges associated with management of fields used for application rate calculation



Historical Overflows



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Sanitary Sewer Overflows

Date	Location	Response Action
3/7/24	Manhole 05-204 near Baker St.	Vacuumed overflow water out of area and replaced valve
4/26/24	Bike path between Brearly St. and Paterson St.	Contents of leaking truck were decanted back into manhole; truck was returned for inspection



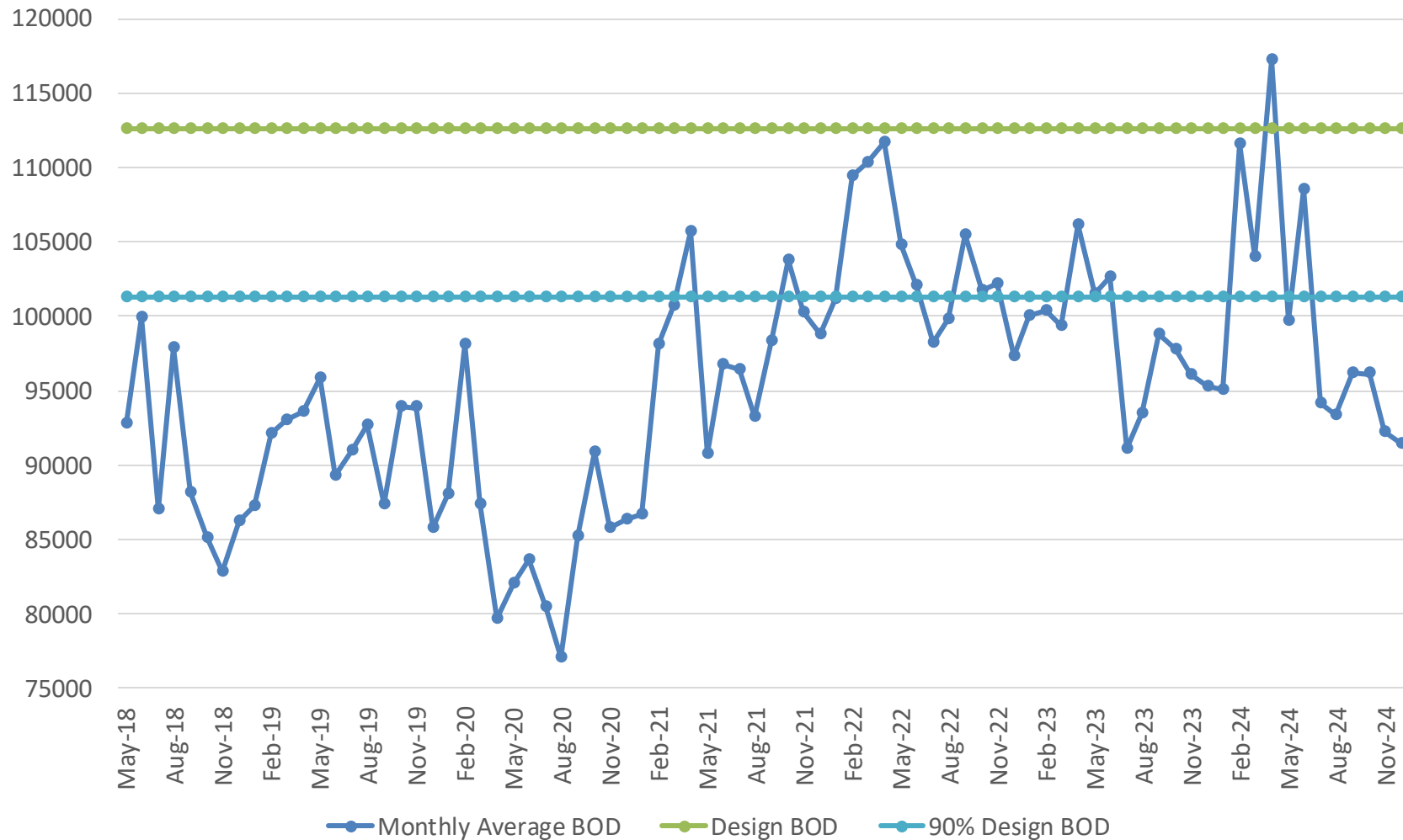
Treatment Facility Overflows

Date	Location	Response Action
4/13/24	DAF Well	Well has been isolated from DAF drainage
9/4/24	Grit Snail Auger	Adjusted equipment
10/5/24 – 10/8/24	Return Activated Sludge Pipe	Leak repaired



Influent BOD Loading

Monthly Average Influent BOD Loadings (lbs/day)



Resolution

The Commission is requested to adopt Resolution 2025-06-12-R4, accepting the Compliance Maintenance Annual Report and the required response actions therein.

- GPA: 3.51
- Responses required for grades below “B”
- Biosolids management: continuing to refine rate calculation methodology and data management
- Actions to prevent overflow reoccurrence
- Certification and submission due by June 30th, 2025



Questions?

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