

Ruekert · Mielke

# Watertown's Stormwater Program Priorities

### 3-Pronged Approach

- Flood mitigation
- Water quality / DNR permit compliance
- Maintenance of existing Best Management Practices (BMPs) and storm sewer system





## **DNR Stormwater MS4 Permit**

- 6 Minimum Control Measures
  - Information & outreach
  - Public involvement
  - Illicit discharge detection & elimination
  - Construction site pollutant control
  - Post-construction pollutant control
  - Pollution prevention

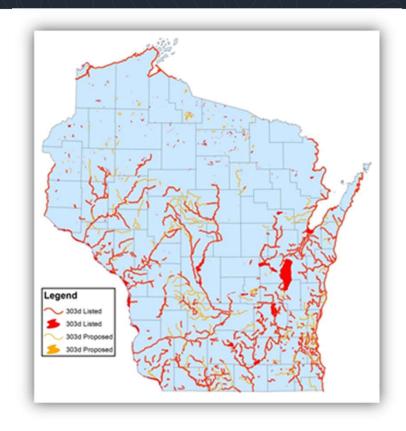




## **DNR Stormwater MS4 Permit**

- TMDL Planning
  - Required on impaired waters
  - Establishes a pollution budget to meet EPA & DNR water quality goals
  - Rock River = sediment and phosphorus limits







## Rock River TMDL – 2023 Status

Waterway (Reachshed)	TSS Loading – No Controls (lbs)	Existing TSS Reduction (%)	Existing TSS Reduction (lbs)	Required TSS Reduction (%)	Required TSS Reduction (lbs)
Sinissippi Lake (#28)	431,635	16.04%	69,229	40%	172,654
Middle Rock River (#29)	946,044	21.19%	200,652	44%	416,259
Johnson Creek (#30)	43,954	21.97%	9,657	40%	17,582

2023 Total Suspended Solids (TSS) Modeling Results

Waterway (Reachshed)	TP Loading – No Controls (lbs)	Existing TP Reduction (%)	Existing TP Reduction (lbs)	Required TP Reduction (%)	Required TP Reduction (lbs)
Sinissippi Lake (#28)	1,452	11.59%	168	28%	407
Middle Rock River (#29)	2,669	16.35%	437	64%	1,708
Johnson Creek (#30)	115	13.80%	16	27%	31



2023 Total Phosphorus (TP) Modeling Results

# **TMDL Compliance Protocol**

- Written plan to meet TMDL goals
  - Meet 20% of TSS gap & 10% of TP gap over the 2024-2029 permit term
- Implement compliance activities
  - Watertown Waterways Improvement Program (WWIP)
  - Stormwater tree program
  - Brine retrofits on deicing equipment
  - Ongoing BMP maintenance
  - Stormwater ordinance updates
  - Optimize leaf management & street sweeping programs
  - Installation of new water quality BMPs



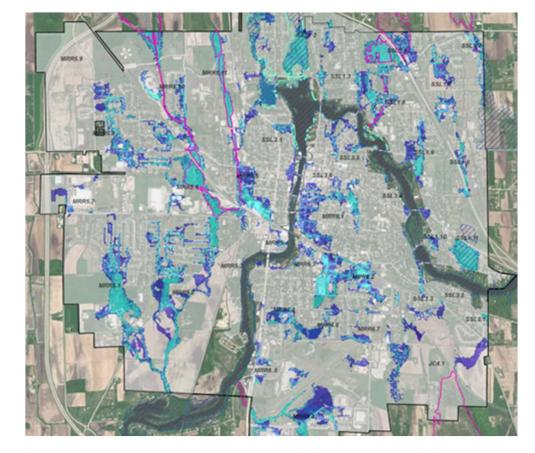
# Flood Mitigation Master Plan

- Master Plan completed in 2024
- Recommended \$30M+ in improvements
  - 2023 dollars
  - Projects spread across City









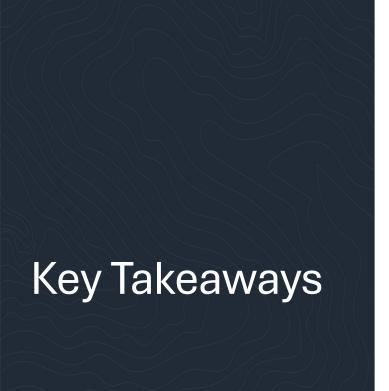


## **BMP Maintenance**

- Out-of-sight, out-of-mind
- Historically underfunded
- Growing maintenance burden
- City-owned vs private-owned BMPs
- Impacts to TMDL compliance







\$

Rate updates are needed



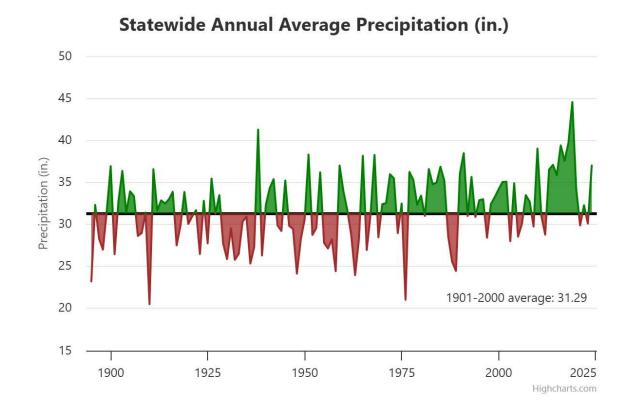
Best practices review offers opportunities to improve



Options are available for rate updates

# Background

- Utility mission
  - Mitigate flooding
  - Improve water quality
  - BMP O&M
- Utility formed in 2006
  - Rate updates:
    - 2007, 2009, 2012, 2016, 2020
- Drive for ongoing improvement = best practices review

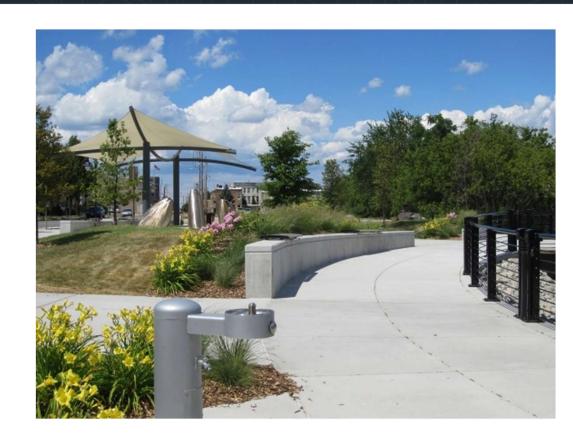




## **Best Practices Review**

- Stormwater Utility organization
  - Mission statement and/or goals
  - Integrated planning practices
  - Assess existing Design Standards & requirements
- Rate structure
  - Multi-family parcel consistency
- Credit policy
- Community support
- Cost in lieu policy
- Cash reserve target
  - 1 year of operating expenses





## Best Practices Review: Mission Statement (Examples)

Grand Chute, WI

Mission Statement: "To provide quality stormwater services to residents of Grand Chute in a manner which protect s human and environmental health and emphasizes sound management of fiscal and natural resources."

Missoula, MT

Mission Statement: "The Stormwater Utility is committed to protecting public health and safety, natural resources, waterways, and our aquifer, while meeting or exceeding state and federal environmental quality regulations."

• Ravenna, OH

Mission Statement: "The mission of Ravenna Stormwater Utility is to protect the lives and property of citizens of the City by capturing, controlling and conveying stormwater runoff safely and efficiently through the City while protecting and enhancing the environment and aesthetics within the City watershed area.



# Best Practices Review: Goals (Examples)

#### Town of Buchanan, WI - Stormwater Utility aims to:

- Improve water flow and stream restoration
- Reduce soil erosion
- Promote infiltration of runoff into the ground
- Decrease volume of stormwater entering streams and lakes
- Prevent pollutant transport
- Provide public education and resources<sup>4</sup>

#### Staunton, VA - Utility Fee Program Goals aim to:

- · Establish a sustainable funding mechanism
- Maintain and repair existing stormwater infrastructure
- Replace inadequate infrastructure
- Implement flood reduction projects
- Enhance water quality in local streams and tributaries<sup>5</sup>

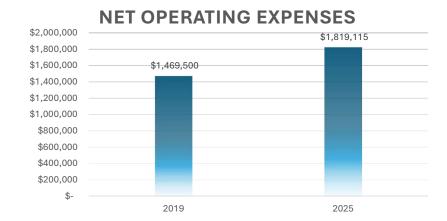
#### EPA Guidance of Core Objectives for Stormwater Utilities:

- Reduce flooding
- Improve surface water quality
- Promote responsible development practices<sup>6</sup>

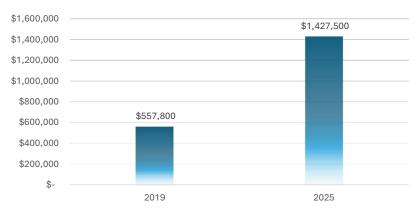
# Rate Analysis

- Net operating expenses up by 24% over 6-year period
  - 3.6% per year
- Capital outlay up by 156% over 6-year period
  - 17% per year
- Debt service decreased from \$250k / year to \$0 over same period
- Forecast expenses
  - 2024 flood-control study
  - DNR compliance
  - BMP O&M
  - Capital projects recommended require additional cash flow









### All Rate Alternatives

- Capital projects greater than \$1M debt-funded
  - 20-year note @ market rate
  - Minimum debt coverage ratio of 1.25
- All other capital projects cash-funded
- Operating & maintenance expenses = annual 4% increase
- No planned increase in ERUs (conservative)

### **Existing Rates**

Description of Account	Volume Charge per ERU	Pollutant Charge per ERU	Administration Fee per Account	
Single Family / Duplex	\$5.61	\$4.78	\$2.13	
Multi-Family	\$5.61	\$3.63	\$2.13	
Commercial	\$5.61	\$5.14	\$2.13	
Industrial	\$5.61	\$4.24	\$2.13	
Institutional & Public Authority	\$5.61	\$2.64	\$2.13	



## Alternative One

- Implementation of flood mitigation recommendations over 30-40 years
- Capital expenditures average \$1.62M annually
- Additional rate adjustments:
  - 2027 (12%)
  - Inflationary increases every year thereafter (3%)

Description of Account	Proposed Volume Charge per ERU	Proposed Pollutant Charge per ERU	Proposed Admin Fee per Account	Percent Increase for Average Parcel
Single Family / Duplex	\$7.75	\$5.71	\$2.31	26%
Multi-Family	\$7.75	\$4.33	\$2.31	28%
Commercial	\$7.75	\$6.14	\$2.31	29%
Industrial	\$7.75	\$5.06	\$2.31	30%
Institutional & Public Authority	\$7.75	\$3.15	\$2.31	32%



### Alternative Two

- Capital expenditures average \$1.45M annually
- \$100k reduction in annual operating expenses
- Delays implementation of City's flood mitigation, water quality and O&M goals
- Additional rate adjustments:
  - 2028 (9%)
  - Inflationary increases in all remaining years (3-4%)

Description of Account	Proposed Volume Charge per ERU	Proposed Pollutant Charge per ERU	Proposed Admin Fee per Account	Percent Increase for Average Parcel
Single Family / Duplex	\$7.09	\$5.24	\$2.15	16%
Multi-Family	\$7.09	\$3.97	\$2.15	18%
Commercial	\$7.09	\$5.64	\$2.15	18%
Industrial	\$7.09	\$4.64	\$2.15	19%
Institutional & Public Authority	\$7.09	\$2.89	\$2.15	20%



## Alternative Three

- Capital expenditures average \$1.26M annually
- \$100k reduction in annual operating expenses
- Significantly delays implementation of City's flood mitigation, water quality and O&M goals
- Additional rate adjustments:
  - 2030 (8%)
  - Inflationary increases in all remaining years (3-4%)

Description of Account	Proposed Volume Charge per ERU	Proposed Pollutant Charge per ERU	Proposed Admin Fee per Account	Percent Increase for Average Parcel
Single Family / Duplex	\$6.77	\$5.07	\$2.15	12%
Multi-Family	\$6.77	\$3.84	\$2.15	13%
Commercial	\$6.77	\$5.45	\$2.15	13%
Industrial	\$6.77	\$4.49	\$2.15	14%
Institutional & Public Authority	\$6.77	\$2.80	\$2.15	16%



# **Proposed Rates**

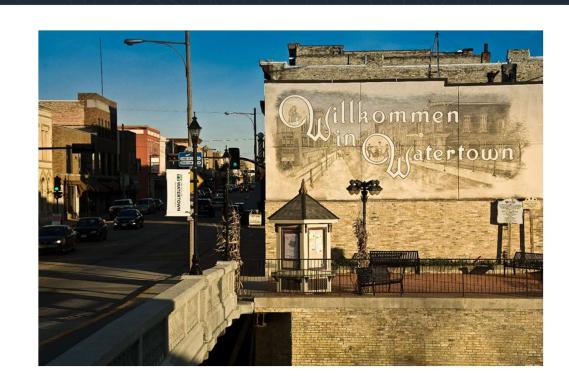
- Adequate cash flow
- Provides debt coverage ratio of 1.25
- Cash reserve target aligned with AWWA cash reserve policy of one year's worth of O&M expenses

Description of Account	Proposed Volume Charge per ERU	Proposed Pollutant Charge per ERU	Proposed Admin Fee per Account	Percent Increase for Average Parcel
Single Family / Duplex	\$7.09	\$5.24	\$2.15	16%
Multi-Family	\$7.09	\$3.97	\$2.15	18%
Commercial	\$7.09	\$5.64	\$2.15	18%
Industrial	\$7.09	\$4.64	\$2.15	19%
Institutional & Public Authority	\$7.09	\$2.89	\$2.15	20%

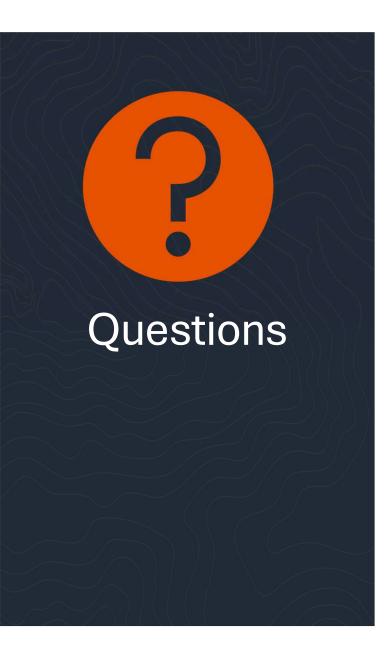


# Next Steps

- Select & adopt rate increase
- Incorporate into 2026 budget
- Continue implementation of bestpractices recommendations









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