

2025 Stormwater Utility Best Practices Review and Rate Update



Stormwater Utility Best Practices Review and Rate Update

September 16, 2025

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1. BEST PRACTICES REVIEW

This report is designed to help the City of Watertown (City) stormwater utility best achieve its mission, which is three-fold: 1) control flooding 2) improve water quality and comply with federal & state stormwater regulations 3) maintain existing storm water facilities.

Working with Ruekert & Mielke, Inc. (R/M) and a stakeholder advisory committee, the City created its stormwater utility in 2006 to equitably recover stormwater costs throughout the City. Costs stem from maintaining and improving the stormwater collection and conveyance system, building flood control and local drainage improvement projects, building water-quality improvement projects that comply with the City's municipal separate storm sewer system permit from the Wisconsin Department of Natural Resources, and operating and maintaining existing flood control and water-quality projects. The utility shares resources and employees with other departments, and these relationships have changed a few times since the utility's inception.

In considering the utility's costs and relationships with other departments, the City requested that R/M examine the utility to determine whether it could make improvements based on industry best practices. The City also requested that R/M update the utility rates to ensure the utility's financial health.

This section of the report reviews the City's current stormwater utility structure, identifies best practices, and recommends improvements.

A. Stormwater Organization

Develop a Mission Statement and Goals/Objectives

To facilitate proactive integration of stormwater best management practices, especially between different agencies, it may be beneficial to establish a written mission statement and detailed goals/objectives for the stormwater utility. This can facilitate the development of a more integrated view of stormwater planning and implementation throughout the City. Additionally, a mission statement would provide guidance to each department regarding the City's overall goals.

Mission Statement Examples:

Grand Chute, WI – Stormwater Utility:

Mission Statement: *"To provide quality stormwater services to the residents of Grand Chute in a manner which protects human and environmental health and emphasizes sound management of fiscal and natural resources."*¹

Missoula, MT – Stormwater Division:

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."*²

¹ Retrieved on 7/25/2025 from: <https://www.grandchutewi.gov/departments/public-works/utility-department/stormwater-utility/>

² Retrieved on 7/25/2025 from: <https://swefc.unm.edu/iamf/level-of-service/level-of-service-mission-statement/level-of-service-examples-of-mission-statements/>

Ravenna, OH – Stormwater Utility:

Mission Statement: *“The mission of the Ravenna Stormwater Utility is to protect the lives and property of the 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.”*³

Goal 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 resources⁴

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 tributaries⁵

EPA Guidance of Core Objectives for Stormwater Utilities:

- Reduce flooding
- Improve surface water quality
- Promote responsible development practices⁶

We recommend that Watertown develop a mission statement and/or goals to guide the utility.

Integrated Planning Practices

As the City advances future planning initiatives such as stormwater goals, utility planning, natural resources management, and parks management, coordination with the Stormwater Utility will be essential. Anticipated shifts in weather patterns, evolving technologies, development trends, energy demands, and regulatory requirements will all have direct implications for stormwater infrastructure, utility operations, and regulatory compliance.

By including stormwater staff in conversations about future development and land use, the City's stormwater goals can be discussed and, where appropriate, integrated with the City's land use goals.

³ Retrieved on 7/25/2025 from: https://codelibrary.amlegal.com/codes/ravenna/latest/ravenna_oh/0-0-0-85104

⁴ Retrieved on 7/25/2025 from: <https://www.townofbuchanan.org/town-services/drainage-stormwater-management/town-of-buchanan-stormwater-utility-district>

⁵ Retrieved on 7/25/2025 from: <https://www.ci.staunton.va.us/departments/community-development/environmental-programs-division/stormwater-utility-fee-program>

⁶ Retrieved on 7/25/2025 from: https://www.epa.gov/sites/default/files/2015-09/documents/guidance-m65annual-version-2x-2_0.pdf

B. Stormwater Rate Structure

In our research on rate structure among peer groups and industry best-practice resources, we found that the City's approach adheres to prevailing trends and stands as a reasonable, defensible methodology. The approach to divide costs into three separate categories – volumetric service, pollutant loading, and administrative – is consistent with industry best practices. This practice even goes beyond what most peers' practice of relying only on volume of impervious area, along with number of accounts.

Although the Public Service Commission (PSC) does not issue advice on stormwater utility rate structure, their support for this method of cost allocation appears in its 2001 ruling on a complaint by Plainwell Tissue against the City of Eau Claire regarding stormwater charges. After Plainwell objected to its charges and the PSC ruled in its favor, Eau Claire proposed a solution that the PSC and Plainwell both accepted. Its new method was based on three components: 1) the base, 2) the operation and maintenance, and 3) the capital and debt service. As long as Watertown continues to charge volume and pollutant loading charges based on impervious surface area and land use whose runoff utilizes the City of Watertown's stormwater programs and/or infrastructure, then Watertown is acting in step with the PSC's ruling.

Watertown's stormwater utility rates are comprised of charges based on 1) runoff volume, 2) pollutant loadings, and 3) administrative charges, with the first two expressed in terms of equivalent runoff unit (ERUs) and the third in terms of number of accounts. An ERU is defined as the amount of impervious surface (e.g. roof, driveways, hardscape) on the average single-family residential parcel (2,900 square feet for the City of Watertown). For nonresidential and multi-family parcels, the total impervious surface on each parcel was previously measured and divided by 2,900 to get an equivalent number of ERUs. It should be noted that this study did not include any recalculation or remeasurement of ERUs.

The ERU method places Watertown in the large majority, as over 80 percent of stormwater utilities nationwide do the same.⁷ The Environmental Protection Agency (EPA) notes that this approach is simple to administer, and it is easier to explain to customers compared to other methods.⁸

The EPA describes two other methods it considers to be potentially more equitable: 1) the intensity of development (ID) method and 2) the equivalent hydraulic area (EHA) method. The ID method considers the size of the impervious area on a parcel relative to the overall parcel size, thus building the intensity of development into the charges. The EHA method also bills customers based on the impact of both impervious and pervious areas within each parcel. While both methods include consideration of pervious area on lots, they suffer from being much more challenging to implement. They require reviewing and analyzing pervious as well as impervious area, so they are more complicated to administer. The public finds them more challenging to understand as well. Therefore, we recommend that Watertown keep its charges based on ERUs. Watertown's current approach uses different pollution intensity by land use to capture some differences between parcels.

The stormwater utility should continue to receive full funding via rates for both practical and equitable reasons. Drawing from property tax revenue lowers the levy limit, which is seldom politically feasible nor advisable. Charging users the full price of the service they receive fairly matches costs with benefits. While other methods exist for funding infrastructure, such as impact fees, these sources can prove much less reliable, especially since they depend on new growth.

⁷ "Legal Considerations for Enacting, Implementing, & Funding Stormwater Programs". National Association of Clean Water Agencies. 2016. <http://www.nacwa.org/docs/default-source/default-document-library/2016-12-08stormwaterwhitepaper.pdf?sfvrsn=0>. Accessed March 26, 2019.

⁸ "Funding Stormwater Programs". Environmental Protection Agency. January 2008. https://www.epa.gov/sites/production/files/2015-10/documents/region3_factsheet_funding.pdf. Accessed August 20, 2025.

This uncertainty is likely the reason that only ten percent of stormwater utilities rely on one-time capital recovery fees.⁹

We recommend Watertown keep its rate structure of dividing costs into administrative, volumetric, and pollutant loading, and of assigning the volumetric and pollutant loading costs based on ERUs. We recommend the stormwater utility continue to receive full funding from rates.

We also recommended Watertown apply a consistent approach to multi-family residential parcels such as apartments, condos, senior living facilities, etc. The most common approach from peer communities is to charge these facilities similar to nonresidential parcels where the total impervious surface in the development is measured and divided by 2,900 to get an equivalent number of ERUs. The resulting charge is then equally divided among the number of dwelling units (inclusive of administrative charges which should mirror how other utility costs are charged in the City).

C. Stormwater Credit Policy

Watertown offers credits for nonresidential stormwater mitigation practices worth up to seventy-five percent of the volumetric and pollutant loading charges. No credits are given for administrative charges since Watertown incurs those costs regardless of mitigation practices. These mitigation practices must exceed the City's discharge standards at the time the parcel was developed for its present use. Users must apply for credits by providing plans and studies that demonstrate how their practices exceed the City's requirements, as well as agreements that commit the users to maintaining these practices. The Director of Public Works has thirty days to review applications and make a recommendation to the Public Works Commission, with the final decision being determined by the Public Works Commission. If the applicant disagrees with the ruling, the applicant can appeal to an administrative review board within thirty days of having received the most recent bill. If the credits are approved, users must provide evidence periodically to show that the practices are still producing the benefits promised in the application.

Most peer communities have credit policies similar to Watertown's. While the size of credit offered varies, the application process remains consistent. The peers are often more specific in either their ordinances or stormwater utility manuals on the criteria by which the size of the credit is determined. For instance, the City of Greenfield's credit policy explains that best management practices are eligible for up to a 33-percent credit for the ERU charge based on how much it reduces the total suspended solids and how much of the area it impacts. They explain the calculation for determining the credit and then provide examples.

Watertown and its peers have seen few stormwater credit applications, partly due to limited public awareness and low return on investment. Credit applications will likely rise as awareness grows and the application process becomes more streamlined.

Similar to many peer communities, Watertown requires that those who have received credits enter into maintenance agreements. As part of the maintenance agreement, the creditors must complete routine inspections and submit the resulting inspection reports to the City.

The City has made significant progress in recent years in highlighting the credit program on their website. The application and numerous sample documents are available online to potential applicants.

⁹ "2021 Stormwater Utility Survey". Black & Veatch Management Consulting, LLC. 2021.
<https://webassets.bv.com/2021-03/2021%20Stormwater%20Utility%20Report%20WEB%20FINAL.pdf>. Accessed August 20, 2025.

D. Building Community Support

Besides having a robust credit policy, stormwater utilities can take other measures to reduce regulatory and legal issues. The National Association of Clean Water Agencies (NACWA) recommends educating the public about the benefits of stormwater utilities and the costs of not addressing flood control and water quality.¹⁰ The Chesapeake Bay Foundation encourages utilities to keep detailed records of its work and report often to the public about how much pollution and risk of flooding have been reduced.¹¹ NACWA urges utilities to engage elected officials and provide regular updates on the crucial work being done to safeguard water quality and mitigate flooding. Creating broad support for stormwater utilities dampens chances for litigation and complaints, as well as increases support for fees.

When asked to supply one piece of advice for other stormwater utilities, a peer told R/M that public outreach was crucial to successfully raising rates. Public outreach would have helped this peer prevent dozens of phone calls from angry customers and would boost support for rate increases.

Finding a way to connect stormwater work with the priorities of the community can garner significant support for the utilities. For instance, if fishing and boating are favorite pastimes within the community, the utility can emphasize the impact that its work will have on water conditions for local bodies of water, and how this will benefit the future quality of these activities.

Watertown participates in the Rock River Stormwater Group (RRSG). The RRSG promotes passive outreach materials and directly communicates with property owners and the general public at farmers' markets and other City events throughout the year.

We recommend Watertown continue to leverage existing and new resources to promote the value of their stormwater utility. This includes ongoing education of residents, business owners and elected officials.

E. Cost in Lieu Policy

On occasion, the City receives development proposals that cannot meet the City's flood control and/or water quality ordinances. These exceptions are typically redevelopment sites or additions to current sites where site-specific conditions do not allow for compliance. The Department of Natural Resources and the City do have the ability to approve such sites using a provision referred to as "Maximum Extent Practicable" (MEP).

However, when the City does so, it takes on an incremental burden. For example, making an exception under MEP might require a larger public storm sewer system to accommodate increased runoff from one of these sites, or the City might need to achieve more pollutant removal itself to meet its TMDL limits. In lieu of simply turning down these projects in the future, the City can adopt a policy to accommodate the development while still meeting its needs.

We recommend that Watertown creates a cost-in-lieu policy that requires a landowner to offset the City's additional costs if MEP provisions are required for development approval. The policy should cover the initial capital cost, any subsequent replacement costs, and any incremental operation and maintenance costs the City would incur from the proposed development.

¹⁰ "Legal Considerations for Enacting, Implementing, & Funding Stormwater Programs". National Association of Clean Water Agencies. 2016. <http://www.nacwa.org/docs/default-source/default-document-library/2016-12-08stormwaterwhitepaper.pdf?sfvrsn=0>. Accessed August 20, 2025.

¹¹ "Best Practices Guide: Local Stormwater Utilities, Authorities, and Fees". Chesapeake Bay Foundation. January 2015. https://www.cbf.org/document-library/cbf-guides-fact-sheets/Best-Practices-Guide-Stormwater-Utilities-and-Fees_Final89b4.pdf. Accessed August 20, 2025.

F. Summary

The above recommendations will allow the City of Watertown's stormwater utility to more closely follow industry and peer community best practices. Implementing these recommendations will position the City to allocate utility funds better aligned with the utility's core mission of addressing the City's flooding, water quality, and maintenance needs.

According to Wisconsin Statute section 66.0628(2), the City must also ensure that money collected through stormwater fees are spent on only stormwater related expenses. If they are spent on anything else, the courts may rule that these fees are actually taxes. As such, spending stormwater utility funds on anything beyond stormwater related expenses is excessive or unreasonable and hence illegal.¹²

¹² "Powers of Municipalities FAQ 8". League of Wisconsin Municipalities. January 2014. <https://www.lwm-info.org/1258/Powers-of-Municipalities-FAQ-8>. Accessed August 20, 2025.

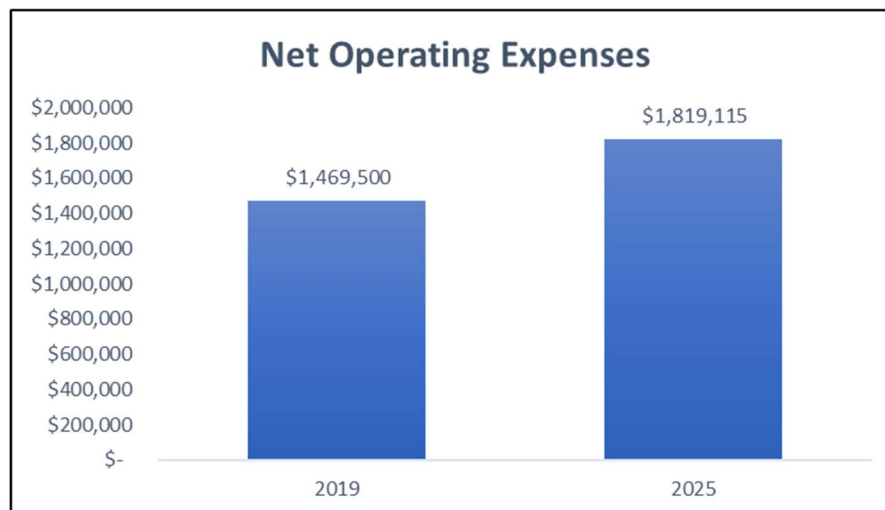
2. STORMWATER RATE ANALYSIS

Watertown's rates are designed to recover the costs it incurs in providing flood mitigation, improving water quality and operation & maintenance. The rates are determined based on runoff volume and pollutant loadings, and they are expressed in terms of equivalent runoff units (ERUs). An ERU is the amount of impervious area (e.g. roofs, driveways) on the average single-family residential parcel, which is 2,900 square feet for Watertown. For non-residential parcels, Watertown measures the total impervious surface on each parcel and divides the result by 2,900 to arrive at the number of ERUs allocated for that parcel. The rates also include administrative charges, which are divided by the number of customer accounts.

Rates were last updated in 2020. They are expressed below in monthly amounts:

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

Since the last rate increase, net operating expenses have increased an average of 3.6 percent per year over a 6-year period.



Blunting the impact of the increase in operating expenses and capital outlay, debt service has remained relatively flat since 2020. However, the City completed an extensive City-wide flood-control study in 2024, and the capital expenditures recommended within that analysis require increased cash flow.

As part of this study, R/M evaluated three rate deployment alternatives. The first alternative models cash flow based on the current capital project list which is the City's current 5-year Capital Improvement Plan (CIP) plus an additional 5 years of projected capital projects (extending out 10 years in totality). The second alternative reduces both the capital projects and the annual operational expenses. The third alternative drastically reduces capital expenditures, while also reducing annual operational expenses.

All analyzed rate structures allow for adequate cash flow for the utility. They include revenue to provide for a debt coverage ratio of 1.25, the standard for municipal and utility borrowing. All alternative rate structures also provide cash reserve targets aligned with recommendations from the American Water Works Association of one year's worth of operating expenses to act as a buffer against unexpected expenses such as emergency repairs or replacements and potential corresponding shortfalls in revenue.¹³ It is recommended that the City consider updating the cash reserve policy to maintain a reserve equal or greater than 12-months of operation and maintenance expenses.

Watertown has also considered funding operation and maintenance improvements on several private storm water facilities within the City. As an example, if the City were to complete approximately \$60,000 of work per BMP, on five separate facilities, proposed rates would increase by an additional 3% above what is presented in the alternatives herein.

For all alternatives:

- The capital investment forecast beginning in 2026 is based on a high-level estimate provided by the City and updated by R/M. This forecast incorporates costs identified in the 2024 flood control study, which outlines projects that would bring Watertown significantly closer to meeting its flood mitigation goals and TMDL stormwater pollutant discharge requirements.
- Capital projects greater than \$1 million in estimated cost were assumed to be debt funded (20 year note at current market rates). All other capital expenditures were assumed to be cash funded. The increase in the equivalency charges are designed to maintain an annual minimum debt coverage of 125 percent and cash reserves of at least one year's worth of operating expenses as recommended in this study.
- A four-percent annual growth rate was assumed for operation and maintenance expenses. Note that even if expenses do follow this trajectory on average, the increases are still unlikely to match the smooth trajectory shown in the forecast. ERUs within the City were conservatively assumed to stay flat.
- This forecast should be compared annually to actual costs to see what adjustments, if any, need to be made for assumptions and rate increases.

¹³ "Cash Reserve Policy Guidelines". American Water Works Association. 2025
<https://www.awwa.org/policy-statement/cash-reserves/>. Accessed August 20, 2025.

A. Alternative One

This alternative increases rates with the goal of completing all the projects outlined on both the City's 5-year CIP (2026-2030) and the 2031-2035 capital project list. This alternative would most rapidly progress the City towards their flood mitigation, water quality and O&M goals. It would also put the City on a path for full implementation of the flood mitigation recommendations outlined in the master plan over 30-40 years.

Capital expenditures over the initial 10-year period are approximately \$16.2 million, an average of \$1.62 million per year. The cash flow forecast for this alternative is provided in Exhibit A and the resulting rates are summarized below.

An additional rate adjustment will be needed in 2027 (12%) and annual inflationary adjustments (3%) every year thereafter (as shown on the cash flow forecast).

Proposed Rates – Alternative One

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%

B. Alternative Two

This alternative delays completion of several key capital projects and replacement of the City's street sweepers and storm water vehicle. Equipment replacement would be strategically planned and adjusted annually, with limited replacements in years that street sweepers are purchased (prioritizing street sweeper replacement over other equipment replacement in those years).

Capital expenditures over the initial 10-year period are approximately \$14.5 million, an average of \$1.45 million per year. This alternative also includes a \$100,000 reduction in annual operating expenses. The cash flow forecast for this alternative is provided in Exhibit B and the resulting rates are summarized on the following table.

An additional rate adjustment will be needed in 2028 (9%) and annual inflationary adjustments (3-4%) in all remaining years (as shown on the cash flow forecast).

Proposed Rates – Alternative Two

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%

C. Alternative Three

This alternative further delays completion of numerous key capital projects and replacement of the City's street sweepers and storm water vehicle. Similar to Alternative 2, equipment replacement will be strategically planned and adjusted annually, with limited replacements in years that street sweepers are purchased (prioritizing street sweeper replacement over other equipment replacement in those years).

Capital expenditures over the initial 10-year period are approximately \$12.6 million, an average of \$1.26 million per year. This alternative also includes a \$100,000 reduction in annual operating expenses. The cash flow forecast for this alternative is provided in Exhibit C and the resulting rates are summarized below.

An additional rate adjustment will be needed in 2030 (8%) and annual inflationary adjustments (3-4%) in all remaining years (as shown on the cash flow forecast).

Proposed Rates – Alternative Three

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%

D. Rate Comparisons

In 2024, close to 2,135 stormwater utilities across the country responded to a survey about rates.¹⁴ The monthly single-family residential fees per month averaged \$6.19, although the fees spanned from zero to \$46.71 per month. This huge range reflects the widely varying degrees of flood risk and water-quality issues, as well as varying degrees of regulatory requirements and public and political support.

Wisconsin also sees a large span in stormwater fees, with fees ranging from \$0.86 to \$18.58 per monthly single-family residential ERU. Some municipalities on the lower end of the range may subsidize stormwater costs with revenue from property taxes. Urban communities with MS4, TMDL, and flood concerns are generally on the higher end of the range.

E. Summary of Recommendations

The following monthly rate structure is suggested for implementation in 2026 to balance implementation of Watertown's flood mitigation, water quality and operation & maintenance goals with the magnitude of the proposed rate increase. The recommended structure matches Alternative Two from the above analysis.

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%

If the City desires to more aggressively pursue implementation of their goals, the proposed rates from Alternative One are recommended.

The additional recommendations from this analysis are summarized below:

- **Continue updating the rate structure** to generate the required funding. Evaluate the fee criteria to consider increases on a frequent, recurring basis (inflationary increases every year to lessen the burden of the larger increases).
- **Continue updating the Capital Improvement Plan (CIP) regularly**, prioritizing projects with cost estimates and funding sources to match the utility's rate structure. Debt funding will likely be required for large flood mitigation and water quality construction projects.
- **Explore options to fund maintenance of private stormwater BMPs** which are not currently being adequately maintained (primarily located in residential areas).
- **Continue to proactively research and apply for local, county, state and federal grant funding** to cost-effectively finance stormwater projects.

¹⁴ "Western Kentucky University Stormwater Utility Survey 2024". C. Warren Campbell. 2024. [Western Kentucky University Stormwater Utility Survey 2024](#) Accessed August 20, 2025.

- **Develop a Mission Statement and/or Goals** to guide the utility's stormwater management practices.
- **Integrate stormwater staff in cross-functional planning and land development meetings** such as utility services, natural resource management, and park management to integrate the City's stormwater goals with other initiatives (where applicable).
- **Apply a consistent approach to ERU calculations for multi-family residential parcels** such as apartments, condos, senior living facilities, etc.
- **Implement Design Standards to integrate implications of changing rainfall patterns** by facilitating additional discussion and design around more severe precipitation events.
- **Consider offering credits to incentivize new developments** to pursue increased stormwater pollutant reduction (beyond the required 80% TSS / 40% TP compliance), with incentives indexed to the City's MS4 compliance status by watershed to facilitate MS4 permit compliance.
- **Continue to utilize and expand existing stormwater resources, including the Rock River Stormwater Group.** Maintain dialogue with elected officials regarding the importance of its current work. To the extent practicable, the utility could consider partnering with local schools to educate children about stormwater, potentially engaging the City's schools to help in the maintenance of existing stormwater practices.
- **Establish a cost-in-lieu policy** requiring landowners to offset the City's additional costs if MEP provisions are required for development approval. The policy should cover the initial capital cost, any subsequent replacement costs, and any incremental operation and maintenance costs the City would incur in the proposed development.
- **Create a formal cash reserve policy** equal to one year of operating expenses for the stormwater utility.
- **Evaluate potential software platforms** that utilize emerging technology to ease the Utility's administrative and billing efforts.
- **Continue to make progress implementing the City's Flood Control Master Plan.** The following projects were recommended in the master plan, but were not included in the 10-year capital project list discussed herein:
 - Red Fox Court (MRR 5.1)
 - South Street (MRR 5.2)
 - Hoffman & Fairview Drive / Bernard Street (MRR 5.3 & 5.5)
 - Dayton Street (MRR 5.6)
 - Dayton Creek (MRR 5.8)
 - Main Street / Carriage Hill Drive / Viaduct Additional Phases (MRR 5.10)
 - 9th Street / Dodge Street (MRR 6.1)
 - Hart Street / 12th Street (MRR 6.2)
 - River Drive / 3rd Street (MRR 6.3)
 - Utah Street (MRR 6.4)
 - Lakeside Terrace / Clark Street (MRR 6.6)
 - Loeb Lane / Lauren Lane (MRR 6.8)
 - Center & Spaulding Streets (SLL 1.3)
 - Hospital Frontage Road / Memorial Drive (SLL 1.5)

Exhibit A - Alternative 1 Cash Flow Forecast										
Utility	Storm Water			Notes Capital expenditures estimated by City and R/M; all projects cash funded other than flood mitigation projects greater than \$1 million in cost which are debt funded Minimum cash reserves = one year of operating expenses Minimum debt service coverage = 125%						
Annual Inflation	4.00%	Per City								
Capital Expenditures -- % Debt Funded	100%	Projects > \$1M								
Interest Rate	4.82%									
Loan Length (years)	20									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Operating Revenue	\$ 2,998,760	\$ 3,358,612	\$ 3,459,370	\$ 3,563,151	\$ 3,670,045	\$ 3,780,147	\$ 3,893,551	\$ 4,010,358	\$ 4,130,669	\$ 4,254,589
Net Operations & Maintenance Expenses	1,871,080	1,945,923	2,023,760	2,104,710	2,188,898	2,276,454	2,367,513	2,462,213	2,560,702	2,663,130
Net Operations	1,127,681	1,412,689	1,435,610	1,458,441	1,481,147	1,503,692	1,526,039	1,548,145	1,569,967	1,591,459
Depreciation										
Capital Expenditures -- Cash-funded	1,481,150	1,140,000	1,045,000	1,760,000	860,000	1,062,000	1,335,000	845,000	1,210,000	810,000
Debt Service	-	174,640	174,640	174,640	269,467	269,467	269,467	269,467	364,294	364,294
Net Cash Flow	\$ (353,469)	\$ 98,049	\$ 215,970	\$ (476,199)	\$ 351,680	\$ 172,226	\$ (78,428)	\$ 433,678	\$ (4,327)	\$ 417,165
Debt Service Coverage	N/A	809%	822%	835%	550%	558%	566%	575%	431%	437%
Cash Balance at EOY	\$ 1,954,169	\$ 2,052,218	\$ 2,268,188	\$ 1,791,989	\$ 2,143,670	\$ 2,315,896	\$ 2,237,468	\$ 2,671,146	\$ 2,666,819	\$ 3,083,984
% of O&M	104%	105%	112%	85%	98%	102%	95%	108%	104%	116%
Revenue Forecast										
ERUs	17,825	17,825	17,825	17,825	17,825	17,825	17,825	17,825	17,825	17,825
Volume Charge / Month	\$ 7.75	\$ 8.68	\$ 8.94	\$ 9.21	\$ 9.48	\$ 9.77	\$ 10.06	\$ 10.36	\$ 10.68	\$ 11.00
Year over Year % Change in Volume										
Equivalency Charge	38%	12%	3%	3%	3%	3%	3%	3%	3%	3%
Pollutant Rate / Month	\$ 5.10	\$ 5.71	\$ 5.88	\$ 6.06	\$ 6.24	\$ 6.43	\$ 6.62	\$ 6.82	\$ 7.03	\$ 7.24
Year over Year % Change in Pollutant										
Equivalency Charge	20%	12%	3%	3%	3%	3%	3%	3%	3%	3%
Customer Accounts	9,024	9,024	9,024	9,024	9,024	9,024	9,024	9,024	9,024	9,024
Rate / Account / Month	\$ 2.31	\$ 2.59	\$ 2.66	\$ 2.74	\$ 2.83	\$ 2.91	\$ 3.00	\$ 3.09	\$ 3.18	\$ 3.28
Charge	8%	12%	3%	3%	3%	3%	3%	3%	3%	3%
Existing Interest	-	-	-	-	-					
Existing Principal	-	-	-	-	-					
Total Existing Debt Service	-	-	-	-	-	-	-	-	-	-
Capital Expenditures - Cash Funded	1,481,150	1,140,000	1,045,000	1,760,000	860,000	1,062,000	1,335,000	845,000	1,210,000	810,000
Capital Expenditures - Debt Funded	-	2,210,000	-	-	1,200,000	-	-	-	1,200,000	-
Total Capital Expenditures	1,481,150	3,350,000	1,045,000	1,760,000	2,060,000	1,062,000	1,335,000	845,000	2,410,000	810,000
Total New Debt Service	-	174,640	174,640	174,640	269,467	269,467	269,467	269,467	364,294	364,294

Exhibit B - Alternative 2 Cash Flow Forecast										
Utility	Storm Water			Notes Capital expenditures estimated by City and R/M; all projects cash funded other than flood mitigation projects greater than \$1 million in cost which are debt funded Minimum cash reserves = one year of operating expenses Minimum debt service coverage = 125%						
Annual Inflation	4.00%	Per City								
Capital Expenditures -- % Debt Funded	100%	Projects > \$1M								
Interest Rate	4.82%									
Loan Length (years)	20									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Operating Revenue	\$ 2,750,422	\$ 2,860,439	\$ 3,117,879	\$ 3,242,594	\$ 3,372,298	\$ 3,507,189	\$ 3,612,405	\$ 3,720,777	\$ 3,832,401	\$ 3,947,373
Net Operations & Maintenance Expenses	1,767,080	1,837,763	1,911,273	1,987,724	2,067,233	2,149,923	2,235,919	2,325,356	2,418,370	2,515,105
Net Operations	983,343	1,022,676	1,206,605	1,254,870	1,305,064	1,357,267	1,376,486	1,395,421	1,414,030	1,432,267
Depreciation										
Capital Expenditures -- Cash-funded	1,446,150	710,000	1,090,000	1,070,000	980,000	1,062,000	935,000	845,000	930,000	845,000
Debt Service	-	174,640	174,640	174,640	269,467	269,467	269,467	269,467	364,294	364,294
Net Cash Flow	\$ (462,807)	\$ 138,037	\$ (58,034)	\$ 10,230	\$ 55,598	\$ 25,800	\$ 172,019	\$ 280,954	\$ 119,736	\$ 222,974
Debt Service Coverage	N/A	586%	691%	719%	484%	504%	511%	518%	388%	393%
Cash Balance at EOY	\$ 1,844,831	\$ 1,982,867	\$ 1,924,833	\$ 1,935,063	\$ 1,990,660	\$ 2,016,461	\$ 2,188,480	\$ 2,469,434	\$ 2,589,170	\$ 2,812,144
% of O&M	104%	108%	101%	97%	96%	94%	98%	106%	107%	112%
Revenue Forecast										
ERUs	17,825	17,825	17,825	17,825	17,825	17,825	17,825	17,825	17,825	17,825
Volume Charge / Month	\$ 7.09	\$ 7.37	\$ 8.04	\$ 8.36	\$ 8.69	\$ 9.04	\$ 9.31	\$ 9.59	\$ 9.88	\$ 10.18
Year over Year % Change in Volume										
Equivalency Charge	26%	4%	9%	4%	4%	4%	3%	3%	3%	3%
Pollutant Rate / Month	\$ 4.68	\$ 4.87	\$ 5.31	\$ 5.52	\$ 5.74	\$ 5.97	\$ 6.15	\$ 6.33	\$ 6.52	\$ 6.72
Year over Year % Change in Pollutant										
Equivalency Charge	10%	4%	9%	4%	4%	4%	3%	3%	3%	3%
Customer Accounts	9,024	9,024	9,024	9,024	9,024	9,024	9,024	9,024	9,024	9,024
Rate / Account / Month	\$ 2.15	\$ 2.24	\$ 2.44	\$ 2.53	\$ 2.64	\$ 2.74	\$ 2.82	\$ 2.91	\$ 3.00	\$ 3.09
Charge	1%	4%	9%	4%	4%	4%	3%	3%	3%	3%
Existing Interest	-	-	-	-	-					
Existing Principal	-	-	-	-	-					
Total Existing Debt Service	-	-	-	-	-	-	-	-	-	-
Capital Expenditures - Cash Funded	1,446,150	710,000	1,090,000	1,070,000	980,000	1,062,000	935,000	845,000	930,000	845,000
Capital Expenditures - Debt Funded	-	2,210,000	-	-	1,200,000	-	-	-	1,200,000	-
Total Capital Expenditures	1,446,150	2,920,000	1,090,000	1,070,000	2,180,000	1,062,000	935,000	845,000	2,130,000	845,000
Total New Debt Service	-	174,640	174,640	174,640	269,467	269,467	269,467	269,467	364,294	364,294

Exhibit C - Alternative 3 Cash Flow Forecast																	
Utility	Storm Water			Notes Capital expenditures estimated by City and R/M; all projects cash funded other than flood mitigation projects greater than \$1 million in cost which are debt funded Minimum cash reserves = one year of operating expenses Minimum debt service coverage = 125%													
Annual Inflation	4.00%	Per City															
Capital Expenditures -- % Debt Funded	100%	Projects > \$1M															
Interest Rate	4.82%																
Loan Length (years)	20																
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035							
Operating Revenue	\$ 2,649,889	\$ 2,755,885	\$ 2,866,120	\$ 2,980,765	\$ 3,219,226	\$ 3,315,803	\$ 3,415,277	\$ 3,517,735	\$ 3,623,267	\$ 3,731,965							
Net Operations & Maintenance Expenses	1,767,080	1,837,763	1,911,273	1,987,724	2,067,233	2,149,923	2,235,919	2,325,356	2,418,370	2,515,105							
Net Operations	882,810	918,122	954,847	993,041	1,151,993	1,165,880	1,179,358	1,192,379	1,204,897	1,216,860							
Depreciation																	
Capital Expenditures -- Cash-funded	1,446,150	740,000	885,000	870,000	980,000	1,062,000	935,000	810,000	930,000	845,000							
Debt Service	-	-	-	-	150,933	150,933	150,933	150,933	245,760	245,760							
Net Cash Flow	\$ (563,340)	\$ 178,122	\$ 69,847	\$ 123,041	\$ 21,060	\$ (47,053)	\$ 93,425	\$ 231,446	\$ 29,137	\$ 126,100							
Debt Service Coverage	N/A	N/A	N/A	N/A	763%	772%	781%	790%	490%	495%							
Cash Balance at EOY	\$ 1,744,298	\$ 1,922,420	\$ 1,992,266	\$ 2,115,307	\$ 2,136,367	\$ 2,089,315	\$ 2,182,739	\$ 2,414,186	\$ 2,443,323	\$ 2,569,423							
% of O&M	99%	105%	104%	106%	103%	97%	98%	104%	101%	102%							
Revenue Forecast																	
ERUs	17,825	17,825	17,825	17,825	17,825	17,825	17,825	17,825	17,825	17,825							
Volume Charge / Month	\$ 6.77	\$ 7.04	\$ 7.32	\$ 7.62	\$ 8.22	\$ 8.47	\$ 8.73	\$ 8.99	\$ 9.26	\$ 9.53							
Year over Year % Change in Volume																	
Equivalency Charge	21%	4%	4%	4%	8%	3%	3%	3%	3%	3%							
Pollutant Rate / Month	\$ 4.53	\$ 4.71	\$ 4.90	\$ 5.10	\$ 5.50	\$ 5.67	\$ 5.84	\$ 6.01	\$ 6.19	\$ 6.38							
Year over Year % Change in Pollutant																	
Equivalency Charge	6%	4%	4%	4%	8%	3%	3%	3%	3%	3%							
Customer Accounts	9,024	9,024	9,024	9,024	9,024	9,024	9,024	9,024	9,024	9,024							
Rate / Account / Month	\$ 2.15	\$ 2.24	\$ 2.33	\$ 2.42	\$ 2.61	\$ 2.69	\$ 2.77	\$ 2.85	\$ 2.94	\$ 3.03							
Charge	1%	4%	4%	4%	8%	3%	3%	3%	3%	3%							
Existing Interest	-	-	-	-	-												
Existing Principal	-	-	-	-	-												
Total Existing Debt Service	-	-	-	-	-	-	-	-	-	-							
Capital Expenditures - Cash Funded	1,446,150	740,000	885,000	870,000	980,000	1,062,000	935,000	810,000	930,000	845,000							
Capital Expenditures - Debt Funded	-	-	-	-	1,910,000	-	-	-	1,200,000	-							
Total Capital Expenditures	1,446,150	740,000	885,000	870,000	2,890,000	1,062,000	935,000	810,000	2,130,000	845,000							
Total New Debt Service	-	-	-	-	150,933	150,933	150,933	150,933	245,760	245,760							