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January 29th, 2026

Mr. Jeremy Rubio,
Water Resources Division
EGLE - Kalamazoo District Office
7953 Adobe Road
Kalamazoo, MI 49009

**RE: NPDES Permit No. MI0023299/Kalamazoo WWTP
Asset Management Annual Report**

Dear Mr. Rubio:

This correspondence is being provided to update your office on the status of the City of Kalamazoo asset management program implementation. The City of Kalamazoo submitted an Asset Management Plan (AMP) in January 2017 to the Michigan Department of Environmental Quality (MDEQ) and it was approved. The AMP included a schedule for completing the NPDES permit asset management requirements.

1) a description of the staffing levels maintained during the year:

The Kalamazoo Water Reclamation Plant total staffing level at the end of 2025 was 85 fulltime equivalent positions. Staffing consisted of 22 operations staff, 15 maintenance staff, 19 collections system staff, 15 lab/IPP staff (who work in both water and wastewater), 10 process control/electrician staff (who work in both water and wastewater), 4 administration/engineering staff.

2) a description of inspections and maintenance activities conducted, and corrective actions taken during the year:

The City of Kalamazoo maintenance, operations, and process control staff perform routine preventative maintenance on plant and collection system equipment. They also perform demand maintenance activities when necessary. The City utilizes Lucity Computerized Maintenance Management Systems (CMMS) to track assets and work orders in the Wastewater Treatment Plant and sanitary collection system. The complete list of Treatment Plant and sanitary collection system assets, demand work orders, preventative work orders, and corrective actions are housed in these databases and are available for review upon request.

The City contracts with a predictive maintenance firm to conduct vibration analysis on critical equipment every two months, with reports available for review upon request. In 2025, the City expanded its program to include thermal imaging IR scans of motor control centers (MCCs) throughout the WWTP, with additional oil testing of these MCCs scheduled for 2026. Semiannual calibration of municipal, industrial, and WWTP influent flow meters is also performed by an external contractor.

3) expenditures for collection system maintenance activities, treatment works maintenance activities, corrective actions, and capital improvement during the previous year:

Expenditures for collection system maintenance were \$2,824,176.33 for 2025. Expenditures for treatment works maintenance activities and corrective actions were \$3,183,551.77 for 2025. Expenditures for process control maintenance and corrective actions were \$1,386,653.41 for 2025. The Capital Improvement amended budget for 2025 was \$12,269,688 for the wastewater system with \$8,206,563 for the treatment works and \$3,263,125 for the collection system, and \$600,000 for Sustainable Biosolids Management Alternatives, and \$200,000 for a Lateral Lining Program for the township and city.

4) a summary of assets/areas identified for inspection/action (including capital improvement) in the upcoming year based on the five (5) core elements and the Business Risk Factors:

The 2025 City of Kalamazoo asset management activities included WWTP evaluation, sanitary system modeling/updates, continued collection system inspection, ratings and assignment of criticality of all sanitary collection system components, Capital Improvement Plan development, and Wastewater rate development.

Additional cleaning, CCTV, Vac-A-Tee cleanout installation, Lift Station Upgrades, continued implementation of the real-time decision support system for sanitary sewers to monitor levels and flows, and rating of pipes and manholes will be on-going by field staff. In 2025 Lining Rehabilitation projects included monoforming (manhole rehab), the trenchless rehabilitation of lateral sewers and submain sewers identified as a 3, 4, or 5. Additionally, in 2025 the Vac-A-Tee program continued in-City, and in our partner communities.

The City of Kalamazoo continues to implement a real-time decision support system for collections and is working to implement similar tools for the WWTP. This real-time decision support system will help to achieve the following goals:

- Provide ability to strategically guide operations. Working in a resource constrained environment, the City will benefit from knowing where to deploy resources to make the largest impact.
- Stabilize the inflow. With no explicit storage upstream of the KWRP, there is a strong desire to forecast and stabilize inflow for most effective treatment.
- Monitor the capacity of the system. Given resource constraints, we need to know the total capacity of the system (currently and with optimization) to allow planning/engineering to work within future condition.

- Identify growth potential. As the only water reclamation plant in Kalamazoo County (with 54 MGD capacity), there is a strong desire to know what the growth potential is for the region and how the collection system and WWTP can support community growth.
- I&I source identification. There is a strong desire to locate sources and eliminate I&I.

The City of Kalamazoo's 2026 asset management and capital activities will continue to focus on the CMOM approach to the sanitary collection system.

Sewer Trenchless Rehab Program
 Sewer Main Root Control Program
 Sewer Inspection Program
 Sewer Cleaning Program
 Newton Ct Sewer main Upsize from 6" to 8"
 Fellows Ct Sewer main Upsize from 6" to 8"
 John Street Siphon Replacement

The City of Kalamazoo made significant progress in 2025 with the installation of 10 new tertiary disc filters, this process has replaced the tertiary sand filter process formerly in service. Commissioning and startup of the filter units was achieved in April of 2024. Final SCADA communication and ancillary equipment completion is anticipated to occur by the end of 2026.

The City of Kalamazoo plans to move forward with the rehab of four (4) final clarifiers at the WWTP, beginning with clarifier lauder covers and catwalk replacement. Construction bidding for the project is to take place in 2026, and work is anticipated to begin in 2026.

The City of Kalamazoo has continued capacity design work for a WWTP Biosolids solution with a dryer end product by 2030. Project design and funding is currently in progress.

5) a maintenance budget and capital improvement budget for the upcoming year that take into account implementation of an effective Asset Management Program that meets the five (5) core elements:

The 2026 City of Kalamazoo adopted operations and maintenance budget includes \$2,982,692 for collections system maintenance, \$2,946,134 for treatment plant maintenance, and \$1,731,206 for process control maintenance activities. The 2026 adopted Capital Improvement budget is \$26,286,250 with \$11,550,000 for treatment works and \$4,536,250 for the collection system, \$10,000,000 for Sustainable Residual Biosolids, and \$200,000 for the Lateral Lining Program. These projects were identified in previous years. The City has completed the process of evaluating the condition of assets and criticality to the treatment system.

6) an updated asset inventory based on the original submission; and:

In 2025 an audit of all plant equipment, preventative maintenance schedules, and demand maintenance work order system upgrades began. In 2026 physical asset tagging of new and

existing equipment will be a main focus. An updated list of asset inventory for the treatment works and collection system is available for review upon request.

7) an updated OM&R budget with an updated rate schedule that includes the amount of insufficient revenues, if any.:

The OM&R budget with updated rate schedule and revenue requirements have been updated to reflect additional capital and OM&R expenditures within the study period of 1 to 5 years. The rate study can be found as an attachment to the MiEnviro submission for the Annual Asset Management report and is titled *2026 Kalamazoo Wastewater Rate Report*, in cooperation with revenue requirements an overall wastewater system revenue increase of approximately 9% for 2026 was enacted beginning Jan 1st, 2026.

If you have any questions regarding this compliance issue for our facility, or any other issues, please contact me at 269-337-8696 or drusts@kalamazoo.org.

Respectfully,



Susie Drust
Wastewater Superintendent

Attachments

cc: COK File
Jeremy Rubio, EGLE
Terri Shattuck, EGLE



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MEMORANDUM

Proposed 2026 Kalamazoo Wastewater Rates

October 30, 2025
Updated November 7, 2025

To: James Baker

From: Bart Foster

The intent of this this memorandum is to introduce proposed Wastewater Rates for 2026. The recommendations presented herein have been developed in coordination with City staff and stakeholder representatives. *This document has been slightly updated from that originally published a week ago to reflect refinements in certain customer usage data based on ongoing review. The changes in recommended rates are inconsequential. It has also been appended to include additional material setting forth specific calculations of the Test Year 2031 Wastewater Rates (which establish the baseline for the 2026 Rates) - and which summarizes the updated financial forecast.*

The proposed 2026 Wastewater Rates reflect several distinct but related analyses:

1. Overall **revenue requirements** for the Wastewater Utility are forecasted for a 10-year period, and a strategic financial plan is developed to support the financial position and address needed investments and operations.
2. A **cost of service** study for an appropriate “test year” is conducted to allocate revenue requirements to individual customer classes.
3. Wastewater **rate schedules** are designed to result in equalized rates via a “glide path”.

The study approach utilized to establish these proposed rates mirrors that used to establish the existing rates, which was documented in a report dated October 29, 2024. This memorandum report is intended to serve as an executive summary of rate recommendations, and to introduce subtle methodology changes and updated calculations. The calculation tables contained within the body of this memorandum report are principally focused on the results of the overall study and are designed to illustrate and outline the updated glide path to equalized rates in 2031.

Appendix A to this report contains additional specific calculation tables identical in format and content to the October 2024 report, and Appendix B is comprised of tables summarizing the updated financial forecast for the Wastewater System. *Interested stakeholders are encouraged to review the October 2024 report for additional information on the methodologies and calculations set forth in this executive summary memorandum report.*

The proposed 2026 Wastewater Rates reflect some subtle modifications compared to the current rates, including:

- The glide path towards equalized retail rates has been extended to 2031.
- Recognition of material reductions in wastewater contributions from Pfizer. In addition to presenting revenue challenges, this development has triggered decisions that were already under consideration regarding Wastewater Rates and has resulted in:
 - The City is opting to remove all monitored industries from the SHAREs program, and to bill them based on their monthly wastewater contributions.
 - The City is opting to replace the current “quantity/quality” billing approach for monitored industries with a pure surcharge (above domestic strength) methodology.
 - Certain costs directly related to industrial monitoring, which are currently being allocated to pollutant cost pools and recovered from all customers, are being directly allocated to monitored industries.
- There are some subtle modifications regarding certain customers’ participation in certain cost pools – 2 of the Municipalities are now being allocated costs related to lift stations.
- The structure of the Municipality fixed monthly charges is unchanged but presented in a slightly different manner, which moderately impacts the glide path strategy for those customers.
- The rates for retail customers reflect a rebalancing between readiness to serve charges and commodity rates to more closely align with the City’s water rate schedule.

Most of these changes are designed to be phased in over the same glide path as equalized retail wastewater rates. These changes are discussed further in subsequent sections of this executive summary report.

Financial Plan Forecast and 2026 Revenue Requirements

I have updated the 10-year financial forecast for the Wastewater Utility. Appendix B contains tables illustrating the updated forecast. The exhibit that follows this introduction is designed to summarize the updated forecast. Please note that this version of the forecast – particularly after 2026 and 2027 – should be considered extremely preliminary. The specific capital needs to address recent dramatic increases in solids handling costs remain under development and alternative scenarios are certainly worthy of additional discussion. Under any scenario the recommended rate adjustment for 2026, and perhaps those forecasted for 2027 through 2031, will not change materially, as they are designed to achieve minimum debt service coverage levels established by the Utility Financial Policy and related financial metrics.

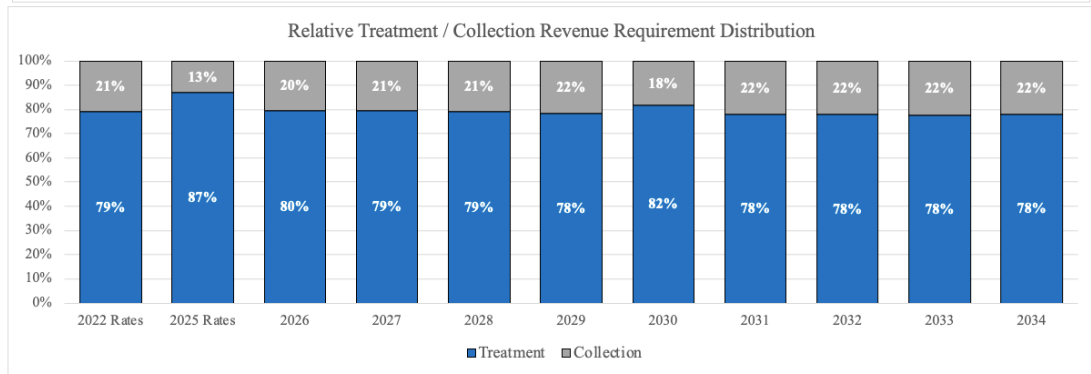
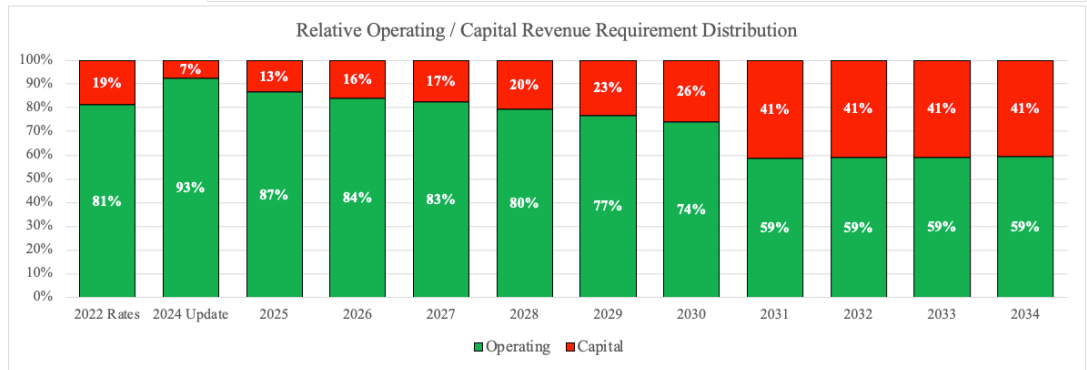
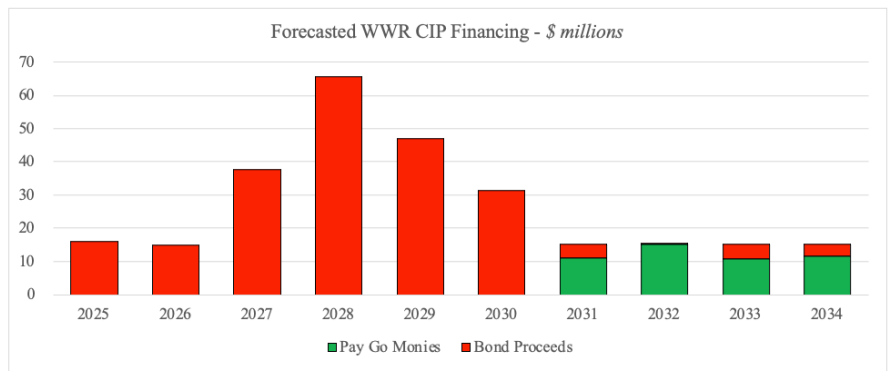
The foundational assumptions to formulate the updated forecast include:

- Capital Improvement Program financing requirements consistent with the latest version provided for review.
- A CIP execution rate of 80%.
- Investment in solids handling facilities starting in 2027, and active at the start of 2031.
 - *The forecast does **not** apply the 80% execution rate to this project.*
- Once active, a significant (~ \$12 million) **net** reduction in annual operating expenses, as sludge hauling expense is dramatically reduced and replaced with incremental operating expenses associated with the new facilities.
- Financing of the solids handling facilities to be provided via CWSRF financing through the State of Michigan. **Alternative financing vehicles could materially change the forecast.**
- A **recommended** overall System rate increase of 9% for 2026.
- **Projected** (not yet recommended) additional increases of 7.5% annually for 2027 through 2030.
- Projected “revenue neutral” rate adjustment of zero for 2031 – the first year the investment is projected to yield sludge hauling savings
- Inflationary increases thereafter.
- The combination of capital financing sources and annual System rate adjustments are designed to maintain the minimum policy levels of debt service coverage in the short term and adequate liquidity amounts.
 - *For purposes of these projections, I’ve assumed that the Utility Financial Policy minimum coverage level of 1.40 is applicable to the senior lien debt service coverage, since that is the only lien of debt that existed at the time the policy was established.*

As noted in the exhibit, the cost structure of the Wastewater Utility is forecasted to change materially once the solids project is completed and the operating expenses are reduced. This will also change the relative structure of the annual revenue requirement between treatment and collection revenue requirements.

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	2025 est	2026	2027	2028	2029	2030	2031	2032	2033	2034
WWR Rate Plan		9.0%	7.5%	7.5%	7.5%	7.5%	0.0%	3.0%	3.0%	3.0%
Senior Lien Debt Service Coverage	1.38	1.40	1.63	1.66	1.74	1.94	2.84	2.82	2.98	2.96
All-In Debt Service Coverage	1.28	1.31	1.53	1.30	1.29	1.39	1.69	1.70	1.77	1.75
CIP Execution %	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Days Cash Ratio	184	195	220	239	257	286	366	320	327	325



As we prepare to pivot to the Cost of Service analysis, these variances in cost structure of the Wastewater Utility merit consideration. It makes sense to use 2031 as the “test year” for

Wastewater Cost of Service and Rate design analyses. Otherwise, there could be significant short term instability, only to be reversed once the new operating scenario emerges.

Revenue Requirement Comparison

The following exhibit summarizes the forecasted annual revenue requirements for the 2026 budget year and the 2031 Test Year.

	<u>2026</u> <u>Budget Year</u> \$	<u>2031</u> <u>Test Year</u> \$	
<u>Revenue Requirements</u>			
1	Revenue from Existing Rates	44,047,900	44,047,900
2	Proposed Rate Adjustment	9.0%	45.6%
3	Rate Increase Revenue	3,964,300	20,070,900
4	Total Revenue from Rates	48,012,200	64,118,800
5	Miscellaneous and Non-Operating Revenue	1,049,900	1,806,200
6	Total Revenue	49,062,100	65,925,000
<u>Revenue Requirements</u>			
7	Operating Expenses	39,799,200	37,092,600
8	Net Revenue (6) - (7)	9,262,900	28,832,400
9	Debt Service	7,052,000	17,049,000
10	Debt Service Coverage (8)/(9)	1.31	1.69
11	Sr. Lien Debt Service Coverage (excludes SRF)	1.40	2.84
12	Revenues after Debt Service	2,210,900	11,783,400
13	Applied to: PILOT	600,000	600,000
14	Applied to: Working Capital / CIP	1,610,900	11,183,400
15	Total Revenue Requirements	49,062,100	65,925,000

Cost of Service Study

As noted above, for purposes of evaluating the utility costs of service I've chosen 2031 as the "test year" for the Cost of Service Study to support the proposed 2026 Wastewater Rates. The projected 2031 revenue requirements are allocated to cost categories and customer classes consistent with the methodology introduced for the 2025 Wastewater Rates, while recognizing the modifications introduced earlier herein – and as further delineated below.

The City has opted to make modifications regarding how costs are allocated to, and rates are developed for, monitored industries. The new approach reflects two specific changes:

1. Under the existing rate structure, monitored industries are billed via a “quantity / quality” approach, by which if their individual monitored pollutant loadings are “below domestic” they pay for lower than “domestic” loadings. The City has opted to convert to a pure “surcharge” approach, where the charges to individual industries related to monitored pollutants are computed at the minimum domestic loading, or the monitored loading, whichever is greater. This approach is justified – in part because the “domestic” loadings are established as a “limit” by ordinance. Other retail and wholesale customers are assigned cost responsibility for these pollutant cost pools based on domestic ordinance limits – not based on their specific contributions. Also, the existing approach was designed in a different era and today’s relative wastewater contributions by class are materially different. Historically the industrial load was a much larger element of plant design and operations assumptions and realities. As recently as 2000 contributions from monitored industries accounted for 36% of the flow, 60% of the Total Suspended Solids, and 50% of the revenue of the Wastewater System. Today’s relative figures for each of these components are 23%, 23%, and 30%, respectively.
2. Certain costs directly related to industrial monitoring, which are currently being allocated to pollutant cost pools and recovered from all customers, are being directly allocated to monitored industries, and included in a rate applied to their measured volumetric contributions.

Converting from the “quantity/quality” approach to the pure “above domestic” surcharge approach - and including an industrial specific rate to recover industrial monitoring costs - will put the City’s Wastewater Rate Methodology on a more consistent basis with its peers.

These modifications will also include eliminating any monitored industries from the SHARES program. Part of this rationale is developments regarding Pfizer’s wastewater contributions to the System, as discussed earlier.

The modified Cost of Service Study approach also includes these changes:

- There are some subtle modifications regarding certain customers participation in certain cost pools – 2 of the Municipalities (Augusta and Charleston) are now being allocated costs related to lift stations.
- The structure of the Municipality fixed monthly charges is unchanged but presented in a slightly different manner, which moderately impacts the glide path strategy for those customers.
- The rates for retail customers reflect a rebalancing between readiness to serve charges and commodity rates to more closely align with the City’s water rate schedule.

Appendix A to this report contains tables that set forth the detailed cost of service calculations. The results of the calculations establish the basis for the proposed 2026 Wastewater Rates.

Equalized Wastewater Rates

The proposed 2026 Wastewater Rates are set forth in summary form in the attached Table 15 – which summarizes detailed individual analyses of monitored industrial, municipal wholesale, and domestic retail rates in the “sub tables” 15a, 15b, and 15c, respectively.

The proposed 2026 Wastewater Rates envision continuing the glide path introduced with the 2025 Wastewater Rates, while extending the glide path to end in in 2031. The glide path has been somewhat complicated in that the changes to the industrial rate structure introduced above also must now be considered. The proposed 2026 Wastewater Rates envision that the modifications to the industrial rates will be incrementally implemented in the same glide path period as the equalized retail wastewater rates, although under a slightly accelerated approach:

- **25%** of the shift away from quantity/quality billing for monitored industries towards a pure surcharge program is being implemented for the 2026 Wastewater Rates, with the remaining 75% of the shift envisioned to occur in equal 15% installments from 2027 through 2031.
- **60%** of the industrial monitoring charges are being implemented for the 2026 Wastewater Rates, with the remaining 40% envisioned to occur in equal 10% installments from 2027 through 2030.

This “lag” in implementation of the new industrial rate structure will require a minor adjustment to the glide path strategy for wastewater rates to domestic customers. Rates to these customers will need to be calculated in a manner that recognizes the interim lower revenue from monitored industries during the structural implementation. This strategy is laid out in the table below. For the 2026 Wastewater Rates, the domestic customer “baseline” for glide path purposes requires the starting point to be increased by 0.6% from the targeted System rate adjustment. The resulting 9.6% becomes the *adjusted System average* baseline for retail glide path rate calculations.

As illustrated in the table, the overall impact of this strategy is still a lower increase to domestic customers than to monitored industries over the entirety of the glide path.

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	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>Total</u>
<u>Glide Path Strategy</u>							
System Rate Adjustment	9.0%	7.5%	7.5%	7.5%	7.5%	0.0%	45.6%
<i>Domestic Adjustment</i>	<u>0.6%</u>	<u>0.2%</u>	<u>0.1%</u>	<u>-0.1%</u>	<u>0.5%</u>	<u>0.0%</u>	
<i>Domestic Baseline</i>	9.6%	7.7%	7.6%	7.4%	8.0%	0.0%	
<u>Glide Path Effective Results</u>							
Retail Customers	-0.3%	-0.6%	-0.6%	-0.8%	-0.1%	-1.7%	40.0%
Municipalities	-8.3%	-0.9%	-1.0%	-1.2%	-3.0%	0.1%	27.0%
Domestic Customers	-2.4%	-0.7%	-0.7%	-0.9%	-0.8%	-1.2%	36.5%
Monitored Industries	5.7%	1.6%	1.6%	1.8%	1.7%	2.4%	66.8%

The impact on the glide path calculations for inside City and outside City retail rates can be described in the same manner as presented for the existing rates. Equalized Rates will require increases **over** the System average for inside City customers and **under** the System average for outside City customers. The only difference is that the System average needs to be adjusted to accommodate the phase in of the new industrial rate structure. The glide path for inside City rates will require annual increases of ~ 1.4% over and above the **adjusted System average** each year during the glide path. So for 2026 inside City rates would increase ~ 11.0% (9.6% *adjusted System average plus 1.4%*). The outside City rates would have somewhat of a mirror effect with increases of ~ 3.4 below the **adjusted System average** each year. So for 2026 outside City rates would increase ~ 6.2% (9.6% *adjusted System average minus 3.4%*).

The exhibit below illustrates the general glide path approach for retail rates. This table shows summary impacts for overall retail customer classes. Changes in individual retail readiness to serve charges and commodity rates will vary based on the detailed cost of service analyses, as illustrated in Table 15c.

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
Domestic Baseline	9.6%	7.7%	7.6%	7.4%	8.0%	0.0%
Inside City Retail	11.0%	9.1%	9.0%	8.8%	9.5%	0.2%
Outside City Retail	6.2%	4.4%	4.3%	4.1%	4.7%	-4.2%
<u>Glide Path Factor</u>						
Inside City Retail	1.4%	1.4%	1.4%	1.4%	1.5%	0.2%
Outside City Retail	-3.4%	-3.3%	-3.3%	-3.3%	-3.3%	-4.2%

The attached tables set forth how this strategy impacts specific rates for each rate class, including the Municipalities and the monitored industries. Similar adjustments and impacts would occur during the glide path for these rate classes. I note that the implementation

complexities for the industrial monitored rates complicate the glide path “simplicity” – particularly in the final step to Equalized Rates in 2031.

Monitored Industrial Wastewater Rates

Implementing the phase strategy of the changes to the industrial rate structure is complicated and requires a series of analytical illustrations. The specific calculations are shown in the lengthy Table 15a attached to this memorandum report.

Municipal Wholesale Wastewater Rates

The proposed and forecasted fixed monthly charges for the Municipal wholesale customers is set forth in Table 15b. This presentation has been modified from previous formats to illustrate unique features applicable to certain wholesale customers. All customers are assigned treatment and interceptor costs based on their contributed volume. Effective with the 2026 Wastewater Rates, two municipal customers (Augusta and Charleston) are being assigned additional costs related to lift stations. The incremental unit costs for these customers are highlighted in yellow in Table 15b. Additionally – most of these customers “billed volume” is directly reported by wholesale metering, which captures infiltration and inflow within each community. The billed volume for two other municipal customers (Galesburg and the Portage SW Interceptor) is reported by water meters and does not include such local infiltration and inflow. The unit cost (as applied to billed volume) for these customers is increased to recognize this, as highlighted in blue in Table 15b. This has always been a part of the rate determination – these proposed rates simply highlight the building blocks for the fixed monthly wholesale charges.

I note that the varying impacts on the individual Municipalities are entirely related to the SHAREs program, and the “reset” that occurs as historical metered volumes are evaluated to implement it.

Retail Wastewater Rates

Table 15c sets forth the proposed and forecasted retail wastewater rates designed to result in Equalized Rates in 2031 via the glide path. This format is identical to that presented in the 2025 Wastewater Rate Report. As noted earlier, there are two unique developments:

1. The glide path takes into consideration the phased implementation of the new industrial rate structure, which requires development of the adjusted System average rate adjustment concept.
2. The retail rates structure reflects a rebalancing between readiness to serve charges and commodity rates to more closely align with the City’s water rate schedule. This is accomplished by recovering more costs related to infiltration and inflow via the readiness to serve charges and less from the commodity rates than in prior rate structures.

Again, the specific cost of service analyses supporting these recommendations is presented in the calculation tables that comprise Appendix A, and that follow the same approach as that set forth in the October 2024 report. In closing, I want to emphasize that these proposed rates are merely the “next step” in the glide path strategy, and one that is much more complicated than that instituted for the City’s Water Rates. The planned road to equalized Wastewater Rates will continue to have to be carefully monitored to adjust to:

- Future developments regarding the solids handling project timing and results;
- Impacts of varying wastewater contributions by monitored industrial customers, and the wholesale municipalities in the SHARES program;
- Future decisions on System rate adjustments.

I prepared to discuss this material and to present these recommendations to all stakeholders at your convenience.

Wastewater Utility

Table Index for Test Year 2031 Wastewater Rate Calculations (Appendix A) Test Year 2031

<u>Table</u>	<u>Title</u>	<u>Methodology Changes from Prior Study</u>
1	Baseline Units of Service and Revenue Projections	No less than domestic strength for industrial monitored units
2	Customer Class Units of Service	Include Industrial Specific via metered volumes
2a	Users of Each Unit Process	Separate Lift Stations from Local Collection Cost Pool. Assign Lift Station costs to Augusta and Charleston
2b	Summary of Wastewater Treatment Allocation Factors	Assign 60% of Regulatory Sampling & Analysis costs to Industrial Specific Cost Pool
3	Cost of Service to be Recovered from Rates	NA
4	Allocation of Operation and Maintenance Expense to Functional Cost Components	Assign 60% of Regulatory Sampling & Analysis costs to Industrial Specific Cost Pool
5	Development of Capital Asset Values for Cost of Service	NA
6	Allocation of Rate Base to Functional Cost Components	NA
7	Allocation of Depreciation Expense to Functional Cost Components	NA
8	Unit Costs of Service	NA
9	Allocation of Cost of Service to Customer Classes	NA
10	Customer Class Cost of Service Compared to Existing Rate Revenue	NA
11	Calculation of Municipal Wholesale Charges	None - but charges are illustrated via a unit cost structure based on specific characteristics of each Municipality
12	Calculation of Wastewater Readiness to Serve Charges	Increase in the portion of costs related to infiltration and inflow that are recovered via the readiness to serve charges
13	Calculation of Wastewater Commodity Rates	Remove all industries from SHARES program and convert all industries to pure surcharge billing. Develop industrial specific commodity charge
14	Comparison of Existing and Projected Wastewater Rates	None - but format change to reflect above rate structure modifications noted above

Table Index for *Proposed 2026* Wastewater Rate Calculations *Reflects Results of Updated Glide Path*

<u>Table</u>	<u>Title</u>	<u>Comments / Changes from Prior Study</u>
15	Proposed 2026 Wastewater Rates	See Tables 15a, 15b, and 15c for details
16	Comparison of Existing and Proposed Rate Revenue	
17	Updated Calculation of Projected Glide Path to Equalized Retail Rates	
18	Comparison of "Typical" Retail Wastewater Bills Under Existing and Projected Rates	
15a	Projected Glide Path to Equalized Monitored Industrial Rates	13 pages of detailed calculations to phase in methodology changes: no "credits" for below domestic pollutant contributions and incorporate industrial specific cost pool
15b	Projected Glide Path to Equalized Municipality Charges	Illustrate cost structure based on specific characteristics of each Municipality
15c	Projected Glide Path to Equalized Retail Rates and Calculation of 2026 Rates	2 pages detailing Table 17

Table Index for Updated 10-Year Wastewater Financial Forecast (Appendix B)

<u>Page</u>	<u>Title</u>	<u>Comment</u>
1	Key Assumptions	Regarding inflation, financing terms, etc
2	Utility Financial Policy Target Fund Balances and Coverage Ratios	Establishes Goals and Objectives
3	Capital Improvement Program Financing	Plan to fund Biosolids project is key
4	Financial Plan Summary	Forecasted operating fund results - cash basis and metrics
5	Proforma Statement of Net Position	Forecasted operating fund results - accrual basis and metrics

Report Tables

Proposed 2026 Wastewater Rates

Reflects Implementation of Glide Path to 2031 Equalized Rates as Set Forth in Appendix A

**Table 15
Wastewater Utility
Proposed 2026 Wastewater Rates**

	(1)	(2)	(3)	(4)
INSIDE CITY Service Charges - \$/bill				
Meter Size inches	Existing Rates \$/bill	Proposed 2026 Rates \$/bill	Change \$/bill	% Change
Quarterly				
5/8	20.47	22.96	2.49	12.2%
3/4	21.24	23.91	2.67	12.6%
1	23.60	26.80	3.20	13.6%
1 1/2	26.71	30.59	3.88	14.5%
2	35.25	40.99	5.74	16.3%
3	97.94	116.99	19.05	19.5%
4	121.14	145.09	23.95	19.8%
6	175.28	210.66	35.38	20.2%
Flat Rate	120.36	133.38	13.02	10.8%
Monthly				
5/8	15.23	16.49	1.26	8.3%
3/4	15.50	16.83	1.33	8.6%
1	16.27	17.79	1.52	9.3%
1 1/2	17.34	19.11	1.77	10.2%
2	20.21	22.65	2.44	12.1%
3	41.19	48.20	7.01	17.0%
4	48.95	57.62	8.67	17.7%
6	67.00	79.50	12.50	18.7%
OUTSIDE CITY Service Charges - \$/bill				
Meter Size inches	Existing Rates \$/bill	Proposed 2026 Rates \$/bill	Change \$/bill	% Change
Quarterly				
5/8	25.03	27.15	2.12	8.5%
3/4	26.29	28.57	2.28	8.7%
1	30.03	32.76	2.73	9.1%
1 1/2	35.01	38.33	3.32	9.5%
2	48.72	53.68	4.96	10.2%
3	149.65	166.56	16.91	11.3%
4	187.04	208.38	21.34	11.4%
6	274.27	305.93	31.66	11.5%
Flat Rate	157.77	167.13	9.36	5.9%
Monthly				
5/8	16.73	17.84	1.11	6.6%
3/4	17.14	18.30	1.16	6.8%
1	18.40	19.71	1.31	7.1%
1 1/2	20.04	21.56	1.52	7.6%
2	24.62	26.69	2.07	8.4%
3	58.26	64.35	6.09	10.5%
4	70.73	78.30	7.57	10.7%
6	99.81	110.82	11.01	11.0%
Dewatering	10.55	12.15	1.60	15.2%
COMMODITY CHARGES				
	Existing Rates \$/cu mtr	Proposed 2026 Rates \$/cu mtr	Change \$/cu mtr	% Change
Inside City Retail	1.174	1.300	0.126	10.7%
Outside City Retail	1.561	1.649	0.088	5.6%



Table 15
Wastewater Utility
Proposed 2026 Wastewater Rates

	(1)	(2)	(3)	(4)
MUNICIPAL WHOLESALE FIXED MONTHLY CHARGES				
	<u>Existing Rates</u> \$/cu mtr	<u>Proposed 2026 Rates</u> \$/cu mtr	<u>Change</u> \$/cu mtr	<u>% Change</u>
Mun wholesale Unit Cost				
Treatment	0.982	1.067	0.085	8.7%
Interceptors	0.063	0.064	0.001	1.6%
Lift Stations	0.000	0.098	0.098	
Report by Water Meter	0.346	0.395	0.049	14.2%
"Normal" Rate	1.045	1.131	0.086	8.2%
	<u>Existing Rates</u> \$/month	<u>Proposed 2026 Rates</u> \$/month	<u>Change</u> \$/month	<u>% Change</u> (a)
<u>Municipalities</u>				
Portage	453,800	460,500	6,700	1.5%
Galesburg	11,200	8,700	(2,500)	-22.3%
Vicksburg	28,900	30,500	1,600	5.5%
Gull Lake	85,600	92,700	7,100	8.3%
Augusta	6,000	3,800	(2,200)	-36.7%
Mattawan	36,500	37,100	600	1.6%
South County	10,000	11,500	1,500	15.0%
Charleston	3,200	3,700	500	15.6%
Portage SW Int	50,800	42,300	(8,500)	-16.7%

* Existing Charges are based on prior estimates of annual volume. Monthly charge impact reflects changes in volume.

Table 15
Wastewater Utility
Proposed 2026 Wastewater Rates

	(1)	(2)	(3)	(4)
MUNICIPAL WHOLESALE FIXED MONTHLY CHARGES				
	Existing <u>Rates</u> \$/cu mtr	Proposed <u>2026 Rates</u> \$/cu mtr	<u>Change</u> \$/cu mtr	<u>% Change</u>
Mun wholesale Unit Cost				
Treatment	0.982	1.067	0.085	8.7%
Interceptors	0.063	0.064	0.001	1.6%
Lift Stations	0.000	0.098	0.098	
Report by Water Meter	0.346	0.395	0.049	14.2%
"Normal" Rate	1.045	1.131	0.086	8.2%
	Existing <u>Rates</u> \$/month	Proposed <u>2026 Rates</u> \$/month	<u>Change</u> \$/month	<u>% Change</u> (a)
<u>Municipalities</u>				
Portage	453,800	460,500	6,700	1.5%
Galesburg	11,200	8,700	(2,500)	-22.3%
Vicksburg	28,900	30,500	1,600	5.5%
Gull Lake	85,600	92,700	7,100	8.3%
Augusta	6,000	3,800	(2,200)	-36.7%
Mattawan	36,500	37,100	600	1.6%
South County	10,000	11,500	1,500	15.0%
Charleston	3,200	3,700	500	15.6%
Portage SW Int	50,800	42,300	(8,500)	-16.7%

* Existing Charges are based on prior estimates of annual volume. Monthly charge impact reflects changes in volume.

**Table 16
Wastewater Utility**

**Comparison of Existing and Proposed Rate Revenue
Rate Year 2026**

<u>Line No.</u>	(1) Existing Rate <u>Revenue</u> \$	(2) 2026 Proposed <u>Revenue</u> \$	(3) <u>Variance</u> \$	(4) <u>% Variance</u>	
Retail Customers					
1	Inside City	11,911,500	13,222,100	1,310,600	11.0%
2	Outside City	10,852,700	11,525,500	672,800	6.2%
3	Subtotal Retail	22,764,200	24,747,600	1,983,400	8.7%
4	Municipalities	8,232,000	8,289,600	57,600	0.7%
5	Subtotal "Domestic"	30,996,200	33,037,200	2,041,000	6.6%
Monitored Industries					
6	Pfizer	4,418,600	4,969,800	551,200	12.5%
7	Graphic Packaging	5,794,200	6,796,200	1,002,000	17.3%
8	Inside City	750,900	904,600	153,700	20.5%
9	Outside City	2,088,000	2,296,000	208,000	10.0%
10	TOTAL	44,047,900	48,003,800	3,955,900	9.0%
11	Inside City Subtotal	18,456,600	20,922,900	2,466,300	13.4%
12	Outside City Subtotal	25,591,300	27,080,900	1,489,600	5.8%
13	Monitored Industries	13,051,700	14,966,600	1,914,900	14.7%
<u>Municipalities Detail</u>					
14	Portage	5,445,600	5,526,000	80,400	1.5%
15	Galesburg	134,400	104,400	(30,000)	-22.3%
16	Vicksburg	346,800	366,000	19,200	5.5%
17	Gull Lake	1,027,200	1,112,400	85,200	8.3%
18	Augusta	72,000	45,600	(26,400)	-36.7%
19	Mattawan	438,000	445,200	7,200	1.6%
20	South County	120,000	138,000	18,000	15.0%
21	Charleston	38,400	44,400	6,000	15.6%
22	Portage SW Int	609,600	507,600	(102,000)	-16.7%
23	Total	8,232,000	8,289,600	57,600	0.7%
<u>Inside City Industrial Monitored</u>					
24	Allnex USA	592,800	708,800	116,000	19.6%
25	Arvco	49,800	57,900	8,100	16.3%
26	Continental Linen	46,300	60,100	13,800	29.8%
27	Domestic Linen Supply	39,500	47,800	8,300	21.0%
28	Kal Metal Finishers	22,500	30,000	7,500	33.3%
29	Total	750,900	904,600	153,700	20.5%
<u>Outside City Industrial Monitored</u>					
30	Kalsec	871,700	956,900	85,200	9.8%
31	Kalamazoo Brewing	869,000	958,000	89,000	10.2%
32	Green Bay Pkg	74,200	82,800	8,600	11.6%
33	Clean Earth Env	91,800	98,300	6,500	7.1%
34	Waste Mgmt	0	0	0	0.0%
35	Zoetis	117,100	130,800	13,700	11.7%
36	Charles River	64,200	69,200	5,000	7.8%
37	Total	2,088,000	2,296,000	208,000	10.0%

**Table 17
Wastewater Utility**

Updated Calculation of Projected Glide Path to Equalized Retail Rates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Adjusted System Rate Adj -></i>		9.6%	7.5%	7.5%	7.5%	7.5%	0.0%
INSIDE CITY Service Charges - \$/bill							
Meter Size	Existing Rates	Proposed 2026	<i>Projected 2027</i>	<i>Projected 2028</i>	<i>Projected 2029</i>	<i>Projected 2030</i>	Target 2031
inches	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill
Quarterly							
5/8	20.47	22.96	25.26	27.80	30.59	33.66	34.28
3/4	21.24	23.91	26.40	29.15	32.19	36.33	36.33
1	23.60	26.80	29.85	33.24	37.02	42.47	42.47
1 1/2	26.71	30.59	34.37	38.61	43.38	50.66	50.66
2	35.25	40.99	46.75	53.32	60.81	73.17	73.17
Flat Rate	120.36	133.38	144.98	157.59	171.30	187.24	187.24
Monthly							
5/8	15.23	16.49	17.52	18.61	19.77	20.64	20.64
3/4	15.50	16.83	17.92	19.08	20.32	21.32	21.32
1	16.27	17.79	19.08	20.47	21.96	23.37	23.37
1 1/2	17.34	19.11	20.66	22.33	24.14	26.10	26.10
2	20.21	22.65	24.89	27.36	30.07	33.60	33.60
3	41.19	48.20	55.33	63.51	72.90	88.86	88.86
4	48.95	57.62	66.52	76.80	88.67	109.33	109.33
6	67.00	79.50	92.53	107.69	125.34	157.08	157.08
OUTSIDE CITY Service Charges - \$/bill							
Meter Size	Existing Rates	Proposed 2025	<i>Projected 2026</i>	<i>Projected 2027</i>	<i>Projected 2028</i>	<i>Projected 2029</i>	Target 2030
inches	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill	\$/bill
Quarterly							
5/8	25.03	27.15	28.94	30.82	32.77	34.28	34.28
3/4	26.29	28.57	30.50	32.53	34.64	36.33	36.33
1	30.03	32.76	35.11	37.60	40.19	42.47	42.47
1 1/2	35.01	38.33	41.24	44.33	47.56	50.66	50.66
2	48.72	53.68	58.12	62.86	67.86	73.17	73.17
Flat Rate	157.77	167.13	173.98	180.94	187.83	187.24	187.24
Monthly							
5/8	16.73	17.84	18.69	19.56	20.44	20.64	20.64
3/4	17.14	18.30	19.20	20.12	21.05	21.32	21.32
1	18.40	19.71	20.75	21.83	22.92	23.37	23.37
1 1/2	20.04	21.56	22.79	24.07	25.38	26.10	26.10
2	24.62	26.69	28.44	30.27	32.16	33.60	33.60
3	58.26	64.35	69.85	75.75	81.99	88.86	88.86
4	70.73	78.30	85.18	92.58	100.43	109.33	109.33
6	99.81	110.82	120.92	131.81	143.42	157.08	157.08
Dewatering	10.55	12.15	13.75	15.54	17.53	20.64	20.64
COMMODITY CHARGES							
	Existing Rates	Proposed 2025	<i>Projected 2026</i>	<i>Projected 2027</i>	<i>Projected 2028</i>	<i>Projected 2029</i>	Target 2030
	\$/cu mtr	\$/cu mtr	\$/cu mtr	\$/cu mtr	\$/cu mtr	\$/cu mtr	\$/cu mtr
Inside City Retail	1.174	1.300	1.415	1.539	1.670	1.823	1.821
Outside City Retail	1.561	1.649	1.712	1.775	1.837	1.912	1.821



**Table 18
Wastewater Utility**

**Comparison of "Typical" Retail Wastewater Bills Under Existing and Projected Rates
Test Year 2031**

Line No.	Customer Class	Meter Size	(1) Billable Water Use * cu mtr	(2) Bill Under Existing Rates \$	(3) Next Step Glide Path 2026 \$	(4) Annual Change \$	(5) End of Glide Path 2031 \$	(6) Cumulative Increase (Decrease) \$	(7) Cumulative Change	(8) Percent Annual Change
INSIDE CITY - QUARTERLY										
1	Residential	5/8"	0	20.47	22.96	12.2%	34.28	13.81	67%	9.0%
2	Residential	5/8"	42.9	70.83	78.73	11.2%	112.40	41.57	59%	8.0%
3	Residential	1"	100	141.00	156.80	11.2%	224.57	83.57	59%	8.1%
4	Commercial	1"	750	904.10	1,001.80	10.8%	1,408.22	504.12	56%	7.7%
5	Commercial	2"	2,250	2,676.75	2,965.99	10.8%	4,170.42	1,493.67	56%	7.7%
INSIDE CITY - MONTHLY										
6	Residential	1"	100	133.67	147.79	10.6%	205.47	71.80	54%	7.4%
7	Commercial	2"	135	175.83	194.61	10.7%	271.94	96.11	55%	7.5%
8	Industrial	4"	700	839.14	929.11	10.7%	1,300.80	461.66	55%	7.6%
9	Industrial	6"	5,000	5,937.00	6,579.50	10.8%	9,262.08	3,325.08	56%	7.7%
OUTSIDE CITY - QUARTERLY										
10	Residential	5/8"	0	25.03	27.15	8.5%	34.28	9.25	37%	5.4%
11	Residential	5/8"	42.9	92.00	97.89	6.4%	112.40	20.40	22%	3.4%
12	Residential	1"	100	186.13	197.66	6.2%	224.57	38.44	21%	3.2%
13	Commercial	1"	750	1,200.78	1,269.51	5.7%	1,408.22	207.44	17%	2.7%
14	Commercial	2"	2,250	3,547.26	3,748.58	5.7%	4,147.91	600.65	17%	2.6%
OUTSIDE CITY - MONTHLY										
15	Residential	1"	100	174.50	184.61	5.8%	205.47	30.97	18%	2.8%
16	Commercial	2"	135	235.36	249.31	5.9%	279.44	44.08	19%	2.9%
17	Industrial	4"	700	1,117.32	1,180.99	5.7%	1,308.30	190.98	17%	2.7%
18	Industrial	6"	5,000	7,875.73	8,323.30	5.7%	9,214.33	1,338.60	17%	2.7%

*Winter Quarter

Outside / Inside Multiplier

QUARTERLY

Residential	5/8"	0	1.22	1.18	(0.04)	1.00	(0.22)
Residential	5/8"	42.6	1.30	1.24	(0.06)	1.00	(0.30)
Residential	1"	100	1.32	1.26	(0.06)	1.00	(0.32)
Commercial	1"	750	1.33	1.27	(0.06)	1.00	(0.33)
Commercial	2"	2,250	1.33	1.26	(0.06)	0.99	(0.33)

MONTHLY

Residential	1"	100	1.31	1.25	(0.06)	1.00	(0.31)
Commercial	2"	135	1.34	1.28	(0.06)	1.03	(0.31)
Industrial	4"	700	1.33	1.27	(0.06)	1.01	(0.33)
Industrial	6"	5,000	1.33	1.27	(0.06)	0.99	(0.33)



Table 15a
Wastewater Utility
Projected Glide Path to Equalized Monitored Industrial Rates

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Units Glide Path</i>						
<u>Existing</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
<i>Allowable "Below Domestic" Factor</i>						
	<i>75%</i>	<i>60%</i>	<i>45%</i>	<i>30%</i>	<i>15%</i>	<i>0%</i>

Pfizer

Domestic Volume Charges	3,530,100	3,530,100	3,530,100	3,530,100	3,530,100	3,530,100	3,530,100
COD Surcharges	1,769,300	1,769,300	1,769,300	1,769,300	1,769,300	1,769,300	1,769,300
TSS Surcharges	(85,400)	(64,100)	(51,200)	(38,400)	(25,600)	(12,800)	0
NH3 Surcharges	(38,600)	(29,000)	(23,200)	(17,400)	(11,600)	(5,800)	0
PHOS Surcharges	(1,900)	(1,400)	(1,100)	(900)	(600)	(300)	0
Ind Specific Charges	3,530,100	3,530,100	3,530,100	3,530,100	3,530,100	3,530,100	3,530,100

Total

Graphics Packaging

Domestic Volume Charges		103,200	62,000	61,900	62,000	61,900	62,000
Domestic Volume Charges	2,870,800	2,870,800	2,870,800	2,870,800	2,870,800	2,870,800	2,870,800
COD Surcharges	10,981,200	10,981,200	10,981,200	10,981,200	10,981,200	10,981,200	10,981,200
TSS Surcharges	(413,000)	(309,800)	(247,800)	(185,900)	(123,900)	(62,000)	0
NH3 Surcharges	(52,100)	(39,100)	(31,300)	(23,400)	(15,600)	(7,800)	0
PHOS Surcharges	(17,300)	(13,000)	(10,400)	(7,800)	(5,200)	(2,600)	0
Ind Specific Charges	2,870,800	2,870,800	2,870,800	2,870,800	2,870,800	2,870,800	2,870,800

Total

Allnex USA

Domestic Volume Charges	360,900	360,900	360,900	360,900	360,900	360,900	360,900
COD Surcharges	706,800	706,800	706,800	706,800	706,800	706,800	706,800
TSS Surcharges	(52,400)	(39,300)	(31,400)	(23,600)	(15,700)	(7,900)	0
NH3 Surcharges	(6,400)	(4,800)	(3,800)	(2,900)	(1,900)	(1,000)	0
PHOS Surcharges	(2,600)	(2,000)	(1,600)	(1,200)	(800)	(400)	0
Ind Specific Charges	360,900	360,900	360,900	360,900	360,900	360,900	360,900

Total

Arvco

Domestic Volume Charges	6,400	6,400	6,400	6,400	6,400	6,400	6,400
COD Surcharges	29,000	29,000	29,000	29,000	29,000	29,000	29,000
TSS Surcharges	22,100	22,100	22,100	22,100	22,100	22,100	22,100
NH3 Surcharges	100	100	100	100	100	100	100
PHOS Surcharges	100	100	100	100	100	100	100
Ind Specific Charges	6,400	6,400	6,400	6,400	6,400	6,400	6,400

Total



Table 15a
Wastewater Utility
Projected Glide Path to Equalized Monitored Industrial Rates

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Units Glide Path</i>						
<u>Existing</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
<i>Allowable "Below Domestic" Factor</i>						
	<i>75%</i>	<i>60%</i>	<i>45%</i>	<i>30%</i>	<i>15%</i>	<i>0%</i>

Continental Linen

Domestic Volume Charges	55,300	55,300	55,300	55,300	55,300	55,300	55,300
COD Surcharges	0	0	0	0	0	0	0
TSS Surcharges	(10,600)	(8,000)	(6,400)	(4,800)	(3,200)	(1,600)	0
NH3 Surcharges	(1,000)	(800)	(600)	(500)	(300)	(200)	0
PHOS Surcharges	(400)	(300)	(200)	(200)	(100)	(100)	0
Ind Specific Charges	55,300	55,300	55,300	55,300	55,300	55,300	55,300

Total

Domestic Lnen Supply

Domestic Volume Charges	37,200	37,200	37,200	37,200	37,200	37,200	37,200
COD Surcharges	10,100	10,100	10,100	10,100	10,100	10,100	10,100
TSS Surcharges	(4,600)	(3,500)	(2,800)	(2,100)	(1,400)	(700)	0
NH3 Surcharges	(600)	(500)	(400)	(300)	(200)	(100)	0
PHOS Surcharges	(200)	(200)	(100)	(100)	(100)	0	0
Ind Specific Charges	37,200	37,200	37,200	37,200	37,200	37,200	37,200

Total

Kal Metal Finishers

Domestic Volume Charges	31,600	31,600	31,600	31,600	31,600	31,600	31,600
COD Surcharges	(12,400)	(9,300)	(7,400)	(5,600)	(3,700)	(1,900)	0
TSS Surcharges	(7,200)	(5,400)	(4,300)	(3,200)	(2,200)	(1,100)	0
NH3 Surcharges	(200)	(200)	(100)	(100)	(100)	0	0
PHOS Surcharges	(200)	(200)	(100)	(100)	(100)	0	0
Ind Specific Charges	31,600	31,600	31,600	31,600	31,600	31,600	31,600

Total

Kalsec

Domestic Volume Charges	186,500	186,500	186,500	186,500	186,500	186,500	186,500
COD Surcharges	1,283,300	1,283,300	1,283,300	1,283,300	1,283,300	1,283,300	1,283,300
TSS Surcharges	46,700	46,700	46,700	46,700	46,700	46,700	46,700
NH3 Surcharges	(3,200)	(2,400)	(1,900)	(1,400)	(1,000)	(500)	0
PHOS Surcharges	(700)	(500)	(400)	(300)	(200)	(100)	0
Ind Specific Charges	186,500	186,500	186,500	186,500	186,500	186,500	186,500

Total



Table 15a
Wastewater Utility
Projected Glide Path to Equalized Monitored Industrial Rates

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Units Glide Path</i>						
<u>Existing</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
<i>Allowable "Below Domestic" Factor</i>						
	<i>75%</i>	<i>60%</i>	<i>45%</i>	<i>30%</i>	<i>15%</i>	<i>0%</i>

Kalamazoo Brewing

Domestic Volume Charges	218,400	218,400	218,400	218,400	218,400	218,400	218,400
COD Surcharges	714,800	714,800	714,800	714,800	714,800	714,800	714,800
TSS Surcharges	129,800	129,800	129,800	129,800	129,800	129,800	129,800
NH3 Surcharges	(700)	(500)	(400)	(300)	(200)	(100)	0
PHOS Surcharges	2,900	2,900	2,900	2,900	2,900	2,900	2,900
Ind Specific Charges	218,400	218,400	218,400	218,400	218,400	218,400	218,400

Total

Green Bay Pkg

Domestic Volume Charges	12,300	12,300	12,300	12,300	12,300	12,300	12,300
COD Surcharges	64,100	64,100	64,100	64,100	64,100	64,100	64,100
TSS Surcharges	18,700	18,700	18,700	18,700	18,700	18,700	18,700
NH3 Surcharges	400	400	400	400	400	400	400
PHOS Surcharges	0	0	0	0	0	0	0
Ind Specific Charges	12,300	12,300	12,300	12,300	12,300	12,300	12,300

Total

Clean Earth Env

Domestic Volume Charges	27,500	27,500	27,500	27,500	27,500	27,500	27,500
COD Surcharges	61,400	61,400	61,400	61,400	61,400	61,400	61,400
TSS Surcharges	(2,800)	(2,100)	(1,700)	(1,300)	(800)	(400)	0
NH3 Surcharges	3,500	3,500	3,500	3,500	3,500	3,500	3,500
PHOS Surcharges	500	500	500	500	500	500	500
Ind Specific Charges	27,500	27,500	27,500	27,500	27,500	27,500	27,500

Total

Zoetis

Domestic Volume Charges	0	0	0	0	0	0	0
COD Surcharges	142,300	142,300	142,300	142,300	142,300	142,300	142,300
TSS Surcharges	32,600	32,600	32,600	32,600	32,600	32,600	32,600
NH3 Surcharges	0	0	0	0	0	0	2,300
PHOS Surcharges	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Ind Specific Charges	0	0	0	0	0	0	0

Total



Table 15a
Wastewater Utility
Projected Glide Path to Equalized Monitored Industrial Rates

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Units Glide Path</i>						
<u>Existing</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
<i>Allowable "Below Domestic" Factor</i>						
	<i>75%</i>	<i>60%</i>	<i>45%</i>	<i>30%</i>	<i>15%</i>	<i>0%</i>

Charles River

Domestic Volume Charges	0	0	0	0	0	0	0
COD Surcharges	22,200	22,200	22,200	22,200	22,200	22,200	41,500
TSS Surcharges	9,400	9,400	9,400	9,400	9,400	9,400	22,500
NH3 Surcharges	200	200	200	200	200	200	1,600
PHOS Surcharges	2,900	2,900	2,900	2,900	2,900	2,900	2,900
Ind Specific Charges	0	0	0	0	0	0	0
Total							

Table 15a (continued)
Wastewater Utility
Projected Glide Path to Equalized Monitored Industrial Rates

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	<i>Glide Path Rates</i>								
Sys Rate->	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>Cum Chg</u>	<u>Annl Chg</u>	
	9.0%	7.5%	7.5%	7.5%	7.5%	0.0%			
	<i>Industrial Specific Phase in Factors</i>								
	60%	70%	80%	90%	100%	100%			
Pfizer									
Domestic Volume Charges	1.145	1.195	1.247	1.301	1.358	1.413	1.418	23.8%	4.4%
COD Surcharges	0.404	0.437	0.466	0.497	0.530	0.565	0.566	40.1%	7.0%
TSS Surcharges	1.366	1.624	1.910	2.246	2.641	3.072	3.072	124.9%	17.6%
NH3 Surcharges	5.037	5.088	5.083	5.078	5.073	5.011	5.011	-0.5%	-0.1%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									
Graphics Packaging									
Domestic Volume Charges	0.924	1.007	1.097	1.195	1.302	1.415	1.418	53.5%	8.9%
COD Surcharges	0.380	0.416	0.449	0.485	0.524	0.566	0.566	48.9%	8.3%
TSS Surcharges	1.297	1.558	1.851	2.199	2.613	3.072	3.072	136.9%	18.8%
NH3 Surcharges	4.781	4.880	4.926	4.973	5.020	5.011	5.011	4.8%	0.9%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									
Allnex USA									
Domestic Volume Charges	1.274	1.395	1.528	1.673	1.832	2.001	2.007	57.5%	9.5%
COD Surcharges	0.380	0.416	0.449	0.485	0.524	0.566	0.566	48.9%	8.3%
TSS Surcharges	1.297	1.558	1.851	2.199	2.613	3.072	3.072	136.9%	18.8%
NH3 Surcharges	4.781	4.880	4.926	4.973	5.020	5.011	5.011	4.8%	0.9%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									
Arvco									
Domestic Volume Charges	1.274	1.395	1.528	1.673	1.832	2.001	2.007	57.5%	9.5%
COD Surcharges	0.380	0.416	0.449	0.485	0.524	0.566	0.566	48.9%	8.3%
TSS Surcharges	1.297	1.558	1.851	2.199	2.613	3.072	3.072	136.9%	18.8%
NH3 Surcharges	4.781	4.880	4.926	4.973	5.020	5.011	5.011	4.8%	0.9%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									

Table 15a (continued)
Wastewater Utility
Projected Glide Path to Equalized Monitored Industrial Rates

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	<i>Glide Path Rates</i>								
Sys Rate->	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>Cum Chg</u>	<u>Annl Chg</u>	
	9.0%	7.5%	7.5%	7.5%	7.5%	0.0%			
	<i>Industrial Specific Phase in Factors</i>								
	60%	70%	80%	90%	100%	100%			
Continental Linen									
Domestic Volume Charges	1.274	1.395	1.528	1.673	1.832	2.001	2.007	57.5%	9.5%
COD Surcharges	0.380	0.416	0.449	0.485	0.524	0.566	0.566	48.9%	8.3%
TSS Surcharges	1.297	1.558	1.851	2.199	2.613	3.072	3.072	136.9%	18.8%
NH3 Surcharges	4.781	4.880	4.926	4.973	5.020	5.011	5.011	4.8%	0.9%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									
Domestic Lnen Supply									
Domestic Volume Charges	1.274	1.395	1.528	1.673	1.832	2.001	2.007	57.5%	9.5%
COD Surcharges	0.380	0.416	0.449	0.485	0.524	0.566	0.566	48.9%	8.3%
TSS Surcharges	1.297	1.558	1.851	2.199	2.613	3.072	3.072	136.9%	18.8%
NH3 Surcharges	4.781	4.880	4.926	4.973	5.020	5.011	5.011	4.8%	0.9%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									
Kal Metal Finishers									
Domestic Volume Charges	1.274	1.395	1.528	1.673	1.832	2.001	2.007	57.5%	9.5%
COD Surcharges	0.380	0.416	0.449	0.485	0.524	0.566	0.566	48.9%	8.3%
TSS Surcharges	1.297	1.558	1.851	2.199	2.613	3.072	3.072	136.9%	18.8%
NH3 Surcharges	4.781	4.880	4.926	4.973	5.020	5.011	5.011	4.8%	0.9%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									
Kalsec									
Domestic Volume Charges	1.652	1.718	1.786	1.857	1.931	2.002	2.007	21.5%	4.0%
COD Surcharges	0.410	0.442	0.470	0.500	0.532	0.566	0.566	38.0%	6.7%
TSS Surcharges	1.367	1.625	1.911	2.247	2.642	3.072	3.072	124.7%	17.6%
NH3 Surcharges	5.116	5.152	5.131	5.110	5.089	5.011	5.011	-2.1%	-0.4%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									

Table 15a (continued)
Wastewater Utility
Projected Glide Path to Equalized Monitored Industrial Rates

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	<i>Glide Path Rates</i>								
Sys Rate->	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>Cum Chg</u>	<u>Annl Chg</u>	
	9.0%	7.5%	7.5%	7.5%	7.5%	0.0%			
	<i>Industrial Specific Phase in Factors</i>								
	60%	70%	80%	90%	100%	100%			
Kalamazoo Brewing									
Domestic Volume Charges	1.652	1.718	1.786	1.857	1.931	2.002	2.007	21.5%	4.0%
COD Surcharges	0.410	0.442	0.470	0.500	0.532	0.566	0.566	38.0%	6.7%
TSS Surcharges	1.367	1.625	1.911	2.247	2.642	3.072	3.072	124.7%	17.6%
NH3 Surcharges	5.116	5.152	5.131	5.110	5.089	5.011	5.011	-2.1%	-0.4%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									
Green Bay Pkg									
Domestic Volume Charges	1.652	1.718	1.786	1.857	1.931	2.002	2.007	21.5%	4.0%
COD Surcharges	0.410	0.442	0.470	0.500	0.532	0.566	0.566	38.0%	6.7%
TSS Surcharges	1.367	1.625	1.911	2.247	2.642	3.072	3.072	124.7%	17.6%
NH3 Surcharges	5.116	5.152	5.131	5.110	5.089	5.011	5.011	-2.1%	-0.4%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									
Clean Earth Env									
Domestic Volume Charges	1.652	1.718	1.786	1.857	1.931	2.002	2.007	21.5%	4.0%
COD Surcharges	0.410	0.442	0.470	0.500	0.532	0.566	0.566	38.0%	6.7%
TSS Surcharges	1.367	1.625	1.911	2.247	2.642	3.072	3.072	124.7%	17.6%
NH3 Surcharges	5.116	5.152	5.131	5.110	5.089	5.011	5.011	-2.1%	-0.4%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									
Zoetis									
Domestic Volume Charges									
COD Surcharges	0.410	0.442	0.470	0.500	0.532	0.566	0.566	38.0%	6.7%
TSS Surcharges	1.367	1.625	1.911	2.247	2.642	3.072	3.072	124.7%	17.6%
NH3 Surcharges	5.116	5.152	5.131	5.110	5.089	5.011	5.011	-2.1%	-0.4%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		
Total									

Table 15a (continued)
Wastewater Utility
Projected Glide Path to Equalized Monitored Industrial Rates

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	<i>Glide Path Rates</i>								
	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>Cum Chg</u>	<u>Annl Chg</u>	
Sys Rate->	9.0%	7.5%	7.5%	7.5%	7.5%	0.0%			
	<i>Industrial Specific Phase in Factors</i>								
	60%	70%	80%	90%	100%	100%			

Charles River

Domestic Volume Charges

COD Surcharges	0.410	0.442	0.470	0.500	0.532	0.566	0.566	38.0%	6.7%
TSS Surcharges	1.367	1.625	1.911	2.247	2.642	3.072	3.072	124.7%	17.6%
NH3 Surcharges	5.116	5.152	5.131	5.110	5.089	5.011	5.011	-2.1%	-0.4%
PHOS Surcharges	14.246	14.864	15.337	15.826	16.330	16.664	16.664	17.0%	3.2%
Ind Specific Charges	0.000	0.071	0.083	0.094	0.106	0.118	0.118		

Total

Table 15a (continued)

Wastewater Utility

Projected Glide Path to Equalized Monitored Industrial Rates

	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	<i>Revenue Glide Path</i>						
	<u>Existing</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
	\$	\$	\$	\$	\$	\$	\$
Pfizer							
Domestic Volume Charges	4,042,000	4,218,500	4,402,000	4,592,700	4,793,900	4,988,000	5,005,700
COD Surcharges	714,800	773,200	824,500	879,300	937,700	999,700	1,001,400
TSS Surcharges	(116,700)	(104,100)	(97,800)	(86,200)	(67,600)	(39,300)	0
NH3 Surcharges	(194,400)	(147,600)	(117,900)	(88,400)	(58,800)	(29,100)	0
PHOS Surcharges	(27,100)	(20,800)	(16,900)	(14,200)	(9,800)	(5,000)	0
Ind Specific Charges	0	250,600	293,000	331,800	374,200	416,600	416,600
Total	4,418,600	4,969,800	5,286,900	5,615,000	5,969,600	6,330,900	6,423,700
Graphics Packaging							
Domestic Volume Charges	2,652,600	2,890,900	3,149,300	3,430,600	3,737,800	4,062,200	4,070,800
COD Surcharges	4,172,900	4,568,200	4,930,600	5,325,900	5,754,100	6,215,400	6,215,400
TSS Surcharges	(535,700)	(482,700)	(458,700)	(408,800)	(323,800)	(190,500)	0
NH3 Surcharges	(249,100)	(190,800)	(154,200)	(116,400)	(78,300)	(39,100)	0
PHOS Surcharges	(246,500)	(193,200)	(159,500)	(123,400)	(84,900)	(43,300)	0
Ind Specific Charges	0	203,800	238,300	269,900	304,300	338,800	338,800
Total	5,794,200	6,796,200	7,545,800	8,377,800	9,309,200	10,343,500	10,625,000
Allnex USA							
Domestic Volume Charges	459,800	503,500	551,500	603,800	661,200	722,200	724,300
COD Surcharges	268,600	294,000	317,400	342,800	370,400	400,000	400,000
TSS Surcharges	(68,000)	(61,200)	(58,100)	(51,900)	(41,000)	(24,300)	0
NH3 Surcharges	(30,600)	(23,400)	(18,700)	(14,400)	(9,500)	(5,000)	0
PHOS Surcharges	(37,000)	(29,700)	(24,500)	(19,000)	(13,100)	(6,700)	0
Ind Specific Charges	0	25,600	30,000	33,900	38,300	42,600	42,600
Total	592,800	708,800	797,600	895,200	1,006,300	1,128,800	1,166,900
Arvco							
Domestic Volume Charges	8,200	8,900	9,800	10,700	11,700	12,800	12,800
COD Surcharges	11,000	12,100	13,000	14,100	15,200	16,400	16,400
TSS Surcharges	28,700	34,400	40,900	48,600	57,700	67,900	67,900
NH3 Surcharges	500	500	500	500	500	500	500
PHOS Surcharges	1,400	1,500	1,500	1,600	1,600	1,700	1,700
Ind Specific Charges	0	500	500	600	700	800	800
Total	49,800	57,900	66,200	76,100	87,400	100,100	100,100



Table 15a (continued)

Wastewater Utility

Projected Glide Path to Equalized Monitored Industrial Rates

	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	<i>Revenue Glide Path</i>						
	<u>Existing</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
	\$	\$	\$	\$	\$	\$	\$
Continental Linen							
Domestic Volume Charges	70,500	77,100	84,500	92,500	101,300	110,700	111,000
COD Surcharges	0	0	0	0	0	0	0
TSS Surcharges	(13,700)	(12,500)	(11,800)	(10,600)	(8,400)	(4,900)	0
NH3 Surcharges	(4,800)	(3,900)	(3,000)	(2,500)	(1,500)	(1,000)	0
PHOS Surcharges	(5,700)	(4,500)	(3,100)	(3,200)	(1,600)	(1,700)	0
Ind Specific Charges	0	3,900	4,600	5,200	5,900	6,500	6,500
Total	46,300	60,100	71,200	81,400	95,700	109,600	117,500
Domestic Lnen Supply							
Domestic Volume Charges	47,400	51,900	56,800	62,200	68,200	74,400	74,700
COD Surcharges	3,800	4,200	4,500	4,900	5,300	5,700	5,700
TSS Surcharges	(6,000)	(5,500)	(5,200)	(4,600)	(3,700)	(2,200)	0
NH3 Surcharges	(2,900)	(2,400)	(2,000)	(1,500)	(1,000)	(500)	0
PHOS Surcharges	(2,800)	(3,000)	(1,500)	(1,600)	(1,600)	0	0
Ind Specific Charges	0	2,600	3,100	3,500	3,900	4,400	4,400
Total	39,500	47,800	55,700	62,900	71,100	81,800	84,800
Kal Metal Finishers							
Domestic Volume Charges	40,300	44,100	48,300	52,900	57,900	63,200	63,400
COD Surcharges	(4,700)	(3,900)	(3,300)	(2,700)	(1,900)	(1,100)	0
TSS Surcharges	(9,300)	(8,400)	(8,000)	(7,000)	(5,700)	(3,400)	0
NH3 Surcharges	(1,000)	(1,000)	(500)	(500)	(500)	0	0
PHOS Surcharges	(2,800)	(3,000)	(1,500)	(1,600)	(1,600)	0	0
Ind Specific Charges	0	2,200	2,600	3,000	3,300	3,700	3,700
Total	22,500	30,000	37,600	44,100	51,500	62,400	67,100
Kalsec							
Domestic Volume Charges	308,100	320,400	333,100	346,300	360,100	373,400	374,300
COD Surcharges	526,200	567,200	603,200	641,700	682,700	726,300	726,300
TSS Surcharges	63,800	75,900	89,200	104,900	123,400	143,500	143,500
NH3 Surcharges	(16,400)	(12,400)	(9,700)	(7,200)	(5,100)	(2,500)	0
PHOS Surcharges	(10,000)	(7,400)	(6,100)	(4,700)	(3,300)	(1,700)	0
Ind Specific Charges	0	13,200	15,500	17,500	19,800	22,000	22,000
Total	871,700	956,900	1,025,200	1,098,500	1,177,600	1,261,000	1,266,100

Table 15a (continued)

Wastewater Utility

Projected Glide Path to Equalized Monitored Industrial Rates

	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	<i>Revenue Glide Path</i>						
	<u>Existing</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
	\$	\$	\$	\$	\$	\$	\$
Kalamazoo Brewing							
Domestic Volume Charges	360,800	375,200	390,100	405,600	421,700	437,200	438,300
COD Surcharges	293,100	315,900	336,000	357,400	380,300	404,600	404,600
TSS Surcharges	177,400	210,900	248,000	291,700	342,900	398,700	398,700
NH3 Surcharges	(3,600)	(2,600)	(2,100)	(1,500)	(1,000)	(500)	0
PHOS Surcharges	41,300	43,100	44,500	45,900	47,400	48,300	48,300
Ind Specific Charges	0	15,500	18,100	20,500	23,200	25,800	25,800
Total	869,000	958,000	1,034,600	1,119,600	1,214,500	1,314,100	1,315,700
Green Bay Pkg							
Domestic Volume Charges	20,300	21,100	22,000	22,800	23,800	24,600	24,700
COD Surcharges	26,300	28,300	30,100	32,100	34,100	36,300	36,300
TSS Surcharges	25,600	30,400	35,700	42,000	49,400	57,400	57,400
NH3 Surcharges	2,000	2,100	2,100	2,000	2,000	2,000	2,000
PHOS Surcharges	0	0	0	0	0	0	0
Ind Specific Charges	0	900	1,000	1,200	1,300	1,500	1,500
Total	74,200	82,800	90,900	100,100	110,600	121,800	121,900
Clean Earth Env							
Domestic Volume Charges	45,400	47,200	49,100	51,100	53,100	55,100	55,200
COD Surcharges	25,200	27,100	28,900	30,700	32,700	34,800	34,800
TSS Surcharges	(3,800)	(3,400)	(3,200)	(2,900)	(2,100)	(1,200)	0
NH3 Surcharges	17,900	18,000	18,000	17,900	17,800	17,500	17,500
PHOS Surcharges	7,100	7,400	7,700	7,900	8,200	8,300	8,300
Ind Specific Charges	0	2,000	2,300	2,600	2,900	3,200	3,200
Total	91,800	98,300	102,800	107,300	112,600	117,700	119,000
Zoetis							
Domestic Volume Charges	0	0	0	0	0	0	0
COD Surcharges	58,300	62,900	66,900	71,200	75,700	80,500	80,500
TSS Surcharges	44,600	53,000	62,300	73,300	86,100	100,100	100,100
NH3 Surcharges	0	0	0	0	0	0	11,500
PHOS Surcharges	14,200	14,900	15,300	15,800	16,300	16,700	16,700
Ind Specific Charges	0	0	0	0	0	0	0
Total	117,100	130,800	144,500	160,300	178,100	197,300	208,800



Table 15a (continued)

Wastewater Utility

Projected Glide Path to Equalized Monitored Industrial Rates

	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	<i>Revenue Glide Path</i>						
	<u>Existing</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
	\$	\$	\$	\$	\$	\$	\$
Charles River							
Domestic Volume Charges	0	0	0	0	0	0	0
COD Surcharges	9,100	9,800	10,400	11,100	11,800	12,600	23,500
TSS Surcharges	12,800	15,300	18,000	21,100	24,800	28,900	69,100
NH3 Surcharges	1,000	1,000	1,000	1,000	1,000	1,000	8,000
PHOS Surcharges	41,300	43,100	44,500	45,900	47,400	48,300	48,300
Ind Specific Charges	0	0	0	0	0	0	0
Total	64,200	69,200	73,900	79,100	85,000	90,800	148,900

Table 15a (Summary Conclusion)
Wastewater Utility

Summary of Monitored Industrial Rate Glide Path

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<i>Revenue Glide Path</i>						
	<u>Existing</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>
	\$	\$	\$	\$	\$	\$	\$
ALL Monitored Industries							
Domestic Volume Charges	8,055,400	8,558,800	9,096,500	9,671,200	10,290,700	10,923,800	10,955,200
COD Surcharges	6,104,600	6,659,000	7,162,200	7,708,500	8,298,100	8,931,200	8,944,900
TSS Surcharges	(400,300)	(257,900)	(148,700)	9,600	232,000	530,700	836,700
NH3 Surcharges	(481,400)	(362,500)	(286,500)	(211,000)	(134,400)	(56,700)	39,500
PHOS Surcharges	(226,600)	(151,600)	(99,600)	(50,600)	5,000	64,900	123,300
Ind Specific Charges	0	520,800	609,000	689,700	777,800	865,900	865,900
Total	13,051,700	14,966,600	16,332,900	17,817,400	19,469,200	21,259,800	21,765,500
		14.7%	9.1%	9.1%	9.3%	9.2%	2.4%
Pfizer							
Domestic Volume Charges	4,042,000	4,218,500	4,402,000	4,592,700	4,793,900	4,988,000	5,005,700
COD Surcharges	714,800	773,200	824,500	879,300	937,700	999,700	1,001,400
TSS Surcharges	(116,700)	(104,100)	(97,800)	(86,200)	(67,600)	(39,300)	0
NH3 Surcharges	(194,400)	(147,600)	(117,900)	(88,400)	(58,800)	(29,100)	0
PHOS Surcharges	(27,100)	(20,800)	(16,900)	(14,200)	(9,800)	(5,000)	0
Ind Specific Charges	0	250,600	293,000	331,800	374,200	416,600	416,600
Total	4,418,600	4,969,800	5,286,900	5,615,000	5,969,600	6,330,900	6,423,700
		12.5%	6.4%	6.2%	6.3%	6.1%	1.5%
Graphics Packaging							
Domestic Volume Charges	2,652,600	2,890,900	3,149,300	3,430,600	3,737,800	4,062,200	4,070,800
COD Surcharges	4,172,900	4,568,200	4,930,600	5,325,900	5,754,100	6,215,400	6,215,400
TSS Surcharges	(535,700)	(482,700)	(458,700)	(408,800)	(323,800)	(190,500)	0
NH3 Surcharges	(249,100)	(190,800)	(154,200)	(116,400)	(78,300)	(39,100)	0
PHOS Surcharges	(246,500)	(193,200)	(159,500)	(123,400)	(84,900)	(43,300)	0
Ind Specific Charges	0	203,800	238,300	269,900	304,300	338,800	338,800
Total	5,794,200	6,796,200	7,545,800	8,377,800	9,309,200	10,343,500	10,625,000
		17.3%	11.0%	11.0%	11.1%	11.1%	2.7%
Inside City Monitored							
Domestic Volume Charges	626,200	685,500	750,900	822,100	900,300	983,300	986,200
COD Surcharges	278,700	306,400	331,600	359,100	389,000	421,000	422,100
TSS Surcharges	(68,300)	(53,200)	(42,200)	(25,500)	(1,100)	33,100	67,900
NH3 Surcharges	(38,800)	(30,200)	(23,700)	(18,400)	(12,000)	(6,000)	500
PHOS Surcharges	(46,900)	(38,700)	(29,100)	(23,800)	(16,300)	(6,700)	1,700
Ind Specific Charges	0	34,800	40,800	46,200	52,100	58,000	58,000
Total	750,900	904,600	1,028,300	1,159,700	1,312,000	1,482,700	1,536,400
		20.5%	13.7%	12.8%	13.1%	13.0%	3.6%
Outside City Monitored							
Domestic Volume Charges	734,600	763,900	794,300	825,800	858,700	890,300	892,500
COD Surcharges	938,200	1,011,200	1,075,500	1,144,200	1,217,300	1,295,100	1,306,000
TSS Surcharges	320,400	382,100	450,000	530,100	624,500	727,400	768,800
NH3 Surcharges	900	6,100	9,300	12,200	14,700	17,500	39,000
PHOS Surcharges	93,900	101,100	105,900	110,800	116,000	119,900	121,600
Ind Specific Charges	0	31,600	36,900	41,800	47,200	52,500	52,500
Total	2,088,000	2,296,000	2,471,900	2,664,900	2,878,400	3,102,700	3,180,400
		10.0%	7.7%	7.8%	8.0%	7.8%	2.5%



**Table 15b
Wastewater Utility
Projected Glide Path to Equalized Municipality Charges**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
		<i>TY 2031</i>		<i>(4) / (3) -1</i>		<i>(1)*[1+(5)]</i>							
		45.6%		Adjusted System Rate Adj ->		9.6%							
<i>Rates Glide Path Calculations</i>							<i>Glide Path Rates</i>						
Annual Volume <i>cu mtr</i>	Existing Rates \$/cu mtr	Indexed Rates \$/cu mtr	Target 2031 \$/cu mtr	Cumulative Change Glide Path->	Annual Change 6	2026 \$/cu mtr	Existing Rates	2026 9.6%	2027 7.7%	2028 7.6%	2029 7.4%	2030 8.0%	2031 0.0%
Wholesale Cost Pools													
Treatment	0.982	1.429	1.360	-4.8%	-0.8%	1.067	0.982	1.067	1.140	1.217	1.296	1.360	1.360
Interceptors	0.063	0.092	0.058	-37%	-7.4%	0.064	0.063	0.064	0.064	0.064	0.064	0.058	0.058
Lift Stations	0.000	0.000	0.131			0.098	0.000	0.098	0.106	0.114	0.122	0.132	0.131
Report by Water Meter "Normal" Rate	0.346	0.504	0.648	29%	4.3%	0.395	0.346	0.395	0.444	0.498	0.558	0.628	0.648
	1.045	1.521	1.418	-7%	-1.2%	1.131	1.045	1.132	1.205	1.282	1.361	1.418	1.418
Customer Unit Costs													
Portage	4,886,300	1.045	1.521	1.418		1.131	1.045	1.131	1.204	1.281	1.360	1.418	1.418
Galesburg	68,700	1.391	2.025	2.066		1.526	1.391	1.526	1.648	1.779	1.918	2.046	2.066
Vicksburg	323,700	1.045	1.521	1.418		1.131	1.045	1.131	1.204	1.281	1.360	1.418	1.418
Gull Lake	983,600	1.045	1.521	1.418		1.131	1.045	1.131	1.204	1.281	1.360	1.418	1.418
Augusta	37,500	1.045	1.521	1.549		1.229	1.045	1.229	1.310	1.395	1.482	1.550	1.549
Mattawan	393,700	1.045	1.521	1.418		1.131	1.045	1.131	1.204	1.281	1.360	1.418	1.418
South County	122,400	1.045	1.521	1.418		1.131	1.045	1.131	1.204	1.281	1.360	1.418	1.418
Charleston	36,400	1.045	1.521	1.549		1.229	1.045	1.229	1.310	1.395	1.482	1.550	1.549
Portage SW Int	332,400	1.391	2.025	2.066		1.526	1.391	1.526	1.648	1.779	1.918	2.046	2.066
Total	7,184,700												
Customer Monthly Charges - \$ (Volume x Rate)/12 *													
Portage	453,800	619,300	577,400	-6.8%	-1.2%	453,800	460,500	490,300	521,600	553,800	577,400	577,400	577,400
Galesburg	11,200	11,600	11,800	1.7%	0.3%	11,200	8,700	9,400	10,200	11,000	11,700	11,800	11,800
Vicksburg	28,900	41,000	38,300	-6.6%	-1.1%	28,900	30,500	32,500	34,600	36,700	38,300	38,300	38,300
Gull Lake	85,600	124,700	116,200	-6.8%	-1.2%	85,600	92,700	98,700	105,000	111,500	116,200	116,200	116,200
Augusta	6,000	4,800	4,800	0.0%	0.0%	6,000	3,800	4,100	4,400	4,600	4,800	4,800	4,800
Mattawan	36,500	49,900	46,500	-6.8%	-1.2%	36,500	37,100	39,500	42,000	44,600	46,500	46,500	46,500
South County	10,000	15,500	14,500	-6.5%	-1.1%	10,000	11,500	12,300	13,100	13,900	14,500	14,500	14,500
Charleston	3,200	4,600	4,700	2.2%	0.4%	3,200	3,700	4,000	4,200	4,500	4,700	4,700	4,700
Portage SW Int	50,800	56,100	57,200	2.0%	0.3%	50,800	42,300	45,700	49,300	53,100	56,700	57,200	57,200
Total	686,000	927,500	871,400	-6.0%	-1.0%	686,000	690,800	736,500	784,400	833,700	870,800	871,400	871,400

* Existing Charges are based on prior estimates of annual volume



**Table 15c
Wastewater Utility**

Projected Glide Path to Equalized Retail Rates and Calculation of 2026 Rates

	(1)	(2)	(3)	(4)	(5)	(6)
		<i>TY 2031</i>		<i>(3) / (2) -1</i>		<i>(1)*[1+(5)]</i>
		45.6%		<i>Adjusted System Rate Adj -></i>		9.6%
INSIDE CITY Service Charges - \$/bill						
Meter Size inches	Existing Rates \$/bill	Indexed Rates \$/bill	Target 2031 \$/bill	Cumulative Change	Annual Change 6	2026 \$/bill
Quarterly						
5/8	20.47	29.80	34.28	15%	2.4%	22.96
3/4	21.24	30.92	36.33	17%	2.7%	23.91
1	23.60	34.35	42.47	24%	3.6%	26.80
1 1/2	26.71	38.88	50.66	30%	4.5%	30.59
2	35.25	51.31	73.17	43%	6.1%	40.99
3	97.94	142.57	238.95	68%	9.0%	116.99
4	121.14	176.34	300.34	70%	9.3%	145.09
6	175.28	255.15	443.61	74%	9.7%	210.66
Flat Rate	120.36	175.20	187.24	7%	1.1%	133.38
Monthly						
5/8	15.23	22.17	20.64	-7%	-1.2%	16.49
3/4	15.50	22.56	21.32	-5%	-0.9%	16.83
1	16.27	23.68	23.37	-1%	-0.2%	17.79
1 1/2	17.34	25.24	26.10	3%	0.6%	19.11
2	20.21	29.42	33.60	14%	2.2%	22.65
3	41.19	59.96	88.86	48%	6.8%	48.20
4	48.95	71.25	109.33	53%	7.4%	57.62
6	67.00	97.53	157.08	61%	8.3%	79.50
OUTSIDE CITY Service Charges - \$/bill						
Meter Size inches	Existing Rates \$/bill	Indexed Rates \$/bill	Target 2031 \$/bill	Cumulative Change	Annual Change	2026 \$/bill
Quarterly						
5/8	25.03	36.44	34.28	-6%	-1.0%	27.15
3/4	26.29	38.27	36.33	-5%	-0.9%	28.57
1	30.03	43.71	42.47	-3%	-0.5%	32.76
1 1/2	35.01	50.96	50.66	-1%	-0.1%	38.33
2	48.72	70.92	73.17	3%	0.5%	53.68
3	149.65	217.84	238.95	10%	1.6%	166.56
4	187.04	272.27	300.34	10%	1.6%	208.38
6	274.27	399.24	443.61	11%	1.8%	305.93
Flat Rate	157.77	229.66	187.24	-18%	-3.3%	167.13
Monthly						
5/8	16.73	24.35	20.64	-15%	-2.7%	17.84
3/4	17.14	24.95	21.32	-15%	-2.6%	18.30
1	18.40	26.78	23.37	-13%	-2.2%	19.71
1 1/2	20.04	29.17	26.10	-11%	-1.8%	21.56
2	24.62	35.84	33.60	-6%	-1.1%	26.69
3	58.26	84.81	88.86	5%	0.8%	64.35
4	70.73	102.96	109.33	6%	1.0%	78.30
6	99.81	145.29	157.08	8%	1.3%	110.82
Dewatering	10.55	15.36	20.64	34%	5.0%	12.15
COMMODITY CHARGES						
	Existing Rates \$/cu mtr	Indexed Rates \$/cu mtr	Target 2031 \$/cu mtr	Cumulative Change	Annual Change	Adjusted 2026 \$/cu mtr
Inside City Retail	1.174	1.709	1.821	7%	1.1%	1.300
Outside City Retail	1.561	2.272	1.821	-20%	-3.6%	1.649

Table 15c (continued)
Wastewater Utility

Detailed Illustration of Projected Glide Path to Equalized Retail Rates

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	
Existing Rates \$/unit	Glide Path Adjustment	2026 Rates			2027 Rates			2028 Rates			2029 Rates			2030 Rates			2031 Rates			Indexed 2031 Rates \$/unit	Glide Path Rounding Variance	
		System Rate	Total Rate	2026 Rates \$/unit	System Rate	Total Rate	2027 Rates \$/unit	System Rate	Total Rate	2028 Rates \$/unit	System Rate	Total Rate	2029 Rates \$/unit	System Rate	Total Rate	2029 Rates \$/unit	System Rate	Total Rate	2031 Rates \$/unit			
		Proposed	[1+(2)] x [1+(3)]-1	(2) x [1+(4)]	Forecast - to be updated	[1+(2)] x [1+(6)]-1	(5) x [1+(7)]	Forecast - to be updated	[1+(2)] x [1+(9)]-1	(8) x [1+(10)]	Forecast - to be updated	[1+(2)] x [1+(12)]-1	(11) x [1+(13)]	Forecast - to be updated	[1+(2)] x [1+(12)]-1	(11) x [1+(13)]	Forecast - to be updated	[1+(2)] x [1+(18)]-1	Table 15	(17) x [1+(19)]	(20)/(21)-1	
INSIDE CITY Service Charges - \$/bill																						
Meter Size (inches)																						
Quarterly																						
5/8	20.47	2.4%	9.6%	12.2%	22.96	7.7%	10.2%	25.31	7.6%	10.1%	27.88	7.4%	9.9%	30.65	8.0%	10.6%	33.88	0.0%	2.4%	34.28	34.68	-1.2%
3/4	21.24	2.7%	9.6%	12.6%	23.91	7.7%	10.6%	26.45	7.6%	10.5%	29.24	7.4%	10.3%	32.26	8.0%	10.9%	35.79	0.0%	2.7%	36.33	36.76	-1.2%
1	23.60	3.6%	9.6%	13.5%	26.80	7.7%	11.6%	29.90	7.6%	11.5%	33.33	7.4%	11.3%	37.09	8.0%	11.9%	41.50	0.0%	3.6%	42.47	42.99	-1.2%
1 1/2	26.71	4.5%	9.6%	14.5%	30.59	7.7%	12.6%	34.43	7.6%	12.5%	38.72	7.4%	12.2%	43.46	8.0%	12.9%	49.05	0.0%	4.5%	50.66	51.26	-1.2%
2	35.25	6.1%	9.6%	16.3%	40.99	7.7%	14.3%	46.84	7.6%	14.2%	53.47	7.4%	13.9%	60.93	8.0%	14.6%	69.81	0.0%	6.1%	73.17	74.06	-1.2%
3	97.94	9.0%	9.6%	19.5%	116.99	7.7%	17.4%	137.32	7.6%	17.3%	161.04	7.4%	17.1%	188.50	8.0%	17.7%	221.88	0.0%	9.0%	238.95	241.82	-1.2%
4	121.14	9.3%	9.6%	19.8%	145.09	7.7%	17.7%	170.76	7.6%	17.6%	200.79	7.4%	17.4%	235.66	8.0%	18.0%	278.13	0.0%	9.3%	300.34	303.94	-1.2%
6	175.28	9.7%	9.6%	20.2%	210.66	7.7%	18.1%	248.79	7.6%	18.0%	293.55	7.4%	17.8%	345.72	8.0%	18.4%	409.43	0.0%	9.7%	443.61	448.97	-1.2%
Flat Rate	120.36	1.1%	9.6%	10.8%	133.38	7.7%	8.9%	145.25	7.6%	8.8%	158.03	7.4%	8.6%	171.61	8.0%	9.2%	187.40	0.0%	1.1%	187.24	189.49	-1.2%
Monthly																						
5/8	15.23	-1.2%	9.6%	8.3%	16.49	7.7%	6.4%	17.55	7.6%	6.3%	18.66	7.4%	6.1%	19.80	8.0%	6.7%	21.13	0.0%	-1.2%	20.64	20.88	-1.1%
3/4	15.50	-0.9%	9.6%	8.6%	16.83	7.7%	6.7%	17.96	7.6%	6.6%	19.14	7.4%	6.4%	20.36	8.0%	7.0%	21.78	0.0%	-0.9%	21.32	21.58	-1.2%
1	16.27	-0.2%	9.6%	9.4%	17.79	7.7%	7.5%	19.12	7.6%	7.4%	20.53	7.4%	7.2%	22.00	8.0%	7.8%	23.71	0.0%	-0.2%	23.37	23.66	-1.2%
1 1/2	17.34	0.6%	9.6%	10.2%	19.11	7.7%	8.3%	20.70	7.6%	8.2%	22.40	7.4%	8.0%	24.19	8.0%	8.6%	26.27	0.0%	0.6%	26.10	26.42	-1.2%
2	20.21	2.2%	9.6%	12.1%	22.65	7.7%	10.1%	24.94	7.6%	10.0%	27.44	7.4%	9.8%	30.13	8.0%	10.4%	33.27	0.0%	2.2%	33.60	34.01	-1.2%
3	41.19	6.8%	9.6%	17.0%	48.20	7.7%	15.0%	55.43	7.6%	14.9%	63.68	7.4%	14.7%	73.03	8.0%	15.3%	84.22	0.0%	6.8%	88.86	89.93	-1.2%
4	48.95	7.4%	9.6%	17.7%	57.62	7.7%	15.7%	66.65	7.6%	15.6%	77.02	7.4%	15.3%	88.84	8.0%	16.0%	103.04	0.0%	7.4%	109.33	110.66	-1.2%
6	67.00	8.3%	9.6%	18.7%	79.50	7.7%	16.6%	92.70	7.6%	16.5%	107.99	7.4%	16.3%	125.57	8.0%	16.9%	146.83	0.0%	8.3%	157.08	158.97	-1.2%
OUTSIDE CITY Service Charges - \$/bill																						
Meter Size (inches)																						
Quarterly																						
5/8	25.03	-1.0%	9.6%	8.5%	27.15	7.7%	6.6%	28.94	7.6%	6.5%	30.82	7.4%	6.3%	32.77	8.0%	6.9%	35.03	0.0%	-1.0%	34.28	34.68	-1.2%
3/4	26.29	-0.9%	9.6%	8.7%	28.57	7.7%	6.8%	30.50	7.6%	6.7%	32.53	7.4%	6.5%	34.64	8.0%	7.1%	37.09	0.0%	-0.9%	36.33	36.77	-1.2%
1	30.03	-0.5%	9.6%	9.1%	32.76	7.7%	7.2%	35.11	7.6%	7.1%	37.60	7.4%	6.9%	40.19	8.0%	7.5%	43.20	0.0%	-0.5%	42.47	42.99	-1.2%
1 1/2	35.01	-0.1%	9.6%	9.5%	38.33	7.7%	7.6%	41.24	7.6%	7.5%	44.33	7.4%	7.3%	47.56	8.0%	7.9%	51.31	0.0%	-0.1%	50.66	51.26	-1.2%
2	48.72	0.5%	9.6%	10.2%	53.68	7.7%	8.3%	58.12	7.6%	8.2%	62.86	7.4%	8.0%	67.86	8.0%	8.6%	73.67	0.0%	0.5%	73.17	74.05	-1.2%
3	149.65	1.6%	9.6%	11.3%	166.56	7.7%	9.4%	182.17	7.6%	9.3%	199.06	7.4%	9.1%	217.11	8.0%	9.7%	238.12	0.0%	1.6%	238.95	241.82	-1.2%
4	187.04	1.6%	9.6%	11.4%	208.38	7.7%	9.5%	228.13	7.6%	9.4%	249.52	7.4%	9.2%	272.40	8.0%	9.8%	299.04	0.0%	1.6%	300.34	303.97	-1.2%
6	274.27	1.8%	9.6%	11.5%	305.93	7.7%	9.6%	335.32	7.6%	9.5%	367.20	7.4%	9.3%	401.36	8.0%	9.9%	441.15	0.0%	1.8%	443.61	448.97	-1.2%
Flat Rate	157.77	-3.3%	9.6%	5.9%	167.13	7.7%	4.1%	173.98	7.6%	4.0%	180.94	7.4%	3.8%	187.83	8.0%	4.4%	196.07	0.0%	-3.3%	187.24	189.51	-1.2%
Monthly																						
5/8	16.73	-2.7%	9.6%	6.6%	17.84	7.7%	4.8%	18.69	7.6%	4.7%	19.56	7.4%	4.5%	20.44	8.0%	5.1%	21.48	0.0%	-2.7%	20.64	20.90	-1.2%
3/4	17.14	-2.6%	9.6%	6.8%	18.30	7.7%	4.9%	19.20	7.6%	4.8%	20.12	7.4%	4.6%	21.05	8.0%	5.2%	22.15	0.0%	-2.6%	21.32	21.58	-1.2%
1	18.40	-2.2%	9.6%	7.1%	19.71	7.7%	5.3%	20.75	7.6%	5.2%	21.83	7.4%	5.0%	22.92	8.0%	5.6%	24.20	0.0%	-2.2%	23.37	23.66	-1.2%
1 1/2	20.04	-1.8%	9.6%	7.6%	21.56	7.7%	5.7%	22.79	7.6%	5.6%	24.07	7.4%	5.4%	25.38	8.0%	6.0%	26.91	0.0%	-1.8%	26.10	26.42	-1.2%
2	24.62	-1.1%	9.6%	8.4%	26.69	7.7%	6.5%	28.44	7.6%	6.4%	30.27	7.4%	6.3%	32.16	8.0%	6.8%	34.36	0.0%	-1.1%	33.60	33.99	-1.1%
3	58.26	0.8%	9.6%	10.5%	64.35	7.7%	8.5%	69.85	7.6%	8.4%	75.75	7.4%	8.2%	81.99	8.0%	8.8%	89.24	0.0%	0.8%	88.86	89.94	-1.2%
4	70.73	1.0%	9.6%	10.7%	78.30	7.7%	8.8%	85.18	7.6%	8.7%	92.58	7.4%	8.5%	100.43	8.0%	9.1%	109.56	0.0%	1.0%	109.33	110.66	-1.2%
6	99.81	1.3%	9.6%	11.0%	110.82	7.7%	9.1%	120.92	7.6%	9.0%	131.81	7.4%	8.8%	143.42	8.0%	9.4%	156.92	0.0%	1.3%	157.08	158.97	-1.2%
Dewatering	10.55	5.0%	9.6%	15.1%	12.15	7.7%	13.1%	13.75	7.6%	13.0%	15.54	7.4%	12.8%	17.53	8.0%	13.5%	19.89	0.0%	5.0%	20.64	18.41	12.1%
COMMODITY CHARGES - \$/cu mtr																						
Inside City Retail	1.174	1.1%	9.6%	10.8%	1.300	7.7%	8.8%	1.415	7.6%	8.7%	1.539	7.4%	8.5%	1.670	8.0%	9.1%	1.823	0.0%	1.1%	1.821	1.842	-1.1%
Outside City Retail	1.561	-3.6%	9.6%	5.6%	1.649	7.7%	3.8%	1.712	7.6%	3.7%	1.775	7.4%	3.5%	1.837	8.0%	4.1%	1.912	0.0%	-3.6%	1.821	1.843	-1.2%

Appendix A

Test Year 2031 Wastewater Cost of Service Study and Rate Calculation Tables

Table 1
Wastewater Utility
Baseline Units of Service and Revenue Projections
Test Year 2031

Line No.	(1) Estimated Accounts	(2) Estimated Volume cu mtr	Estimated Monitored Pollutant Loadings				(7) Est. Existing Rate Revenue \$	
			(3) COD kg	(4) TSS kg	(5) NH3 kg	(6) PHOS kg		
Retail Customers								
1	Inside City	20,051	8,347,200	(a)	(a)	(a)	(a)	11,911,500
2	Outside City	17,095	5,594,400	(a)	(a)	(a)	(a)	10,852,700
3	Subtotal Retail	37,146	13,941,600					22,764,200
4	Municipalities	9	7,184,700	(a)	(a)	(a)	(a)	8,232,000
5	Subtotal "Domestic"	37,155	21,126,300					30,996,200
Monitored Industries								
6	Pfizer	1	3,530,100	3,456,700	914,300	64,600	28,700	4,418,600
7	Graphic Packaging	1	2,870,800	12,353,400	743,500	52,500	23,300	5,794,200
8	Inside City	5	491,400	968,400	74,600	900	700	750,900
9	Outside City	7	444,700	2,500,600	349,600	8,300	10,200	2,088,000
10	TOTAL	37,169	28,463,300	19,279,100	2,082,000	126,300	62,900	44,047,900
11	Inside City Subtotal	20,057	11,709,400	13,321,800	818,100	53,400	24,000	18,456,600
12	Outside City Subtotal	17,112	16,753,900	5,957,300	1,263,900	72,900	38,900	25,591,300
13	Monitored Industries	14	7,337,000	19,279,100	2,082,000	126,300	62,900	13,051,700

(a) Loadings not monitored, but assigned via application of "domestic strength" assumptions.

Municipalities Detail

14	Portage	1	4,886,300	(a)	(a)	(a)	(a)	5,445,600
15	Galesburg	1	68,700	(a)	(a)	(a)	(a)	134,400
16	Vicksburg	1	323,700	(a)	(a)	(a)	(a)	346,800
17	Gull Lake	1	983,600	(a)	(a)	(a)	(a)	1,027,200
18	Augusta	1	37,500	(a)	(a)	(a)	(a)	72,000
19	Mattawan	1	393,700	(a)	(a)	(a)	(a)	438,000
20	South County	1	122,400	(a)	(a)	(a)	(a)	120,000
21	Charleston	1	36,400	(a)	(a)	(a)	(a)	38,400
22	Portage SW Int	1	332,400	(a)	(a)	(a)	(a)	609,600
23	Total	9	7,184,700	(a)	(a)	(a)	(a)	8,232,000

Inside City Industrial Monitored

24	Allnex USA	1	360,900	879,300	41,100	200	300	592,800
25	Arvco	1	6,400	32,100	23,800	200	200	49,800
26	Continental Linen	1	55,300	26,400	3,700	0	0	46,300
27	Domestic Linen Supply	1	37,200	27,900	5,000	100	100	39,500
28	Kal Metal Finishers	1	31,600	2,700	1,000	400	100	22,500
29	Total	5	491,400	968,400	74,600	900	700	750,900

Outside City Industrial Monitored

30	Kalsec	1	186,500	1,372,400	95,000	200	800	871,700
31	Kalamazoo Brewing	1	218,400	819,200	186,400	3,300	4,700	869,000
32	Green Bay Pkg	1	12,300	70,000	21,900	600	100	74,200
33	Clean Earth Env	1	27,500	74,500	4,300	4,000	700	91,800
34	Waste Mgmt	1	0	0	0	0	0	0
35	Zoetis	1	0	142,300	32,600	0	1,000	117,100
36	Charles River	1	0	22,200	9,400	200	2,900	64,200
37	Total	7	444,700	2,500,600	349,600	8,300	10,200	2,088,000

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Table 2
Wastewater Utility
Customer Class Units of Service
Test Year 2031

Line No.	(1) Contributed Volume cu mtr	(3) "Retail" Infiltration & Inflow		(4) "Wholesale Proxy" Volume cu mtr	(5) Interceptor Related &I cu mtr	(6) Total Treated Volume cu mtr	(8) Strength				(11) Number of Bills	(12) Industrial Specific cu mtr
		(2) Customer Related cu mtr	(3) Volume Related cu mtr				(7) COD kg	(8) Suspended Solids kg	(9) NH3 kg	(10) PHOS kg		
Retail Customers												
1	8,347,200	1,213,600	641,400	10,202,200	1,133,600	11,335,800	3,990,000	2,161,900	152,800	67,900	101,596	
2	5,594,400	1,005,700	429,900	7,030,000	781,200	7,811,200	2,674,100	1,448,900	102,400	45,500	80,812	
3	13,941,600	2,219,300	1,071,300	17,232,200	1,914,800	19,147,000	6,664,100	3,610,800	255,200	113,400	182,408	0
4	7,184,700	153,000	30,800	7,368,500	818,700	8,187,200	3,522,200	1,908,500	134,800	59,800	92	
5	21,126,300	2,372,300	1,102,100	24,600,700	2,733,500	27,334,200	10,186,300	5,519,300	390,000	173,200	182,500	0
Monitored Industries												
6	3,530,100	0	0	3,530,100	392,300	3,922,400	3,456,700	914,300	64,600	28,700	12	3,530,100
7	2,870,800	0	0	2,870,800	319,000	3,189,800	12,353,400	743,500	52,500	23,300	12	2,870,800
8	491,400	5,000	37,700	534,100	59,400	593,500	980,800	149,400	9,100	4,100	60	491,400
9	444,700	5,000	34,100	483,800	53,700	537,500	2,519,900	365,500	15,900	10,900	84	656,800
10	28,463,300	2,382,300	1,173,900	32,019,500	3,557,900	35,577,400	29,497,100	7,692,000	532,100	240,200	182,668	7,549,100
11	11,709,400	1,218,600	679,100	13,607,100	1,512,000	15,119,100	17,324,200	3,054,800	214,400	95,300	101,668	3,362,200
12	16,753,900	1,163,700	494,800	18,412,400	2,045,900	20,458,300	12,172,900	4,637,200	317,700	144,900	81,000	4,186,900
13	7,337,000	10,000	71,800	7,418,800	824,400	8,243,200	19,310,800	2,172,700	142,100	67,000	168	7,549,100
14	17,748,500	2,229,300	1,143,100	21,120,900	2,346,900	20,278,000	22,518,200	4,869,200	332,700	151,700	182,564	4,019,000
15						20,360,100						
16						20,278,000						
Municipalities Detail												
17	4,886,300	0	0	4,886,300	542,900	5,429,200	2,335,700	1,265,600	89,400	39,700	12	
18	68,700	26,200	5,300	100,200	11,100	111,300	47,900	26,000	1,800	800	4	
19	323,700	0	0	323,700	36,000	359,700	154,700	83,800	5,900	2,600	12	
20	983,600	0	0	983,600	109,300	1,092,900	470,200	254,800	18,000	8,000	12	
21	37,500	0	0	37,500	4,200	41,700	17,900	9,700	700	300	12	
22	393,700	0	0	393,700	43,700	437,400	188,200	102,000	7,200	3,200	12	
23	122,400	0	0	122,400	13,600	136,000	58,500	31,700	2,200	1,000	12	
24	36,400	0	0	36,400	4,000	40,400	17,400	9,400	700	300	12	
25	332,400	126,800	25,500	484,700	53,900	538,600	231,700	125,500	8,900	3,900	4	
26	7,184,700	153,000	30,800	7,368,500	818,700	8,187,200	3,522,200	1,908,500	134,800	59,800	92	0
Inside City Industrial Monitored												
27	360,900	1,000	27,700	389,600	43,300	432,900	879,300	93,500	6,600	2,900	12	360,900
28	6,400	1,000	500	7,900	900	8,800	32,100	23,800	200	200	12	6,400
29	55,300	1,000	4,200	60,500	6,700	67,200	26,400	14,300	1,000	400	12	55,300
30	37,200	1,000	2,900	41,100	4,600	45,700	27,900	9,600	700	300	12	37,200
31	31,600	1,000	2,400	35,000	3,900	38,900	15,100	8,200	600	300	12	31,600
32	491,400	5,000	37,700	534,100	59,400	593,500	980,800	149,400	9,100	4,100	60	491,400
Outside City Industrial Monitored												
33	186,500	1,000	14,300	201,800	22,400	224,200	1,372,400	95,000	3,400	1,500	12	186,500
34	218,400	1,000	16,800	236,200	26,200	262,400	819,200	186,400	4,000	4,700	12	218,400
35	12,300	1,000	900	14,200	1,600	15,800	70,000	21,900	600	100	12	12,300
36	27,500	1,000	2,100	30,600	3,400	34,000	74,500	7,100	4,000	700	12	27,500
37	0	1,000	0	1,000	100	1,100	0	0	0	0	12	0
38	0	0	0	0	0	0	142,300	32,600	2,300	1,000	12	125,300
39	0	0	0	0	0	0	41,500	22,500	1,600	2,900	12	86,800
40	444,700	5,000	34,100	483,800	53,700	537,500	2,519,900	365,500	15,900	10,900	84	656,800

Table 2a
Users of Each Unit Process
Test Year 2031

	(1)	(2)	(3)	(4)	(5)	
Line No.	<u>Customer Class</u>	KWRP Common to All	Municipal Interceptor	Lift Stations	Local Collection Infrastructure	Industrial Specific
	<u>Retail Customers</u>					
1	Inside City	✓	✓	✓	✓	--
2	Outside City	✓	✓	✓	✓	--
3	Municipalities (Wholesale)	✓	✓	✓ ~	--	--
	<u>Monitored Industries</u>					
4	Pfizer	✓	✓	--	--	✓
5	Graphic Packaging	✓	✓	--	--	✓
6	Inside City	✓	✓	✓	✓	✓
7	Outside City	✓	✓	✓	✓	✓

~ 2 Municipalities (Augusta and Charleston) are allocated Lift Station costs

Table 2b
Wastewater Utility
Summary of Wastewater Treatment Allocation Factors
Test Year 2031

<u>No.</u>	<u>Component</u>	<u>Volume</u>	<u>COD</u>	<u>SS</u>	<u>NH3</u>	<u>PHOS</u>	<u>Industrial Specific</u>
<u>Operating Expenses</u>							
1	Primary Treatment	0%	20%	58%	9%	13%	
2	Secondary Treatment	0%	27%	13%	31%	29%	
3	Solids Handling and Removal	0%	41%	58%	0%	1%	
4	Tertiary Treatment	0%	8%	58%	0%	34%	
5	Regulatory Sampling & Analysis		8%	21%	4%	6%	60%
<u>Capital Revenue Requirements</u>							
6	Primary Treatment	100%	0%	0%	0%	0%	0%
7	Secondary Treatment	22%	64%	5%	9%	0%	0%
8	Solids Handling and Removal	0%	41%	58%	0%	1%	0%
9	Tertiary Treatment	7%	7%	72%	7%	7%	0%

Table 3
Wastewater Utility
Cost of Service to be Recovered from Rates
Test Year 2031

<u>Line No.</u>	(1) <u>O&M Expense</u> \$	(2) <u>Capital Costs</u> \$	(3) <u>Total</u> \$
	Revenue Requirements		
1	36,392,600		36,392,600
2	700,000		700,000
3		17,049,000	17,049,000
4		600,000	600,000
5		11,183,400	11,183,400
6	<u>37,092,600</u>	<u>28,832,400</u>	<u>65,925,000</u>
	Less Other Income Sources		
7	(316,000)	(1,264,000)	(1,580,000)
8	(226,200)		(226,200)
9	<u>(542,200)</u>	<u>(1,264,000)</u>	<u>(1,806,200)</u>
10	36,550,400	27,568,400	64,118,800
	<u>Total Cost of Service on a Utility Basis</u>		
11	36,550,400		36,550,400
12		600,000	600,000
13		8,930,000	8,930,000
14		18,038,400	18,038,400
15	<u>36,550,400</u>	<u>27,568,400</u>	<u>64,118,800</u>
	<u>System Rate of Return Calculation</u>		
16			18,038,400
17			291,760,400
18			6.18%

Table 4
Wastewater Utility
Allocation of Operation and Maintenance Expense to Functional Cost Components
Test Year 2031

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	Common to All Wholesale										Local	Industrial	Industrial
Line No.	Item	Total	Volume	COD	Suspended Solids	NH3	PHOS	Customer	Municipal Interceptor	Lift Stations	Collection Infrastructure	Surveillance	Pretreatment Program
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Administrative	3,868,600	229,200	850,500	1,261,700	241,200	381,500	267,200	108,300	149,300	379,700	0	0
2	Customer Service	2,246,200						2,246,200					
3	Municipal Collection	4,102,000							910,200		3,191,800		
4	Lift Stations Treatment Process	1,255,300								1,255,300			
5	Raw Pumping	374,400	374,400	0	0	0	0						
6	Primary Treatment	1,412,200	0	282,400	819,100	127,100	183,600						
7	Secondary	5,189,700	0	1,401,200	674,700	1,608,800	1,505,000						
8	Solids Handling	10,271,900	0	4,211,500	5,957,700	0	102,700						
9	Tertiary Treatment	2,806,300	0	224,500	1,627,700	0	954,100						
10	General Plant	3,376,300	63,100	1,030,300	1,528,500	292,200	462,200						
11	Industrial Specific	1,489,700										744,900	744,800
12	TOTAL	36,392,600	666,700	8,000,400	11,869,400	2,269,300	3,589,100	2,513,400	1,018,500	1,404,600	3,571,500	744,900	744,800
13	OPEB O&M Expense	700,000	41,600	153,900	228,300	43,600	69,000	48,300	19,600	27,000	68,700	0	0
14	less: Other Income Credit	(542,200)	(32,200)	(119,200)	(176,800)	(33,800)	(53,500)	(37,400)	(15,200)	(20,900)	(53,200)	0	0
15	IPP Cost Recovery	0		59,400	159,700	30,500	48,300						(297,900)
16	ISS Cost Recovery	0		59,400	159,800	30,500	48,300					(298,000)	
17	Net Allocated Total	36,550,400	676,100	8,153,900	12,240,400	2,340,100	3,701,200	2,524,300	1,022,900	1,410,700	3,587,000	446,900	446,900
18	Direct Treatment	20,054,500	374,400	6,119,600	9,079,200	1,735,900	2,745,400						
19	Indirect Treatment Allocation		1.9%	30.5%	45.3%	8.7%	13.7%						
20	Direct	32,524,000	437,500	7,149,900	10,607,700	2,028,100	3,207,600	2,246,200	910,200	1,255,300	3,191,800		
21	Indirect Allocation		1.3%	22.0%	32.6%	6.2%	9.9%	6.9%	2.8%	3.9%	9.8%		

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Table 5
Wastewater Utility
Development of Capital Asset Values for Cost of Service
Test Year 2031

No.		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		Original Cost			Accumulated Depreciation			Original Cost Less Depreciation			Annual Depreciation Expense		
		Existing	CIP Add'ns	Total	Existing	CIP Add'ns	Total	Existing	CIP Add'ns	Total	Existing	CIP Add'ns	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	COLLECTION SYSTEM												
1	Lift Stations	8,348,500	5,500,000	13,848,500	3,228,600	447,500	3,676,100	5,119,900	5,052,500	10,172,400	180,000	126,900	306,900
2	Sanitary Sewer Connection	6,589,900	4,112,500	10,702,400	2,826,100	339,300	3,165,400	3,763,800	3,773,200	7,537,000	131,600	82,300	213,900
	<u>Sewer Collectors</u>												
3	Municipal Interceptor	9,778,200	8,332,600	18,110,800	8,298,000	719,300	9,017,300	1,480,200	7,613,300	9,093,500	48,200	162,500	210,700
4	City Only Infrastructure	30,916,800	2,312,000	33,228,800	21,601,800	223,700	21,825,500	9,315,000	2,088,300	11,403,300	317,100	44,600	361,700
5	Township Only Infrastructure	0	16,360,000	16,360,000	0	1,097,200	1,097,200	0	15,262,800	15,262,800	0	302,000	302,000
6	All Other "Common"	11,090,500	0	11,090,500	6,287,500	0	6,287,500	4,803,000	0	4,803,000	203,500	0	203,500
7	Total Collection System Investment	66,723,900	36,617,100	103,341,000	42,242,000	2,827,000	45,069,000	24,481,900	33,790,100	58,272,000	880,400	718,300	1,598,700
	TREATMENT												
8	Raw Pumping	905,500	3,200,000	4,105,500	842,200	280,000	1,122,200	63,300	2,920,000	2,983,300	6,700	80,000	86,700
9	Preliminary and Primary Treatment	6,779,500	3,800,000	10,579,500	6,626,100	257,500	6,883,600	153,400	3,542,500	3,695,900	72,600	95,000	167,600
	<u>Secondary Treatment</u>												
10	Aeration	2,643,800	0	2,643,800	2,553,600	0	2,553,600	90,200	0	90,200	20,400	0	20,400
11	Secondary Pumping/Clarif	17,375,300	13,476,000	30,851,300	15,048,800	1,229,900	16,278,700	2,326,500	12,246,100	14,572,600	458,100	336,900	795,000
12	Secondary Treatment 2013	0	0	0	0	0	0	0	0	0	0	0	0
13	Carbon Regeneration	906,900	0	906,900	856,600	0	856,600	50,300	0	50,300	17,200	0	17,200
14	Tertiary Filters	26,402,800	0	26,402,800	9,552,600	0	9,552,600	16,850,200	0	16,850,200	448,600	0	448,600
	<u>Sludge Treatment</u>												
15	Primary Sludge Thickeners	60,100	0	60,100	60,100	0	60,100	0	0	0	1,300	0	1,300
16	Primary Sludge Pumping	3,883,600	0	3,883,600	3,318,000	0	3,318,000	565,600	0	565,600	19,200	0	19,200
17	Incinerator	91,000	0	91,000	74,600	0	74,600	16,400	0	16,400	1,300	0	1,300
18	Spent Carbon Thickeners	6,900	1,540,000	1,546,900	6,900	134,800	141,700	0	1,405,200	1,405,200	0	38,500	38,500
19	Solids Handling Process	37,524,700	135,600,000	173,124,700	14,636,000	5,145,000	19,781,000	22,888,700	130,455,000	153,343,700	701,500	3,390,000	4,091,500
20	Septic Facility	530,100	0	530,100	473,200	0	473,200	56,900	0	56,900	3,900	0	3,900
21	WWTP General	24,574,200	19,742,100	44,316,300	19,676,800	2,257,700	21,934,500	4,897,400	17,484,400	22,381,800	473,000	731,000	1,204,000
22	Net Treatment	121,684,400	177,358,100	299,042,500	73,725,500	9,304,900	83,030,400	47,958,900	168,053,200	216,012,100	2,223,800	4,671,400	6,895,200
23	Subtotal	188,408,300	213,975,200	402,383,500	115,967,500	12,131,900	128,099,400	72,440,800	201,843,300	274,284,100	3,104,200	5,389,700	8,493,900
24	Total Wastewater General	16,830,600	2,792,000	19,622,600	11,047,700	588,600	11,636,300	5,782,900	2,203,400	7,986,300	302,900	133,200	436,100
25	TOTAL	205,238,900	216,767,200	422,006,100	127,015,200	12,720,500	139,735,700	78,223,700	204,046,700	282,270,400	3,407,100	5,522,900	8,930,000

Table 6
Wastewater Utility
Allocation of Rate Base to Functional Cost Components
Test Year 2031

Line No.	Book Value Investment - \$	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		Total	Volume	COD	Suspended Solids	NH3	PHOS	Customer	Municipal Interceptor	Lift Stations	Local Collection Infrastructure
Common to All Wholesale											
COLLECTION SYSTEM											
1	Lift Stations	10,172,400								10,172,400	
2	Sanitary Sewer Connection	7,537,000									7,537,000
Sewer Collectors											
3	Municipal Interceptor	9,093,500							9,093,500		
4	City Infrastructure	11,403,300									11,403,300
5	Township Infrastructure	15,262,800									15,262,800
6	All Other Infrastructure	4,803,000									4,803,000
7	Total Collection System Investment	58,272,000	0	0	0	0	0	0	9,093,500	10,172,400	39,006,100
TREATMENT											
8	Raw Pumping	2,983,300	2,983,300	0	0	0	0				
9	Preliminary and Primary Treatment	3,695,900	3,695,900	0	0	0	0				
Secondary Treatment											
10	Aeration	90,200	19,900	57,700	4,500	8,100	0				
11	Secondary Pumping/Clarif	14,572,600	3,206,000	9,326,500	728,600	1,311,500	0				
12	Carbon Regeneration	50,300	11,100	32,200	2,500	4,500	0				
13	Tertiary & Outfall	16,850,200	1,179,600	1,179,500	12,132,100	1,179,500	1,179,500				
Sludge Treatment											
14	Primary Sludge Thickeners	0	0	0	0	0	0				
15	Primary Sludge Pumping	565,600	0	231,900	328,000	0	5,700				
16	Incinerator	16,400	0	6,700	9,500	0	200				
17	Spent Carbon Thickeners	1,405,200	0	576,100	815,000	0	14,100				
18	Solids Handling Process	153,343,700	100	62,870,900	88,939,300	0	1,533,400				
19	Septage Facility	56,900	56,900	0	0	0	0				
20	WWTP General	22,381,800	1,289,200	8,586,200	11,901,100	289,400	315,900				
21	Net Treatment	216,012,100	12,442,000	82,867,700	114,860,600	2,793,000	3,048,800	0	0	0	0
22	Subtotal	274,284,100	12,442,000	82,867,700	114,860,600	2,793,000	3,048,800	0	9,093,500	10,172,400	39,006,100
23	Wastewater General	7,986,300	353,700	2,355,000	3,264,200	79,400	86,600	0	288,300	322,500	1,236,600
24	Net Plant Investment	282,270,400	12,795,700	85,222,700	118,124,800	2,872,400	3,135,400	0	9,381,800	10,494,900	40,242,700
25	Working Capital	9,273,200	410,500	2,734,500	3,790,200	92,200	100,600	0	334,800	374,500	1,435,900
26	Inventories	216,800	9,500	63,900	88,600	2,200	2,400	0	7,800	8,800	33,600
27	Rate Base	291,760,400	13,215,700	88,021,100	122,003,600	2,966,800	3,238,400	0	9,724,400	10,878,200	41,712,200
28	Payment in Lieu of Taxes	600,000	34,500	230,200	319,000	7,800	8,500				
29	WWTP Allocation Factors		5.8%	38.4%	53.2%	1.3%	1.4%				
30	General Allocation Factors		4.4%	29.5%	40.9%	1.0%	1.1%	0.0%	3.6%	4.0%	15.5%

Table 7
Wastewater Utility
Allocation of Depreciation Expense to Functional Cost Components
Test Year 2031

Line No.	Annual Local Depreciation Expense - \$	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
		Total	Volume	COD	Suspended Solids	NH3	PHOS	Customer	Municipal Interceptor	Lift Stations	Local Collection Infrastructure
COLLECTION SYSTEM											
1	Lift Stations	306,900								306,900	
2	Sanitary Sewer Connection	213,900									213,900
<u>Sewer Collectors</u>											
3	Municipal Interceptor	210,700							210,700		
4	City Infrastructure	361,700									361,700
5	Township Infrastructure	302,000									302,000
6	All Other Infrastructure	203,500									203,500
7	Total Collection System Investment	1,598,700	0	0	0	0	0	0	210,700	306,900	1,081,100
TREATMENT											
8	Raw Pumping	86,700	86,700	0	0	0	0				
9	Preliminary and Primary Treatment	167,600	167,600	0	0	0	0				
<u>Secondary Treatment</u>											
10	Aeration	20,400	4,500	13,100	1,000	1,800	0				
11	Secondary Pumping/Clarif	795,000	174,800	508,800	39,800	71,600	0				
12	Carbon Regeneration	17,200	3,800	11,000	900	1,500	0				
13	Tertiary & Outfall	448,600	31,400	31,400	323,000	31,400	31,400				
<u>Sludge Treatment</u>											
14	Primary Sludge Thickeners	1,300	0	500	800	0	0				
15	Primary Sludge Pumping	19,200	0	7,900	11,100	0	200				
16	Incinerator	1,300	0	500	800	0	0				
17	Spent Carbon Thickeners	38,500	0	15,800	22,300	0	400				
18	Solids Handling Process	4,091,500	0	1,677,500	2,373,100	0	40,900				
19	Septage Facility	3,900	3,900	0	0	0	0				
20	WWTP General	1,204,000	100,000	479,500	586,600	22,500	15,400				
21	Net Treatment	6,895,200	572,700	2,746,000	3,359,400	128,800	88,300	0	0	0	0
22	Subtotal	8,493,900	572,700	2,746,000	3,359,400	128,800	88,300	0	210,700	306,900	1,081,100
23	Wastewater General	436,100	28,100	135,600	165,900	6,400	4,400	0	12,600	18,400	64,700
24	TOTAL	8,930,000	600,800	2,881,600	3,525,300	135,200	92,700	0	223,300	325,300	1,145,800
25	<i>WWTP Allocation Factors</i>		8.3%	39.8%	48.7%	1.9%	1.3%				
26	<i>General Allocation Factors</i>		6.5%	31.1%	38.0%	1.5%	1.0%	0.0%	2.9%	4.2%	14.8%

Table 8
Wastewater Utility
Unit Costs of Service
Test Year 2031

Line No.	Description	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8)	(9)
		Common to All Wholesale									Local
		<u>Total</u>	<u>Volume</u>	<u>COD</u>	<u>Suspended Solids</u>	<u>NH3</u>	<u>PHOS</u>	<u>Customer</u>	<u>Municipal Interceptor</u>	<u>Lift Stations</u>	<u>Collection Infrastructure</u>
1	Total Units of Service Units		35,577,400 <i>cu mtr</i>	29,497,100 <i>kg</i>	7,692,000 <i>kg</i>	532,100 <i>kg</i>	240,200 <i>kg</i>	182,668 <i>Bills</i>	35,577,400 <i>cu mtr</i>	20,360,100 <i>cu mtr</i>	20,278,000 <i>cu mtr</i>
2	Net Operating Expense	36,550,400	676,100	8,153,900	12,240,400	2,340,100	3,701,200	2,524,300	1,022,900	1,410,700	3,587,000
3	Unit Cost, \$/Unit		0.0190	0.2764	1.5913	4.3979	15.4088	13.8191	0.0288	0.0693	0.1769
4	Payment in Lieu of Taxes	600,000	34,500	230,200	319,000	7,800	8,500	0	0	0	0
5	Unit Cost, \$/Unit		0.0010	0.0078	0.0415	0.0147	0.0354	0.0000	0.0000	0.0000	0.0000
6	Depreciation Expense	8,930,000	600,800	2,881,600	3,525,300	135,200	92,700	0	223,300	325,300	1,145,800
7	Unit Cost, \$/Unit		0.0169	0.0977	0.4583	0.2541	0.3859	0.0000	0.0063	0.0160	0.0565
8	Rate Base	291,760,400	13,215,700	88,021,100	122,003,600	2,966,800	3,238,400	0	9,724,400	10,878,200	41,712,200
9	Return on Rate Base @ 6.18%	18,038,400	817,100	5,442,000	7,543,000	183,400	200,200	0	601,200	672,600	2,578,900
10	Unit Cost, \$/Unit		0.0230	0.1845	0.9806	0.3447	0.8335	0.0000	0.0169	0.0330	0.1272
11	Total Cost of Service	64,118,800	2,128,500	16,707,700	23,627,700	2,666,500	4,002,600	2,524,300	1,847,400	2,408,600	7,311,700
12	Unit Cost, \$/Unit		0.0598	0.5664	3.0717	5.0113	16.6636	13.8191	0.0519	0.1183	0.3606

Table 9
Wastewater Utility
Allocation of Cost of Service to Customer Classes
Test Year 2031

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Line No.	Description	Common to All Wholesale									Local
		Total	Volume	COD	Suspended Solids	NH3	PHOS	Customer	Municipal Interceptor	Lift Stations	Collection Infrastructure
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Total Cost of Service	64,118,800	2,128,500	16,707,700	23,627,700	2,666,500	4,002,600	2,524,300	1,847,400	2,408,600	7,311,700
2	Unit Costs of Service		0.0598	0.5664	3.0717	5.0113	16.6636	13.8191	0.0519	0.1183	0.3606
Retail Customers											
1	Inside City	18,897,200	678,200	2,260,000	6,640,800	765,700	1,131,500	1,404,000	588,600	1,341,000	4,087,400
2	Outside City	12,966,900	467,300	1,514,700	4,450,600	513,200	758,200	1,116,700	405,600	924,100	2,816,500
3	Subtotal Retail	31,864,100	1,145,500	3,774,700	11,091,400	1,278,900	1,889,700	2,520,700	994,200	2,265,100	6,903,900
4	Municipalities	10,455,700	489,800	1,994,900	5,862,500	675,500	996,400	1,600	425,300	9,700	0
5	Subtotal "Domestic"	42,319,800	1,635,300	5,769,600	16,953,900	1,954,400	2,886,100	2,522,300	1,419,500	2,274,800	6,903,900
Monitored Industries											
6	Pfizer	6,424,900	234,700	1,957,900	2,808,500	323,700	478,200	200	203,700		
7	Graphic Packaging	10,628,900	190,800	6,997,200	2,283,800	263,100	388,300	200	165,600		
8	Inside City	1,538,000	35,400	555,700	458,900	45,600	68,300	1,000	30,900	70,100	214,000
9	Outside City	3,207,800	32,100	1,427,300	1,122,700	79,500	181,700	1,400	27,900	63,500	193,800
10	TOTAL	64,119,400	2,128,300	16,707,700	23,627,800	2,666,300	4,002,600	2,525,100	1,847,600	2,408,400	7,311,700
11	Inside City Subtotal	31,064,100	904,400	9,812,900	9,383,500	1,074,400	1,588,100	1,405,200	785,100	1,411,100	4,301,400
12	Outside City Subtotal	33,055,300	1,223,900	6,894,800	14,244,300	1,591,900	2,414,500	1,119,900	1,062,500	997,300	3,010,300
13	Monitored Industries	21,799,600	493,000	10,938,100	6,673,900	711,900	1,116,500	2,800	428,100	133,600	407,800
Municipalities Detail											
14	Portage	6,927,000	324,800	1,323,000	3,887,600	448,000	661,500	200	281,900		
15	Galesburg	141,900	6,700	27,100	79,900	9,000	13,300	100	5,800		
16	Vicksburg	458,300	21,500	87,600	257,400	29,600	43,300	200	18,700		
17	Gull Lake	1,394,900	65,400	266,300	782,700	90,200	133,300	200	56,800		
18	Augusta	58,200	2,500	10,100	29,800	3,500	5,000	200	2,200	4,900	
19	Mattawan	558,400	26,200	106,600	313,300	36,100	53,300	200	22,700		
20	South County	173,600	8,100	33,100	97,400	11,000	16,700	200	7,100		
21	Charleston	56,800	2,400	9,900	28,900	3,500	5,000	200	2,100	4,800	
22	Portage SW Int	686,600	32,200	131,200	385,500	44,600	65,000	100	28,000		
23	Total	10,455,700	489,800	1,994,900	5,862,500	675,500	996,400	1,600	425,300	9,700	0
Inside City Industrial Monitored											
24	Allnex USA	1,165,300	25,900	498,100	287,200	33,100	48,300	200	22,500	51,200	156,100
25	Arvco	101,800	500	18,200	73,100	1,000	3,300	200	500	1,000	3,200
26	Continental Linen	116,900	4,000	15,000	43,900	5,000	6,700	200	3,500	7,900	24,200
27	Domestic Linen Supply	85,400	2,700	15,800	29,500	3,500	5,000	200	2,400	5,400	16,500
28	Kal Metal Finishers	68,600	2,300	8,600	25,200	3,000	5,000	200	2,000	4,600	14,000
29	Total	1,538,000	35,400	555,700	458,900	45,600	68,300	1,000	30,900	70,100	214,000
Outside City Industrial Monitored											
30	Kalsec	1,265,800	13,400	777,400	291,800	17,000	25,000	200	11,600	26,500	80,800
31	Kalamazoo Brewing	1,315,900	15,700	464,000	572,600	20,000	78,300	200	13,600	31,000	94,600
32	Green Bay Pkg	122,600	900	39,600	67,300	3,000	1,700	200	800	1,900	5,700
33	Clean Earth Env	119,300	2,000	42,200	21,800	20,000	11,700	200	1,800	4,000	12,300
34	Waste Mgmt	900	100	0	0	0	0	200	100	100	400
35	Zoetis	223,900	0	80,600	100,100	11,500	16,700	200	0	0	0
36	Charles River	159,400	0	23,500	69,100	8,000	48,300	200	0	0	0
37	Total	3,207,800	32,100	1,427,300	1,122,700	79,500	181,700	1,400	27,900	63,500	193,800

Table 10
Wastewater Utility

Customer Class Cost of Service Compared to Existing Rate Revenue
Test Year 2031

Line No.		(1) Allocated Cost of Service	(2) Revenue Existing Rates	(3) Variance	(4) % Variance
Retail Customers					
1	Inside City	18,897,200	11,911,500	6,985,700	58.6%
2	Outside City	12,966,900	10,852,700	2,114,200	19.5%
3	Subtotal Retail	31,864,100	22,764,200	9,099,900	40.0%
4	Municipalities	10,455,700	8,232,000	2,223,700	27.0%
5	Subtotal "Domestic"	42,319,800	30,996,200	11,323,600	36.5%
Monitored Industries					
6	Pfizer	6,424,900	4,418,600	2,006,300	45.4%
7	Graphic Packaging	10,628,900	5,794,200	4,834,700	83.4%
8	Inside City	1,538,000	750,900	787,100	104.8%
9	Outside City	3,207,800	2,088,000	1,119,800	53.6%
10	TOTAL	64,119,400	44,047,900	20,071,500	45.6%
11	Inside City Subtotal	31,064,100	18,456,600	12,607,500	68.3%
12	Outside City Subtotal	33,055,300	25,591,300	7,464,000	29.2%
13	Monitored Industries	21,799,600	13,051,700	8,747,900	67.0%
<u>Municipalities Detail</u>					
14	Portage	6,927,000	5,445,600	1,481,400	27.2%
15	Galesburg	141,900	134,400	7,500	5.6%
16	Vicksburg	458,300	346,800	111,500	32.2%
17	Gull Lake	1,394,900	1,027,200	367,700	35.8%
18	Augusta	58,200	72,000	(13,800)	-19.2%
19	Mattawan	558,400	438,000	120,400	27.5%
20	South County	173,600	120,000	53,600	44.7%
21	Charleston	56,800	38,400	18,400	47.9%
22	Portage SW Int	686,600	609,600	77,000	12.6%
23	Total	10,455,700	8,232,000	2,223,700	27.0%
<u>Inside City Industrial Monitored</u>					
24	Allnex USA	1,165,300	592,800	572,500	96.6%
25	Arvco	101,800	49,800	52,000	104.4%
26	Continental Linen	116,900	46,300	70,600	152.5%
27	Domestic Linen Supply	85,400	39,500	45,900	116.2%
28	Kal Metal Finishers	68,600	22,500	46,100	204.9%
29	Total	1,538,000	750,900	787,100	104.8%
<u>Outside City Industrial Monitored</u>					
30	Kalsec	1,265,800	871,700	394,100	45.2%
31	Kalamazoo Brewing	1,315,900	869,000	446,900	51.4%
32	Green Bay Pkg	122,600	74,200	48,400	65.2%
33	Clean Earth Env	119,300	91,800	27,500	30.0%
34	Waste Mgmt	900	0	900	0.0%
35	Zoetis	223,900	117,100	106,800	91.2%
36	Charles River	159,400	64,200	95,200	148.3%
37	Total	3,207,800	2,088,000	1,119,800	53.6%



Table 11
Wastewater Utility
Calculation of Municipal Wholesale Charges
Test Year 2031

Line No.	(1)	(2)	(3)	(4)	(5)
1 - Unit Cost Determination	Allocated Cost of Service				Billed Volume
	<u>Total</u>	<u>Treatment</u>	<u>Interceptors</u>	<u>Lift Stations</u>	
<u>Municipalities</u>					
1	6,927,000	6,645,100	281,900	0	4,886,300
2	141,900	136,100	5,800	0	68,700
3	458,300	439,600	18,700	0	323,700
4	1,394,900	1,338,100	56,800	0	983,600
5	58,200	51,100	2,200	4,900	37,500
6	558,400	535,700	22,700	0	393,700
7	173,600	166,500	7,100	0	122,400
8	56,800	49,900	2,100	4,800	36,400
9	686,600	658,600	28,000	0	332,400
10	10,455,700	10,020,700	425,300	9,700	7,184,700
11	9,512,200	9,125,000	387,200	0	6,709,700
12	115,000	101,000	4,300	9,700	73,900
13	828,500	794,700	33,800	0	401,100
<hr/>					
2 - Unit Cost Summary		<u>Allocated Cost of Service</u>	<u>Billed Volume</u>	<u>Effective Unit Cost</u>	
		\$	cu mtr	\$/cu mtr	
<u>Wholesale Cost Pools</u>					
1		9,125,000	6,709,700	1.36	
2		387,200	6,709,700	0.058	
3				1.418	
4		9,700	73,900	0.131	
5				0.648	
6		828,500	401,100	2.066	
<hr/>					
3 - Monthly Charge Calculations		<u>Billed Volume</u>	<u>Effective Unit Cost</u>	<u>Allocated Cost of Service</u>	<u>Fixed Monthly Charge</u>
		cu mtr	\$/cu mtr	\$	\$/mo
<u>Municipalities</u>					
1		4,886,300	1.418	6,928,800	577,400
2		68,700	2.066	141,900	11,800
3		323,700	1.418	459,000	38,300
4		983,600	1.418	1,394,700	116,200
5		37,500	1.549	58,100	4,800
6		393,700	1.418	558,300	46,500
7		122,400	1.418	173,600	14,500
8		36,400	1.549	56,400	4,700
9		332,400	2.066	686,700	57,200
10	Total	7,184,700		10,457,500	871,400

Table 12
Wastewater Utility
Calculation of Wastewater Readiness to Serve Charges
Test Year 2031

	(1)	(2)	(3)	(4)	(5)	(6)
		Common to All <u>Treatment</u>	Municipal <u>Interceptor</u>	Lift <u>Stations</u>	Local Collection <u>Infrastructure</u>	<u>Total</u>
1 Volume Unit Cost - \$/cu mtr <i>Table 9 -></i>		0.0598	0.0519	0.1183	0.3606	
<u>I/I volume to recover in Svc Charge - cu mtr</u>						
2 "Retail" Customer Related		2,382,300	2,382,300	2,382,300	2,382,300	
3 "Retail" Volume Related		1,173,900	0	1,173,900	1,173,900	
4 Interceptor Related		<u>3,557,900</u>	<u>0</u>	<u>3,557,900</u>	<u>3,557,900</u>	
5 Total I/I volume in Svc Charge - cu mtr		7,114,100	2,382,300	7,114,100	7,114,100	
6 Total I/I Costs in Svc Charge - \$ (1)*(5)		425,600	123,700	841,600	2,565,200	3,956,100
7 Equivalent Connections						48,325
8 Infiltration/Inflow Unit Cost recovered in Service Charge - \$/equiv conn (6)/(7)						81.86
9 Service Charge Schedule						

Meter <u>Size</u> inches	Equivalent Connection <u>Factor</u>	Infiltration /Inflow <u>Unit Cost</u> \$/yr <i>Line 8</i>	Unit Billing <u>Cost</u> \$/bill <i>Table 8</i>	Service Charge	
				Monthly <u>Bill</u> \$/bill <i>(2)/12 + (3)</i>	Quarterly <u>Bill</u> \$/bill <i>(2)/4 + (3)</i>
5/8	1.0	81.86	13.82	20.64	34.28
3/4	1.1	90.05	13.82	21.32	36.33
1	1.4	114.61	13.82	23.37	42.47
1 1/2	1.8	147.36	13.82	26.10	50.66
2	2.9	237.41	13.82	33.60	73.17
3	11.0	900.51	13.82	88.86	238.95
4	14.0	1,146.10	13.82	109.33	300.34
6	21.0	1,719.15	13.82	157.08	443.61

Table 13
Wastewater Utility
Calculation of Wastewater Commodity Rates
Test Year 2031

Line No.	(1) Retail Customers	(2) Monitored Industries	(3) Pfizer	(4) Graphic Packaging	
VOLUME UNIT COSTS					
1	Treatment Volume - \$	1,145,500	67,500	234,700	190,800
2	Municipal Interceptor - \$	994,200	58,800	203,700	165,600
3	Lift Stations - \$	2,265,100	133,600	0	0
4	Local Collection - \$	6,903,900	407,800	0	0
5	Subtotal - \$	11,308,700	667,700	438,400	356,400
6	Recovered via Service Charge - \$ (see Table 12)	(3,956,100)	0	0	0
7	Net to Recover via Commodity Rates - \$	7,352,600	667,700	438,400	356,400
8	Billable Volume - cu mtr	13,941,600	936,100	3,530,100	2,870,800
9	Total - \$/cu mtr	0.5274	0.7133	0.1242	0.1241
COD UNIT COST					
9	Treatment - \$/kg	0.5664	0.5664	0.5664	0.5664
10	Non-Monitored Strength - mg/l	478	478	478	478
11	Total - \$/cu mtr	0.2707	0.2707	0.2707	0.2707
SUSPENDED SOLIDS UNIT COST					
12	Treatment - \$/kg	3.0717	3.0717	3.0717	3.0717
13	Non-Monitored Strength - mg/l	259	259	259	259
14	Total - \$/cu mtr	0.7956	0.7956	0.7956	0.7956
NH3 UNIT COST					
15	Treatment - \$/kg	5.0113	5.0113	5.0113	5.0113
16	Non-Monitored Strength - mg/l	18.3	18.3	18.3	18.3
17	Total - \$/cu mtr	0.0917	0.0917	0.0917	0.0917
PHOS UNIT COST					
18	Treatment - \$/kg	16.6636	16.6636	16.6636	16.6636
19	Non-Monitored Strength - mg/l	8.1	8.1	8.1	8.1
20	Total - \$/cu mtr	0.1355	0.1355	0.1355	0.1355
TOTAL UNIT COST					
21	Domestic Strength Contributions - \$/cu mtr	1.821	2.007	1.418	1.418
Monitored Customers					
22	Volume - \$/cu mtr	0.527	0.713	0.124	0.124
23	BOD - \$/kg BOD	0.566	0.566	0.566	0.566
24	SS - \$/kg SS	3.072	3.072	3.072	3.072
25	NH3 - \$/kg NH3	5.011	5.011	5.011	5.011

Table 14
Wastewater Utility
Comparison of Existing and *Projected* Wastewater Rates
Test Year 2031

	(1)	(2)	(3)	(4)
INSIDE CITY Service Charges - \$/bill				
Meter Size inches	Existing Rates \$/bill	<i>Projected</i> 2031 \$/bill	<i>Projected</i> Change \$/bill	<i>Projected</i> % Change
Quarterly				
5/8	20.47	34.28	13.81	67%
3/4	21.24	36.33	15.09	71%
1	23.60	42.47	18.87	80%
1 1/2	26.71	50.66	23.95	90%
2	35.25	73.17	37.92	108%
Flat Rate	120.36	187.24	66.88	56%
Monthly				
5/8	15.23	20.64	5.41	36%
3/4	15.50	21.32	5.82	38%
1	16.27	23.37	7.10	44%
1 1/2	17.34	26.10	8.76	51%
2	20.21	33.60	13.39	66%
3	41.19	88.86	47.67	116%
4	48.95	109.33	60.38	123%
6	67.00	157.08	90.08	134%
OUTSIDE CITY Service Charges - \$/bill				
Meter Size inches	Existing Rates \$/bill	<i>Projected</i> 2031 \$/bill	<i>Projected</i> Change \$/bill	<i>Projected</i> % Change
Quarterly				
5/8	25.03	34.28	9.25	37%
3/4	26.29	36.33	10.04	38%
1	30.03	42.47	12.44	41%
1 1/2	35.01	50.66	15.65	45%
2	48.72	73.17	24.45	50%
Flat Rate	157.77	187.24	29.47	19%
Monthly				
5/8	16.73	20.64	3.91	23%
3/4	17.14	21.32	4.18	24%
1	18.40	23.37	4.97	27%
1 1/2	20.04	26.10	6.06	30%
2	24.62	33.60	8.98	36%
3	58.26	88.86	30.60	53%
4	70.73	109.33	38.60	55%
6	99.81	157.08	57.27	57%
Dewatering	10.55	20.64	10.09	96%
COMMODITY CHARGES				
	Existing Rates \$/cu mtr	<i>Projected</i> 2031 \$/cu mtr	<i>Projected</i> Change \$/cu mtr	<i>Projected</i> % Change
Inside City Retail	1.174	1.821	0.647	55%
Outside City Retail	1.561	1.821	0.260	17%

Table 14
Wastewater Utility
Comparison of Existing and *Projected* Wastewater Rates
Test Year 2031

	(1)	(2)	(3)	(4)
MUNICIPAL WHOLESALE CHARGES				
	<u>Existing Rates</u>	<u>Projected 2031</u>	<u>Projected Change</u>	<u>Projected % Change</u>
	\$/cu mtr	\$/cu mtr	\$/cu mtr	
<u>Mun Wholesale Unit Cost</u>				
Treatment	0.982	1.360	0.378	38%
Interceptors	0.063	0.058	(0.005)	-8%
<i>Total "Normal" Rate</i>	<i>1.045</i>	<i>1.418</i>	<i>0.373</i>	<i>36%</i>
Lift Station Increment	0.000	0.131	0.131	NA
Report by Water Meter Incr	0.346	0.648	0.302	87%
Report by Water Meter	1.391	2.066	0.675	49%
	<u>Existing Rates</u>	<u>Projected 2031</u>	<u>Projected Change</u>	<u>Projected % Change</u>
	\$/month	\$/month	\$/month	
<u>Fixed Monthly Charge</u>				
Portage	453,800	577,400	123,600	27%
Galesburg	11,200	11,800	600	5%
Vicksburg	28,900	38,300	9,400	33%
Gull Lake	85,600	116,200	30,600	36%
Augusta	6,000	4,800	(1,200)	-20%
Mattawan	36,500	46,500	10,000	27%
South County	10,000	14,500	4,500	45%
Charleston	3,200	4,700	1,500	47%
Portage SW Int	50,800	57,200	6,400	13%

Table 14
Wastewater Utility
Comparison of Existing and *Projected* Wastewater Rates
Test Year 2031

	(1)	(2)	(3)	(4)
INDUSTRIAL SURCHARGES				
	Existing <u>Rates</u> \$/unit	<i>Projected</i> <u>2031</u> \$/unit	<i>Projected</i> <u>Change</u> \$/unit	<i>Projected</i> <u>% Change</u>
<u>Commodity Charge - \$/cu mtr *</u>				
Pfizer	1.145	1.418	0.273	24%
Graphic Packaging	0.924	1.418	0.494	54%
Inside City Monitored	1.274	2.007	0.733	58%
Outside City Monitored	1.652	2.007	0.355	21%
<u>COD Charge - \$/kg</u>				
Pfizer	0.404	0.566	0.162	40%
Graphic Packaging	0.380	0.566	0.186	49%
Inside City Monitored	0.380	0.566	0.186	49%
Outside City Monitored	0.410	0.566	0.156	38%
<u>TSS Charge - \$/kg</u>				
Pfizer	1.366	3.072	1.706	125%
Graphic Packaging	1.297	3.072	1.775	137%
Inside City Monitored	1.297	3.072	1.775	137%
Outside City Monitored	1.367	3.072	1.705	125%
<u>NH3 Charge - \$/kg</u>				
Pfizer	5.037	5.011	-0.026	-1%
Graphic Packaging	4.781	5.011	0.230	5%
Inside City Monitored	4.781	5.011	0.230	5%
Outside City Monitored	5.116	5.011	-0.105	-2%
<u>PHOS Charge - \$/kg</u>				
Pfizer	14.246	16.664	2.418	17%
Graphic Packaging	14.246	16.664	2.418	17%
Inside City Monitored	14.246	16.664	2.418	17%
Outside City Monitored	14.246	16.664	2.418	17%
<u>Industrial Specific Charge - \$/cu mtr</u>				
Pfizer	0.000	0.118	0.118	NA
Graphic Packaging	0.000	0.118	0.118	NA
Inside City Monitored	0.000	0.118	0.118	NA
Outside City Monitored	0.000	0.118	0.118	NA

* Existing Commodity Charge reflects charge that would be in effect had pure surcharge method been established for 2025

Appendix B

Financial Forecast Summary Exhibits

Wastewater Forecast for 2026 Budget & Rates - Invest in Alternative Sludge Disposal - turn key 1/1/2031

Key Assumptions

	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>
<u>Key Assumptions</u>										
1 General Operating Expense	26,294,000	26,709,600	27,644,400	28,612,000	29,613,400	30,649,900	31,722,600	32,832,900	33,982,100	35,171,500
2 Sludge Hauling Op Ex	11,900,000	12,400,000	13,640,000	14,250,000	14,900,000	15,570,000	4,670,000	4,830,000	4,990,000	5,150,000
3 Incremental Twp		0	0	0	0	0	0	0	0	0
4 OPEB Costs	881,100	689,600	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000
5 Total Operating Expense	39,075,100	39,799,200	41,984,400	43,562,000	45,213,400	46,919,900	37,092,600	38,362,900	39,672,100	41,021,500
6 PILOT	860,600	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
7 Total Operating Expense	39,935,700	40,399,200	42,584,400	44,162,000	45,813,400	47,519,900	37,692,600	38,962,900	40,272,100	41,621,500
	4.9%	1.2%	5.4%	3.7%	3.7%	3.7%	-20.7%	3.4%	3.4%	3.4%
<u>CIP Requirements</u>										
8 Total Funding Requirements	16,000,000	15,000,000	37,600,000	65,700,000	47,100,000	31,500,000	15,300,000	15,300,000	15,300,000	15,300,000
9 CIAC Funded	0	0	0	0	0	0	0	0	0	0
10 Dedicated SRF Funded	0	0	20,000,000	50,000,000	40,000,000	25,000,000	0	0	0	0
11 Dedicated Grant Funded	0	0	0	0	0	0	0	0	0	0
12 Balance to Fund	16,000,000	15,000,000	17,600,000	15,700,000	7,100,000	6,500,000	15,300,000	15,300,000	15,300,000	15,300,000
13 Minimum Pay Go Funding	4,200,000	4,400,000	4,600,000	4,800,000	5,000,000	5,200,000	5,400,000	5,600,000	5,800,000	6,000,000
14 Bond Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
15 Term	25	25	25	25	25	25	25	25	25	25
16 SRF Loan Interest Rate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
17 Term	30	30	30	30	30	30	30	30	30	30

Wastewater Forecast for 2026 Budget & Rates - Invest in Alternative Sludge Disposal - turn key 1/1/2031

Utility Financial Policy Target Fund Balances and Coverage Ratios

	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>
1 Operating Expense Basis *	39,935,700	40,399,200	42,584,400	44,162,000	45,813,400	47,519,900	37,692,600	38,962,900	40,272,100	41,621,500
2 Working Capital Reserve %	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
3 Emergency Capital Reserve %	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
4 Working Capital Reserve	10,100,000	10,646,000	11,221,800	11,637,500	12,072,700	12,522,400	9,932,700	10,267,400	10,612,400	10,968,000
5 Emergency Capital Reserve	6,060,000	6,388,000	6,733,500	6,983,000	7,244,100	7,513,900	5,960,000	6,160,900	6,367,900	6,581,300
6 Minimum Pay Go Fund Balance	4,200,000	4,400,000	4,600,000	4,800,000	5,000,000	5,200,000	5,400,000	5,600,000	5,800,000	6,000,000
7 Target Unrestricted Fund Balance	20,360,000	21,434,000	22,555,300	23,420,500	24,316,800	25,236,300	21,292,700	22,028,300	22,780,300	23,549,300
8 Target Days Cash Ratio	184	191	191	191	191	191	203	204	204	204
<u>Beginning Balances</u>										
9 Working Capital Reserve	7,780,000									
10 Emergency Capital Reserve	5,680,000									
11 Pay Go Fund Balance	463,700									
12 Bond Payment and Reserve Accts	7,427,600									
13 Total "Unrestricted"	21,351,300									
<u>Sr. Lien Debt Service Coverage Ratios</u>										
14 Rate Covenant	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
15 Utility Financial Policy Min	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
16 Sustainability Target	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
<u>All In Debt Service Coverage Ratios</u>										
17 Rate Covenant	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
18 Utility Financial Policy Min	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
19 Sustainability Target	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30

Wastewater Forecast for 2026 Budget & Rates - Invest in Alternative Sludge Disposal - turn key 1/1/2031

Capital Improvement Program Financing

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<u>Improvement (Pay Go) Fund</u>										
1 Beginning Balance	463,700	463,700	463,700	463,700	519,000	2,759,400	6,725,600	11,086,400	6,967,100	8,058,100
2 Transfers from Revenues	0	0	0	55,300	2,240,400	3,966,200	15,327,000	11,007,700	11,898,700	12,346,700
3 Expend Prior Year Revenue Xfers	0	0	0	0	0	0	(3,966,200)	(15,327,000)	(11,007,700)	(11,898,700)
4 Minimum Pay Go Expenditures	0	0	0	0	0	0	0	0	0	0
5 Additional Expenditures	0	0	0	0	0	0	(7,000,000)	200,000	200,000	200,000
6 Ending Balance	463,700	463,700	463,700	519,000	2,759,400	6,725,600	11,086,400	6,967,100	8,058,100	8,706,100
<i>Target Minimum</i>			4,800,000	5,000,000	5,200,000	5,400,000	5,600,000	5,800,000	6,000,000	6,200,000
<u>Construction Fund</u>										
7 Beginning Balance	21,221,700	15,571,700	961,000	2,005,000	2,030,100	2,010,900	2,021,200	2,012,900	2,080,200	2,009,900
8 Bond Proceeds	10,350,000	0	18,620,000	15,675,000	7,030,000	6,460,000	4,275,000	190,000	4,370,000	3,610,000
9 SRF Proceeds	0	0	20,000,000	50,000,000	40,000,000	25,000,000	0	0	0	0
10 Grant Proceeds	0	0	0	0	0	0	0	0	0	0
11 CIAC	0	0	0	0	0	0	0	0	0	0
12 Indirect Funding Mechanisms	0	0	0	0	0	0	0	0	0	0
13 Investment Income	0	389,300	24,000	50,100	50,800	50,300	50,500	50,300	52,000	50,200
14 Expenditures on CIP	(16,000,000)	(15,000,000)	(37,600,000)	(65,700,000)	(47,100,000)	(31,500,000)	(4,333,800)	(173,000)	(4,492,300)	(3,601,300)
15 Ending Balance	15,571,700	961,000	2,005,000	2,030,100	2,010,900	2,021,200	2,012,900	2,080,200	2,009,900	2,068,800
16 Total Ending Balance	16,035,400	1,424,700	2,468,700	2,549,100	4,770,300	8,746,800	13,099,300	9,047,300	10,068,000	10,774,900
<u>Check</u>										
17 Begin Balance	21,685,400	16,035,400	1,424,700	2,468,700	2,549,100	4,770,300	8,746,800	13,099,300	9,047,300	10,068,000
18 Proceeds	10,350,000	389,300	38,644,000	65,780,400	49,321,200	35,476,500	19,652,500	11,248,000	16,320,700	16,006,900
19 Total CIP	(16,000,000)	(15,000,000)	(37,600,000)	(65,700,000)	(47,100,000)	(31,500,000)	(15,300,000)	(15,300,000)	(15,300,000)	(15,300,000)
20 End Balance	16,035,400	1,424,700	2,468,700	2,549,100	4,770,300	8,746,800	13,099,300	9,047,300	10,068,000	10,774,900

Wastewater Forecast for 2026 Budget & Rates - Invest in Alternative Sludge Disposal - turn key 1/1/2031

Financial Plan Summary

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<u>Baseline Revenue</u>										
1 Revenue from Rates	46,116,000	44,047,900	44,047,900	44,047,900	44,047,900	44,047,900	44,047,900	44,047,900	44,047,900	44,047,900
2 Planned Adjustment	0.0%	9.0%	7.5%	7.5%	7.5%	7.5%	0.0%	3.0%	3.0%	3.0%
3 Cumulative Prior Adjustments	0.0%	9.0%	17.2%	26.0%	35.4%	45.6%	45.6%	49.9%	54.4%	59.1%
4 Effective Months	12	12	12	12	12	12	12	12	12	12
5 Revenue from Prior Increases		0	3,964,300	7,565,200	11,436,200	15,597,500	20,070,900	20,070,900	21,994,500	23,975,800
6 Revenue from Current Increase	0	3,964,300	3,600,900	3,871,000	4,161,300	4,473,400	0	1,923,600	1,981,300	2,040,700
7 Adjusted Revenue from Rates	46,116,000	48,012,200	51,613,100	55,484,100	59,645,400	64,118,800	64,118,800	66,042,400	68,023,700	70,064,400
8 Miscellaneous Revenue	195,000	199,900	204,900	210,000	215,300	220,700	226,200	231,900	237,700	243,600
9 Interest Income	810,000	850,000	920,000	1,090,000	1,230,000	1,370,000	1,580,000	1,600,000	1,450,000	1,530,000
10 Total Revenue	47,121,000	49,062,100	52,738,000	56,784,100	61,090,700	65,709,500	65,925,000	67,874,300	69,711,400	71,838,000
11 Operating Expenses	39,075,100	39,799,200	41,984,400	43,562,000	45,213,400	46,919,900	37,092,600	38,362,900	39,672,100	41,021,500
12 Net Revenue	8,045,900	9,262,900	10,753,600	13,222,100	15,877,300	18,789,600	28,832,400	29,511,400	30,039,300	30,816,500
<u>Debt Service</u>										
13 Sr. Lien	5,827,400	6,603,200	6,601,800	7,978,100	9,139,900	9,679,500	10,151,000	10,466,500	10,088,700	10,400,900
14 SRF Jr. Lien	443,800	448,800	447,900	2,201,900	3,200,700	3,824,400	6,898,000	6,901,600	6,899,900	6,899,900
13 Debt Service (a)	6,271,200	7,052,000	7,049,700	10,180,000	12,340,600	13,503,900	17,049,000	17,368,100	16,988,600	17,300,800
15 "Senior" Debt Service Coverage	1.38	1.40	1.63	1.66	1.74	1.94	2.84	2.82	2.98	2.96
16 Compared to Policy Minimum	(0.02)	0.00	0.23	0.26	0.34	0.54	1.44	1.42	1.58	1.56
17 "All In" Debt Service Coverage	1.28	1.31	1.53	1.30	1.29	1.39	1.69	1.70	1.77	1.78
18 Compared to Policy Minimum	(0.02)	0.01	0.23	(0.00)	(0.01)	0.09	0.39	0.40	0.47	0.48
17 Revenues after Debt Service	1,774,700	2,210,900	3,703,900	3,042,100	3,536,700	5,285,700	11,783,400	12,143,300	13,050,700	13,515,700
19 Applied to: PILOT	860,600	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
20 Applied to: Target Wk Cap	914,100	1,610,900	2,952,000	415,700	435,200	449,700	(2,589,700)	334,700	345,000	355,600
21 Applied to: Target Emrg Cap	0	0	151,900	1,971,100	261,100	269,800	(1,553,900)	200,900	207,000	213,400
22 Balance Remaining for Imp	0	0	0	55,300	2,240,400	3,966,200	15,327,000	11,007,700	11,898,700	12,346,700
<u>Forecasted Balances</u>										
23 Working Capital Reserve	6,658,900	8,269,800	11,221,800	11,637,500	12,072,700	12,522,400	9,932,700	10,267,400	10,612,400	10,968,000
24 Emergency Capital Reserve	4,860,000	4,860,000	5,011,900	6,983,000	7,244,100	7,513,900	5,960,000	6,160,900	6,367,900	6,581,300
25 Improvement (Pay Go) Fund	463,700	463,700	463,700	519,000	2,759,400	6,725,600	11,086,400	6,967,100	8,058,100	8,706,100
26 Bond Payment and Reserve Accts	7,968,600	7,968,600	8,948,600	9,773,600	10,143,600	10,483,600	10,708,600	10,718,600	10,948,600	11,138,600
27 Total Unrestricted	19,951,200	21,562,100	25,646,000	28,913,100	32,219,800	37,245,500	37,687,700	34,114,000	35,987,000	37,394,000
28 Forecasted Days Cash Ratio	184	195	220	239	257	286	366	320	327	328
29 Compared to Policy Minimum	0	4	29	48	65	95	162	117	123	124



Wastewater Forecast for 2026 Budget & Rates - Invest in Alternative Sludge Disposal - turn key 1/1/2031

Proforma Statement of Net Position

	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>
<u>Calculation of Proxy</u>										
1 Revenues	47,121,000	49,062,100	52,738,000	56,784,100	61,090,700	65,709,500	65,925,000	67,874,300	69,711,400	71,838,000
2 Operating Expense (a)	(39,333,700)	(39,797,200)	(41,982,400)	(43,560,000)	(45,211,400)	(46,917,900)	(37,090,600)	(38,360,900)	(39,670,100)	(41,019,500)
3 CIAC	0	0	0	0	0	0	0	0	0	0
4 less: Depreciation Expense	(6,151,000)	(6,456,600)	(7,909,200)	(9,697,300)	(9,750,400)	(9,756,600)	(9,605,900)	(9,626,800)	(9,145,700)	(10,747,900)
5 less: Interest Expense (b)	(3,908,200)	(3,801,300)	(3,684,000)	(4,494,600)	(5,153,300)	(5,378,100)	(5,568,700)	(5,647,200)	(5,528,000)	(5,746,500)
6 Proxy for Change in Net Position	(2,271,900)	(993,000)	(837,600)	(967,800)	975,600	3,656,900	13,659,800	14,239,400	15,367,600	14,324,100
7 Beginning Net Position	76,045,800	73,773,900	72,780,900	71,943,300	70,975,500	71,951,100	75,608,000	89,267,800	103,507,200	118,874,800
8 Ending Net Position	73,773,900	72,780,900	71,943,300	70,975,500	71,951,100	75,608,000	89,267,800	103,507,200	118,874,800	133,198,900
9 Begin <i>Unrestricted</i> Net Position	6,301,400	4,029,500	3,036,500	2,198,900	1,231,100	2,206,700	5,863,600	19,523,400	33,762,800	49,130,400
10 Ending <i>Unrestricted</i> Net Position	4,029,500	3,036,500	2,198,900	1,231,100	2,206,700	5,863,600	19,523,400	33,762,800	49,130,400	63,454,500
11 Begin <i>Adj Unrstd</i> Net Position (c)	50,330,100	48,058,200	47,065,200	46,227,600	45,259,800	46,235,400	49,892,300	63,552,100	77,791,500	93,159,100
12 Ending <i>Adj Unrstd</i> Net Position (c)	48,058,200	47,065,200	46,227,600	45,259,800	46,235,400	49,892,300	63,552,100	77,791,500	93,159,100	107,483,200
<u>(a) Operating Expense Adjustments</u>										
13 Cash Basis O&M	39,075,100	39,799,200	41,984,400	43,562,000	45,213,400	46,919,900	37,092,600	38,362,900	39,672,100	41,021,500
14 less: OPEB Debt Service	(602,000)	(602,000)	(602,000)	(602,000)	(602,000)	(602,000)	(602,000)	(602,000)	(602,000)	(602,000)
15 plus: PILOT	860,600	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
16 Accrual Basis Proxy	39,333,700	39,797,200	41,982,400	43,560,000	45,211,400	46,917,900	37,090,600	38,360,900	39,670,100	41,019,500
(b) Includes OPEB Bond interest										
(c) As defined by 2016-1										

