

SANITARY SEWER USER RATE STUDY

City of Two Rivers

August 2025

Pre-Final for Council Review
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Table of Contents

EXECUTIVE SUMMARY	1
General Overview	1
Recent Sewer Rate History	1
2025 and 2026 Capital Projects	1
Current Needs	1
Recommendations	2
1. INTRODUCTION	1-1
1.1 Project Background	1-1
1.2 Historical Sewer Rates	1-1
1.3 2025 and 2026 Capital Projects	1-2
2. TWO RIVERS SEWER RATE STRUCTURE	2-1
2.1 Fixed Charge	2-1
2.2 Unit Charge	2-1
2.3 Volume (Variable) Charge	2-1
2.4 Industrial Charges	2-1
2.5 Village of Mishicot Charges	2-3
2.6 Sewer Connection Fees	2-3
3. SEWER RATE ANALYSIS	3-1
3.1 Sewer Utility Expenses	3-1
3.1.1 Current Utility Expenses	3-1
3.1.2 Future Utility Expenses	3-2
3.2 Sewer Utility Revenue	3-2
3.2.1 Current Utility Revenue	3-2
3.2.2 Future Sewer Revenue	3-3
4. ADDITIONAL REVENUE ALTERNATIVES	4-1
4.1 Additional Revenue Required	4-1
4.2 Fixed Charge and Unit Charge Increase	4-1
4.2.1 Alternate 1: Increase Fixed Charge and Unit Charges Only	4-1
4.2.2 Alternate 2: Implement an Equivalent Meter System	4-1
4.3 Volume (Variable) Charge Increase	4-3
4.4 Industrial Charge Increase	4-3
4.4.1 Riverside Foods	4-3
4.5 Village of Mishicot Charge Increase	4-4
4.6 Sewer Connection Fees	4-4
5. FINANCES AND FUNDING	5-1
5.1 Financing Methods	5-1
5.1.1 General Obligation Bonds	5-1
5.1.2 Revenue Bonds	5-1
5.1.3 Direct Loans	5-1
5.1.4 Financing Through Government Programs	5-1
5.2 Funding Sources	5-2
5.2.1 Wisconsin Environmental Improvement Fund (CWFP)	5-2

5.2.2	Rural Development (RD)	5-2
5.2.3	Community Development Block Grant (CDBG)	5-2
5.2.4	Other Programs	5-3
5.3	Summary of Probable Financing	5-3
5.4	Revenue Sources	5-3
5.4.1	Special Assessments	5-3
5.4.2	General Fund Allocations	5-3
5.4.3	Impact Fees	5-4
5.4.4	Tax Increment Finance District (TIF)	5-4
5.4.5	Service Charges	5-4
5.5	Financial Status and Considerations	5-4
5.5.1	Revenue Sources and Current User Rates	5-4
5.5.2	Operating Expenses	5-5
5.5.3	Replacement Fund	5-5
5.5.4	Debt Repayments and Debt Reserves	5-5
5.5.5	Other Capital Improvements and Planned Expenses	5-5
5.6	Projected Annual Operating Budget and User Charge Rates	5-5
5.7	Implementation Steps and Schedule	5-6

TABLES AND FIGURES

Table 1-1	Historical Sewer Rates	1-1
Figure 1-1	Historical Sewer Rates	1-2
Table 1-3	2025 and 2026 Capital Projects	1-2
Table 3-1	Existing Sewer Expenses	3-1
Table 3-2	Existing Sewer Revenue	3-2
Table 4-1	Current Sewer Meters	4-1
Table 4-2	Proposed Sewer Meter Equivalents	4-2
Table 4-3	Projected Total Equivalent Sewer Meters	4-2
Table 4-4	Riverside Foods Samples	4-3
Table 5-1	Customer Accounts and Equivalent Dwelling Units	5-5
Table 5-2	Proposed Implementation Schedule	5-6

APPENDICES

Appendix A	Two Rivers Municipal Code – Chapter 5-2 Sewer System User Charge
Appendix B	Village of Mishicot – Sewer Service Agreements
Appendix C	Village of Mishicot – Debt Service Schedule
Appendix D	Annual O&M Costs
Appendix E	List of Current Meters by Address over 1-1/2"
Appendix F	Sewer Utility Cash Flow
Appendix G	Equivalent Sewer User Calculations

EXECUTIVE SUMMARY

General Overview

The City of Two Rivers (City) requested an updated Sewer User Rate Study to assist in developing a plan to fund needed improvements at the wastewater treatment facility (WWTF), the City's numerous lift stations, and extensive collection system. The City has incurred an increasing level of debt service due to the continued improvements to these facilities that will require an increase in revenue to support these efforts.

Town and Country Engineering previously provided a wastewater budget and revenue projections worksheet last updated in April 2022, but the City has continued to pursue large utility projects as part of the Capital Improvements Plan (CIP) and will need to update the rate structure to fund the current and future projects.

Recent Sewer Rate History

The City typically looks at sanitary sewer rates every year and increases rates as needed. The following is a summary of the City's sewer rates over the past 10 years.

Effective Date	Volume Charge	Fixed Charge	Avg Usage (5 CCFs)	Total Bill
1/2014	\$5.25	\$12.20	\$26.25	\$38.45
11/2018	\$5.46	\$12.69	\$27.30	\$39.99
3/2019	\$5.46	\$14.09	\$27.30	\$41.39
1/2020	\$5.60	\$15.00	\$28.00	\$43.00
8/2022	\$5.60	\$17.00	\$28.00	\$45.00
1/2024	\$5.60	\$18.85	\$28.00	\$46.85

2025 and 2026 Capital Projects

The City of Two Rivers has contracted for three capital improvement projects in 2025, including a large street and utility project (Harbor, Emmet, and 16th Street), approximately 200 water and sewer lateral replacements, and the lining of about 8,000 feet of sanitary sewer. The total cost of these projects is about \$4.2M, and the sewer portion of them is about \$1.7M. The 2026 projects are estimated at about \$5.2M with the sewer portion estimated at about \$1.8M.

In order to maintain the City's sewer and wastewater infrastructure in fair to good condition, the City has committed to annual sewer infrastructure projects as part of the CIP plan. The Sewer Utility will need to increase rates to fund these necessary improvements.

Current Needs

The Wisconsin Department of Natural Resources (DNR) and Department of Administration (DOA) have notified the City that they are estimated to have a (\$118,266) shortfall in 2025 and the City will have an additional (\$164,536) shortfall in 2026 with the City's current sewer revenue to have the 110% debt coverage required for all new Clean Water Fund loans. The following options are being considered as a means to raise additional revenue to cover this increased debt service.

1. Raise Rates: The City may raise the Fixed Fee by about \$1.70 per month per user to

provide the debt coverage required for 2025 and would need to increase the Fixed Fee an additional \$2.70 per month in 2026 to cover the additional debt anticipated. The total increase would need to be a minimum of \$4.17 / month to cover the additional debt.

In addition to an increase in the Fixed Fee, raising the Volume Charge from \$5.60 / 100 CF to \$5.70 / 100 CF would generate an estimated \$30,000 in additional revenue annually.

2. Modify the Municipal Code to account for the larger meters: The City currently charges a fixed fee of \$18.85 per month for all water meters regardless of size, and an additional \$12.85 / unit for multi-family residential units. The rate structure could be modified to charge the residential, commercial, industrial, public, and multi-family entities that require larger infrastructure based on the meter size at a higher rate as they place a larger demand for capacity on the WWTF, lift stations, and collection system. This is an "Equivalent Meter" multiplier system that is similar to the system currently used by the Water Department.

With this change in the Municipal Code, it is likely that a lower Fixed Fee increase will still be required to cover the additional debt service. A \$1.00 / month increase should be considered to generate additional revenue.

3. Utilize the Category B Sewer Service Charge: The City adopted sewer service charges for Category B (commercial or industrial) users in 2023 but has not yet utilized this rate structure to charge a surcharge for users that discharge wastewater with higher concentrations of BOD, TSS, or phosphorus. This surcharge is intended to cover the additional charges that the City realizes due to the higher costs of treatment. The implementation of this Service Charge for Riverside Foods is estimated to generate an additional \$131,800 annually.

Recommendations

The City of Two Rivers plans to continue with annual capital improvements projects to maintain the current infrastructure and intends to fund these improvements through the Wisconsin Clean Water Fund Program (CWFP). The City is facing a \$118,266 shortfall for the 2025 project funding and an additional \$164,536 shortfall for the 2026 project funding.

To fund these continued improvements, it is recommended that the City pursue a multi-faceted approach to generating the additional \$282,802 in revenue required to secure the CWFP loans for the projects. These include:

1. Fixed Fee increases for all users, including the Multi-family Unit Charges: By raising the Fixed Fee from \$18.85 / month to \$19.85 / month, and the Unit Charge from \$12.85 / month to \$13.85 / month, the City would generate an additional estimated revenue of \$67,800 / year. This would cover approximately 24% of the overall increase needed.
2. Volume Charge Increase: By raising the Volume Charge from \$5.60 / 100 CF to \$5.80 / 100 CF, the City would generate an additional estimated revenue of \$60,000 / year. This would cover approximately 21% of the overall increase needed.
3. Implement an Equivalent Meter Table similar to the Water Utility: By implementing an Equivalent Meter Table that matches the one used by the Water Utility, the City would charge the larger water users a higher Fixed Fee as they place a larger demand on the Sewer infrastructure. The larger meter count would increase the revenue for the Fixed Fee charges by an estimated \$132,000 / annually. This would cover approximately 47% of the overall increase needed.

4. Implement the Category B Charges for Industrial Users: The City has been working with Riverside Foods for years to bring their sewer discharge into compliance, but this continues to place a high demand on the City's wastewater systems due to the high BOD and TSS concentrations in their discharge. By implementing the surcharge rates that are already included in the Municipal Code, it is estimated that the City will increase the revenue by \$131,000 / year. This revenue stream may vary greatly as the City has limited lab data on the Riverside Foods discharge.

It should be noted that these changes in the City's Sewer Rates are not intended to be penalties to industrial or commercial users, but rather changes that are structured to simply charge all customers more fairly for their cost of these services.

1. INTRODUCTION

1.1 Project Background

The intent of this Sanitary Sewer User Rate Study is to develop and evaluate viable alternatives to fund continued improvements and upgrade of the City of Two Rivers' wastewater treatment facility (WWTF), 17 lift stations, and 65 miles of sanitary sewers.

The City has a Capital Improvement Plan (CIP) that looks at projects each year for the water, sewer, and street departments to construct the needed infrastructure in a sequence that is beneficial to all. For the past 8 years or more, the City has funded the water and sewer portions of these projects through the use of low interest loans via the Wisconsin DNR's Safe Drinking Water Loan Program (SDWLP) and the Clean Water Fund Program (CWFP). These loans are typically to be paid back on a 20-year schedule with annual principal and interest payments.

In addition to the annual collection system improvements, the City has also completed three projects totaling about \$7 million at the wastewater treatment facility and has made improvements at many of the City's lift stations. The needs of these facilities was documented in the Assessment Report completed for the City in March 2017.

1.2 Historical Sewer Rates

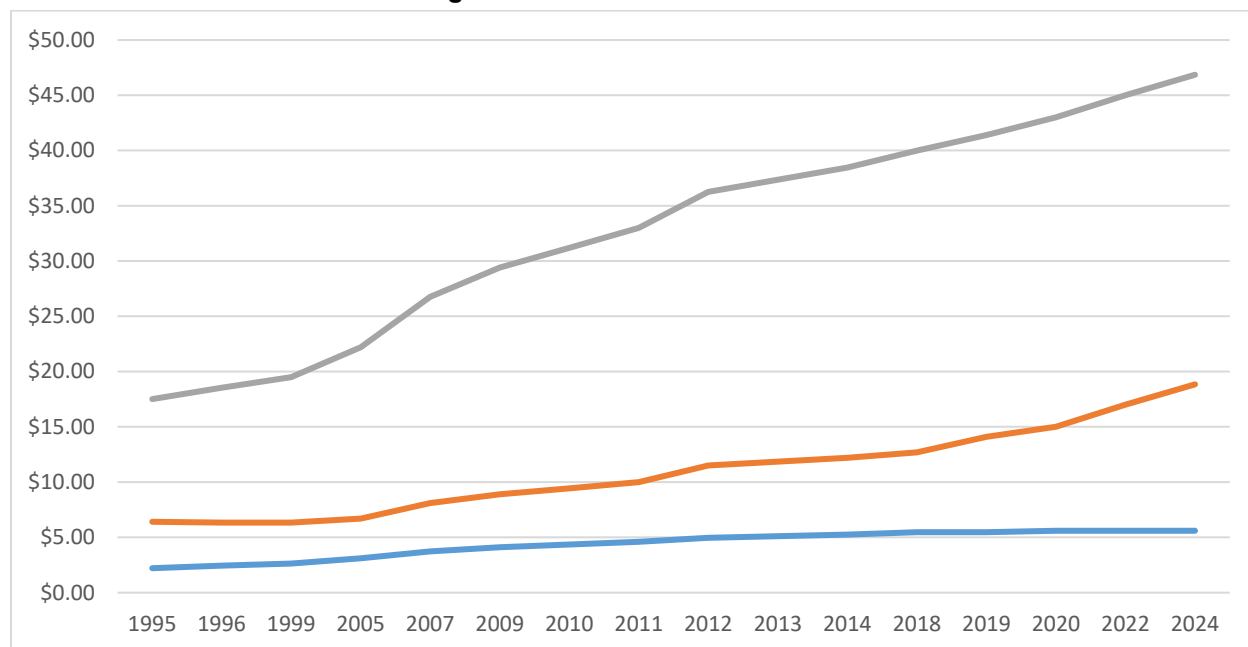
The City of Two Rivers typically looks at sewer rates every year and increases rates as needed. The following Table 1-1 includes the City's sewer rates over the past 30 years. These rate increases are needed to cover the annual increases in O&M costs (approximately 2%) as well as the cost of funding the improvements made to the WWTF, lift stations, and collection system including lateral repairs.

Table 1-1 Historical Sewer Rates

Effective Date	Volume Charge	Fixed Charge	Avg Usage (5 CCFs)	Total Bill
1/1995	\$2.22	\$6.41	\$11.10	\$17.51
1/1996	\$2.44	\$6.34	\$12.20	\$18.54
1/1999	\$2.63	\$6.34	\$13.15	\$19.49
1/2005	\$3.10	\$6.70	\$15.50	\$22.20
5/2007	\$3.73	\$8.10	\$18.65	\$26.75
1/2009	\$4.10	\$8.90	\$20.50	\$29.40
1/2010	\$4.35	\$9.43	\$21.75	\$31.18
1/2011	\$4.60	\$10.00	\$23.00	\$33.00
1/2012	\$4.95	\$11.50	\$24.75	\$36.25
1/2013	\$5.10	\$11.85	\$25.50	\$37.35
1/2014	\$5.25	\$12.20	\$26.25	\$38.45
11/2018	\$5.46	\$12.69	\$27.30	\$39.99
3/2019	\$5.46	\$14.09	\$27.30	\$41.39
1/2020	\$5.60	\$15.00	\$28.00	\$43.00
8/2022	\$5.60	\$17.00	\$28.00	\$45.00
1/2024	\$5.60	\$18.85	\$28.00	\$46.85

Figure 1-2 graphs the historical increases of the Fixed, Volume, and Total average monthly charges over the past 30 years for the City's users.

Figure 1-2 Historical Sewer Rates



1.3 2025 and 2026 Capital Projects

The City of Two Rivers has contracted three capital improvement projects in 2025, included in Table 1-3 below. The City is also looking at similar projects in 2026, but the street and utility project includes only water main replacement and no sewer rehabilitation.

Table 1-3 2025 and 2026 Capital Projects

Project Name	Est. Total Capital Costs	Est. Sewer Utility Costs
1 – 2025 Street and Utility Improvements (Harbor, Emmet, and 16 th Street)	\$1,531,442	\$320,400
2 – 2025 Lateral Replacements	\$1,867,580	\$583,000
3 – 2025 Sewer Lining	\$774,726	\$774,726
1 – 2026 Street and Utility Improvements	\$1,105,540	\$0
2 – 2026 Lateral Replacements	\$3,467,750	\$1,028,500
3 – 2026 Sewer Lining	\$757,950	\$757,950

In order to maintain the City's wastewater infrastructure in fair to good condition, the City has committed to annual sewer infrastructure projects as part of the CIP plan. The Sewer Utility will need to increase rates to fund these continued improvements.

2. TWO RIVERS SEWER RATE STRUCTURE

The City's Sewer System User Charge is covered under Chapter 5-2 of the Municipal Code and was most recently updated by Ordinance on December 18, 2023. The Ordinance increased the rate by the amount \$1.85 for the Fixed Monthly Charge and \$1.85 for the Unit Charge to allow the Utility to cover the rising debt service that funds the continued improvement of the City's sewer infrastructure.

2.1 Fixed Charge

The City charges a Fixed Charge each month to each residential, commercial, industrial, public, and multi-family entity that are connected to the City's collection system. The Fixed Monthly Charge is \$18.85 / month regardless of the size of the meter located at each location.

The intent of the Fixed Charge is to allow the City to fund the cost of maintaining the fixed assets of the community regardless of the flow or loading to the system. This generally includes the debt service, taxes, and a portion of the annual operations and maintenance for the facilities. In 2024, the City charged an average of 5,114 sewer users an estimated \$1,279,523 in fixed charges.

2.2 Unit Charge

The City charges a Unit Charge each month for each additional multi-family unit above one that is connected to the City's collection system. The Unit Monthly Charge is \$12.85 / month regardless of the size of the meter located at each location.

The intent of the Unit Charge is to allow the City to charge multi-family units a larger fee to help fund the cost of maintaining the fixed assets of the community regardless of the flow or loading to the system. This generally includes the debt service, taxes, and a portion of the annual operations and maintenance for the facilities. In 2024, the City charged an average of 535 users an estimated \$95,337 in unit (fixed) charges.

2.3 Volume (Variable) Charge

The City charges a Volume (Variable) Charge each month to all users based on the metered water sales. The Volume Charge is \$5.60 / 100 cubic feet (748 gallons) of water sold at each meter. Residential customers are billed for their actual water usage during the November through March period and the monthly average from the November through March period as the maximum sewer billing for the period of April through October.

The intent of the Volume Charge is to allow the City to charge all users a fee based on the volume of sewage produced based on the metered water sales. These charges are intended to cover the City's costs for operations and maintenance (O&M) of the facilities. In 2024, the City of Two Rivers charged an estimated 29,672,200 cubic feet of sewer use to generate approximately \$1,662,000 in volume charges for the City.

2.4 Industrial Charges

The City's Municipal Code included provisions to address sewer users that discharge wastewater at either higher volumes or higher strength waste concentrations of various pollutants, including BOD, TSS, and phosphorus. See Appendix A for Chapter 5 of the Municipal Code that includes the Utilities and provisions for the "Sewer System User Charge System and Industrial Cost Recovery System" under Chapter 5-2.

The following information is from Section 5-2-5 Amount of Sewer Service Charges in the Municipal Code.

A. Sewer service charge unit costs. This unit cost for the sewer service charges are as follows:

Volume	\$5.60/100 cubic feet
BOD	\$1.04/lb
Suspended Solids	\$1.07/lb
Phosphorus	\$3.94/lb
Fixed Charge	\$18.85/User/Month
Unit Charge	\$12.85/Unit/Month

B. Category A sewer service charge. The sewer service charge for Category A sewer users is as follows:

Fixed Monthly Charge	\$18.85/Month
Volume Charge	\$5.60/100 cubic feet
Unit Charge	\$12.85/additional living unit/Month

C. Category B sewer service charge. The sewer service charge for Category B sewer users is as follows:

Fixed Monthly Charge	\$18.85/Month
Volume Charge	\$5.60/100 cubic feet

Surcharge:

BOD greater than 160 mg/l = \$1.04/lb

Suspended Solids greater than 200 mg/l = \$1.07/lb

Phosphorus greater than 7 mg/l = \$3.94/lb

The Category B sewer service charge shall be computed in accordance with the formula presented below:

$$T = FQ + (V \times Cv) + .00834 V (B \times Cb + S \times Cs + P \times Cp)$$

Where:

T = Total sewer service charge

FQ = Fixed monthly charge

B = Concentration of BOD in mg/l above 160 mg/l

S = Concentration of suspended solids in mg/l above 200 mg/l

P = Concentration of phosphorus in mg/l above 7 mg/l

V = Wastewater volume in 1,000 gallons

Cv = Cost per 1,000 gallons

Cb = Cost per pound of BOD

Cs = Cost per pound of suspended solids

Cp = Cost per pound of phosphorus

.00834 = Conversion factor

In 2024, the City of Two Rivers did not charge any customers as a Category B user; thus, no additional revenue was created for the City.

2.5 Village of Mishicot Charges

The City of Two Rivers provides wastewater treatment services for the Village of Mishicot per an agreement signed in June 2007 (Appendix B). Per that agreement, the City is to own, operate and maintain the wastewater facilities and shall be responsible for the WPDES discharge permit. The Village wastewater is to be processed through the City's facilities. The Village is responsible for compliance with federal, state, and local ordinances for wastewater discharge, and the Village is responsible for adopting City sewer ordinances as applicable.

The Village makes an annual debt service payment for the WWTF and a portion of the City's collection system that conveys the Village's wastewater to the WWTF. The City's portion of this cost is 91.53% and the Village portion is 8.47% per the agreement. Based on the current debt schedule (Appendix C), the Village makes an annual payment of about \$89,469 for their portion of the applicable debt service.

The Village also is responsible for paying a Volume Charge for the flow that it sends to the City for treatment. The flow is measured by a flow meter installed at the Village's lift station prior to pumping to the City and the flow is reported monthly. The Agreement has provisions for measuring the strength of wastewater discharge, but to date no high strength waste has been received. The annual total payments received varies, but a total of \$58,904 was paid in 2023 and \$51,973 paid in 2024.

2.6 Sewer Connection Fees

The City of Two Rivers typical does not charge a sewer connection fee for new users connecting or reconnecting to the collection system. The exception to this is in areas of the City where no connections have been made in areas with deferred assessments and the assessment comes due. For the purpose of this Study it is assumed that these connection fees are infrequent enough to be considered as Miscellaneous Non-Operating Revenue and are not factored into the City's typical revenue.

3. SEWER RATE ANALYSIS

The City's Sewer System User Charge is covered under Chapter 5-2 of the Municipal Code and was most recently updated by Ordinance on December 18, 2023. The Ordinance increased the rate by the amount \$1.85 for the Fixed Monthly Charge and \$1.85 for the Unit Charge to allow the Utility to cover the rising debt service that is funding the continued improvement of the City's sewer infrastructure.

3.1 Sewer Utility Expenses

The City tracks annual sewer utility expenses following standard public accounting methods as required by the State of Wisconsin and provides a Statement of Net Position for the fund dated December 31st of each year. Table 3-1 below includes the 2024 actual total annual reported expenses, and the estimated expenses used in this Study for 2025 and 2026 are listed below and included in Appendix F.

3.1.1 Current Utility Expenses

The values shown in red are the estimated total principal and interest payments for the new CWF loans. In 2024 the Utility paid approximately \$1,262,315 in debt service, \$1,689,189 in O&M costs, and \$341,063 in tax payments to the City. This total is an approximate 2.14% increase over the 2023 total.

Table 3-1 Existing Sewer Expenses

BUDGET ITEM	2024 (actual)	2025 (est.)	2026 (est.)
Expired Debt	\$ 78,399	\$ -	\$ -
State Trust Fund Loan	\$ 6,905	\$ 6,901	\$ 6,902
2019 Debt Issue (Baird)	\$ 82,700	\$ 75,200	\$ 77,700
2020 Debt Issue (Baird)	\$ 11,342	\$ 11,123	\$ 10,893
CWF 4107-08	\$ 412,716	\$ 412,608	\$ 412,497
CWF 4107-18 Lincoln Ave	\$ 49,488	\$ 49,482	\$ 49,475
CWF 4107-27 - 14th Street	\$ 45,319	\$ 45,307	\$ 45,295
CWF 4107-40 - WWTF Headworks, 27th	\$ 247,680	\$ 247,647	\$ 247,612
CWF 4107-44 - WWTF Digester, 14th	\$ 105,656	\$ 105,647	\$ 105,635
CWF 4107-46 - 24th, 25th, Madison, Pine Tree LS	\$ 51,131	\$ 51,124	\$ 51,119
CWF 4107-47 - 17th, Laterals, & Dewatering	\$ 71,700	\$ 78,561	\$ 78,511
CWF 4107-56 - Lincoln St. & Laterals ('23)	\$ 16,241	\$ 17,489	\$ 17,476
CWF 4107-61 - Roosevelt St. & Laterals ('24)	\$ 83,038	\$ 10,973	\$ 65,239
2025 Debt Issue (Baird)	\$ -	\$ -	\$ 16,870
CWF 4107-62 - Harbor, etc, Lining, Laterals ('25)	\$ -	\$ -	\$ 189,012
CWF 4107-64 - Laterals and Lining ('26)	\$ -	\$ -	\$ 164,538
Annual Operation and Maintenance	\$ 1,689,189	\$ 1,722,973	\$ 1,757,432
Replacement Fund	\$ -	\$ -	\$ -
Capital Costs (Collection System)	\$ -	\$ -	\$ -
Capital Costs (WWTF Rehab)	\$ -	\$ -	\$ -
Capital Costs (Lift Station Rehab)	\$ -	\$ -	\$ -
Taxes	\$ 343,250	\$ 346,683	\$ 350,149
Nonoperating Expenses (Interest Expense)	\$ -	\$ -	\$ -
TOTAL ANNUAL EXPENSES	\$ 3,216,355	\$ 3,181,717	\$ 3,646,356

The approximate \$1,689,189 in O&M costs that the Utility incurred in 2024 is about 52.5% of the total expenses of the Utility. These costs are largely the costs of owning and operating the WWTF, collection system, and lift stations. The estimated 2% annual increase in O&M costs is very aggressive and generally does not keep up with the cost of inflation. A breakout of the annual O&M costs for the Utility is included in Appendix D.

3.1.2 Future Utility Expenses

The City retired \$78,399 in debt service for the Sewer Utility in 2024 but is looking to add an estimated \$353,550 in annual principal and interest payments in 2026 with the Harbor, Emmet, and 16th Street project, 2025 and 2026 Lateral Replacement Projects, and the 2025 and 2026 Sewer Lining projects. A 2% annual increase is projected for the annual Operation and Maintenance Costs, and a 1% increase is projected for the taxes paid by the Utility to the City.

While a small decrease in annual expenses is anticipated in 2025 due to the retirement of debt in 2024 and the new debt not payments not due until 2026, the total projected increase in expenses from 2024 to 2026 is 13.37% largely due to the addition of debt as listed above.

3.2 Sewer Utility Revenue

The City tracks annual sewer utility revenue following standard public accounting methods as required by the State of Wisconsin and provides a Statement of Net Position for the fund dated December 31st of each year. Table 3-2 below includes the 2024 total annual reported revenue, and the estimated revenue used in this Study for 2025 and 2026 are listed below and included in Appendix F.

3.2.1 Current Utility Revenue

In 2024 the Utility generated approximately \$3,060,520 in revenue largely through the collection of user charges from the City of Two Rivers (\$2,848,433) and the Village of Mishicot (\$141,442). The City accounts for 95.27% and the Village 4.73% of the total user charges revenue. Additional revenue is also received from the City's TID #7 and TID #8, as well as miscellaneous operating revenue that is also received.

The 2024 revenue of \$3,060,520 versus the expenses of \$3,216,355 left the Sewer Utility with a revenue shortfall of (\$155,835). A similar shortfall of (\$167,913) was experienced in 2023, but each of these were absorbed by the Utility by covering these costs with the Cash and Cash Equivalents held in reserve by the Utility.

Table 3-2 Existing Sewer Revenue

BUDGET ITEM	2024 (actual)	2025 (est.)	2026 (est.)
User Charge Revenues	\$ 2,848,433	\$ 2,901,322	\$ 3,106,328
Mishicot Service Revenue	\$ 89,469	\$ 89,469	\$ 89,469
Mishicot Debt Service Payment	\$ 51,973	\$ 51,961	\$ 51,949
TID #7 & #8 Revenue	\$ 63,160	\$ 72,239	\$ 72,232
Investment Income	\$ -	\$ -	\$ -
Miscellaneous Nonoperating Revenue	\$ -	\$ -	\$ -
Industrial Surcharge Revenue	\$ -	\$ -	\$ 131,808
Sewer Connection Fee	\$ -	\$ -	\$ -
Miscellaneous Operating Revenue	\$ 7,485	\$ 17,832	\$ 17,832
TOTAL ANNUAL REVENUE	\$ 3,060,520	\$ 3,132,822	\$ 3,469,617

3.2.2 Future Sewer Revenue

Based on the projected revenue for 2025 and 2026, the City will need to increase the Utility revenue by a minimum of \$302,666 to provide a debt coverage ratio of 110% as required by the Wisconsin DNR for the new CWFL debt to be incurred in 2025 and 2026. As highlighted in Table 3-2 above in red, increases in the user charges and enacting the City's Industrial Surcharge on at least one sewer user are each viable options to cover a portion of the new debt to be incurred and this will be evaluated further in Chapter 4 of this Study.

4. ADDITIONAL REVENUE ALTERNATIVES

4.1 Additional Revenue Required

As listed in the previous chapter, the City will need to increase the Utility revenue by a minimum of \$302,666 to provide a debt coverage ratio of 110% as required by the Wisconsin DNR for the new CWFP debt to be incurred in 2025 and 2026. As demonstrated in Chapter 2, the City currently has six sources of user-charge revenue available that can be considered for a portion of the additional revenue required.

4.2 Fixed Charge and Unit Charge Increase

The City currently charges a monthly Fixed Charge for each residential, commercial, industrial, public, and multi-family entity that are connected to the City's collection system. The Fixed Charge is \$18.85 / month regardless of the size of the meter. As shown in Table 4-1 below, the City currently has 5,114 total metered sewer users.

Table 4-1 Current Sewer Meters

Size	Residential	Commercial	Industrial	Public	Multi-Family	Total Meter
5/8"	2,640	75	1	0	19	2,735
3/4"	2,045	120	2	1	3	2,171
1"	30	58	4	2	19	113
1-1/2"	0	16	1	2	8	27
2"	0	26	5	11	11	53
3"	0	6	2	1	1	10
4"	0	0	1	3	0	4
6"	0	1	0	0	0	1
Totals	4,715	302	16	20	61	5,114

The City also has 535 additional Unit Charges for the Multi-Family buildings that serve more than one unit with a single shared water meter. There is a total of 61 multi-family buildings in the City ranging in size from duplex units to large developments but the average building has over 8 units.

4.2.1 Alternate 1: Increase Fixed Charge and Unit Charges Only

The Wisconsin Department of Natural Resources (DNR) and Department of Administration (DOA) have notified the City that they are estimated to have a (\$118,266) shortfall in 2025 and an additional (\$164,536) shortfall in 2026 with the City's current sewer revenue to have the 110% debt coverage required for all new Clean Water Fund loans. If the City were to look to cover this shortfall of \$282,802 shortfall by increasing the Fixed Charges and Unit Charges for all user only, the City would need to raise the rates by approximately \$4.17 per month to cover the additional debt service.

4.2.2 Alternate 2: Implement an Equivalent Meter System

It is uncommon for Wisconsin municipalities smaller than 20,000 residents to NOT utilize an "Equivalent Meter Table" similar to the one shown below as Table 4-2. Similar tables are established for most communities in Wisconsin and additional examples can be provided upon request. The intent of this "Equivalent Meter Table" is to charge a larger Fixed Fee to those businesses in the community that place a larger demand for capacity on the WWTF, lift stations, and collection system.

It should be noted that the City of Two Rivers currently charges a similar “Equivalent Meter Charge” to all water users based on the meter size as required by the Wisconsin Public Service Commission.

Table 4-2 Proposed Sewer Meter Equivalents

Meter Size	No. of Equivalent 5/8" Meters
5/8"	1.0
3/4"	1.0
1"	2.5
1-1/2"	5.0
2"	8.0
3"	15.0
4"	25.0
6"	50.0

The implementation of the Equivalent Meter table will increase the total number of equivalent sewer meter charges from 5,114 to 6,048 yet will also reduce the Unit Charges from 535 to only approximately 22 units. This increase in meters would limit the impact on the residential users and would have a larger impact on the commercial, industrial, and public meters in the system. A list of the meters that are 1-1/2" and larger is included in Appendix E. See Table 4-3 for the calculation of equivalent meters.

Table 4-3 Projected Total Equivalent Sewer Meters

Size	Eq. Meter Multiplier	Res.	Comm.	Ind.	Public	Multi-Family	Eq. Meters
5/8"	1.0	2,640	75	1	0	19	2,735
3/4"	1.0	2,045	120	2	1	3	2,171
1"	2.5	30	58	4	2	19	283
1-1/2"	5.0	0	16	1	2	8	135
2"	8.0	0	26	5	11	11	424
3"	15.0	0	6	2	1	1	150
4"	25.0	0	0	1	3	0	100
6"	50.0	0	1	0	0	0	50
Totals				6,048			

The transition to the Equivalent Meter system would generate an additional \$132,053 in revenue with the creation of 934 additional meter charges and the reduction of the unit charges from 535 to only 22 units. If the City considers raising the Fixed Charges based on the Equivalent Meter system, the projected rate increase required to cover the entire \$282,802 debt service increase would be \$2.07 per month.

The City could consider using the Equivalent Meter system in conjunction with increases in the Volume Charge and Industrial Charges to generate the additional revenue required.

4.3 Volume (Variable) Charge Increase

The City charges a monthly Volume (Variable) Charge for all users based on metered water sales. The Volume Charge is \$5.60 / 100 cubic feet (748 gallons) of water sold at each location. In 2024, the City of Two Rivers charged for an estimated 29,672,200 cubic feet of sewer use to generate approximately \$1,662,000 in volume charges for the City, and the Village of Mishicot sales generated an additional \$89,000 in volume charges for a total of \$1,751,000. The annual O&M expenses for the Utility in 2024 were \$1,689,189; thus, allowing the City to pay a portion of the taxes with the revenue generated.

While the volume charges would appear to cover the annual O&M costs for the Utility, the Utility's O&M expenses continue to grow at an estimated 2% annually and the City should consider a slight increase of the volume charge to cover the rising costs. Increasing the volume charge from \$5.60 / 100 CF to \$5.80 / 100 CF would produce an estimated \$59,344 in additional revenue.

4.4 Industrial Charge Increase

The City's Municipal Code included provisions to address sewer users that discharge wastewater at either higher volumes or higher concentrations of various pollutants, including BOD, TSS, and phosphorus. To date, the City of Two Rivers has not charged any customers as a Category B user; thus, no additional revenue was created for the City to cover the added costs of conveying and treating high-strength waste received.

4.4.1 Riverside Foods

Since 2022, the City's engineering and wastewater staff have been working with Riverside Foods at separate facilities located at both 2511 Wilson Street and 2520 Wilson Street to collect sewer samples to test for high-strength waste. Riverside Foods produces oven-ready appetizers at the facilities and discharges high volumes of oil, breadding, and other waste to the City's sewers. The WWTF staff have reported issues with the breadding and oil waste at the facility for years, and the material has also created regular maintenance issues with plugging in the City's sewers.

Riverside Foods has multiple meters supplying water to their facilities and uses an estimated 702,700 cubic feet of water annually (14,400 gpd). The Riverside Foods buildings discharge to the sanitary sewers in multiple locations; thus, making the collection of representative samples a difficult task. The City's engineering staff is working to map the drains from each building and to develop a plan for collecting samples for the entire building and operation. Staff have discussed the need for a single sampling location at each building with Riverside Foods and are working to implement a plan to dye test sewers to confirm that this is achieved. The results of the limited sewer sampling data are shown below in Table 4-4.

Table 4-4 Riverside Foods Samples

Date	BOD Tested (mg/l)	BOD Allowed (mg/l)	TSS Tested (mg/l)	TSS Allowed (mg/l)	P Tested (mg/l)	P Allowed (mg/l)
	396	160	372	200	7	7
	733	160	669	200	7	7
2/2025	2,949	160	1,760	200	7	7

It was noted that the samples collected were drawn from the City's sanitary sewer upstream and downstream of the discharge locations and are likely not reportable for billing purposes. The City engineering staff is working with Riverside Foods to develop agreed upon sample location(s) for

each building in anticipation of the City classifying Riverside Food as a Category B user later this year and implementing the sewer surcharges that are currently included in the Municipal Code.

Due to the limited data and the variability in the samples collected, as well as discussions as to whether both buildings (2511 Wilson and 2520 Wilson) should be included in the calculation of sewer surcharges, the estimated revenue generated by this change in classification vary greatly. Using only the flow from 2511 Wilson Street and the latest samples collected, it is estimated that implementation of the Category B rates could produce an estimated \$131,800 increase in annual revenue.

4.5 Village of Mishicot Charge Increase

The City of Two Rivers provides wastewater treatment services for the Village of Mishicot per an agreement signed in June 2007 (Appendix B). Per that agreement, the Village is responsible for paying a Volume Charge for the flow that it sends to the City for treatment. The flow is measured by a meter at the Village's lift station and is reported monthly to the City for billing purposes. The Agreement has provisions for measuring the strength of wastewater discharge, but the flow from Mishicot is generally considered domestic strength waste and no high strength waste has been received.

As the City has signed an agreement with Mishicot for a portion of the treatment and conveyance costs allocated to the Village, no significant increase in revenue is anticipated. The Utility could generate a slight increase in revenue with an increase in the Volume Charge, but this amount is negligible.

4.6 Sewer Connection Fees

The City of Two Rivers has had relatively flat growth over the past 10 years; thus, it was assumed that the Sewer Connection Fees would have little impact on the Sewer User Rates at this time. This could be re-evaluated if development is pending and connection fees are to be reconsidered.

5. FINANCES AND FUNDING

The City has a Capital Improvements Plan (CIP) that addresses the continuous need to maintain and improve the sewer, water, streets and other infrastructure of the community. The City is looking to continue to fund the sewer portion of these projects with the Sewer Utility enterprise fund and will need to look at ways to finance these improvement projects.

5.1 Financing Methods

There are six possible methods of financing the proposed improvements. These include general obligation bonds, revenue bonds, special assessment bonds, direct loans from private institutions, financing through government programs, and immediate payment. Given the size and scope of the annual capital improvement projects, immediate payment is not possible due to lack of available funds.

5.1.1 General Obligation Bonds

General obligation bonds are readily saleable, and the interest rate is relatively low. These bonds are not dependent on service charges, although service charges can be used to provide the needed revenue. The total amount of general obligation bonds which can be issued by a municipality is limited by Wisconsin Statutes to 5% of the equalized valuation of the municipality. There are many serious disadvantages to this method of financing for projects such as this. First, it is possible that not all users of the new facilities would contribute to the support of the facilities. This would depend upon the method used to recover the payments for these bonds. Secondly, the use made of the wastewater treatment facilities will not necessarily be directly related to the value of a property utilizing the facilities. Third, the sale of general obligation bonds for a utility purpose can affect the credit rating issued to the municipality at the time of the sale of future bonds issues covering other general expenditures.

5.1.2 Revenue Bonds

The advantages of revenue bonds are that their sales do not affect the credit rating or bonding power of the municipality, and they are equitable in that the users of the system pay the capital cost of the facilities. Mortgage revenue bonds are very saleable in Wisconsin if the service charge is such that the net revenues of the utility, after expenses and depreciation, are approximately 1.25 times the debt retirement and operation and maintenance costs. The interest rate for these bonds generally is 1 to 2 percent greater than for general obligation bonds.

5.1.3 Direct Loans

The estimated cost of the proposed CIP projects is quite large, lessening the chance of direct loans from financial institutions or government agencies. Moreover, if available, the interest rates on direct loans may well be less than for either general obligation or mortgage revenue bonds. There are fewer restrictions on the method of revenue generation, and there is less effect on the bonding powers and credit rating of the community than with general obligation bonds.

5.1.4 Financing Through Government Programs

Past demand for improved wastewater treatment resulted in the establishment of state and federal programs for financial assistance to communities undertaking the construction of wastewater treatment facilities improvements. The following sections summarize the government funding programs which may be available.

5.2 Funding Sources

5.2.1 Wisconsin Environmental Improvement Fund (CWFP)

The State of Wisconsin Environmental Improvement Fund (EIF) is managed and administered jointly by WDNR Environmental Loans (EL) and Department of Administration (DOA). EIF encompasses two environmental financing programs for local governments: the Clean Water Fund Program (CWFP), for wastewater and storm water infrastructure projects; and the Safe Drinking Water Loan Program (SDWLP), for drinking water infrastructure projects. The CWFP and SDWLP are revolving loan programs that combine federal grants and state funding to provide financial assistance to municipalities in the form of subsidized loans. Some municipalities may also be eligible for funding in the form of principal forgiveness (PF), which reduces their overall loan amount.

For eligible projects of municipalities with population greater than 10,000 population, the interest rate is 55% of the market rate, 2.475% based on the current market rate of 4.500% as of July 1, 2025. Only those communities whose treatment facilities are in basic compliance with effluent standards are eligible. For treatment plants in violation of effluent standards full financing is available, but at the full market rate. Additionally, the portion of projects for receiving and storing septage and capacity for treating septage can be financed at 0% interest through the CWFP. The standard loan term is 20 years, but terms up to 30 years are possible for pipeline projects and assets that have demonstrated a useful life greater than 20 years.

5.2.2 Rural Development (RD)

The Rural Development (RD) branch of the U.S. Department of Agriculture (USDA) provides financial assistance to small rural communities, those with populations of 10,000 or less. RD has a program in which it provides financial assistance in the form of grants and low-interest loans for the construction of wastewater collection and treatment systems. The loans have a 40-year payback period and are classified as revenue bond type loans secured only by sewer and water use charges.

If funds are available, an RD grant may be combined with a loan to keep user rates reasonable for residential users. To receive a grant, the user charge rates for the average residential customer are compared to a percentage of the median household income (MHI) and the rates for other comparable communities and grant funds may be offered to reduce the rate impacts. Grants may be available for up to 45% of eligible project costs and are intended to benefit residential users and small commercial users. Grants may exceed 45% for communities that qualify for the lowest (poverty) interest rate based on the MHI.

For the user charge impacts described in subsequent paragraphs it will be assumed that the project will not be funded by RD as the City does not qualify for funding.

5.2.3 Community Development Block Grant (CDBG)

The Community Development Block Grant (CDBG) program is a federal formula-allocated grant program under the U.S. Department of Housing and Urban Development (HUD). The State of Wisconsin, Department of Administration administers the state Community Development Block Grant program for public facilities (CDBG-PF), which provides grant money to expand and improve public infrastructure and facility projects critical to community vitality and sustainability. A municipality can qualify for this grant under several conditions, i.e., low and moderate income,

urgent need, or economic development. These grants are highly competitive and may require multiple attempts before successful award.

5.2.4 Other Programs

Focus on Energy incentive programs are available to municipal customers of participating Wisconsin utilities to implement energy efficiency projects. Prescriptive incentives are offered for standard energy efficient technologies that have predictable and predetermined savings, including lighting, many HVAC measures, motors and drives, and others. Custom incentives are available for technologies such as energy efficient aeration and heat recovery and are calculated on a case-by-case basis based on the estimated first year energy savings associated with a project/technology. Custom incentives may pay up to 50 percent of a project's cost, for a maximum of \$200,000 and are available for projects that have a payback between 1.5 and 10 years. There may be opportunities to apply for Focus on Energy incentives for the proposed construction, but these incentives are not included in the user charge impact calculations.

5.3 Summary of Probable Financing

Any of the four practical financing methods may be used, i.e., general obligations bonds, revenue bonds, direct loans from private sources, or government program financing. It is likely that the best interest rates will be achieved through a Wisconsin CWFP Loan for a 20-year loan. For the purposes of this Study, it was assumed that the projects would be funded by CWFP.

5.4 Revenue Sources

Wisconsin Statutes empowers a municipality to construct, maintain, and expand a wastewater system, and further, to collect the revenues to support such a system. There are five potential sources of revenue available to municipalities for support of wastewater treatment facilities. They are as follows: (1) special assessments, (2) general fund revenues, (3) impact fees, (4) TIF fees and (5) service charges.

5.4.1 Special Assessments

The levy of special assessments is provided for by Section 66.07 of the Wisconsin Statutes. Generally, the special assessment principle is used primarily to recover the costs of services and facilities provided immediately adjacent to the property assessed. One additional use of the special assessment provision employed elsewhere from time to time is that of directly assessing the cost of major capital improvements. This is generally utilized in cases where no service charges are made but the governing body wishes to recover the cost of the improvements. It is more applicable to the financing of a collection system than to the treatment plant itself.

If a municipality were to provide the CIP improvements as a general service, it would be possible to assess the costs of the improvements to the benefited parties. However, the municipality would not be able to do so unless the proper legal procedures were followed, and the assessment did not exceed the benefit received by the property assessed. Because of the difficulty in determining the differences in benefits between users and user classes and because of the magnitude of this assessment to present property owners only, special assessments are not recommended.

5.4.2 General Fund Allocations

General Fund monies from general taxation sources and other routine sources of municipal income can be used to pay for the subject project. A direct tax levy to recover the project costs project which are not funded by grants-in-aids is possible. The use of general fund money on a debt service basis is a potential method of financing. This would be accomplished through the

issuance of general obligation bonds as described in Section 5.1.1. Generally, this method of financing is reserved for street improvements, administration improvements and not for wastewater treatment facilities.

5.4.3 Impact Fees

Wisconsin Statute 66.0617 allows cities, villages, towns and counties to assess impact fees on developers to offset the capital costs for public facilities needed because of the new development. The law requires municipalities that wish to utilize the connection fee or connection charge concepts to base these fees on sound concepts. A municipality has the option to implement an impact fee to assist in paying for improvements that are a result of development. These fees cannot be used to finance the deficiencies of any system but for the replacement of systems that will not have adequate capacity to meet new user demands. Any implementation of impact fees will require a needs report (this document will meet that requirement), breakout of costs to present and future users, an ordinance regulating the fees, development of an accounting system to segregate the fees and a public hearing on the ordinance.

The City can utilize this system and may want to consider impact or connection fees for future users. This method will not be used at this time for calculating the user charge impacts. It should be noted that the same bond types can be used in conjunction with this system.

5.4.4 Tax Increment Finance District (TIF)

Municipalities can develop tax increment finance districts to assist in financing wastewater improvements. To utilize this approach, the municipality would have to identify some specific boundaries of land that are mostly undeveloped but are anticipated to be developed soon. The percentage of cost of the proposed project that is related to the potential development of this area included in the TIF district can be paid by the increment of the TIF district. The tax increment is the amount of tax money collected between the value of the district at the time of formation to value of the property after development. This tax increment can be used to pay off projects that have been included in the TIF Plan.

5.4.5 Service Charges

Wisconsin Statute 66.0821(3) empowers a municipality to establish service charges in such amount as to meet all the financial requirements for the construction, reconstruction, improvement, extension, operation, maintenance, repair, and depreciation of a wastewater system. Further, such service charges may be adjusted to cover the payment of all principal and interest of any indebtedness incurred thereof, including the replacement of funds advanced by or paid for the general fund of the municipality. These charges may include a reasonable excess, and the actual basis of the charges is at the discretion of the appointed/elected governing members. To date, the City has used service charges to generate revenue for construction, maintenance and operation of wastewater treatment facilities and this is the anticipated revenue source for future improvements.

5.5 Financial Status and Considerations

5.5.1 Revenue Sources and Current User Rates

The City collects revenues through user service charges and currently serves approximately 5,114 customers with its collection and wastewater treatment system. Table 6-1 presents a summary of the total number of customers, as of the end of 2024. The calculations are based on

the City's customer and sewage usage information that is provided in their 2024 Audit. The recent usage information, and customer counts are provided in Appendix C.

Table 5-1 Customer Accounts and Equivalent Dwelling Units

	Customer Count	Equivalent Units*
Residential	4,715	4,715
Multi-Family	61	61
Commercial	302	302
Industrial	16	16
Public Authority	20	20
Totals	5,114	5,114

The existing user charge system has a fixed charge of \$18.85 per month regardless of the meter size and a flow charge of \$5.60 per 100 cubic feet, which equals about \$46.85 per month for approximately 3,750 gallons per month for the average residential user. The current rates have been in effect since January 2024. User charges will need to be increased further to cover the cost of the City's capital improvement plan.

5.5.2 Operating Expenses

The City's current sewer fund annual operating budget and financial information from past years is provided in Appendix D. The total current annual operating budget is approximately \$3M in recent years. After removing depreciation, debt payments, and other miscellaneous expenses not factored into the estimated O&M costs, the budget for operating and maintaining the WWTF is approximately \$1.7M. A detailed estimate of these future costs is provided in Appendix F.

5.5.3 Replacement Fund

A municipality receiving a loan from the CWFP is required to establish an equipment replacement fund to be used only for expenses incurred for equipment related to the municipality's wastewater treatment works. The City had a replacement fund balance of \$1,176,392 at the end of 2024. The City has maintained this fund balance as a reserve and has not changed this amount since 2017.

5.5.4 Debt Repayments and Debt Reserves

The City has nine CWFLP loans and 3 Debt Issues currently being paid by the sewer utility. The City paid \$1,112,062 in 2024 for debt service and will be adding an estimated \$110,600 in 2025 and \$164,500 in 2026 to the debt service. The City will see a relatively large reduction in debt service after 2027 due to the final payment of two notes totaling \$420,000 to be paid.

5.5.5 Other Capital Improvements and Planned Expenses

It is anticipated that the City will continue to perform sewer improvements and other projects as described above, but these improvements were not factored into the User Charge calculations.

5.6 Projected Annual Operating Budget and User Charge Rates

The projected annual operating budget and user charge rates for the City need to take several components into consideration and can be best analyzed using a cash flow schedule.

The expense components of the cash flow include future debt of the wastewater facility improvements, debt or costs for future capital/improvements public works projects, collection

system depreciation, equipment replacement funds, and total annual operation costs as described in the previous sections. The revenue components of the cash flow are revenue from current rates and equivalent users and projected revenue from rate increases, connection fees, and interest income. Improvements can also be financed through the use of cash on hand or replacement fund reserves.

User charges for an average residential customer are expected to increase from the current average residential charge of approximately \$46.85 per month to between \$48 and \$52 per month depending on the methodology of the user charge system and the City's schedule for the continued capital improvements.

5.7 Implementation Steps and Schedule

The City of Two Rivers intends to apply for continued funding through the Wisconsin CWFP to finance construction. The following implementation schedule is based on the timelines for this loan program, as well as requirements for agency review, approval, and permitting. Plan review will be performed by the WDNR.

A preliminary schedule is presented in Table 5-2. It includes discussions with the City Council in August 2025 and implementation of changes to the Municipal Code by January 2026 to allow the City to close on the 2025 Clean Water Fund Loan in early 2026.

The actual schedule will depend on the City Council meeting schedule.

Table 5-2 Proposed Implementation Schedule

Action	Completion Date
Public Utilities Meeting	August 2025
City Council Meeting	August 2025
City Council Approval	August 2025
Notice of Rate Change	September 2025
Implementation of Rate Change	December 2025
Clean Water Fund Loan Closing	January 2026

Appendix A

Two Rivers Municipal Code – Chapter 5-2 Sewer System User Charge

ORDINANCE

AN ORDINANCE to repeal and recreate Title 5, Chapter 2, Section 5, entitled "Amount of Sewer Service Charges" of the Municipal Code, increasing the fixed charge portions of the rate by amounts--\$1.85 for the Fixed Monthly Charge and \$1.85 for the Unit Charge.

The Council of the City of Two Rivers do ordain as follows:

SECTION 1. That Title 5, Chapter 2, Section 5, (a), (b), and (c) of the Municipal Code is hereby repealed and recreated to read as follows:

SEC. 5-2-5 AMOUNT OF SEWER SERVICE CHARGES

(a) **SEWER SERVICE CHARGE UNIT COSTS.** This unit cost for the sewer service charge are as follows:

Volume	\$5.60/100 cubic feet
BOD	\$1.04/lb
Suspended Solids	\$1.07/lb
Phosphorus	\$3.94/lb
Fixed Charge	\$18.85/User/Month
Unit Charge	\$12.85/Unit/Month

(b) **CATEGORY A SEWER SERVICE CHARGE.** The sewer service charge for Category A sewer users is as follows:

Fixed Monthly Charge	\$18.85/Month
Volume Charge	\$5.60/100 cubic feet
Unit Charge	\$12.85/additional living unit/Month

- (1) Residential customers will be billed the sewer service charge for their actual water usage during the November through March period and the monthly average from the November through March period will be the maximum sewer billing for the period of April through October.

(c) **CATEGORY B SEWER SERVICE CHARGE.** The sewer service charge for Category B sewer users is as follows:

Fixed Monthly Charge	\$18.85/Month
Volume Charge	\$5.60/100 cubic feet

Surcharge:

BOD greater than 160 mg/l = \$1.04/lb

Suspended Solids greater than 200 mg/l = \$1.07/lb

Phosphorus greater than 7 mg/l = \$3.94/lb

The Category B sewer service charge shall be computed in accordance with the formula presented below:

$$T = FQ + (V \times Cv) + .00834 V (B \times Cb + S \times Cs + P \times Cp)$$

Where:

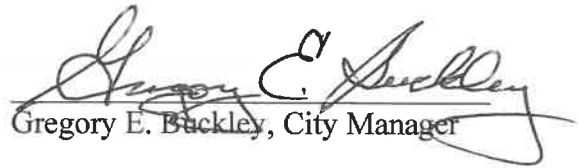
T	=	Total sewer service charge
FQ	=	Fixed monthly charge
B	=	Concentration of BOD in mg/l in the wastewater above 160 mg/l
S	=	Concentration of suspended solids in mg/l in the wastewater above 200 mg/l
P	=	Concentration of phosphorus in mg/l in the wastewater above 7 mg/l
V	=	Wastewater volume in 1,000 gallons
Cv	=	Cost per 1,000 gallons
Cb	=	Cost per pound of BOD
Cs	=	Cost per pound of suspended solids
Cp	=	Cost per pound of phosphorus
.00834	=	Conversion factor

SECTION 2. This Ordinance shall take effect and be in force from and after January 1, 2024, and publication of same.

Dated December 18, 2023.



Adam Wachowski, Council President



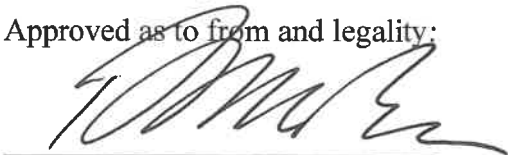
Gregory E. Buckley, City Manager

Attest:



Amanda Baryenbrach, City Clerk

Approved as to form and legality:



John M. Bruce, City Attorney

Sec. 5-1-1. Operation of utilities.

- A. *City manager.* The water and light plant and the sewage disposal plant and the communications plant shall be operated by the city manager in lieu of a commission created pursuant to Wis. Stats. § 66.0805.
- B. *Rates, rules and regulations.*
 - (1) The water and light plant shall be operated pursuant to this chapter and rates, rules and regulations on file with and approved by the Public Service Commission of Wisconsin.
 - (2) The communications plant shall be operated pursuant to this chapter and any applicable orders of the Public Service Commission of Wisconsin.
- C. *Operating rules.* All persons now receiving water, electric or communications services from the utility or who may hereafter make application therefor shall be considered as having agreed to be bound by all applicable orders, rules and regulations as issued by or filed with the Public Service Commission of Wisconsin.
- D. *Validity.* Should any section, clause or provision of this chapter be declared by any court of competent jurisdiction to be invalid, the same shall not affect the validity of the chapter as a whole or any part thereof, other than the part so declared to be invalid.
- E. *Conflicting provisions repealed.* All ordinances in conflict with any provision of this chapter are hereby repealed.

Sec. 5-1-2. Utility service beyond city limits.

Pursuant to the authority granted under Wis. Stats. §§ 66.0813 and 66.0821(2)(b), the city may in the exercise of its reasonable discretion extend water, sewer, electrical or telecommunications service to serve persons or places outside the city's corporate limits. Such discretion shall be exercised pursuant to the adoption of a resolution by the city council.

(Amended 4-2-2018)

Sec. 5-1-3. Special assessments for sewer and water mains and laterals.

Water and sewer main and lateral extensions may be made upon petition of 50 percent of the abutting property owners or when ordered by the council. Special assessments to pay the cost thereof shall be levied pursuant to Wis. Stats. § 66.0703.

Sec. 5-1-4. Sewer service charges for premises against which special assessments have not been levied.

- A. *Sewer service charge.* There is hereby established a sewer service charge, which shall be levied against all premises now or hereafter serviced by sanitary sewers if such premises were not subjected to a special assessment for such sanitary sewers when the same were installed.
- B. *Amount.* Such sewer service charge shall be the original special assessment cost of the improvements, plus any indirect costs thereof, including, but not limited to, the city's carrying costs for financing the cost of the improvement. Such annual carrying charge shall be in an amount calculated to increase or decrease with the consumer price index (CPI).
- C. *Payment.* Such sewer service charge may be paid in cash or in equal annual installments upon the same terms provided for payment of special assessments made against other properties in the same year in which

laterals are installed to such premises. The first installment payment shall be paid before such premises are connected to the sanitary sewers adjacent to such premises, and subsequent payments shall be due and payable at the same time and manner as real estate taxes and other special assessments are paid.

- D. *Application for service.* The owner of any premises against which a sewer service charge is levied pursuant to this section shall make application for municipal sewer service to the city treasurer. Such application shall specify the service desired and shall contain the legal description of the premises to be serviced. The city treasurer shall compute the amount of such service charges and certify the same. Such certification shall be subject to review and final determination by the council upon application by the property owner. The city treasurer shall keep an accurate record of the determination and payment of all such service charges and of the premises against which they are levied.
- E. *Installment payments.* If the owner of any premises subject to sewer service charges shall request the privilege of paying the same in installments, such owner and spouse, if any, shall execute an agreement for the payment of the same which shall contain the legal description of the premises subject to such service charges, and the same shall be recorded by the city treasurer in the office of the Register of Deeds of Manitowoc County and shall be a lien upon such premises until paid. In default of payment of any installment due pursuant to such agreement, the city shall have the right to disconnect such premises from the municipal sewer systems.
- F. *Connection without payment prohibited.* No person shall connect any premises against which a sewer service charge is made pursuant to this section to the municipal sewer systems before such charge is paid or provided for pursuant to this section.
- G. *Application.* This section shall not apply to charges or assessments for unremunerated improvements made to property being annexed to the city, which shall be governed by Wis. Stats. § 2-7-14 of this Code.

Sec. 5-1-5. Compulsory sewer and water connections.

- A. The owners of any buildings used for human habitation or occupancy and located adjacent to a water and sewer main or in a block through which a water or sewer main extends are required to connect the plumbing facilities of such buildings to such water and sewer mains. If any person fails to comply with this section for more than ten days after notice, in writing, he shall be guilty of an offense, and the city may cause such connections to be made and the expense thereof shall be assessed as a special tax against the property pursuant to Wis. Stats. § 281.45.
- B. The city council may extend the time for connection hereunder or grant other temporary relief where strict enforcement would work an unnecessary hardship without corresponding public or private benefit.

(Ord. No. 2024-128, § 1, 6-17-2024)

Sec. 5-1-6. Engineer to keep sewer records and maps.

The city engineer shall keep a record of all sewer connections and make maps showing the location of same and position of all house drains, connections, junctions and other data necessary for efficient service.

Sec. 5-1-7. Water service charges for premises against which special assessments have not been levied.

Water service charges shall be as established by the public service commission.

Sec. 5-1-8. Water service replacement.

A. *Intent and purpose.* The city council finds that it is in the public interest to establish a comprehensive program for the removal and replacement of lead or lead-contaminated water services in use within both the city's water system and in private systems and, to that end, declares the purposes of this section to be as follows:

- (1) To ensure that the water quality at every tap of utility customers meets the water quality standards specified under the federal and state law;
- (2) To reduce the lead in the city's drinking water to meet the Environmental Protection Agency (EPA) standards and ideally to a lead contaminant level of zero in city drinking water for the health of city ratepayers;
- (3) To meet the Wisconsin Department of Natural Resources (WDNR) requirements for local compliance with the Lead and Copper Rule (see 56 CFR 6460, 40 CFR Parts 141.80 to 141.90 and §§ NR 809.541 to 809.55, Wis. Adm. Code); and
- (4) To eliminate leaks due to pipe material or joint deterioration.

B. *Definitions.* Definitions of terms used in this section are provided below:

City water system means the water supply system owned by and located within the city.

Customer service line means the portion of a water service line that extends from the outlet of the curb stop to the inlet of a customer's water meter.

Utility means the city's water utility.

Utility service line means the portion of a water service line from the water main to the outlet of the curb stop, including the curb stop, but not the outlet joint of the curb stop.

Water service line means the service line that extends from the water main to a customer's water meter.

C. *Identification of illegal services.*

- (1) The utility shall create and maintain a record of the location of all identified lead and galvanized iron service lines in the city.
- (2) The utility director or duly authorized agent shall have the right, upon the presentation of credentials, to request to enter a property connected to the city water system at any reasonable time and inspect the customer service line. Any person or entity who owns, manages, or otherwise exercise control over a property connected to the city water system shall allow the utility to inspect the customer service line. If entry is refused, the utility shall obtain a special inspection warrant under Wis. Stats. § 66.0119 or will refer to subsection E. of this section for water service discussion.
- (3) The utility shall provide written notice to any person or entity who owns, manages, or otherwise exercises control over a property connected to the city water system if that property has been inspected and determined to have a lead service line.

D. *Lead or galvanized iron service line replacement requirements.*

(1) *Replacement required.*

- (a) Any existing private lead or galvanized iron water service shall be considered illegal. Illegal services shall be replaced with water service lines constructed of materials approved by the city.

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- (b) Prior to the actual reconstruction of the water main and lateral system, each property owner shall be given written notice of the project. Such notice shall be made not less than 30 days prior to commencement of the actual work.
 - (c) As the reconstruction progresses, the utility director or duly authorized agent shall inspect each private water service connection for the presence of lead. In the event inspection had been made previously, the utility director or duly authorized agent shall determine the condition of the private water connection from inspection records.
 - (d) In the event that the private water service does not contain lead, the city shall reconnect the same to the utility system at an appropriate point near the right-of-way line.
 - (e) In the event that the private water service is found to contain lead, the utility director or duly authorized agent shall immediately notify the owner, in writing, of that fact.
 - (f) Existing lead or galvanized iron service lines that develop a leak or otherwise need repair may not be repaired but must be replaced.
 - (g) Other lead or galvanized iron service lines not part of a reconstruction project shall be replaced in accordance with a schedule developed by the utility. The schedule shall be developed to eliminate lead services lines in the city.
 - (h) Property owners shall replace their customer service lines that meet the definition of an illegal service line according to the schedule developed by the utility. The city or utility or both may issue citations and penalties prescribed by city ordinance on a property owner that fails to replace their customer service line that meet the definition of a lead or galvanized iron service line as required by the schedule or be referred to subsection E. of this section for service disconnection.
- (2) *Owner to replace service.* The owner shall, at the owner's expense, replace the lead water services or water services contaminated with lead. In all cases, the city shall supply an appropriate connection point as part of its work. The owner may elect to:
- (a) Contract with a licensed contractor to complete the repair. Work needed to accomplish the repair shall be done at the expense of the owner. Within 30 days of the giving of notice of deficiency under subsection B.(1)(e) of this section, proof of arrangements for repair shall be provided to the utility director or duly authorized agent, and, within 90 days of the giving of notice, the repairs shall be completed.
 - (b) Have the city's contractors, if available, complete the repair.
 - [1] The city may, as part of any project, request unit bid prices for the calculation of the cost of making appropriate repair to the private building water services.
 - [2] If available, and should the owner select this option, the owner will be charged the entire cost of making the repair, except to the extent a city policy provides an exception to a portion of the costs.
 - (c) The city may establish a program to provide financial assistance to property owners replacing lead service lines.
- E. *Authority to discontinue service.* As an alternative to any other methods provided for obtaining compliance with the requirements of this code regarding replacement of illegal customer service lines, the utility may, no sooner than 30 days after the giving of written notice, discontinue water service to such property served by illegal private water lateral after reasonable notice and an opportunity for hearing before the city utilities committee under Wis. Stats. Ch. 68.
- F. *Financing for replacement of private lead water service lines.*
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- (1) *Purpose.* The city council finds that the replacement of public and private lead service lines protects public health and promotes the general welfare of city residents. The purpose of this section is to facilitate loans to property owners to replace private lead service lines by treating principal and interest repayments, fees and other charges for these loans as special charges eligible for inclusion on the tax bill for these properties.

(2) *Definitions.*

Annual installment means the portion of the private LSL replacement loan amount that is due for a particular year under the private LSL replacement loan agreement.

Borrower means a property owner who enters into a private LSL replacement loan agreement with the city to fund the replacement of a private lead service line on the borrower's property.

Loan agreement means a written agreement among a borrower and the city as provided in subsection (4).

Loan amount means the amount of principal, interest, administrative fees, and other loan charges under the loan agreement to be paid by the borrower under the private LSL replacement loan.

LSL means lead service line.

Private LSL means a customer-side water service line, as defined in Wis. Stats. § 196.372(1)(a), constructed of lead or constructed of galvanized material that is or was downstream of lead.

Private LSL replacement loan means a loan made by the city to a borrower under this section for the replacement of a private lead serviceline on a subject property.

Subject property means any property on which a private lead service line replacement has been made and financed through an outstanding private LSL replacement loan.

- (3) *Loan application and approval.* A prospective borrower applying for a private LSL replacement loan must comply with the loan application process established by the city. The city will review and determine whether to approve the loan application.
- (4) *Loan agreement.* The city and the borrower must execute a loan agreement which at a minimum:
- (a) Sets forth the total loan amount, the annual interest rate on the loan, the loan term, the amount of each annual installment, and any applicable city fee.
 - (b) Informs the borrower that the loan amount shall be considered a special charge, and each year's annual installment shall be levied onto the property tax bill of the subject property as a special charge and be a lien against the subject property pursuant to Wis. Stats. § 66.0627, as amended.
- (5) *Private LSL replacement loan as special charge.* A private LSL replacement loan shall be considered a special charge and lien on the subject property. Each year's annual installment shall be levied onto the property tax bill of the subject property as a special charge pursuant to Wis. Stats. § 66.0627, as amended.
- (6) *Collection of special charges.* The city shall follow its customary practice in collecting special charges placed on the tax rolls, including assessing penalties and charging interest, and initiating foreclosure proceedings where appropriate.
- (7) *Segregated fund.* Special charges collected for private LSL replacement loan repayments shall be placed in a segregated fund and disbursed in accordance with the requirements of the city's funding sources.
- (8) *Record keeping.* The city shall keep an accounting of private LSL replacement loans and payments received by the city and provide borrowers with that information upon request.
- (9) *Administration fee.* The city may establish a reasonable fee to charge a borrower for administering a private LSL replacement loan and include this fee in the loan agreement.

CHAPTER 5-2. SEWER SYSTEM USER CHARGE SYSTEM AND INDUSTRIAL COST RECOVERY SYSTEM¹

Sec. 5-2-1. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

Approving authority. The city council or its duly authorized agent or representative shall have jurisdiction over the use and operation of the wastewater treatment plant, the municipal sanitary sewer system discharging into the wastewater treatment plant, and the municipal separate storm sewer system.

BOD (denoting "biochemical oxygen demand"). The quantity of oxygen utilized in the biochemical oxidation of organic matter in five days at 20° Celsius, expressed as milligrams per liter (mg/l). Quantitative determination of BOD shall be made in accordance with procedures set forth in standard methods.

Building drain. That part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer.

- A. *Building drain, sanitary.* A building drain which conveys sanitary or industrial sewage only.
- B. *Building drain, storm.* A building drain which conveys stormwater or other clear water drainage, but no wastewater.

Building sewer. The extension from the building drain to the public sewer or other place of disposal (also called the "house connection"). The building sewer begins immediately outside of the foundation wall of any building or structure being served and ends at its connection to the public sewer.

- A. *Building sewer, sanitary.* A building sewer which conveys sanitary or industrial sewage only.
- B. *Building sewer, storm.* A building sewer which conveys stormwater or other clear water drainage, but not sanitary or industrial sewage.

Category A. Those sanitary sewer users who discharge normal domestic strength wastewater with concentrations of BOD no greater than 160 mg/l, suspended solids no greater than 200 mg/l, and phosphorus no greater than seven mg/l.

Category B. Those sanitary sewer users who discharge wastewater with concentrations in excess of 160 mg/l of BOD, 200 mg/l suspended solids, and seven mg/l of phosphorus. Users whose wastewater exceeds the concentration for any one of these parameters shall be Category B.

Chlorine requirement. The amount of chlorine, in mg/l, which must be added to sewage to produce a residual chlorine as specified in the Wisconsin Pollutant Discharge Elimination System (WPDES) permit.

Combined sewer. A sewer intended to receive both wastewater and stormwater or surface water.

Combined sewerage. A combination of both wastewater and stormwater or surface water.

Compatible pollutants. BOD, suspended solids, phosphorus, nitrogen, pH, or fecal coliform bacteria, plus additional pollutants identified in the municipality's WPDES permit for its wastewater treatment facility, provided

¹Editor's note(s)—Adopted by the city council of the City of Two Rivers (Title 5, Ch. 2, of the 1981 Code). Amendments noted where applicable.

that such facility is designed to treat such additional pollutants and, in fact, does remove such pollutants to a substantial degree.

Depreciation. An annual operating cost reflecting capital consumption and obsolescence (reduction or future service potential) of the treatment works.

Easement. An acquired legal right for the specified use of land owned by others.

Fecal coliform. Any of a number of organisms common to the intestinal tract of man and animals, whose presence in sanitary sewerage and/or stormwater is an indicator of pollution.

Floatable oil. Oil, fat, or grease in a physical state such that it will separate by gravity from wastewater by treatment in an approved pretreatment facility. Wastewater shall be considered free of floatable oil if it is properly pretreated and the wastewater does not interfere with the collection system.

Ground garbage. The residue from the preparation, cooking, dispensing, handling, storage, and sale of food products and produce that has been shredded to such a degree that all particles will be carried freely in suspension under the flow conditions normally prevailing in public sewers, with no particle greater than one-half-inch in any dimension.

Incompatible pollutants. Wastewater with pollutants that will adversely affect the wastewater treatment facilities or disrupt the quality of wastewater treatment if discharged to the wastewater treatment facilities.

Industrial cost recovery. The recovery by the city from the industrial users of the treatment works of the amount of federal grant money used for the purpose of constructing wastewater facilities allocable to the transportation and treatment of waste from such users.

Industrial wastes. Any solid, liquid, or gaseous substance discharged or escaping from any industrial, manufacturing, or commercial establishment. Such term includes any wastewater which is not sanitary sewage.

Infiltration. The water entering a sewer system, including building drains and sewers, from the ground through such means as, but not limited to, defective pipes, pipe joints, connections or manhole walls.

Infiltration/inflow. The total quantity of water from both infiltration and inflow, without distinguishing the source.

Inflow. The water discharge into a sewer system, including building drains and sewers, from such sources as, but not limited to, roof leaders, cellar, yard and area drains, foundation drains, unpolluted cooling water discharges, drains from springs and swampy areas, manhole covers, cross-connections from storm sewers and combined sewers, catch basins, stormwaters, surface runoff, street wash waters or drainage. Inflow does not include, and is distinguished from, infiltration.

Municipality. The City of Two Rivers.

Natural outlet. Any outlet, including storm sewers and combined sewer overflows, into a watercourse, pond, ditch, lake, or other body of surface water or groundwater.

Nitrogen. Kjeldahl nitrogen which is the sum of organic nitrogen and ammonia nitrogen.

Normal domestic strength wastewater. Wastewater with concentrations of BOD no greater than 160 mg/l, suspended solids no greater than 200 mg/l, and phosphorus no greater than seven mg/l.

Operation and maintenance costs. Includes all costs associated with the operation and maintenance of the wastewater treatment facilities, including administration and replacement costs, all as determined from time to time by the municipality.

Parts per million. A weight-to-weight ratio, the parts per million value multiplied by the factor 8.34 shall be equivalent to pounds per million gallons of water.

Person. Any and all persons, including any individual, firm, company, municipal or private corporation, association, society, institution, enterprise, governmental agency, or other entity.

pH. The logarithm of the reciprocal of the hydrogen ion concentration. The concentration is the weight of hydrogen ions, in grams per liter of solution. Neutral water, for example, has a pH value of seven and a hydrogen-ion concentration of $10(-7)$.

Phosphorus. Total phosphorus and is expressed in mg/l of P (phosphorus).

Pretreatment. The treatment of industrial sewage from privately owned industrial sources prior to introduction into a public treatment works.

Private sewer. A sanitary sewer lateral, storm sewer lateral, or other private sewer that connects a building or parcel to the public sewer, including all portions of a lateral or other private sewer located within a public street right-of-way or public sewer easement.

Public sewer.

A. Any publicly owned sewer, storm drain, sanitary sewer, or combined sewer and shall consist of the following increments:

- (1) *Collector sewer.* A sewer whose primary purpose is to collect stormwater or wastewater from individual point source discharges.
- (2) *Interceptor sewer.* A sewer whose primary purpose is to transport stormwater or wastewater from collector sewers to a treatment facility.
- (3) *Force main.* A pipe in which wastewater is carried under pressure.
- (4) *Pumping station.* A station positioned in the public sewer system at which stormwater or wastewater is pumped to a higher level.

B. The public sewer does not include any portion of a lateral or other private sewer that conveys stormwater or wastewater from individual point source discharges.

Replacement costs. Expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary during the useful life of the wastewater treatment facility to maintain the capacity and performance for which such facilities were designed and constructed. Operation and maintenance costs include replacement costs.

Sanitary sewage. A combination of liquid and water-carried wastes discharged from residences, commercial buildings, industrial plants and institutions, including polluted cooling water.

Sanitary sewer. A sewer that carries sewage or wastewater.

Sewage. The spent water of a person or community. The preferred term is "wastewater."

Sewer. A pipe or conduit that carries wastewater or drainage water.

Sewer service charge. A charge levied on users of the wastewater treatment facilities for payment of operation and maintenance expenses, debt service costs, and other expenses or obligations of said facilities.

Shall. Means it is mandatory; "may" means it is permissible.

Slug. Any discharge of water or wastewater which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than 15 minutes more than five times the average 24-hour concentration of flows during normal operation, and/or adversely affects the collection system and/or performance of the wastewater treatment facility.

Standard methods. The examination and analytical procedures set forth in the most recent edition of Standard Methods for the Examination of Water and Wastewater, published jointly by the American Public Health Association, the American Water Works Association, and the Water Environment Federation.

Storm sewer or drain. A drain or sewer for conveying water, groundwater, subsurface water, or unpolluted water from any source.

Suspended solids. Total suspended matter that either floats on the surface of, or is in suspension in, water, wastewater, or other liquids, and that is removable by laboratory filtering as prescribed in Standard Methods for the Examination of Water and Wastewater, and referred to as "nonfilterable residue."

Total solids. The sum of suspended and dissolved solids.

Toxic amount. Concentrations of any pollutant or combination of pollutants which, upon exposure to or assimilation into any organism, will cause adverse effects, such as cancer, genetic mutations and physiological manifestations as specified and defined by standards issued by the United States Environmental Protection Agency and/or the Wisconsin Department of Natural Resources and/or other governmental agencies.

Unpolluted water. Water quality equal to or better than the effluent of the wastewater treatment facilities or water that would not cause violation of receiving water quality standards and would not be benefitted by discharge to the sanitary sewers and wastewater treatment facilities.

Wastewater. The spent water of a community or person. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions, together with any groundwater, surface water, and stormwater that may be present.

Wastewater collection facilities or wastewater collection system. The structures and equipment required to collect and carry wastewater.

Wastewater treatment facility. An arrangement of devices and structures for treating wastewater and sludge. Also referred to as "wastewater treatment plant."

Waterworks. All facilities for water supply, filtration plant, storage reservoirs, waterlines and services and booster stations for obtaining, treating and distributing potable water.

Watercourse. A natural or artificial channel for the passage of water either continuously or intermittently.

Wisconsin pollutant discharge elimination system (wpdes) permit. A document issued by the State of Wisconsin which establishes performance standards, effluent limitations and monitoring requirements for the municipal stormwater system or municipal wastewater treatment facility.

Editor's note(s)—Amended at time of adoption of Code.

State law reference(s)—See Title 1, General Provisions, Ch. 1-1, Art. III.

Sec. 5-2-2. Use of public sewers.

- A. *Sanitary sewers.* No person(s) shall discharge or cause to be discharged any unpolluted waters such as stormwater, groundwater, roof runoff, subsurface drainage, or cooling water to any sanitary sewer.
- B. *Storm sewers.* Stormwater and all other unpolluted water shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the approving authority and other regulatory agencies. Unpolluted industrial cooling water or process water may be discharged, on approval of the approving authority and other regulatory agencies, to a storm sewer, combined sewer, or natural outlet.
- C. *Prohibited actions.* No person shall place, deposit or permit to be deposited in any unsanitary manner on public or private property within the jurisdiction of the authority any wastewater or other polluted waters

except where suitable treatment has been provided in accordance with provisions of this chapter and WPDES permit.

- (1) No person shall discharge or cause to be discharged to any natural outlet any wastewater or other polluted waters except where suitable treatment has been provided in accordance with provisions of this chapter and the WPDES permit.
- (2) No person shall construct or maintain any privy, privy vault, septic tank, cesspool or other facility intended or used for the disposal of wastewater, except septic tanks may be constructed and maintained where public sewer is not available as determined by the approving authority. All septic tanks shall conform to all applicable federal, state, county and local codes, rules and requirements.

D. *Prohibitions and limitations.* Except as hereinafter provided, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

- (1) Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid, or gas.
- (2) Any waters or wastes containing toxic or poisonous solids, liquids, or gases in sufficient quantity, either singly or by interaction with other wastes, that could injure or interfere with any waste treatment or sludge disposal process, constitute a hazard to humans or animals, or create a public nuisance in the receiving waters of the wastewater treatment facility.
- (3) Any waters or wastes having a pH lower than 5.0 or in excess of 9.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the wastewater treatment facilities.
- (4) Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in public sewers or other interference with the proper operation of the wastewater treatment facilities, such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshing, entrails, and paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.
- (5) The following described substances, materials, waters or waste shall be limited in discharges to sanitary sewer systems to concentrations or quantities which will not harm either the sanitary sewers, wastewater treatment process, or equipment; will not have an adverse effect on the receiving stream; or will not otherwise endanger lives, limbs, public property, or constitute a nuisance. The approving authority may set limitations more stringent than those established below if such more stringent limitations are necessary to meet the above objectives. The approving authority will give consideration to the quantity of subject waste in relation to flows and velocities in the sewers, materials of construction of the sanitary sewers, the wastewater treatment facility, and other pertinent factors. Wastes or wastewater discharged to the sanitary sewers shall not exceed the following limitations:
 - (a) Wastewater having a temperature higher than 150° Fahrenheit (65° Celcius).
 - (b) Wastewater containing more than 25 mg/l of petroleum oil, nonbiodegradable cutting oils, or products of mineral oil origin.
 - (c) Wastewater from industrial plants containing floatable oils, fat, or grease.
 - (d) Any unground garbage. Garbage grinders may be connected to sanitary sewers from homes, hotels, institutions, restaurants, hospitals, catering establishments, or similar places where garbage originates from the preparation of food in kitchens for the purpose of consumption on the premises or when served by caterers.
 - (e) Any waters or wastes containing iron, chromium, copper, zinc, and other toxic and nonconventional pollutants to such degree that the concentration exceeds levels specified by federal, state, and local authorities.

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- (f) Any waters or wastes containing odor-producing substances exceeding limits which may be established by the approving authority or limits established by any federal or state statute, rule, or regulation.
 - (g) Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the approving authority in compliance with applicable state or federal regulations.
 - (h) Any waters or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment processes employed, or are amenable to treatment only to such degree that the wastewater treatment facility effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.
 - (i) Any water or wastes which, by interaction with other water or wastes in the sanitary sewer system, release obnoxious gases, form suspended solids which interfere with the collection system, or create a condition deleterious to structures and treatment processes.
 - (j) Materials which exert or cause:
 - [1] Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the wastewater treatment facility.
 - [2] Unusual volume of flow or concentration of wastes constituting slugs, as defined herein.
 - [3] Unusual concentrations of inert suspended solids (such as, but not limited to, fuller's earth, lime slurries, and lime residues) or of dissolved solids (such as, but not limited to, sodium sulfate).
 - [4] Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions).
 - (k) Incompatible pollutants in excess of the allowed limits as determined by local, state and federal laws and regulations in reference to pretreatment standards developed by the Environmental Protection Agency, 40 CFR Part 403, as amended from time to time.
- E. *Wisconsin pollutant discharge elimination system (WPDES) permit.* No person shall cause or permit a discharge into the sanitary sewers or storm sewers that would cause a violation of the municipality's WPDES permits and any modifications thereof.
- F. *Special arrangements.* No statement contained in this chapter shall be construed as prohibiting any special agreement between the approving authority and any person whereby a waste of unusual strength or character may be admitted to the wastewater treatment facilities, either before or after pretreatment, provided that there is no impairment of the functioning of the wastewater treatment facilities by reason of the admission of such wastes, and no extra costs are incurred by the approving authority without recompense by the person, and further provided that all rates and provisions set forth in this chapter are recognized and adhered to.
- G. *New connections.* New connections to the approving authority's public sewer system will be allowed only if there is available capacity in all of the downstream public sewers, stormwater facilities, and wastewater treatment facilities.

Sec. 5-2-3. Control of industrial wastes directed to public sewers.

- A. *Submission of basic data.* The approving authority may require each person who discharges or seeks to discharge industrial wastes to a public sewer to prepare and file with the approving authority, at such times as it determines, a report that shall include pertinent data relating to the quantity and characteristics of the

wastes discharged to the wastewater treatment facilities. In the case of a new connection, the approving authority may require that this report be prepared prior to making the connection to the public sewers.

- B. *Industrial discharges.* If any waters or wastes are discharged or are proposed to be discharged to the public sewers, which waters or wastes contain substances or possess the characteristics enumerated in section 5-2-2, and which in the judgment of the approving authority have a deleterious effect upon the wastewater treatment facilities, processes, equipment or receiving waters, or which otherwise create a hazard to life, health, or constitute a public nuisance, the approving authority may:
- (1) Reject the wastes;
 - (2) Require pretreatment to an acceptable condition for discharge to the public sewers;
 - (3) Require control over the quantities and rates of discharge; and/or
 - (4) Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges under the provisions of this chapter.
- C. *Control manholes.*
- (1) Each person discharging industrial wastes into a public sewer shall, at the discretion of the approving authority, construct and maintain one or more control manholes or access points to facilitate observation, measurement, and sampling of wastes, including sanitary sewage.
 - (2) Control manholes or access facilities shall be located and built in a manner acceptable to the approving authority. If measuring and/or sampling devices are to be permanently installed, they shall be of a type acceptable to the approving authority.
 - (3) Control manholes, access facilities, and related equipment shall be installed by the person discharging the waste, at his expense, and shall be maintained by him so as to be in safe condition, accessible, and in proper operating condition at all times. Plans for installation of the control manholes or access facilities and related equipment shall be approved by the approving authority prior to the beginning of construction.
- D. *Measurement of flow.* The volume of flow used for computing sewer service charges shall be the metered water consumption of the person as shown in the records of meter readings maintained by the water department or utility except as noted in section 5-2-3.E., metering of waste.
- E. *Metering of waste.* Devices for measuring the volume of waste discharged may be required by the approving authority if this volume cannot otherwise be determined from the metered water consumption records. Metering devices for determining the volume of waste shall be installed, owned, and maintained by the person discharging the wastewater. Following approval and installation, such meters may not be removed without the consent of the approving authority.
- F. *Waste sampling.*
- (1) Industrial wastes discharged into the public sewers shall be subject to periodic inspection and a determination of character and concentration of said wastes. The determination shall be made by the industry as often as may be deemed necessary by the approving authority.
 - (2) Samples shall be collected in such a manner as to be representative of the composition of the wastes. The sampling may be accomplished either manually or by the use of mechanical equipment acceptable to the approving authority.
 - (3) Installation, operation, and maintenance of the sampling facilities shall be the responsibility of the person discharging the waste and shall be subject to the approval of the approving authority. Access to sampling locations shall be granted to the approving authority or its duly authorized representatives at

all times. Every care shall be exercised in the collection of samples to ensure their preservation in a state comparable to that at the time the sample was taken.

G. *Pretreatment.*

- (1) Persons discharging industrial wastes into any public sewer may be required to pretreat such wastes, if the approving authority determines pretreatment is necessary to protect the wastewater treatment facilities or prevent the discharge of incompatible pollutants.
- (2) In that event, such person shall provide, at his expense, such pretreatment or processing facilities as may be determined necessary to render wastes acceptable for admission to the sanitary sewers.

H. *Grease, oil, and sand interceptors.* Grease, oil, and sand interceptors shall be provided when, in the opinion of the approving authority, they are necessary for the proper handling of liquid wastes containing floatable grease in amounts in excess of those specified in this chapter, or any flammable wastes, sand, or other harmful ingredients, except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the approving authority and shall be located as to be readily and easily accessible for cleaning and inspection. In maintaining these interceptors, the owner(s) shall be responsible for the proper removal and disposal by appropriate means of the captured material and shall maintain records of the dates and means of disposal which are subject to review by the approving authority. Disposal of the collected materials performed by owner's(s') personnel or currently licensed waste disposal firms must be in accordance with currently acceptable Department of Natural Resources (DNR) rules and regulations.

I. *Analyses.*

- (1) All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this chapter shall be determined in accordance with the latest edition of "Standard Methods" and with the federal regulations of 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants, as amended from time to time. Sampling methods, location, time, durations, and frequencies are to be determined on an individual basis subject to approval by the approving authority.
- (2) Determination of the character and concentration of the industrial wastes shall be made by the person discharging them, or the person's agent, as designated and required by the approving authority. The approving authority may also make its own analyses on the wastes, and these determinations shall be binding as a basis for sewer service charges.

J. *Submission of information.* Plans, specifications, and any other pertinent information relating to proposed flow equalization, pretreatment, or grease and/or sand interceptor facilities shall be submitted for review and approval of the approving authority prior to the start of their construction if the effluent from such facilities is to be discharged into the public sewers. No construction of such facilities shall commence until said approval has been granted.

Sec. 5-2-4. Basis for sewer service charges.

A. *Sewer users served by water utility water meters.* There is hereby levied and assessed upon each lot, parcel of land, building, or premises having a connection with the wastewater collection system and being served with water solely by the water utility a sewer service charge based, in part, on the quantity of water used, as measured by the water utility water meter used upon the premises.

B. *Sewer users served by private wells.*

- (1) If any person discharging wastewater into the public sanitary sewers procures any part or all of his water from sources other than the water utility, all or part of which is discharged into the sanitary sewers, the person shall have water meters installed by the water utility at the person's expense for

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- the purpose of determining the volume of water obtained from these sources. Where sewer meters are already installed, new water meters will not be required. The water meters shall be furnished by the water utility and installed under its supervision, all costs being at the expense of the person requiring the meter.
- (2) The water utility will charge for each meter a rental charge set by the water utility to compensate for the cost of furnishing and servicing the meter. The rental charge shall be billed at the time the sewer service charge is billed.
- C. *Deduct meters.* If a user feels that a significant amount of metered water does not reach the sanitary sewer, a customer may avail himself of one of the following options:
- (1) He may request the approving authority to have such additional meters or metered services installed as are necessary to calculate the volume of water not discharged to the sanitary sewer (i.e., a "deduct" meter), or he may request the approving authority to have a meter installed to measure the actual amount of sewage discharged to the sanitary sewer (i.e., a "sewage" meter). Requests for a second meter or metered services must be made, in writing, to the approving authority. In the event the approving authority agrees to such installations, the customer shall be charged all costs attendant thereto, including, but not limited to, a meter yoke for each meter (to be installed by a licensed plumber); meter rental (the meter will be owned by the customer and subject to access and inspection by the city personnel at all times) in an amount set annually by the approving authority; remote reading device(s) if necessary; and labor and miscellaneous parts and supplies. No provision shall be made, nor shall any means be taken, to route water from any deduct meter to the customer's general distribution system. In addition to the general penalties set forth in section 5-2-9, any violation of this chapter will result in nullification of the deduct readings and removal of the deduct meter.
- (2) In the event it is physically impractical or impossible to install metering equipment, he may request the approving authority to take such means as it deems necessary to formulate an estimate of the amount of water not being discharged into the sanitary sewerage system or, conversely, the amount of actual sewage discharged thereto.

Sec. 5-2-5. Amount of sewer service charges.

A. *Sewer service charge unit costs.* This unit cost for the sewer service charge are as follows:

Volume	\$5.60/100 cubic feet
BOD	\$1.04/lb
Suspended Solids	\$1.07/lb
Phosphorus	\$3.94/lb
Fixed Charge	\$18.85/User/Month
Unit Charge	\$12.85/Unit/Month

B. *Category A sewer service charge.* The sewer service charge for Category A sewer users is as follows:

Fixed Monthly Charge	\$18.85/Month
Volume Charge	\$5.60/100 cubic feet
Unit Charge	\$12.85/additional living unit/Month

- (1) Residential customers will be billed the sewer service charge for their actual water usage during the November through March period and the monthly average from the November through March period will be the maximum sewer billing for the period of April through October.

C. *Category B sewer service charge.* The sewer service charge for Category B sewer users is as follows:

Fixed Monthly Charge	\$18.85/Month
Volume Charge	\$5.60/100 cubic feet
Surcharge:	
BOD greater than 160 mg/l = \$1.04/lb	
Suspended Solids greater than 200 mg/l = \$1.07/lb	
Phosphorus greater than 7 mg/l = \$3.94/lb	

The Category B sewer service charge shall be computed in accordance with the formula presented below:

$$T = FQ + (V \times Cv) + .00834 V (B \times Cb + S \times Cs + P \times Cp)$$

Where:

T	=	Total sewer service charge
FQ	=	Fixed monthly charge
B	=	Concentration of BOD in mg/l in the wastewater above 160 mg/l
S	=	Concentration of suspended solids in mg/l in the wastewater above 200 mg/l
P	=	Concentration of phosphorus in mg/l in the wastewater above 7 mg/l
V	=	Wastewater volume in 1,000 gallons
Cv	=	Cost per 1,000 gallons
Cb	=	Cost per pound of BOD
Cs	=	Cost per pound of suspended solids
Cp	=	Cost per pound of phosphorus
.00834	=	Conversion factor

(Amended 9-17-2018; 2-4-2019; 12-2-2019; Ord. No. 2022-137, § 1, 7-18-2022); Ord. No. 2023-216, § 1, 12-18-2023)

Sec. 5-2-6. Billing practice.

- A. *Calculation of sewer service charges.* Sewer service charges shall be computed according to the rates and formula presented in this chapter.
- B. *Sewer service charge billing period.* Sewer service charges shall be billed by the approving authority to the sewer users on a monthly basis.
- C. *Payment of sewer service charges.* Those persons billed by the approving authority for the sewer service charges shall pay such charges within 20 days after the billing date at the city hall.
- D. *Late payment.* A charge of not more than one and one-half percent per month will be added to bills not paid within 20 days from date of issuance. This late payment charge shall be applied to the total unpaid balance for utility service, including unpaid late payment charges. This charge is applicable to all customers.
- E. *Penalties.*
 - (1) Such sewer service charges levied by the municipality against the sewer users in accordance with this chapter shall be a debt due to the municipality and shall be a lien upon the property. If this debt is not paid within 30 days after it shall be due, it may be deemed delinquent and may be placed, together with such penalties as provided by statute, on the next year's tax roll and be collected as other taxes are collected.

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- (2) Change of ownership or occupancy of premises found delinquent shall not be cause for reducing or eliminating these penalties.

Sec. 5-2-7. Right of entry; safety; identification.

- A. *Right of entry.* The approving authority or other duly authorized agent of the city, bearing proper credentials and identification, shall be permitted to enter all properties for the purpose of inspection, observation, televising or testing, all in accordance with the provisions in this chapter.
- B. *Safety.* While performing the necessary work on private premises, the approving authority or duly authorized agent of the city shall observe all safety rules applicable to the premises established by the owner or the occupant.
- C. *Identification; right to enter easements.* The approving authority or duly authorized agent of the city, bearing proper credentials and identification, shall be permitted to enter all private properties through which the city holds an easement for the purpose of, but not limited to, inspection, observation, measurement, sampling, repair, and maintenance of any portion of the sewage works lying within said easement, all subject to the terms, if any, of such easement.

Sec. 5-2-8. Sewer construction and connections.

- A. *Work authorized.* No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb sewer or its appurtenances thereof without first obtaining a written permit from the approving authority.
- B. *Cost of sewer connection.* All costs and expenses incident to the installation and connection of a lateral or other private sewer to the public sewer shall be borne by the property owner, except to the extent a city policy may provide an exception to a portion of the costs. The original installation of a public sewer, lateral, or other private sewer is paid for by special assessment if work is completed by contractors hired by the city. Reconstruction of a public sewer main is paid for by the city. Repairs and reconstruction of a lateral or other private sewer are paid for by the property owner. Installation of a new lateral or other private sewer to an existing public sewer is paid for by the property owner.
- C. *Use of old building sewers.* Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the approving authority, to meet all requirements for this chapter.
- D. *Materials and methods of construction.* The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling the trench shall conform to the requirements of the city's building and plumbing code or other applicable rules and regulations of the city. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the ASTM, WPCF Manual of Practice No. 9 and Standard Specifications for Sewer and Water Construction in Wisconsin (current edition) shall apply.
- E. *Building sewer grade, sanitary.* Whenever possible, the building sewer for sanitary service shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.
- F. *Backwater valves, sanitary.* Backwater valves are required for all sanitary sewer laterals that are being installed or replaced. Retrofit of a backwater valve is only required for a building subject to backflow or backwater. The location of the backwater valve must be approved by the approving authority and shall be accessible to the property owner for maintaining, repairing, and replacing. Exemptions to this requirement may be granted by the city upon written request of the property owner.

G. *Laterals and private sewers, sanitary.*

- (1) *Owner maintenance required.* The property owner is responsible for operating, maintaining, repairing, and replacing their sanitary lateral or other private sewer for the purpose of conveying wastewater, preventing inflow and infiltration, and protecting public health, safety and welfare. The owner is responsible for lateral and other private sewer costs, from the public sewer connection into the building, except to the extent the city may provide an exception to a portion of the costs.
- (2) *Inspection required.* The city shall inspect existing sanitary laterals as part of a public sanitary sewer maintenance, repair or reconstruction project or at other times deemed appropriate by the city, including at the time of water service repair or replacement at any property.
- (3) *Notification of defect.* If the city identifies a defect or condition that interferes with sanitary lateral or sewer operation, the city shall send the property owner notification of the defect or condition, including a statement that the lateral or other private sewer must be repaired or replaced, or the condition corrected, not later than 90 days after the date of notice, or within such longer time deemed reasonable by the city.
- (4) *Owner to correct defect.* The property owner is responsible for correcting defective sanitary laterals and other private sewers. Work shall be completed in strict conformance with applicable codes and in a manner that corrects the deficiencies. The property owner may elect to make the repair, hire a licensed contractor or, if available, have city contractors correct the deficiencies. As part of a public sanitary sewer reconstruction project, the city agrees to obtain bid prices to replace sanitary laterals and other private sewers.
- (5) *Lateral or private sewer fees.* The following fees are hereby created and imposed, each fee billed and payable in monthly installments with regular monthly billing for utility services:
 - (a) *Televising refusal fee.* A \$50.00 monthly fee is hereby imposed for connection of a lateral or other private sewer to the sanitary sewerage system serving city rate payers, which owner refuses to consent to televising of the lateral or other private sewer by the city. This fee will be imposed beginning 30 days after a request has been made by the city for permission to televise the lateral or other private sewer. This fee will continue until the owner consents to televising by the city.
 - (b) *Failure to correct fee.* A \$50.00 monthly fee is also hereby imposed for connection of a lateral or other private sewer to the sanitary sewerage system, serving city rate payers, which owner fails to take corrective action upon request by the city to repair the sewer lateral leaking freshwater into the sewerage system. This fee will be imposed beginning 30 days following notice by the city to the owner that corrective action is required and has not been completed on schedule. This fee will continue until corrective action is completed by owner.
 - (c) *Fee exemptions.* The following are the exemptions and procedures from lateral fees:
 - [1] *Televising exemption.* Upon request by the city to televise a lateral or other private sewer connected to the sanitary sewer system in the city, the owner may grant consent to televise the lateral by signing a consent form provided by the city. Upon receipt of such signed consent form, the city is authorized to access the lateral or other private sewer and adjacent property for purposes of televising the lateral. Owners complying with this section are exempt from the televising refusal fee.
 - [2] *Corrective fee exemption.* Each owner that repairs the private sewer lateral determined by the city to be leaking freshwater into the sanitary sewerage system shall be exempt from the failure to correct fee beginning at such time that verification of corrective action has been provided by the owner to the city.

H. *Laterals and private sewers, storm.*

- (1) *Owner maintenance required.* The property owner is responsible for operating, maintaining, repairing, and replacing their storm lateral and other private sewer for the purpose of conveying groundwater or stormwater and protecting public health, safety and welfare. The owner is responsible for lateral and other private sewer costs, from the public sewer connection into the building, except to the extent the city may provide an exception to a portion of the costs.
- (2) *Inspection required.* The city shall inspect existing sanitary laterals as part of a public sanitary sewer maintenance, repair or reconstruction project or at other times deemed appropriate by the city, including at the time of water service repair or replacement at any property.
- (3) *Notification of defect.* If the city identifies a defect or condition that interferes with storm lateral or sewer operation, the city shall send the property owner notification of the defect or condition, including a statement that the lateral or other private sewer must be repaired or replaced, or the condition corrected, not later than 90 days after the date of notice or within such longer time deemed reasonable by the city.
- (4) *Owner to correct defect.* The property owner is responsible for corrective defective storm laterals and other private sewers. Work shall be completed in strict conformance with applicable codes and in a manner that corrects the deficiencies. The property owner may elect to make the repair, hire a licensed contractor or, if available, have city contractors correct the deficiencies.

I. *Stormwater and groundwater drains.*

- (1) No person shall allow or make connection of roof downspouts, exterior foundation drains, sump pumps, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which is connected directly or indirectly to a sanitary sewer.
- (2) All existing downspouts, building sump pump discharges, or groundwater drains, etc., connected directly or indirectly to a sanitary sewer shall be disconnected within 30 days of the date of an official written notice from the approving authority.

J. *Sump pump discharge regulated.*

- (1) *Findings.* The city council finds that uncontrolled discharge from sump pumps, including frozen runoff onto public sidewalks and streets and excess runoff from one lot onto another, poses a threat to the public health and safety. The problem is not uniform throughout the city, as it varies with the topography of the area and soil contents.
- (2) *Discharge into storm sewer required.* Where a connection order is issued in accordance with this section, a sump pump shall be connected so as to discharge.
- (3) *Where system not available.* Where no mini storm sewer or storm sewer system is available or is not adequate to receive the anticipated flow, the sump pump discharge shall drain on the premises, not onto the sidewalk, street or curbing.
- (4) *Issuance of connection order.* The approving authority shall issue a written order that a property drain its sump pump discharge into a mini storm sewer or storm sewer if adjacent to the parcel.
- (5) *Inspection.* Connections to the storm sewer must be inspected by the city.
- (6) *Connection order; extensions.* A connection order may be served, in person or by first-class mail, upon either the owner of the property or its occupant. The order shall provide that, unless an appeal from the order is timely filed, connection to the storm sewer shall be made within 90 days after its issuance. Upon reasonable written request made by the owner, time extensions may be granted for ordered connections at the discretion of the approving authority.

(7) *Failure to connect fees.* The following fees are hereby created and imposed, each fee billed and payable in monthly installments with regular monthly billing for utility services:

(a) *Failure to connect fee.* A \$50.00 monthly fee is hereby imposed for failure of the property owner to connect their sump pump to the mini storm or storm sewer upon request by the city. This fee will be imposed beginning 30 days following notice by the city to the owner that connection is required and has not been completed on schedule. This fee will continue until connection by the owner.

(b) *Fee exemption.* The following are the exemptions and procedures from lateral fees:

[1] *Connection fee exemption.* Each property owner that connects their sump pump to the mini storm or storm sewer upon request by the city shall be exempt from the failure to connect fee beginning at such time that verification of connection has been provided by the owner to the city.

K. *Mini storm sewers/storm sewer laterals.*

(1) A mini storm sewer shall consist of a six-inch to 12-inch diameter pipe located underground and within the street right-of-way or permanent easement for sump pump connections.

(2) A storm sewer lateral shall consist of a minimum four-inch diameter pipe constructed to connect directly to the mini storm sewer or storm sewer main by the use of an in-line wye. The lateral shall serve a single building.

(3) The sump pump discharge shall be connected at the building and extend underground to the mini storm sewer/storm sewer lateral connection provided at the property line. The cost of a mini storm sewer/storm sewer lateral project shall be special assessed to the property owners. No downspouts shall be connected to a storm sewer lateral, except with permission of the approving authority for hazard mitigation and it shall be limited to one downspout. No downspouts shall be connected to a mini storm sewer.

L. *Conformance to plumbing codes.* The connection of the building sewer into the sanitary sewer or storm sewer shall conform to the requirements of the building and plumbing code, or other applicable rules and regulations of the municipality or the procedures set forth in appropriate specifications of the ASTM and WPCF Manual of Practice No. 9. All such sanitary sewer connections shall be made gastight and watertight. Any deviation from the prescribed procedures and materials must be approved by the approving authority before installation.

M. *Inspection connection.* The person making a connection to a public sewer shall notify the approving authority when the building sewer is ready for inspection and connection to the public sewer. The connection shall be inspected and approved by the approving authority.

N. *Barricades; restoration.* All excavations for the building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the approving authority.

(Amended 1-15-2018)

Sec. 5-2-9. Violations and penalties.

A. *Public nuisance.* The violation of any provision of sections 5-2-1 through 5-2-4, inclusive, or sections 5-2-5.G. or 5-2-7 or 5-2-8, hereof, shall constitute a public nuisance as that term is defined in the Municipal Code.

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- B. *Abatement of nuisance, no immediate danger.* If it is determined that public nuisance has been created, or is being maintained, by violation of this chapter (as set forth herein above), but that the nature of such nuisance is not such as to threaten great and immediate danger to the public health, safety, peace, morals, or decency, written notice shall be served on the person causing or maintaining the nuisance to remove or correct the same (identifying the nature of the violation) within a specified reasonable time. The offender shall, with the period of time stated in said notice, abate the nuisance and permanently cease all violations.
- C. *Abatement of nuisance, immediate danger.* If it determined that a public nuisance caused by the violation of this chapter exists and that there is great and immediate danger to the public health, safety, peace, morals, or decency, the city manager, city engineer, and/or the chief of police may cause the same to immediately be abated and charge the cost thereof to the owner, occupant, or person causing, permitting or maintaining the nuisance, as the case may be. If notice to abate the nuisance has been given to the owner, such cost shall be assessed against the real estate as a special charge.
- D. *Accidental discharge.* Any person found to be responsible for accidentally allowing a deleterious discharge into the sewer system which causes damage to the wastewater treatment facility and/or receiving body of water shall, in addition to a fine, pay an amount to cover any damages, both values to be established by the approving authority.
- E. *Penalty for violation.* Any person who violates any provisions of this chapter shall be subject to a penalty as provided in chapter 1-1, article II, of the city's Code, which chapter is, by this reference, made a part hereof as if fully set forth herein.
- F. *Liability to municipality for losses.* Any person violating any provisions of this chapter shall, in addition to any penalty or fine which may be assessed against him, become liable to the municipality for any expense, loss, or damage occasioned by reason of such violation which the municipality may suffer as a result thereof.

Editor's note(s)—Amended at time of adoption of Code.

State law reference(s)—See Title 1, General Provisions, Ch. 1-1, Art. III.

Sec. 5-2-10. Appeals.

- A. *Procedures.*
- (1) Any user, permit applicant, or permit holder affected by any decision, action or determination, including cease and desist orders, made by the approving authority interpreting or implementing the provisions of this chapter or in any permit issued herein may file with the approving authority a written request for reconsideration within ten days of the date of such decision, action or determination, setting forth in detail the facts supporting the user's request for reconsideration. The approving authority shall render a decision on the request for reconsideration to the user, permit applicant, or permit holder, in writing, within 15 days of receipt of request. If the ruling on the request for reconsideration made by the approving authority is unsatisfactory, the person requesting reconsideration may, within ten days after notification of the action, file a written appeal with the city council and the City of Two Rivers.
 - (2) A fee of \$50.00 shall accompany any appeal to the city council for its ruling. This fee may be refunded if the appeal is sustained in favor of the appellant.
 - (3) The written appeal shall be heard by the city council within 30 days from the date of filing. The city council shall make a final ruling on the appeal within ten days from the date of the hearing.

Sec. 5-2-11 Validity; amendments.

- A. *Superseding previous ordinances.* This chapter governing sewer use, industrial wastewater discharges, sewer service charges, and sewer connections and construction shall supersede all previous ordinances of the municipality.
- B. *Invalidation clause.* Invalidity of any section, clause, sentence, or provision in the chapter shall not affect the validity of any other section, clause, sentence, or provision of this chapter which can be given effect without such invalid part or parts.
- C. *Amendment.* The municipality, through its duly authorized officers, reserves the right to amend this chapter in part or in whole whenever it may deem necessary.

Sec. 5-2-12 Audit; notification; records.

- A. *Biennial audit.* The municipality shall review, at least every two years, the wastewater contribution to its sewer users, the operation and maintenance expenses of the wastewater treatment facilities, and the sewer service charge system. Based on this review, the municipality shall revise the sewer service charge system, if necessary, to accomplish the following:
 - (1) Maintain a proportionate distribution of operation and maintenance expenses among sewer users based on the wastewater volume and pollutant loadings discharged by the users;
 - (2) Generate sufficient revenues to pay the operation and maintenance expenses of the wastewater treatment facilities; and
 - (3) Apply excess revenues collected from a class of users to the operations and maintenance expenses attributable to that class of users for the next year and adjust the sewer service charge rates accordingly.
- B. *Annual notification.* The municipality shall notify its sewer users annually about the sewer service charge rates. The notification shall show what portion of the rates are attributable to the operation and maintenance expenses, and debt service costs of the wastewater treatment facilities. The notification shall occur in conjunction with a regular bill.
- C. *Records.* The municipality shall maintain records regarding wastewater flows and loadings, costs of the wastewater treatment facilities, sampling programs, and other information which is necessary to document compliance with 2 CFR Part 1500 of the Clean Water Act.

Appendix B

Village of Mishicot – Sewer Service Agreements

AMENDMENT TO CONTRACTUAL AGREEMENT BETWEEN
CITY OF TWO RIVERS AND VILLAGE OF MISHICOT
FOR WASTEWATER TREATMENT SERVICES

THIS AMENDMENT to AGREEMENT dated June 5, 2007, is made by and between the CITY OF TWO RIVERS, hereinafter referred to as "City", and the VILLAGE OF MISHICOT, hereinafter referred to as "Village".

WHEREAS, the parties desire to modify the AGREEMENT to clarify existing conditions and distribution of fixed and variable costs; and

WHEREAS, the parties have determined that such modifications are in the best interests of the City and Village;

NOW THEREFORE, in consideration of the mutual benefits accruing to the parties, City and Village agree as follows:

1. Article III Section 3.01 Par. 4 is amended to read as follows:

The City has annual WWTP debt service payments, annual capital improvements costs, and an annual replacement fund deposit requirement. Each of these annual costs shall be allocated between the City and the Village based on their respective percentages cited above.

2. Article III Section 3.01 Par. 7 through 13 is amended to read as follows:

The City's obligation under this agreement shall be contingent upon the City being awarded a Wisconsin Clean Water Fund (CWF) loan for projects in an amount sufficient for all project costs for the improvements to the City's wastewater treatment facility, and further subject to the City's entry into a 20-year Financial Assistance Agreement which will be developed between the City and the State for capital costs. Capital costs shall include all engineering for planning, design, bidding, supervision, inspection, and surveys; soil exploration and testing work; interim financing costs; construction costs; equipment purchases, land purchases, legal fees and any other work or services required for the construction of the facilities.

The capital costs for the wastewater collection system, not used by the Village, will be solely recovered from the City of Two Rivers. The capital costs for improvements of the wastewater collection system used by the Village downstream of the Parkway Boulevard Sewage Lift Station, excluding the Parkway Boulevard Sewage Lift Station and Sewage Force Main, will be distributed in proportion to the Village and City's respective share of 80 percent of the design capacity for gravity sewer segments. The

annual operation and maintenance costs for the wastewater collection system used by the Village will be distributed in proportion to the Village and City's respective share of the system as described in Exhibit "A".

The City shall plan, design, construct, and maintain improvements to the Parkway Boulevard Sewage Lift Station to handle the wastewater flows discharged by the Village. Any future annual debt retirement and capital improvements costs for lift station and force main improvements shall be distributed to the Village and City in proportion to their respective design flows to sewage lift station and force main. The City is required by the WDNR to have a replacement fund for equipment at the Parkway Boulevard Sewage Lift Station. The annual replacement fund will be distributed to the Village and City in proportion to their respective design flows to the sewage lift station and force main. The fixed charge shall be recovered from the Village on a semi-annual basis through a fixed charge. The annual operation and maintenance costs for the Parkway Boulevard Sewage Lift Station and Sewage Force Main will be distributed as described in Exhibit "A".

The Village planned, designed, and constructed gravity sanitary sewer improvements on Parkway Boulevard from the Parkway Boulevard Sewage Lift Station to Mishicot Road, on Mishicot Road from Parkway Boulevard to approximately 800 feet north of County Trunk Highway (CTH) 'VV', and on State Trunk Highway (STH) '147' from approximately 800 feet north of CTH 'VV' to Crystal Springs Road. The Village of Mishicot has ownership of the gravity sanitary sewer improvements described above for the period of the Clean Water Fund (CWF) loan, after which, the ownership of the improvements will be given to the City. The City will maintain the gravity sanitary sewer while it is under the Village ownership. The allocated capacity of the gravity sanitary sewer to the Village will be 0.91 million gallons per day (mgd). The Village will own and be responsible for all operation and maintenance costs for the Village owned force main located upstream of Crystal Springs Road.

A user charge system has been developed to allocate debt service costs for the gravity sanitary sewer based on the Village and City share of project capital costs. The user charge system is presented in Exhibit "A". The City's share of capital cost debt service charge shall be recovered from the City on a semi-annual basis through a fixed charge.

The Village planned, designed, constructed, and maintains Sewage Lift Station No. 1 in the Village and force main to deliver the wastewater to gravity sanitary sewer at the intersection of STH '147' and Crystal Springs Road, and metering and sampling equipment at the Village Sewage Lift Station support building to measure and sample the wastewater pumped to the City. The Sewage Lift Station support building shall include odor control facilities to prevent odor problems in the City's wastewater collection system. All construction, maintenance, operation, and project costs for these facilities shall be paid by the Village.

Any Village owned gravity sanitary sewer within the City's corporate limits shall be constructed in accordance with the City's standards and be subject to approval by the City. All emergency repairs to the Village's gravity sanitary sewer within the City's corporate limits and along STH '147' from the City's corporate limits to Crystal Springs Road shall be performed by the City within 24 hours of the needed emergency repairs. The cost for repairs will be distributed in proportion to the Village and City's respective share of 80 percent of the design capacity for the sewer segments.

3. Article IV Section 4.01 Par. 4 is amended to read as follows:

The operation and maintenance costs will be paid by the Village on a monthly basis based on the wastewater flows metered at the Village monitoring station. The volume charge will be variable for the balance of the term of the agreement. The volume charges developed in Exhibit "A" User Charge System will be reviewed and revised not less than every two years. The City shall provide notice to the Village of such changes to volume charges and shall provide a mark-up of Exhibit "A" showing the breakdown of operation and maintenance costs and calculations of the volume charge, a minimum of two months prior to implementation.

4. Article V Section 5.01 is amended to read as follows:

5.01 The Village planned, designed, and constructed a metering and sampling station at the Village Sewage Lift Station support building. The Village shall operate and maintain the station. The plans and specifications for the metering and sampling station shall be subject to the City review and approval.

5. EXHIBIT "A" USER CHARGE SYSTEM is amended as presented in EXHIBIT "A" attached dated August 31, 2018.

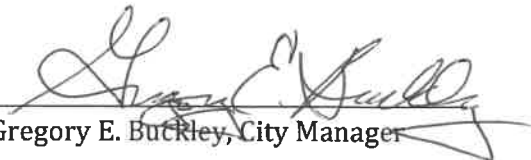
6. All other terms and conditions of the AGREEMENT dated June 5, 2007 are hereby ratified and affirmed.

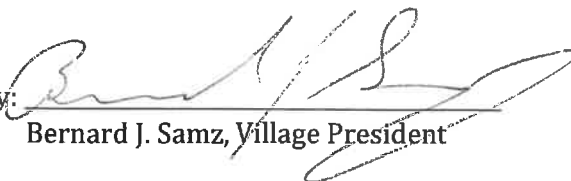
Dated this 3 day of February 2020

Dated this 3 day of February 2020

CITY OF TWO RIVERS

VILLAGE OF MISHICOT

By: 
Gregory E. Buckley, City Manager

By: 
Bernard J. Samz, Village President

By: 
Kim M. Graves, City Clerk

By: 
Carol Paider, Clerk/Treasurer

EXHIBIT "A"

USER CHARGE SYSTEM

This user charge system describes the methods and procedures for distribution of debt retirement, capital improvements costs, replacement fund costs, and operation and maintenance costs to the Village of Mishicot.

ALLOCATION OF DEBT RETIREMENT, ANNUAL CAPITAL IMPROVEMENTS COSTS, AND REPLACEMENT FUND DEPOSITS

Annual debt service costs, capital improvements costs and replacement fund deposits (as required by the WDNR or agreed upon by the City and Village) for the WWTP shall be allocated to the Village in proportion to its relative share of the design average flow for the WWTP. The design average annual flow is 3.07 million gallons per day (mgd), based on projected design year 2025 flows and loadings for the City and the Village. The Village share of the design average annual flow is 0.260 mgd. The Village portion of the design flow is 8.47 percent.

The allocation of the debt service costs, annual capital improvements costs and replacement fund deposits shall be recalculated following any calendar year in which the annual flow for the Village exceeds 0.260 mgd based on flow data provided to the City by the Village.

The City has annual collection system and WWTP debt service payments of \$550,900.46 for improvements prior to 2018, \$239,983.17 for 2018 improvements, and \$43,041.25 for 310 Interceptor improvements; annual capital improvements costs of \$5,400.00; and an annual replacement fund deposit requirement of \$178,262.00. Each of these annual costs shall be allocated to the Village based on its respective percentage stated above.

Additional annual debt service costs, annual capital improvements costs, and replacement fund deposits (as required by the WDNR or agreed upon by the City and Village) required as the result of expansion and improvement of the City's WWTP shall be allocated to the Village in the same manner as described in the paragraphs above. Such allocation shall also be subject to recalculation in the same manner as described in the paragraphs above.

The Village's total cost shall be 8.47 percent of existing and additional debt service costs, existing and additional capital improvements costs, and existing and additional replacement fund deposits. The cost shall be recovered from the Village on a semi-annual basis through a fixed charge. Said fixed charge shall include the Village's share of debt service costs for the preceding six months, capital improvement costs for the preceding six months, and required replacement fund deposits for the upcoming six months.

The capital costs for improvements of the wastewater collection system used by the Village downstream of the Parkway Boulevard Sewage Lift Station, excluding the Parkway Boulevard Sewage Lift Station, will be distributed in proportion to the Village's share of the design flow of the force main and Village's share of 80% of the design capacity of sanitary sewer segments receiving wastewater flow from the Village.

A summary of the City Annual Fixed Cost allocation to the Village is presented in Table 1.

Table 1 Summary of City Annual Fixed Cost Allocation to Village

Item	Annual Cost, Dollars	
	Total	Village Share
Debt Retirement		
Existing Net	550,900.46	21,909.94
2018 WWTP Improvements	239,983.17	20,326.57
310 Interceptor Improvements	43,041.25	8,650.00
Annual Capital Improvements		
WWTP	5,000.00	423.50
Parkway Boulevard Sewage Lift Station	400.00	160.00
Replacement Fund Deposit	178,262.00	15,098.79
TOTAL	\$1,017,586.88	\$66,568.80

ALLOCATION OF OPERATION AND MAINTENANCE COSTS

A volume charge shall be paid by the Village for the City's operation and maintenance (O&M) costs based on the actual flows measured at the Village's monitoring station in accordance with this section of the User Charge System. O&M costs shall include wages and administrative expenses, legal, accounting, engineering and consultants' fees and expenses, payments to retirement, health and hospitalization funds, fringe benefits, insurance premiums, expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary to maintain the capacity and performance of the WWTP and collection system during its service life, all utilities, chemicals, equipment parts, lubrication and laboratory supplies, all other ordinary and necessary costs required to support the daily operations of the WWTP and collection system, all plant and sanitary sewer maintenance.

A summary of the O&M costs distributed to the Village of Mishicot is presented in Attachment 1. These costs will be updated not less than every two years to establish the O&M user charge to the Village. O&M costs will be allocated based on the average annual 2-year flow.

Allocation to the City's general fund will not be included in the Village volume unit charge. The O&M costs for the City Wastewater Collection System, not used by the Village, will not be included in the volume unit charge. The volume unit charge will include O&M costs for the WWTP, Parkway Boulevard Sewage Lift Station, force main, and interceptor sewer downstream of the discharge including the gravity sewer described in this exhibit.

The total length of pipelines in the City of Two Rivers collection system is estimated to be 345,596 lineal feet. The length of collection pipeline used by the Village is estimated to be 25,515 lineal feet. This length is 7.38 percent of the total length of pipeline in the system. This Village share of collection system use will be updated every two years. The collection system O&M costs are based on the Village using an average of 40 percent of the capacity of the gravity sewer improvements (upstream of the Parkway Boulevard Sewage Lift Station), Parkway Boulevard Sewage Lift Station, Parkway Boulevard Sewage Lift Station force main, and the interceptor sewer from the force main discharge to the WWTP. The Village share is 40 percent of the 7.38 percent of the collection system O&M costs for the collection system used by the Village; and 40 percent of the O&M costs for the sewage lift station and sewage force

main used by the Village. The Village share of the cost for outside services employed is based on the Village portion of average daily flow. The costs for the wastewater collection system, not used by the Village, will be solely recovered from the City of Two Rivers.

The volume charge from the City to the Village will include a cost of \$1,000 for administration and monitoring. A summary of the City O&M cost allocation to the Village is presented in Table 2.

Table 2 Summary of City Annual O&M Costs Allocation to Village

Item	Annual Cost, Dollars	
	Total	Village Share
WWTP Operations Budget (2018)	1,039,770.00	80,270.24
Wastewater Collection System	146,734.00	4,331.59
Parkway Boulevard SLS and SFM	7,870.00	3,148.00
Administration Fee	1,000.00	1,000.00
TOTAL	\$1,195,374.00	\$88,749.83

The volume charge shall be determined by dividing the O&M costs by the total volume received at the WWTP. The calculation of the volume charge for the Village is presented below:

$$\begin{aligned} \text{Average Annual Flow to WWTP (last 2-year avg.)} &= 2.210 \text{ mgd (Two Rivers)} \\ &+ 0.180 \text{ mgd (Mishicot)} \\ &= 2.390 \text{ mgd} \end{aligned}$$

$$\begin{aligned} &92.28\% \text{ City of Two Rivers} \\ &\underline{7.72\%} \text{ Village of Mishicot} \end{aligned}$$

Annual O&M Costs Distributed to Village:

$$\begin{aligned} \text{Wastewater Treatment } 1,039,770.00 \times 0.0772 &= \$80,270.24 \\ \text{Collection System } (0.0738 \times \$146,734.00) \times 0.40 &= \$4,331.59 \\ \text{Sewage Lift Station and Force Main } \$7,870.00 \times 0.40 &= \$3,148.00 \\ \text{Administrative Fee } \$1,000.00 \times 1.00 &= \$1,000.00 \end{aligned}$$

The volume charge from the City to the Village for the annual O&M costs is calculated as follows:

$$\begin{aligned} \text{Volume Charge} &= \text{Annual O\&M Costs allocated to Village} \div \text{Annual flow for Village} \\ &= \$88,749.83 \div 67.44 \text{ million gallons} \\ &= \$1.316/1,000 \text{ gallons} \end{aligned}$$

The O&M costs will be paid by the Village on a monthly basis based on the wastewater flows metered at the Village monitoring station. Payment by the Village to the City for the period through June of 2020 will be \$1.316 per 1,000 gallons. The volume charge will be variable for the balance of the term of the agreement. The volume charge will be reviewed and revised not less than every two years.

Mishicot Waste
ORIGINAL
FINAL

CONTRACTUAL AGREEMENT BETWEEN CITY OF TWO RIVERS
AND
VILLAGE OF MISHICOT
FOR
WASTEWATER TREATMENT SERVICES

THIS AGREEMENT, made this 5th day of June, 2007 by and between the City of Two Rivers, a municipal corporation (the "City") and the Village of Mishicot, (the "Village").

WHEREAS, the City owns and operates a wastewater treatment plant, located within the City of Two Rivers, for the treatment of wastewater; and

WHEREAS, the City plans on expanding and improving the wastewater treatment plant to treat the wastewater from the Village and serve future community needs for both City and Village; and

WHEREAS, the Village desires to be able to contribute wastewater to that plant; and

WHEREAS, the City shall provide treatment of the wastewater from the Village Sewer Service Area approved by Bay Lake Regional Planning Commission and the WDNR and any expansions thereto at the City's facilities; and

WHEREAS, the City and the Village pursuant to authority granted by Wisconsin Statutes, '66.0301(2), wish to enter into an intergovernmental agreement for wastewater treatment services, which shall provide for a detailed method of payment to the City by the Village for wastewater of the Village accepted and treated by the City; and

WHEREAS, the City and the Village have, by resolution of their respective governing bodies, been authorized to negotiate with each other, a contract for the conveyance, treatment, and disposal of wastewater from the Village.

NOW THEREFORE, IT IS AGREED AS FOLLOWS:

ARTICLE I

DEFINITIONS

For purposes of this Agreement, the following terms have the following meanings:

1.01 BLRPC shall mean Bay-Lake Regional Planning Commission.

1.02 EPA shall mean the United States Environmental Protection Agency or any successor federal agency thereto.

1.03 FIXED CHARGES shall mean charges allocated for debt service costs, annual capital improvements costs, replacement fund deposits, and administrative and monitoring costs associated with measurement of flows and loadings.

1.04 FLOW PROPORTIONAL SAMPLE shall mean a sample taken that is proportional to the volume of flow during a 24-hour sampling period. The sampling period and schedule for the City and Village shall be the same.

1.05 OPERATION AND MAINTENANCE COSTS shall mean all ordinary and necessary costs to the City of carrying out and administering its powers, duties and functions and operating and maintaining the wastewater treatment plant (WWTP) and wastewater collection system, and shall include by way of example but not limitation: wages and administrative expenses, legal, accounting, engineering and consultants' fees and expenses, payments to retirement, health and hospitalization funds, fringe benefits, insurance premiums, expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary to maintain the capacity and performance of the WWTP and collection system during its service life, costs of all utilities, chemicals, equipment parts, lubrication and laboratory supplies, all other ordinary and necessary costs required to support the daily operations of the WWTP and collection system, all plant and sanitary sewer maintenance.

1.06 SEWER SERVICE AREA shall mean the area served by wastewater management facilities. The limits of sewer service areas shall be approved by BLRPC and the WDNR.

1.07 SEWER USE ORDINANCE shall mean the Two Rivers Sewer Use Ordinance that regulates the use of public and private sewers and drains, disposal of holding tank and septic tanks wastes into the wastewater collection system and wastewater treatment plant in the City of Two Rivers; and provides penalties for violation thereof.

1.08 USER CHARGE SYSTEM shall mean the established criteria and methodology for levying user charges on users of the collection system and treatment facilities. The user charges shall be levied for the cost of debt retirement, operation, maintenance, and replacement of such wastewater conveyance, treatment, and disposal facilities.

1.09 WASTEWATER shall mean the spent water of a community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial, industrial, and institutions sources together with any groundwater, surface water, and storm water that may be present.

1.10 WASTEWATER COLLECTION SYSTEM shall mean the pipelines, structures, equipment, and processes which are designed to collect and carry wastewater to the wastewater treatment plant.

1.11 WASTEWATER MANAGEMENT FACILITIES shall mean the pipelines, structures, equipment, and processes which are designed to collect, carry and treat domestic wastewater and industrial discharges.

1.12 WASTEWATER TREATMENT PLANT (WWTP) shall mean the wastewater treatment plant, located within the City of Two Rivers, and all equipment related thereto whether affixed to the land or moveable and all wastewater treatment plant improvements to be constructed in the future, to include influent pump station, preliminary treatment facilities, primary treatment facilities, secondary treatment facilities, disinfection facilities, sludge thickening facilities, sludge stabilization facilities, sludge dewatering facilities, and sludge storage facilities.

1.13 WDNR shall mean the Department of Natural Resources of the State of Wisconsin or any successor state agency thereto.

1.14 WPDES PERMIT shall mean the City's permit to discharge pollutants, issued under the Wisconsin Pollutant Discharge Elimination System (WPDES), Chapter NR 210, Wisconsin Administrative Code, pursuant to Chapter 147 of the State of Wisconsin Statutes.

ARTICLE II

GENERAL DISCHARGE REQUIREMENTS

2.01 The City shall own, operate, and maintain the wastewater management facilities and shall be responsible for discharging in accordance with the WPDES discharge permit or in accordance with other regulations that may be imposed from time to time. Subject to the Village's compliance with its obligations under the terms of this Agreement, Village wastewater shall be processed through the City's wastewater management facilities.

2.02 The Village agrees to comply with all existing or hereafter applicable provisions of Title II of The Federal Water Pollution Control Act, as amended (PL92500, 33USC 1251 and hereafter the Act) which Act and all amendments thereto are incorporated herein by reference, all existing and future pollution abatement laws, statutes, rules, regulations, ordinances, water quality standards, Wisconsin Pollutant Discharge Elimination System Permit conditions, and lawful orders and decrees of any governmental body, authority or agency having jurisdiction over the parties with respect to the collection, treatment and disposal of wastewater. The Village shall indemnify and hold the City harmless from any and all claims, damages, liabilities, judgments, actions, causes of action, orders, fines, penalties and forfeitures ("claims") of any nature whatsoever arising from the Village's failure to comply with the foregoing, including attorney fees, costs and disbursements incurred by the City in defending itself against such claims.

2.03 The Village agrees to comply with all, federal, state, and local statutes, regulations and ordinances applicable to the City, including all subsequent amendments thereto pertaining to the subject matter of this agreement. The Village further agrees to adopt, upon advance consultation with the City, any new ordinances or revisions of its existing ordinances as may be necessary to implement and enforce the provisions of the Two Rivers Sewer Use Ordinance within its territorial jurisdiction. The Village agrees to comply with Two Rivers Sewer Use Ordinance, present and

future.

2.04 The Village agrees to revise their sewer use ordinance to comply with the requirements of Sec. 5-2-2 (Use of Public Sewers) and Sec. 5-2-3 (Control of Industrial Wastes Directed to Public Sewers) of the City's Sewer Use Ordinance. Village shall revise and enact Sewer Use Ordinance no later than 60 days prior to discharge to the City wastewater management facilities. The Village agrees to adopt any revisions to Sec. 5-2-2 and Sec. 5-2-3 of the City's Sewer Use Ordinance within 60 days of enactment of such revisions by the City.

ARTICLE III

ALLOCATION OF DEBT SERVICE COSTS, ANNUAL CAPITAL IMPROVEMENTS COSTS, AND REPLACEMENT FUND DEPOSITS FOR THE WASTEWATER TREATMENT PLANT (WWTP) AND CONVEYANCE SYSTEM

3.01 Annual debt service costs, capital costs and replacement fund deposits (as required by the WDNR or agreed upon by the City and Village) for the WWTP shall be allocated between the City and the Village in proportion to their relative shares of the design average flow for said WWTP. Said design average annual flow is 3.07 million gallons per day (mgd), based on projected design year 2025 flows and loadings for the City and the Village. City and Village shares of that design average annual flow are 2.81 mgd and 0.260 mgd respectively. Accordingly, the City portion of said design flow is 91.53 percent and the Village portion of said design flow is 8.47 percent.

A user charge system will be developed to allocate debt service costs, annual capital improvements costs and replacement fund deposits. A copy of the user charge system is presented in Exhibit "A".

The allocation of said debt service costs, annual capital improvements costs and replacement fund deposits shall be recalculated following any calendar year in which the annual flow for the Village exceeds 0.260 mgd based on flow data provided to the City by the Village in accordance with ARTICLE V and/or the annual flow for the City exceeds 2.81 mgd.

The City has existing annual WWTP debt service payments of \$94,952, annual capital improvements costs, and an annual replacement fund deposit requirement of \$106,000. Each of these annual costs shall be allocated between the City and the Village based on their respective percentages cited above.

Additional annual debt service costs, annual capital improvements costs, and replacement fund deposits (as required by the WDNR or agreed upon by the City and Village) required as the result of expansion and improvement of the City's WWTP described herein shall be allocated between the City and the Village in the same manner as described in the paragraphs above. Such allocation shall also be subject to recalculation in the same manner as described in the paragraphs above.

The Village's total share of existing and additional debt service costs, existing and additional capital improvements costs, and existing and additional replacement fund deposits shall be recovered from the Village on a semi-annual basis through a fixed charge. Said fixed charge shall include the Village's share of debt service costs for the preceding six months, capital improvement costs for the preceding six months, and required replacement fund deposits for the upcoming six months. The City shall provide the Village a detailed listing of capital improvements with the billing statement.

The City's obligation under this agreement shall be contingent upon the City being awarded a Wisconsin Clean Water Fund (CWF) loan for the project in an amount sufficient for all project costs for the improvements to the City's wastewater treatment facility (currently estimated at \$4.04 million), and further subject to the City's entry into a 20-year Financial Assistance Agreement which will be developed between the City and the State for capital costs. Capital costs shall include all engineering for planning, design, bidding, supervision, inspection, and surveys; soil exploration and testing work; interim financing costs; construction costs; equipment purchases, land purchases, legal fees and any other work or services required for the construction of the facilities.

The capital costs for the wastewater collection system, not used by the Village, will be solely recovered from the City of Two Rivers. The capital costs for improvements of the wastewater collection system used by the Village downstream of the Parkway Boulevard Sewage Lift Station, excluding the Parkway Boulevard Sewage Lift Station, will be distributed in proportion to the Village and City's respective share of the design flow of the force main and sewer segments. The annual operation and maintenance costs for the wastewater collection system used by the Village will be distributed in proportion to the Village and City's respective share of the actual flow through the force main and sewer segments.

The City shall plan, design, construct, and maintain improvements to the Parkway Boulevard Sewage Lift Station to handle the wastewater flows discharged by the Village. The City's obligation under this agreement shall be contingent upon the City being awarded a Wisconsin CWF loan for the project in an amount sufficient for all project costs for the improvements to the City's Parkway Boulevard lift station (currently estimated at \$125,000), and further contingent on the City's entry into a 20-year Financial Assistance Agreement which will be developed between the City and the State for capital costs. The Village shall pay 100% of the capital costs for such lift station improvements not to exceed \$125,000. Any additional costs beyond \$125,000 for such lift station improvements will be borne by the City. The annual debt retirement cost for the lift station improvements shall be distributed to the Village in proportion to the share of CWF loan received for the sewage lift station. The City is required by the WDNR to have a replacement fund for equipment at the Parkway Boulevard Sewage Lift Station. The annual replacement fund will be distributed to the Village and City in proportion to their respective design flows to the sewage lift station. The fixed charge shall be recovered from the Village on a semi-annual basis through a fixed charge. Future capital costs after the initial upgrade shall be distributed to the Village and City in proportion to their respective design flows to the sewage lift station. The annual operation and maintenance costs for the Parkway Boulevard Sewage Lift Station will be distributed in proportion to the Village and City's respective share of the actual flows pumped.

The Village shall plan, design, and construct gravity sanitary sewer improvements on Parkway Boulevard from the Parkway Boulevard Sewage Lift Station to Mishicot Road, on Mishicot Road from Parkway Boulevard to approximately 800 feet north of County Trunk Highway (CTH) 'VV', and on State Trunk Highway (STH) '147' from approximately 800 feet north of CTH 'VV' to Crystal Springs Road. The Village of Mishicot will have ownership of the gravity sanitary sewer improvements described above for the period of the Clean Water Fund (CWF) loan, after which, the ownership of the improvements will be given to the City. The City will maintain the gravity sanitary sewer while it is under the Village ownership. The allocated capacity of the gravity sanitary sewer to the Village will be 0.91 million gallons per day (mgd). The Village will own and be responsible for all operation and maintenance costs for the Village owned force main located upstream of Crystal Springs Road.

A user charge system has been developed to allocate debt service costs for the gravity sanitary sewer based on the Village and City share of project capital costs. The user charge system is presented in Exhibit "A". The City's share of capital cost debt service charge shall be recovered from the City on a semi-annual basis through a fixed charge.

The Village shall plan, design, construct, and maintain Sewage Lift Station No. 1 in the Village and force main to deliver the wastewater to gravity sanitary sewer at the intersection of STH '147' and Crystal Springs Road, and metering and sampling equipment at the Village Sewage Lift Station support building to measure and sample the wastewater pumped to the City. The Sewage Lift Station support building shall include odor control facilities to prevent odor problems in the City's wastewater collection system. All construction, maintenance, operation, and project costs for these improvements shall be paid by the Village.

Any Village owned gravity sanitary sewer within the City's corporate limits shall be constructed in accordance with the City's standards and be subject to approval by the City. All emergency repairs to the Village's gravity sanitary sewer within the City's corporate limits and along STH '147' from the City's corporate limits to Crystal Springs Road shall be performed by the City within 24 hours of the needed emergency repairs. The cost for repairs will be distributed in proportion to the Village and City's respective share of the design flow of the sewer segments.

3.02 The City shall bill the Village for fixed charges by the 1st day of March and the 1st day September, and the Village shall pay the City no later than the 15th day of April and the 15th day of October. Any payment not made when due shall be subject to a three percent (3%) penalty for each month or part thereof that such payment remains delinquent.

The Village shall bill the City for fixed charges by the 1st day of March and the 1st day September, and the City shall pay the Village no later than the 15th day of April and the 15th day of October. Any payment not made when due shall be subject to a three percent (3%) penalty for each month or part thereof that such payment remains delinquent.

ARTICLE IV

ALLOCATION OF OPERATION AND MAINTENANCE COSTS

4.01 The Village will operate and maintain the metering and sampling station constructed by the Village. A volume charge shall be paid by the Village for the City operation and maintenance costs based on the actual flows measured at the monitoring station in accordance with a user charge system. The volume charge is based on the assumption that the Village will discharge "domestic strength wastewater". If routine sampling shows that the Village is discharging high strength waste (greater than 350 milligrams per liter (mg/l) average monthly concentration for biochemical oxygen demand (BOD₅) and suspended solids), the City reserves the right to revise the user charge system to include both volume and loading unit charges to Village and City. Operation and maintenance costs shall include wages and administrative expenses, legal, accounting, engineering and consultants' fees and expenses, payments to retirement, health and hospitalization funds, fringe benefits, insurance premiums, expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary to maintain the capacity and performance of the WWTP and collection system during its service life, all utilities, chemicals, equipment parts, lubrication and laboratory supplies, all other ordinary and necessary costs required to support the daily operations of

the WWTP and collection system, all plant and sanitary sewer maintenance.

A user charge system will be developed to allocate operation and maintenance costs based on flow. A copy of the user charge system is presented in Exhibit "A". Updates to the user charge system shall be in accordance with the methodologies of the user charge system. Allocation to the City's general fund will not be included in the Village volume unit charge. The operation and maintenance costs for the City Wastewater Collection System, not used by the Village, will not be included in the volume unit charge. The volume unit charge will include operation and maintenance costs for the Parkway Boulevard Sewage Lift Station, force main, and interceptor sewer downstream of the discharge. The costs for the wastewater collection system, not used by the Village, will be solely recovered from the City of Two Rivers. The volume charge shall be determined by dividing the operation and maintenance costs by the total volume received at the WWTP.

The construction, maintenance, and operation costs for the Village wastewater collection system, lift stations, force mains, and sewage lift station support building and equipment will be paid by the Village.

The operation and maintenance costs will be paid by the Village on a monthly basis based on the wastewater flows metered at the Village monitoring station. Payment for the first two years from the date the Village starts discharging to the City shall be \$1.443 per 1,000 gallons. The volume charge will be variable for the balance of the term of the agreement. The volume charges developed in the User Charge System will be reviewed and revised not less than every two years. The City shall provide notice to the Village of such changes to volume charges and shall provide a mark-up of Exhibit "A" showing the breakdown of operation and maintenance costs and calculations of the volume charge, a minimum of two months prior to implementation.

4.02 The Village shall pay the City no later than the 20th day of each month following the month billed for the volume charge. Any monthly payment not made when due shall be subject to a three percent (3%) penalty for each month or part thereof that such payment remains delinquent.

ARTICLE V

METHOD OF MEASURING FLOWS AND LOADINGS

5.01 The Village shall plan, design, and construct a metering and sampling station at the Village Sewage Lift Station support building. The Village will operate and maintain the station. The plans and specifications for the metering and sampling station shall be subject to the City review and approval.

5.02 The metering and sampling station shall be capable of providing continuous flow metering and flow proportional sampling.

5.03 Flow proportional composite samples will be collected and analyzed by the City at the City's discretion. The City's annual costs for administration and monitoring will be \$1,000 which shall be paid by the Village as a fixed charge on October 15th of each year.

5.04 The Village will maintain flow data records. The Village shall provide monthly flow data to the City by the 5th day of the following month.

5.05 The Village shall have the flow meter calibrated annually. The cost for all operation costs and calibration work shall be paid by the Village. The Village shall provide the City a copy of meter calibration report.

5.06 The metering and sampling station can be inspected by the City during normal operating hours (7:00 a.m. to 12:00 noon and 12:30 p.m. to 3:30 p.m. Monday through Friday).

ARTICLE VI

FUTURE INCREASES IN ALLOTTED CAPACITY

6.01 The capital costs and replacement costs will be allocated to the Village in accordance with ARTICLE III. The allocation will be according to the average annual design flows of 0.26 mgd for the Village and 3.07 mgd for the WWTP (including City and Village). The design flows are based on the best available estimate of required capacity.

6.02 It is understood that the City and/or the Village may require additional capacity to meet their respective needs.

6.03 If discharges from the City or the Village reach their design flows or loadings, allocated treatment plant capacity can be transferred between parties if capacity is available and upon mutual consent between the City and the Village. The cost of the treatment plant capacity shall be reallocated to and paid by the party requiring additional capacity. The cost for the additional capacity shall equal the total debt retirement for the treatment plant, including interest, times the percent capacity purchased.

6.04 If the treatment plant needs to be expanded to meet the needs of the City and/or the Village, the cost of the treatment plant improvements shall be allocated between parties, based on their respective needs for such additional capacity.

ARTICLE VII

USER CHARGE DISPUTES

7.01 If the Village disagrees with any charge levied by the City, the Village shall first make its disputed payment as scheduled, under protest. The Village shall within thirty (30) days of such payment file a detailed written objection with the City setting forth the reasons for such dispute and the Village's proposed resolution thereof. The City shall have thirty (30) days from its receipt of such written objection in which to either approve the objection or to arrange a meeting of the parties, which meeting shall be held not more than forty-five (45) days after the receipt of the objection by the City unless such time is extended by agreement of the parties. At such meeting each party shall be allowed no more than three (3) representatives, including legal counsel. If a meeting is not so scheduled, or if it becomes apparent after said meeting that agreement cannot be reached, either party may appeal as provided by " 66.0821 (5), Wisconsin Statutes. Any refund to the Village as a result of the appeal contemplated herein shall bear interest from the date of payment to the date of refund at the rate of the existing prime rate at the time of the dispute.

ARTICLE VIII

EXAMINATION OF BOOKS AND RECORDS

8.01 The City shall maintain records of cost allocations, charges, payments, and metering and sampling which affect determinations pursuant to the provisions of this agreement. The City shall afford free access to the Village such accurate books and records relating to the conveyance and treatment of wastewater as may be pertinent to this Agreement. The Village shall have the right to request that the City's annual audit include such detailed items as may be pertinent and necessary to a full understanding of the times which enter into the City's billings to the Village.

8.02 The City shall afford free access to the Village such reports, plans and specifications, and records relating to capital improvements of the collection system and WWTP greater than \$100,000 in value that affect debt retirement, replacement fund, or operation and maintenance costs allocated to the Village. The City shall provide notice to the Village of such improvements, a minimum of two months prior to bidding, to permit the Village time to comment and request clarification of planned work.

ARTICLE IX

CITY AND VILLAGE MEETINGS REGARDING WASTEWATER MANAGEMENT

9.01 The City shall notify the Village 72 hours prior to any open public meetings of the City Council or any of its committees in which wastewater management issues will be discussed. Similarly, the Village shall notify the City 72 hours prior to any open public meetings of the Village Board or any of its committees in which wastewater management issues will be discussed. The notice shall include a written agenda of the meeting and may be delivered by facsimile transmission. The Village and City may have one or more authorized representatives attend such open public meetings.

ARTICLE X

DISPUTE RESOLUTION

10.01 (a) Except as otherwise expressly agreed herein, if any claim, controversy or dispute arising out of or relating to this Agreement occurs, the Parties agree that they shall first attempt in good faith to resolve the matter informally, and promptly, through negotiation. If a dispute should arise, any party may initiate good faith negotiation by delivering a written request to the other party to meet with ten (10) days at a mutually agreed upon time and place. Each party may designate up to three (3) representatives to participate in good faith negotiations. If the parties are not able to resolve the dispute within thirty (30) days after the written request to meet is made, either party may proceed to require mediation of the dispute as set forth in this section.

(b) If informal negotiation as provided in (a) does not resolve the dispute, the parties must conduct mediation before commencing litigation. Mediation may be commenced by either party upon written notice to the other, and shall proceed as follows:

(1) Each party shall designate up to three (3) representatives with appropriate authority to be its representatives in the mediation of the dispute.

(2) If the parties cannot mutually agree upon a qualified, impartial mediator within five (5) days of such written notice, a qualified, impartial mediator will be appointed by the Chairperson of the Alternative Dispute Resolution Committee of the State Bar of Wisconsin.

(3) The mediation session shall take place within thirty (30) days of the appointment of the mediator, at a location within Manitowoc County.

(4) Each party shall provide the mediator with a brief memorandum setting forth its position with regard to the issues of the dispute at least ten (10) days prior to the scheduled mediation sessions. The parties shall produce all information reasonably required for the mediator to understand the issues presented. The mediator may require the parties to supplement such information, but the parties shall not be required to produce communications to or from their attorneys.

(5) The mediator shall not have authority to impose a resolution upon the parties, but will attempt to assist the parties in resolving their dispute. The mediation sessions shall be held in private, unless prohibited by applicable law. In addition to the parties= designated representatives, their attorneys may be present and participate in the mediation sessions. The expenses of the mediator will be borne equally by the parties.

(6) The parties may not introduce as evidence in any judicial proceeding any views expressed or suggestions made by the other party with respect to the possible settlement of the dispute; and proposals made or expressed by the mediator; or the fact that the other party had or had not indicated willingness to accept a proposal for settlement made by the mediator or otherwise during the mediation. The parties agree that Wisconsin Statutes Sections 904.08 and 904.085 will apply with respect to any mediation between the parties.

(7) A settlement agreement made during the course of mediation shall be deemed a contract, enforceable by either party.

(8) If a dispute is not resolved through mediation, either party wishing to pursue additional legal action shall bring such action in the Circuit Court for Manitowoc County, Wisconsin.

ARTICLE XI

TERM OF AGREEMENT

11.01 The term of this Agreement is indefinite. No breach or violation of any of the terms of this Agreement by any Party shall operate to void or terminate or provide grounds for termination of this Agreement, it being the intent of the Parties that the provisions of this Agreement shall be subject to specific performance, that injunctive relief shall be provided to cure any breaches prospectively, and that damages shall be awarded to redress any harm occasioned by a breach. Termination of this Agreement shall be only upon mutual agreement of the City, Village, and the WDNR.

ARTICLE XII

AMENDMENT

12.01 This Agreement may be amended by mutual agreement approved by the governing bodies of the Parties to this Agreement and signed by appropriate and duly authorized officers of the parties hereto.

ARTICLE XIII

SEVERABILITY

13.01 If any provisions of this Agreement shall be held or deemed to be or shall, in fact, be

inoperative or unenforceable as applied in any particular case in any jurisdiction or jurisdictions or in all jurisdictions, or in all cases because it conflicts with any other provision or provisions hereof or any constitution or statute or rule of public policy, or for any other reason, such circumstance shall not have the effect of rendering the provision in question inoperative or unenforceable in any other case or circumstance, or of rendering any other provision or provisions herein contained invalid, inoperative, or unenforceable to any extent whatever. The invalidity of any one or more phrases, sentences, clauses or Article in this Agreement contained, shall not affect the remaining portions of this Agreement, or any part thereof.

ARTICLE XIV

AUTHORITY

14.01 This Agreement, and all of the terms and conditions hereto, shall bind the parties and their respective successors, transferees, and assigns, as set forth above. This Agreement is made in Wisconsin and shall be governed, interpreted, construed, and enforced according to the laws of the State of Wisconsin.

ARTICLE XV

EFFECTIVE DATE

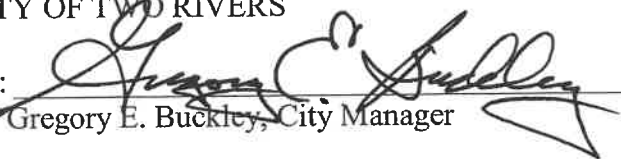
15.01 This Agreement shall be effective on the date this agreement is fully executed by both parties.

IN WITNESS WHEREOF, the City and Village hereby certify that this Agreement has been duly approved by its respective governing body on the date stated below in accordance with State and local laws, rules and regulations, and that such City and Village has caused its duly authorized officers to execute this Agreement on the dates written below.

Executed this 5th day of June, 2007.

CITY OF TWO RIVERS

By:


Gregory E. Buckley, City Manager

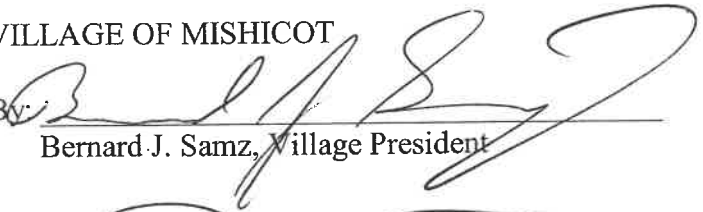
Attest:


Richard A. Schultz, City Clerk

Executed this 5th day of June, 2007.

VILLAGE OF MISHICOT

By:


Bernard J. Samz, Village President

Attest:


James F. Bydalek, Village Clerk-Treasurer

EXHIBIT "A"

USER CHARGE SYSTEM

This user charge system describes the methods and procedures for distribution of debt retirement, capital improvements costs, replacement fund costs, and operation and maintenance costs to the Village of Mishicot.

ALLOCATION OF DEBT RETIREMENT, ANNUAL CAPITAL IMPROVEMENTS COSTS, AND REPLACEMENT FUND DEPOSITS

Annual debt service costs, capital improvements costs and replacement fund deposits (as required by the WDNR or agreed upon by the City and Village) for the WWTP shall be allocated to the Village in proportion to its relative share of the design average flow for the WWTP. The design average annual flow is 3.07 million gallons per day (mgd), based on projected design year 2025 flows and loadings for the City and the Village. The Village share of the design average annual flow is 0.260 mgd. The Village portion of the design flow is 8.47 percent.

The allocation of the debt service costs, annual capital improvements costs and replacement fund deposits shall be recalculated following any calendar year in which the annual flow for the Village exceeds 0.260 mgd based on flow data provided to the City by the Village.

The City has existing annual WWTP debt service payments of \$94,952, annual capital improvements costs, and an annual replacement fund deposit requirement of \$106,000. Each of these annual costs shall be allocated to the Village based on its respective percentage.

Additional annual debt service costs, annual capital improvements costs, and replacement fund deposits (as required by the WDNR or agreed upon by the City and Village) required as the result of expansion and improvement of the City's WWTP shall be allocated to the Village in the same manner as described in the paragraphs above. Such allocation shall also be subject to recalculation in the same manner as described in the paragraphs above.

The Village's total cost shall be 8.47 percent of existing and additional debt service costs, existing and additional capital improvements costs, and existing and additional replacement fund deposits. The cost shall be recovered from the Village on a semi-annual basis through a fixed charge. Said fixed charge shall include the Village's share of debt service costs for the preceding six months, capital improvement costs for the preceding six months, and required replacement fund deposits for the upcoming six months.

The capital costs for improvements of the wastewater collection system used by the Village downstream of the Parkway Boulevard Sewage Lift Station, excluding the Parkway Boulevard Sewage Lift Station, will be distributed in proportion to the Village's share of the design flow of the force main and sewer segments.

The Village shall pay 100% of the capital costs improvements to the Parkway Boulevard Sewage Lift Station not to exceed \$125,000. The annual debt retirement cost for the lift station improvements

shall be distributed to the Village in proportion to the share of Clean Water Fund (CWF) loan received for the sewage lift station. The City is required by the WDNR to have a replacement fund for equipment at the Parkway Boulevard Sewage Lift Station. The annual replacement fund will be distributed to the Village in proportion to the Village's share of the design flow of the sewage lift station. The fixed charge shall be recovered from the Village on a semi-annual basis through a fixed charge.

Gravity sanitary sewer will be constructed by the Village on Parkway Boulevard from the Parkway Boulevard Sewage Lift Station to Mishicot Road, on Mishicot Road from Parkway Boulevard to approximately 800 feet north of County Trunk Highway (CTH) 'VV', and on State Trunk Highway (STH) '147' from approximately 800 feet north of CTH 'VV' to Crystal Springs Road. The project cost, including construction, engineering, and contingencies, will be financed with a CWF loan obtained by the Village. The parallel cost estimate prepared for the project indicates that 100 percent of the Village share of the project cost is eligible for subsidized interest rate and 91.73 percent of the City share of the project cost is eligible for subsidized interest rate. The annual debt service costs to the Village and City will be finalized after construction is completed and will be determined using these parallel cost ratios.

The additional engineering costs to be paid by the City of Two Rivers for planning, design, bidding, and project coordination to implement the gravity sanitary sewer project is \$50,700. A summary of the costs is presented in Table 1.

Table 1 Summary of Engineering Services Costs to the City
to Implement Gravity Sanitary Sewer Project

Item	Cost, Dollars
Project Coordination	21,500
Wastewater Management Facilities Plan	3,800
Parallel Cost Estimate Preparation	1,800
Design Services	18,000
Bidding Services	5,600
TOTAL PROJECT COST SHARE	50,700

The maximum construction cost to the Village for the gravity sanitary sewer will be \$816,655. Engineering services for construction inspection services will be performed on a time and expense basis. Engineering services for construction administration services will be performed on a lump sum basis. The costs for tree replanting and soil and material testing are estimates. The City shall pay 100% of their share of the cost presented in Table 2 (adjusted for final costs). Any overrun in construction costs, construction inspection services, or soil and material testing costs shown in Table 2 shall be paid by the City of Two Rivers, unless any cost overrun is mutually agreed upon by the City of Two Rivers and Village of Mishicot to be shared.

If the costs for construction inspection services and soil and material testing are less than the amounts shown in Table 2, the cost will be distributed in proportion to the listed costs. The fixed charge shall be recovered from the City on a semi-annual basis through a fixed charge.

Table 2 Summary of Gravity Sanitary Sewer Project Cost Distribution to City and Village

Item	Cost, Dollars	
	Village of Mishicot	City of Two Rivers
Construction	816,655	199,244(a)
Tree Planting Allowance	No Cost	7,000
Construction Administrative Services	18,400	15,700
Construction Inspection Services	42,740	41,940
Soil and Material Testing	6,000	15,300
TOTAL PROJECT COST SHARE	883,795	279,184

(a) Construction is being performed on a unit price basis. Final costs will be based on final quantities and bid unit prices

ALLOCATION OF OPERATION AND MAINTENANCE COSTS

A volume charge shall be paid by the Village for the City's operation and maintenance (O & M) costs based on the actual flows measured at the Village's monitoring station in accordance with this section of the User Charge System. O & M costs shall include wages and administrative expenses, legal, accounting, engineering and consultants' fees and expenses, payments to retirement, health and hospitalization funds, fringe benefits, insurance premiums, expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary to maintain the capacity and performance of the WWTP and collection system during its service life, all utilities, chemicals, equipment parts, lubrication and laboratory supplies, all other ordinary and necessary costs required to support the daily operations of the WWTP and collection system, and all plant and sanitary sewer maintenance.

A summary of the O & M costs distributed to the Village of Mishicot is presented in Table 3. These costs will be updated not less than every two years to establish the O & M user charge to the Village. O & M costs will be allocated based on flow.

Allocation to the City's general fund will not be included in the Village volume unit charge. The O & M costs for the City Wastewater Collection System, not used by the Village, will not be included in the volume unit charge. The volume unit charge will include O & M costs for the WWTP, Parkway Boulevard Sewage Lift Station, force main, and interceptor sewer downstream of the discharge including the gravity sewer improvements described in this exhibit.

The total length of pipelines in the City of Two Rivers collection system after the Village improvements are completed is estimated to be 345,596 lineal feet. The length of collection pipeline used by the Village is estimated to be 25,515 lineal feet. This length is 7.38 percent of the total length of pipeline in the system. This Village share of collection system use will be updated every two years. The collection system O & M costs are based on the Village using an average of 40 percent of the capacity of the gravity sewer improvements, Parkway Boulevard Sewage Lift Station, Parkway Boulevard Sewage Lift Station force main, and the interceptor sewer from the force main discharge to the WWTP. The Village share is 40 percent of the 7.38 percent of the collection system O & M costs for this portion of the collection system. The Village share of the cost for outside services employed is based on the Village portion of average daily flow (8.95%). The costs for the wastewater collection system, not used by the Village, will be solely recovered from the City

of Two Rivers.

The volume charge shall be determined by dividing the O & M costs by the total volume received at the WWTP. The calculation of the volume charge for the Village is presented below:

Average Annual Flow to WWTP (2003) = 1.7953 mgd (Two Rivers)
 + 0.1765 mgd (Mishicot)
 = 1.9718 mgd

91.05% City of Two Rivers
 8.95% Village of Mishicot

Annual O & M Costs Distributed to Village:

Wastewater Treatment $\$950,537 \times 0.0895 =$ \$85,073
 Collection System $(0.0738 \times \$65,405) \times 0.4000 =$ \$1,931
 Sewage Lift Station and Force Main $\$2,800 \times 0.40 =$ \$1,120

Table 3 Summary of O & M Costs

Item	Annual Cost, Dollars
Operation Plant	
Wages Permanent (Labor for sewage lift station deleted \$3,968)	196,898
Utilities (Power and SCADA telephone service for sewage lift station deleted \$15,808)	103,157
Maintenance	15,450
Other Services	51,500
Postage	515
Membership and Dues	515
Other Supplies	22,454
Subtotal	390,489
Other Operating Supplies	
Utilities	97,850
Other Services	515
Other Supplies	8,240
Subtotal	106,605
Transportation Expense	
Maintenance	1,030
Other Services	16,480
Other Supplies	3,605
Subtotal	21,115
Maintenance - Treatment and Disposal Plant Equipment	
Wages - Permanent	42,683
Other Services	5,150
Other Supplies	15,450
Subtotal	63,283
Maintenance - General Plant Structures and Equipment	
Other Services	3,605
Other Supplies	5,150
Subtotal	8,755
Employee Pensions and Benefits	
Wages - Permanent	60,305
Wisconsin Retirement	35,551
FICA	23,245
Health Insurance	81,487

Subtotal (Pensions and benefits deleted for sewage lift station \$3,968)	196,620
Miscellaneous General Expenses	
Other Services	206
Printing	309
Training	1,545
Membership & Dues	515
Travel	1,030
Other Supplies	515
Subtotal	4,120
Sludge Conditioning Chemicals	112,270
Property Insurance (Insurance for sewage lift station deleted \$924)	24,826
Regulatory Commission Expenses	22,454
TOTAL COST FOR WASTEWATER TREATMENT	950,537

Where 0.0738 is the portion of the O & M costs for sewer used by Village
0.4000 is the portion of the Village share of sewage lift station, force main,
and sewer capacity

Outside Services Employed $\$54,075 \times 0.0895 =$ \$ 4,840

TOTAL ANNUAL COST TO VILLAGE	<u>\$92,964</u>
------------------------------	-----------------

Annual Flow for Village (2003) = 64.4225 mgd

Volume Charge to Village = \$92,964 ÷ 64.4225 mgd

$$= \$1.443/1,000 \text{ gallons}$$

The O & M costs will be paid by the Village on a monthly basis based on the wastewater flows metered at the Village monitoring station. Payment for the first two years from the date the Village starts discharging to the City will be \$1.443 per 1,000 gallons. The volume charge will be variable for the balance of the term of the agreement. The volume charge will be reviewed and revised not less than every two years.

The annual cost to the Village for administration and monitoring will be \$1,000, which will be paid by the Village to the City as a fixed charge on October 15th of each year.

Appendix C

Village of Mishicot – Debt Service Schedule

YEAR	Net Payment 2008 Parkway Blvd SLS + SS	2014 310 Int. SS Improvements	2018 Two Rivers WWTP Improvements 4107-40	2018 Two Rivers WWTP Improvements 4107-44	Capital Improvement Costs	TOTAL		BALANCE
								\$ 678,656.27
2020	\$ 19,575.57	\$ 15,570.00	\$ 20,326.57		\$ 583.50	\$ 56,055.64		\$ 622,600.63
2021	\$ 17,404.39	\$ 15,570.00	\$ 20,326.57		\$ 583.50	\$ 53,884.46		\$ 568,716.17
2022						\$ (90,901.86)	*	\$ 659,618.03
2022	\$ 17,396.55	\$ 15,570.00	\$ 19,225.45	\$ 6,139.54	\$ 583.50	\$ 58,915.04		\$ 600,702.99
2023	\$ 17,388.52	\$ 15,570.00	\$ 19,222.97	\$ 6,138.92	\$ 583.50	\$ 58,903.91		\$ 541,799.08
2024	\$ 17,380.30	\$ 8,650.00	\$ 19,220.46	\$ 6,138.27	\$ 583.50	\$ 51,972.53		\$ 489,826.55
2025	\$ 17,371.89	\$ 8,650.00	\$ 19,217.90	\$ 6,137.63	\$ 583.50	\$ 51,960.92		\$ 437,865.63
2026	\$ 17,363.27	\$ 8,650.00	\$ 19,215.28	\$ 6,136.97	\$ 583.50	\$ 51,949.02		\$ 385,916.61
2027	\$ 17,354.45	\$ 8,650.00	\$ 19,212.62	\$ 6,136.31	\$ 583.50	\$ 51,936.88		\$ 333,979.73
2028		\$ 8,650.00	\$ 19,209.92	\$ 6,135.63	\$ 583.50	\$ 34,579.05		\$ 299,400.68
2029		\$ 8,650.00	\$ 19,207.16	\$ 6,134.94	\$ 583.50	\$ 34,575.60		\$ 264,825.08
2030		\$ 8,650.00	\$ 19,204.34	\$ 6,134.23	\$ 583.50	\$ 34,572.07		\$ 230,253.01
2031		\$ 8,650.00	\$ 19,201.48	\$ 6,133.52	\$ 583.50	\$ 34,568.50		\$ 195,684.51
2032		\$ 8,650.00	\$ 19,198.56	\$ 6,132.79	\$ 583.50	\$ 34,564.85		\$ 161,119.66
2033			\$ 19,195.59	\$ 6,132.05	\$ 583.50	\$ 25,911.14		\$ 135,208.52
2034			\$ 19,192.57	\$ 6,131.31	\$ 583.50	\$ 25,907.38		\$ 109,301.14
2035			\$ 19,189.48	\$ 6,130.54	\$ 583.50	\$ 25,903.52		\$ 83,397.62
2036			\$ 19,186.33	\$ 6,129.77	\$ 583.50	\$ 25,899.60		\$ 57,498.02
2037			\$ 18,183.13	\$ 6,128.98	\$ 583.50	\$ 24,895.61		\$ 32,602.41
2038			\$ 19,179.87	\$ 6,128.18	\$ 583.50	\$ 25,891.55		\$ 6,710.86
2039				\$ 6,127.36	\$ 583.50	\$ 6,710.86		\$ (0.00)
	\$ 141,234.94	\$ 140,130.00	\$ 366,116.25	\$ 110,406.94	\$ 11,670.00	\$ 769,558.13		

* adjustment to add debt based on email from Taryn Nall and Mishicot

Appendix D

Annual O&M Costs

	2023	2024	Startup Budget	Allocation Percentages						Allocation of Costs					
	Actual	Actual		Dem.	Vol.	BOD	SS	P	CC	Dem.	Vol.	BOD	SS	P	CC
Operation															
Operation Plant and Lift Stations	\$528,207	\$549,143		0%	25%	40%	25%	10%	0%	\$ -	\$ 137,286	\$ 219,657	\$ 137,286	\$ 54,914	\$ -
Chlorine	\$3,701	\$0		0%	50%	25%	25%	0%	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Phosphorus Removal Chemicals	\$86,810	\$80,869		0%	0%	0%	0%	100%	0%	\$ -	\$ -	\$ -	\$ -	\$ 80,869	\$ -
Sludge Conditioning Chemicals	\$11,682	\$35,037		0%	50%	25%	25%	0%	0%	\$ -	\$ 17,519	\$ 8,759	\$ 8,759	\$ -	\$ -
Other Operating Supplies	\$27,618	\$18,901		0%	25%	40%	25%	10%	0%	\$ -	\$ 4,725	\$ 7,560	\$ 4,725	\$ 1,890	\$ -
Transportation Expense	\$21,818	\$32,162		0%	25%	40%	25%	10%	0%	\$ -	\$ 8,041	\$ 12,865	\$ 8,041	\$ 3,216	\$ -
Maintenance															
Maintenance of Collection System	\$149,148	\$137,585		10%	15%	40%	25%	10%	0%	\$ 13,759	\$ 20,638	\$ 55,034	\$ 34,396	\$ 13,759	\$ -
Maintenance of Collection System Pumps	\$11,096	\$6,132		10%	15%	40%	25%	10%	0%	\$ 613	\$ 920	\$ 2,453	\$ 1,533	\$ 613	\$ -
Maintenance of WWTF Equipment	\$112,711	\$105,408		10%	15%	40%	25%	10%	0%	\$ 10,541	\$ 15,811	\$ 42,163	\$ 26,352	\$ 10,541	\$ -
Maintenance of WWTF Structures	\$11,175	\$23,183		10%	15%	40%	25%	10%	0%	\$ 2,318	\$ 3,477	\$ 9,273	\$ 5,796	\$ 2,318	\$ -
Administrative and General															
Billing Collecting & accounting	\$76,842	\$86,548		50%	0%	0%	0%	0%	50%	\$ 43,274	\$ -	\$ -	\$ -	\$ -	\$ 43,274
Meter Reading	\$20,169	\$20,891		50%	0%	0%	0%	0%	50%	\$ 10,446	\$ -	\$ -	\$ -	\$ -	\$ 10,446
Uncollectable accounts	\$41	\$552		50%	0%	0%	0%	0%	50%	\$ 276	\$ -	\$ -	\$ -	\$ -	\$ 276
Administrative & General Salaries	\$181,268	\$194,520		50%	0%	0%	0%	0%	50%	\$ 97,260	\$ -	\$ -	\$ -	\$ -	\$ 97,260
Office Supplies and expenses	\$704	\$608		50%	0%	0%	0%	0%	50%	\$ 304	\$ -	\$ -	\$ -	\$ -	\$ 304
Ouside services employed	\$65,890	\$77,412		50%	0%	0%	0%	0%	50%	\$ 38,706	\$ -	\$ -	\$ -	\$ -	\$ 38,706
Insurance expense	\$56,683	\$57,017		0%	15%	40%	25%	10%	10%	\$ -	\$ 8,553	\$ 22,807	\$ 14,254	\$ 5,702	\$ 5,702
Employee pension and benefits	\$135,692	\$148,995		0%	15%	40%	25%	10%	10%	\$ -	\$ 8,553	\$ 22,807	\$ 14,254	\$ 5,702	\$ 5,702
Regulatory commission expense	\$13,884	\$14,022		0%	15%	40%	25%	10%	10%	\$ -	\$ 8,553	\$ 22,807	\$ 14,254	\$ 5,702	\$ 5,702
Misc. General Expenses	\$600	\$1,191		0%	15%	40%	25%	10%	10%	\$ -	\$ 8,553	\$ 22,807	\$ 14,254	\$ 5,702	\$ 5,702
Rents	\$108,303	\$99,013		50%	0%	0%	0%	0%	50%	\$ 49,507	\$ -	\$ -	\$ -	\$ -	\$ 49,507
										\$ 267,003	\$ 242,626	\$ 448,992	\$ 283,905	\$ 190,927	\$ 262,579

Appendix E

List of Current Meters by Address over 1-1/2”

Name	Service Address	Acct Billcode
NEW CEMETERY-BLDG -R	3801 MISHICOT RD	W1.50
BELLEVUE PLACE ESTATES LLC	903 RAINBOW CT	W1.50
GOVE ENTERPRISES LLC	1814 19TH ST -1822	W1.50
BELLEVUE PLACE ESTATES LLC	915 RAINBOW CT	W1.50
WALGREENS	2200 WASHINGTON ST	W1.50
WALGREENS	2200 WASHINGTON ST	W1.50
ABUNDANT LIFE CHURCH	1969 ROOSEVELT AVE	W1.50
CITY HALL	1717 E PARK ST	W1.50
CITY TABERNACLE INC	1410 17TH ST A	W1.50
BELLEVUE PLACE ESTATES LLC	904 BELLEVUE PL	W1.50
NORTH OAK HEALTH CARE/WISTERIA HAUS LLC	2741 45TH ST	W1.50
TWO RIVERS DAY CARE CENTER	4404 BELLEVUE PL	W1.50
HARBOR PARK SHELTER - R	1145 HARBOR ST	W1.50
GRACE CONGREGATIONAL CHURCH	2801 GARFIELD ST	W1.50
MCDONALD'S	1414 LAKE ST	W1.50
SUSIE Q FISH COMPANY	1812 EAST ST	W1.50
KURTZ'S	1410 WASHINGTON ST	W1.50
THE SPICES OF 2 RIVERS LLC	1210 WASHINGTON ST	W1.50
GOVE ENTERPRISES LLC	1808 19TH ST	W1.50
VILLAGE INN SUITES	130 LOHMAN RD	W1.50
GOVE ENTERPRISES LLC	1913 SCHOOL ST	W1.50
WALSH FIELD ST RINK-R		W1.50
SUSIE Q FISH COMPANY	1812 EAST ST	W1.50
DOMNITZ FLOWERS LLC	1714 11TH ST	W1.50
MUELLER MANOR	3215 MISHICOT RD	W1.50
BELLEVUE PLACE ESTATES LLC	916 BELLEVUE PL	W1.50
RIVERSIDE FOODS, INC.	2511 WILSON ST	W1.50
CHANDRAAGIRI PETROLEUM, LLC/CAR WASH	816 22ND ST	W1.50
LIGHTHOUSE INN	1515 MEMORIAL DR B	W1.50
VILLAGE INN MOTEL	3310 MEMORIAL DR	W1.50
CLASSIC COATINGS	5024 WOODLAND DR	W1.50
PUBLIC WORKS GARAGE -P	1415 LAKE ST	W2.00
LESTER LIBRARY	1001 ADAMS ST	W2.00
ARISTO MFG CO	1722 MONROE ST	W2.00
IRONWOOD PLASTICS PLANT #2	2720 18TH ST	W2.00
ANKUR DESAI	2702 MEMORIAL DR	W2.00
RANG INC	3009 LINCOLN AVE	W2.00
NESHOTAH - PARK SHELTER -R	2111 PIERCE ST	W2.00
SEAGULL MAR & RV CT	1400 LAKE ST	W2.00
T R FIRE STATION	2122 MONROE ST	W2.00
CEMETERY NO. 2 -R		W2.00

IRONWOOD PLASTICS	2800 18TH ST	W2.00
MANITOWOC APTS LLC	1523 16TH ST	W2.00
VIETNAM VET'S SHELTER-R	1300 35TH ST	W2.00
TWO RIVERS CAR WASH	1611 16TH ST	W2.00
SCHWARTZ NON-WOVEN CORP	1000 SCHOOL ST	W2.00
MEMORIAL DR IRRIGATION - R		W2.00
VILLAGE INN MOTEL-LAKESIDE & LOBBY	3310 MEMORIAL DR	W2.00
TR CLINIC LTD	2219 GARFIELD ST	W2.00
SCENIC RIVER LLC	2510 W RIVER ST	W2.00
ST JOHN'S SCHOOL	3607 45TH ST	W2.00
VINTON-TWO RIVERS, LLC	1322 33RD ST	W2.00
NSH 1 HAMILTON DR LLC	2500 GARFIELD ST	W2.00
ROUNDYS SUPERMARKETS	1010 22ND ST	W2.00
LAKESHORE APARTMENTS LLC	1101 MONROE ST	W2.00
LAKESHORE APARTMENTS LLC	1100 ADAMS ST	W2.00
COMMUNITY HOUSE -R	1520 17TH ST	W2.00
CENTRAL PARK - EAST -R		W2.00
ST PETER THE FISHERMAN	3201 MISHICOT RD	W2.00
HAMILTON WOOD TYPE & PRINTING MUSEUM INC	1816 10TH ST	W2.00
TRW&L-U		W2.00
US POST OFFICE	1516 18TH ST	W2.00
ARISTO MFG CO	1722 MONROE ST	W2.00
TRIPP & ASSOCIATES	2411 34TH ST	W2.00
VIETNAM VET'S SHELTER-IRRIG.-R	1300 35TH ST	W2.00
STARBUCKS	1509 WASHINGTON ST	W2.00
ARISTO MFG CO	1722 MONROE ST	W2.00
CITY OF TR - BATHHOUSE-R		W2.00
OLD CEMETERY (FRONT SECTION)-R		W2.00
3404 MEMORIAL LLC	3404 MEMORIAL DR G-H	W2.00
3404 MEMORIAL LLC	3404 MEMORIAL DR E-F	W2.00
3404 MEMORIAL LLC	3404 MEMORIAL DR C-D	W2.00
3404 MEMORIAL LLC	3404 MEMORIAL DR K-L	W2.00
3404 MEMORIAL LLC	3404 MEMORIAL DR I-J	W2.00
HOLY FAMILY	800 LAKEFRONT WAY	W2.00
TR HIGH SCHOOL CONCESSION STAN	4519 LINCOLN AVE	W2.00
3404 MEMORIAL LLC	3404 MEMORIAL DR A-B	W2.00
VILLAGE GREEN EAST / BB 00-tworiv-347	2401 POLK ST	W2.00
MJ TWO RIVERS LLC	1800 JEFFERSON ST	W2.00
SCHWARTZ MFG CO	1000 SCHOOL ST	W2.00
BIG LOADS LLC DBA LISA'S LAUNDRY LAND	1720 14TH ST	W2.00
ST PETER THE FISHERMAN	3201 MISHICOT RD	W2.00
US COAST GUARD DUNS #009855503		W2.00

BUJAR LLC	3911 LINCOLN AVE	W2.00
LESTER LIBRARY	1001 ADAMS ST	W2.00
KAHLENBERG INDUSTRIES INC	1700 12TH ST	W2.00
TWO RIVERS HOTEL GROUP LLC , DBA COBBLESTONE HOTEL	1407 16TH ST	W2.00
OLD CEMETERY NO. 1 -R		W2.00
TR CLINIC LTD	2219 GARFIELD ST	W2.00
AIM MANITOWOC LLC	606 PARKWAY BLVD	W2.00
KOENIG SCHOOL - NEW	1114 LOWELL ST	W2.00
NATIONAL GUARD#MAD4065 & 2071	2225 SANDY BAY RD	W2.00
WPS CORP - #100463	800 COLUMBUS ST	W2.00
CENTRAL PARK WEST-SHELTER/IRR/SPLPAD		W2.00
AURORA HEALTH CENTER	5300 MEMORIAL DR	W2.00
2523 34TH ST LLC	2523 34TH ST	W2.00
EGGERS DIVISION LLC	1 EGGERS DR	W3.00
JF MAGEE - SCHOOL	3502 GLENWOOD ST	W3.00
METAL WARE CORPORATION	1710 MONROE ST	W3.00
LB CLARKE - NEW ADDITION	4613 PARKWAY BLVD	W3.00
METAL WARE CORPORATION	1710 MONROE ST	W3.00
VILLAGE GREEN WEST / BB 00-tworiv-348	2602 FOREST AVE	W3.00
RIVERSIDE FOODS, INC.-NEW ADDITION	2511 WILSON ST	W3.00
LIGHTHOUSE INN	1515 MEMORIAL DR B	W3.00
NSH 1 HAMILTON DR LLC	2500 GARFIELD ST	W3.00
PIONEER REST CEMETERY -R	3801 MISHICOT RD	W3.00
AURORA HEALTH CENTER	5300 MEMORIAL DR	W3.00
EGGERS DIVISION LLC	1 EGGERS DR	W3.00
NSH 1 HAMILTON DR LLC	1 HAMILTON DR	W3.00
METAL WARE CORPORATION	1710 MONROE ST	W3.00
METAL WARE CORPORATION	1710 MONROE ST	W3.00
FILTRATION PLANT-S	1101 WASHINGTON ST	W4.00
FORMRITE TUBE COMPANY	408 COLUMBUS ST	W4.00
MISH.RD OFF BELLV PL CEMETERY-R		W4.00
FOREST VIEW CEMETERY -R		W4.00
WASTEWATER TREAT PLT -S		W4.00
TR HIGH SCHOOL	4519 LINCOLN AVE	W4.00
AURORA HEALTH CENTER	5000 MEMORIAL DR	W6.00
AURORA HEALTH CENTER	5000 MEMORIAL DR	W6.00

Appendix F

Sewer Utility Cash Flow

City of Two Rivers		Rate of increase														
Sch 13 - Cash Flow		2.0% O&M Costs														
July-25		0% Collection System Replacement														
BUDGET ITEM	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
EXPENSES																
Expired Debt	\$ 72,513	\$ 78,399														
State Trust Fund Loan	\$ 6,905	\$ 6,905	\$ 6,901	\$ 6,902	\$ 6,901											
2019 Debt Issue (Baird)	\$ 82,700	\$ 82,700	\$ 75,200	\$ 77,700	\$ 75,100		\$ 79,500	\$ 76,500								
2020 Debt Issue (Baird)	\$ 11,342	\$ 11,342	\$ 11,123	\$ 10,893	\$ 10,653	\$ 10,403	\$ 10,138									
CWF 4107-08	\$ 412,716	\$ 412,716	\$ 412,608	\$ 412,497	\$ 412,383											
CWF 4107-18 Lincoln Ave	\$ 49,488	\$ 49,488	\$ 49,482	\$ 49,475	\$ 49,470	\$ 49,463	\$ 49,456	\$ 49,450	\$ 49,443	\$ 49,437	\$ 49,429	\$ 49,422	\$ 49,415	\$ 49,407	\$ 49,400	
CWF 4107-27 - 14th Street	\$ 45,319	\$ 45,319	\$ 45,307	\$ 45,295	\$ 45,283	\$ 45,269	\$ 45,257	\$ 45,243	\$ 45,229	\$ 45,215	\$ 45,200	\$ 45,185				
CWF 4107-40 - WWTF Headworks, 27th	\$ 247,680	\$ 247,680	\$ 247,647	\$ 247,612	\$ 247,579	\$ 247,543	\$ 247,508	\$ 247,472	\$ 247,435	\$ 247,397	\$ 247,359	\$ 247,320	\$ 247,280	\$ 247,240	\$ 247,198	\$ 247,157
CWF 4107-44 - WWTF Digester, 14th	\$ 105,656	\$ 105,656	\$ 105,647	\$ 105,635	\$ 105,624	\$ 105,613	\$ 105,600	\$ 105,589	\$ 105,576	\$ 105,564	\$ 105,551	\$ 105,538	\$ 105,525	\$ 105,511	\$ 105,498	\$ 105,484
CWF 4107-46 - 24th, 25th, Madison, Pine Tree LS	\$ 51,131	\$ 51,131	\$ 51,124	\$ 51,119	\$ 51,114	\$ 51,110	\$ 51,105	\$ 51,101	\$ 51,096	\$ 51,091	\$ 51,086	\$ 51,082	\$ 51,076	\$ 51,071	\$ 51,066	\$ 51,060
CWF 4107-47 - 17th, Laterals, & Dewatering	\$ 71,700	\$ 71,700	\$ 78,561	\$ 78,511	\$ 78,498	\$ 78,485	\$ 78,472	\$ 78,458	\$ 78,444	\$ 78,430	\$ 78,416	\$ 78,401	\$ 78,386	\$ 78,371	\$ 78,355	\$ 78,339
CWF 4107-56 - Lincoln St. & Laterals ('23)	\$ 16,241	\$ 16,241	\$ 17,489	\$ 17,476	\$ 17,474	\$ 17,471	\$ 17,468	\$ 17,465	\$ 17,462	\$ 17,459	\$ 17,456	\$ 17,453	\$ 17,449	\$ 17,446	\$ 17,443	\$ 17,439
CWF 4107-61 - Roosevelt St. & Laterals ('24)	\$ 83,038	\$ 83,038	\$ 10,973	\$ 65,239	\$ 65,228	\$ 65,218	\$ 65,207	\$ 65,196	\$ 65,184	\$ 65,172	\$ 65,161	\$ 65,148	\$ 65,135	\$ 65,123	\$ 65,110	\$ 65,097
2025 Debt Issue (Baird)	\$ -	\$ -	\$ -	\$ 16,870	\$ 14,050	\$ 13,050	\$ 13,050	\$ 12,550	\$ 12,050	\$ 11,550	\$ 11,050	\$ 10,600	\$ 10,200			
CWF 4107-62 - Harbor, Emmet, 16th, Lining, Laterals ('25)	\$ -	\$ -	\$ -	\$ 189,012	\$ 179,089	\$ 179,054	\$ 179,019	\$ 178,982	\$ 178,945	\$ 178,906	\$ 178,867	\$ 178,827	\$ 178,786	\$ 178,743	\$ 178,700	\$ 178,656
CWF 4107-64 - Laterals and Lining ('26)	\$ -	\$ -	\$ -	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538	\$ 164,538
Annual Operation and Maintenance	\$ 1,624,042	\$ 1,689,189	\$ 1,722,973	\$ 1,757,432	\$ 1,792,581	\$ 1,828,432	\$ 1,865,001	\$ 1,902,301	\$ 1,940,347	\$ 1,979,154	\$ 2,018,737	\$ 2,059,112	\$ 2,100,294	\$ 2,142,300	\$ 2,185,146	\$ 2,228,849
Replacement Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Costs (Collection System)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Capital Costs (WWTF Rehab)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Capital Costs (Lift Station Rehab)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Taxes	\$ 341,063	\$ 343,250	\$ 346,683	\$ 350,149	\$ 353,651	\$ 357,187	\$ 360,759	\$ 364,367	\$ 368,010	\$ 371,691	\$ 375,407	\$ 379,162	\$ 382,953	\$ 386,783	\$ 390,651	\$ 394,557
Nonoperating Expenses (Interest Expense)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL ANNUAL EXPENSES	\$ 3,149,021	\$ 3,216,355	\$ 3,181,717	\$ 3,646,356	\$ 3,669,216	\$ 3,490,237	\$ 3,532,078	\$ 3,559,212	\$ 3,523,760	\$ 3,565,604	\$ 3,608,258	\$ 3,651,788	\$ 3,651,037	\$ 3,686,533	\$ 3,733,105	\$ 3,731,176
REVENUES																
User Charge Revenues	\$ 2,810,457	\$ 2,848,433	\$ 2,901,322	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686	\$ 3,165,686
Mishicot Service Revenue	\$ 83,569	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469	\$ 89,469
Mishicot Debt Service Payment	\$ 58,904	\$ 51,973	\$ 51,961	\$ 51,949	\$ 51,937	\$ 34,579	\$ 34,576	\$ 34,572	\$ 34,569	\$ 34,565	\$ 25,911	\$ 25,907	\$ 25,904	\$ 25,900	\$ 25,896	\$ 25,892
Inter-Department Services																
TID #7 & #8 Revenue		\$ 63,160	\$ 72,239	\$ 72,232	\$ 72,224	\$ 72,217	\$ 45,679	\$ 45,675	\$ 45,671	\$ 45,667	\$ 45,662					
Investment Income		\$ -	\$ -	\$ -	\$ 15,979	\$ 14,710	\$ 15,043	\$ 14,697	\$ 14,075	\$ 13,802	\$ 13,108	\$ 11,893	\$ 9,774	\$ 7,642	\$ 5,133	\$ 2,134
Miscellaneous Nonoperating Revenue		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial Surcharge Revenue		\$ -	\$ -	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580
Sewer Connection Fee		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous Operating Revenue	\$ 28,178	\$ 7,485	\$ 17,832	\$ 17,832	\$ 14,383	\$ 14,383	\$ 14,383	\$ 14,383	\$ 14,383	\$ 14,383	\$ 14,383	\$ 14,383	\$ 14,383	\$ 14,383	\$ 14,383	\$ 14,383
TOTAL ANNUAL REVENUE	\$ 2,981,108	\$ 3,060,520	\$ 3,132,822	\$ 3,529,748	\$ 3,542,259	\$ 3,523,624	\$ 3,497,417	\$ 3,497,062	\$ 3,496,434	\$ 3,496,153	\$ 3,486,799	\$ 3,439,918	\$ 3,437,797	\$ 3,435,660	\$ 3,433,148	\$ 3,430,144
Cash and Cash Equivalents - Beginning of Year																
Annual Excess Revenue (Shortfall)	\$ 619,735	\$ 1,830,245	\$ 1,714,519	\$ 1,714,519	\$ 1,597,912	\$ 1,470,955	\$ 1,504,342	\$ 1,469,680	\$ 1,407,531	\$ 1,380,205	\$ 1,310,754	\$ 1,189,295	\$ 977,426	\$ 764,185	\$ 513,313	\$ 213,356
	\$ (167,913)	\$ (155,835)	\$ (48,895)	\$ (116,607)	\$ (126,957)	\$ 33,387	\$ (34,661)	\$ (62,150)	\$ (27,326)	\$ (69,451)	\$ (121,459)	\$ (211,869)	\$ (213,241)	\$ (250,872)	\$ (299,957)	\$ (301,032)
REVENUE DETAILS																
Equivalent Meters Added Per Year-City		0														
Estimated Number of Equivalent Users		5,114	5,114	6,048	6,048	6,048	6,048	6,048	6,048	6,048	6,048	6,048	6,048	6,048	6,048	6,048
Estimated Number of Additional Unit Charges		535	535	22	22	22	22	22	22	22	22	22	22	22	22	22
Estimated monthly residential usage -100 cf (round off to 3500 gal/mo)		5.0	5.0	5.0	5.0											
Estimated Additional Usage - New Useres		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Estimated Annual City Usage -100 cf		296,792	296,792	296,792	296,792	296,792	296,792	296,792	296,792	296,792	296,792	296,792	296,792	296,792	296,792	296,792
Industrial Details																
Estimated Annual Water Usage (100 cf gal)-Industrial				3,864												
Estimated Annual BOD Loading >160 mg/L (pounds)				67,248												
Estimated Annual TSS Loading >200 mg/L (pounds)				37,601												
Estimated Annual P Loading > 7 mg/L (pounds)				0												
ESTIMATED MONTHLY USER CHARGES																
City Fixed Charges																
Actual Monthly Fixed Charge per Equivalent Meter		\$ 18.85	\$ 18.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85	\$ 19.85
Additional Unit Charge		\$ 12.85	\$ 12.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85	\$ 13.85
Actual Annual Fixed Charge Revenue Generated	\$ 1,239,284	\$ 1,239,284	\$ 1,239,284	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290	\$ 1,444,290
City Variable Charges - O, M & R Costs (cost per 100 cf)																
Actual Variable Charge per 100 cf Implemented		\$ 5.60	\$ 5.60	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80
Actual Annual Variable Charge Revenue Generated	\$ 1,662,038	\$ 1,662,038	\$ 1,662,038	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396	\$ 1,721,396
TOTAL ACTUAL MONTHLY USER CHARGE PER RESIDENTIAL USER	\$ 46.85	\$ 46.85	\$ 46.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85	\$ 48.85
Industry Variable Charges																
Variable Charge per 100 cf		\$ 5.60	\$ 5.60	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80	\$ 5.80
Annual Variable Charge revenue Generated		\$ -	\$ -	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410	\$ 22,410
Variable Charge per pound BOD	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.04
Annual Variable Charge revenue Generated	\$ -	\$ -	\$ -	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938	\$ 69,938
Variable Charge per pound TSS	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07	\$ 1.07
Annual Variable Charge revenue Generated		\$ -	\$ -	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233	\$ 40,233
Variable Charge per pound P	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94	\$ 3.94
Annual Variable Charge revenue Generated	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industry Variable Charges Total	\$ -	\$ -	\$ -	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580	\$ 132,580
REVENUE GENERATED BY RATES	\$ -	\$ -	\$ -	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267	\$ 3,298,267
DEBT COVERAGE																
Rate Increase Additional Revenue		\$ 79,412	\$ 72,302	\$ 396,926	\$ 12,510	\$ (18,635)	\$ (26,207)	\$ (355)	\$ (628)							
Total Debt Payments (with CWF Loans and Debt Reserve)	\$ 1,256,429	\$ 1,262,315	\$ 1,112,062	\$ 1,538,774	\$ 1,522,984	\$ 1,104,617	\$ 1,106,318	\$ 1,092,544	\$ 1,015,402	\$ 1,014,759	\$ 1,014,113	\$ 1,013,514	\$ 967,790	\$ 957,450	\$ 957,308	\$ 907,770
Total Regular Revenue	\$ 2,981,108	\$ 3,060,520	\$ 3,132,822	\$ 3,529,748	\$ 3,542,259	\$ 3,523,632	\$ 3,497,417	\$ 3,497,062	\$ 3,496,434	\$ 3,496,153	\$ 3,486,799	\$ 3,439,918	\$ 3,437,797	\$ 3,435,660	\$ 3,433,148	\$ 3,430,144
Total Operating Expenses	\$ 1,624,042	\$ 1,689,189	\$ 1,72													

Appendix G

Equivalent Sewer User Calculations

Current Sewer Meter Charges

Sewer Meters (Based on 2024 Data)							
Size	Equivalents	Residential	Commercial	Industrial	Public	Multi-Family	Eq. Meter
5/8"	1.0	2,640	75	1	0	19	2,735
3/4"	1.0	2,045	120	2	1	3	2,171
1"	1.0	30	58	4	2	19	113
1-1/2"	1.0	0	16	1	2	8	27
2"	1.0	0	26	5	11	11	53
3"	1.0	0	6	2	1	1	10
4"	1.0	0	0	1	3	0	4
6"	1.0	0	1	0	0	0	1
		4,715	302	16	20	61	5,114

Meter Type	Meter Count	Fixed Rate	Total (month)	Total (annual)	New Fixed	Total (annual)	Add. Revenue
Eq. Meters	5,114	\$18.85	\$96,399	\$1,156,787	\$20.85	\$1,279,523	\$122,736
Additional Units	535	\$12.85	\$6,875	\$82,497	\$14.85	\$95,337	\$12,840
Annual Total			\$103,274	\$1,239,284			\$135,576

Proposed Sewer Meter Charges - Eq. Meters for All Meters

Sewer Meters (Based on 2024 Data)							
Size	Equivalents	Residential	Commercial	Industrial	Public	Multi-Family	Eq. Meter
5/8"	1.0	2,640	75	1	0	19	2,735
3/4"	1.0	2,045	120	2	1	3	2,171
1"	2.5	30	58	4	2	19	283
1-1/2"	5.0	0	16	1	2	8	135
2"	8.0	0	26	5	11	11	424
3"	15.0	0	6	2	1	1	150
4"	25.0	0	0	1	3	0	100
6"	50.0	0	1	0	0	0	50
		4,715	302	16	20	61	6,048

Meter Type	Meter Count	Fixed Rate	Total (month)	Total (annual)	Add. Revenue
Eq. Meters	6,048	\$18.85	\$113,995	\$1,367,945	\$211,158
Additional Units	22	\$12.85	\$283	\$3,392	(\$79,105)
Total			\$114,278	\$1,371,337	\$132,053

Proposed Sewer Meter Charges - Eq. Meters for Commercial, Industrial, & Public Only

Sewer Meters (Based on 2024 Data)							
Size	Equivalents	Residential	Commercial	Industrial	Public	Multi-Family	Eq. Meter
5/8"	1.0	2,640	75	1	0	19	2,735
3/4"	1.0	2,045	120	2	1	3	2,171
1"	2.5	30	58	4	2	19	209
1-1/2"	5.0	0	16	1	2	8	103
2"	8.0	0	26	5	11	11	347
3"	15.0	0	6	2	1	1	136
4"	25.0	0	0	1	3	0	100
6"	50.0	0	1	0	0	0	50
		4,715	302	16	20	61	5,851

Meter Type	Meter Count	Fixed Rate	Total (month)	Total (annual)	Add Revenue
Eq. Meters	5,851	\$18.85	\$110,291	\$1,323,496	\$166,709
Additional Units	535	\$12.85	\$6,875	\$82,497	\$0
Total			\$117,166	\$1,405,993	\$166,709