

# WASTEWATER UTILITY

**WASTEWATER UTILITY (SEWER)  
FUND 401**

**DEPARTMENT:** Public Works

**DIVISION:** Wastewater Utility

**PROGRAM MANAGER:** Facilities Manager – Fox River Water Pollution Control Center

**PROGRAM DESCRIPTION:**

On a daily basis the Wastewater Utility provides the staff, materials and equipment to operate and maintain the sanitary sewer collection system and the wastewater treatment plant. The Utility also executes the Industrial Pre-Treatment Program that is intended to protect both the plant and collection system from hazardous materials that are dangerous to employees, and may upset the operations of the plant, causing treatment processes to be ineffective. The Utility’s goal is to provide residents with a trouble free collection system, and meet the Wisconsin Pollution Discharge Elimination System (WPDES) discharge permit obligations in a cost-effective manner.

**SERVICES:**

**Collection System**

- Clean the City's sanitary sewer system on a 3 to 4 year cycle and maintain a collection system cleaning log.
- Identify problem sewer lines or excessive inflow and infiltration (I & I) through various techniques including televising, flow monitoring, manhole inspections and private property sources, and collaborate with the Engineering Department to effect timely repairs.
- Maintain 4 conventional and 2 emergency lift stations.
- Deploy emergency pumps during extreme wet weather events to protect lives.
- Respond to sewer back-ups or any other sanitary sewer-related complaints.

**Treatment Plant**

- Operate and maintain a 12.5 million gallons/day (MGD) Regional Activated Sludge Tertiary Treatment Plant, to meet WPDES permit requirements.
- Contract for disposal of 5 million gallons of biosolids annually.
- Execute the Industrial Pre-Treatment Program.
- Perform over 11,000 laboratory analyses on wastewater samples for process control, permit compliance, Quality Assurance/Quality Control (QA/QC) and industrial monitoring.

**STAFFING:**

<b>Position (FTE)</b>	<b>2015 Actual</b>	<b>2016 Actual</b>	<b>2017 Actual</b>	<b>2018 Actual</b>	<b>2019 Budget</b>
<b>WPCC Manager</b>	1.00	1.00	1.00	1.00	1.00
<b>WPCC Operations Supervisor</b>	1.00	1.00	1.00	1.00	1.00
<b>WPCC Maintenance Supervisor</b>	0.00	0.00	1.00	1.00	1.00
<b>Pretreatment/Process Supervisor</b>	1.00	1.00	1.00	0.00	0.00

<b>Position (FTE)</b>	<b>2015 Actual</b>	<b>2016 Actual</b>	<b>2017 Actual</b>	<b>2018 Actual</b>	<b>2019 Budget</b>
<b>Pretreatment / Lab Supervisor</b>	0.00	0.00	0.00	1.00	1.00
<b>Senior Chemist</b>	1.00	1.00	1.00	0.00	0.00
<b>Chemist</b>	2.00	2.00	2.00	3.00	2.50
<b>Lead WPCO Operator</b>	2.00	2.00	1.00	2.00	2.00
<b>WPCO Operator</b>	4.00	4.00	5.00	4.00	4.00
<b>WPCO Operator in Training</b>	1.00	1.00	1.00	2.00	2.00
<b>Lead WPCO Maintenance Specialist</b>	1.00	1.00	0.00	0.00	0.00
<b>WPCO Maintenance Specialist</b>	4.00	4.00	4.00	4.00	4.00
<b>Office Services Assistant</b>	0.50	0.50	0.50	0.50	0.75
<b>Seasonal employees</b>	1.00	1.00	1.00	1.00	1.00
<b>Total</b>	<b>19.50</b>	<b>19.50</b>	<b>19.50</b>	<b>20.50</b>	<b>20.25</b>

Note: In addition to the above, costs of 4.77 FTE are allocated to the Sewer Utility for support services received from the Finance, Human Resources, Information Technology and Engineering Departments.

#### ACTIVITY MEASURES:

<b>ACTIVITY</b>	<b>2015 Actual</b>	<b>2016 Actual</b>	<b>2017 Actual</b>	<b>2018 Projected</b>	<b>2019 Budgeted</b>
<b>Annual inches of precipitation <sup>1</sup></b>	34.84	35.82	38.64	35.00	32.26
<b>By-pass events</b>	1	-	-	-	-
<b>Total by-pass locations</b>	2	-	-	-	-
<b>Basement backups</b>	-	1	1	-	-
<b>Miles of sewer cleaned/ Gallons H2O used (thousands)</b>	30/ 162	53/ 278	46/ 253	39/ 206	55/ 288
<b>Avg. MGD treated</b>	8.444	9.120	9.822	8.981	9.092
<b>Kwh/MG <sup>4</sup></b>	2,218	2,083	1,985	1,922	1,791
<b>Electricity \$/MG <sup>4</sup></b>	\$188	\$176	\$169	\$163	\$152
<b>\$/MG to treat Operate and Maintain (O &amp; M)</b>	\$1,149	\$1,278	\$1,193	\$1,118	\$1,192
<b>MG Biosolids land applied <sup>3</sup></b>	6.405	4.250	5.096	4.837	6.000
<b>Cost for application</b>	\$192,1677	\$120,642	\$182,760	\$171,230	\$219,000
<b>Overtime hours</b>	1,157	1,123	1,225	1,136	1,160
<b>Average residential charges per household<sup>2</sup></b>	\$493.89	\$491.20	\$488.38	\$490.17	\$489.90

<sup>1</sup> Average annual precipitation is 32.26 inches.

<sup>2</sup> Based on total revenue from residential customers/number of residential units.

<sup>3</sup> 2015 – Cleaned East biosolids storage tank.

<sup>4</sup> Significant drop in Kwh usage due to energy savings improvement projects at the WPCO.

## **OBJECTIVES ACCOMPLISHED IN 2018:**

\* Indicates if associated with one of the City's Comprehensive Plan short-term focus initiatives.

1. Continue process of improving phosphorus removal at Water Pollution Control Center (WPCC) with the ultimate goal of meeting new water quality standards by September 2021.
  - Request for Proposal (RFP) for design of WPCC improvements to meet low phosphorus levels scheduled to be distributed in late Fall 2018.
2. Clean third anaerobic digester and perform necessary repairs. Provide safe disposal of digester contents to maintain complete compliance with WPDES permit.
  - Cleaning of third digester completed October 2018.
3. Complete standby generator and controls upgrade project.
  - Project complete. Standby generator can be easily operated and exercised under load for improved reliability.
  - Ability to perform maintenance safely on the main plant switchgears.
4. Automate collection system maintenance and inspection paper documentation with software package that can be used to help predict failing or trouble areas in the City in addition to a user friendly categorized system for all data and activities within the collection system.
  - Scheduled to begin fall 2018. Software will help predict failing or trouble areas in the City in addition to a user friendly categorized system for all activities within the collection system. Will allow use of mobile devices for real time documentation and reporting.
5. Research and provide anaerobic digester mixing strategies to increase biogas production for electricity generation from the WPCC biogas conditioning and cogeneration system.
  - Options reviewed similar to those considered in the 2035 Facilities Plan. Currently costs do not justify additional digester mixing.
6. Research maintenance software upgrades or programs for replacement of old maintenance software system.
  - Reviewing software packages for maintenance of wastewater treatment plants. Recommendation for new software included in the 2019 budget. See 2019 objective.

## **OBJECTIVES TO BE ACCOMPLISHED IN 2019:**

\* Indicates if associated with one of the City's Comprehensive Plan short-term focus initiatives.

1. Collaborate with engineering consultant to implement best alternative for compliance with low level phosphorus removal requirements and develop plans and specifications for bidding.
2. Replace WPCC Computerized Maintenance Management System (CMMS) software with simplified user friendly web-based CMMS.
3. Continue to manage and operate the biogas conditioning and cogeneration system for electricity generation. Optimize existing anaerobic digester mixing system to enhance biogas production for the cogeneration system.
4. Rehabilitate primary effluent and Return Activated Sludge (RAS) splitter structure.

## **BUDGET SUMMARY:**

- 1). The 2019 revenue budget for sales and services reflect a continuing downward trend of residential water usage as customers utilize conservation efforts and consumer product innovations to reduce consumption. The 2019 budget applies the sewer user rates that have been in effect since the 1<sup>st</sup> quarter of 2015, and no rate adjustment is currently anticipated for 2019.

- 2). Operating revenues for the contract communities reflect the WPCC treatment plant cost, in which the contract communities share approximately 52% based on flow. Budgeted 2019 shared cost for the operations and maintenance of the plant is anticipated to increase by 2%. In addition to the operating and maintenance charges, the contract communities also are expected to pay their pro-rata share of capital improvement projects at the treatment plant and funding the DNR mandated Equipment Replacement Fund (estimated revenues of \$718,000 reflected as capital contributions), of which there are three (3) projects in 2019 (see wastewater capital improvement schedules later in this section).
- 3). Salary costs are distributed across all functions within the utility, and allocated amounts can fluctuate from year to year based upon changes in emphasis or process. Salary budgets include an overall salary adjustment factor of 2.5%. Actual salary amounts for individual employees and the impact on department salary budgets depend on the position in salary grades, including the impact of step increases for eligible employees, and determination of satisfactory performance. In addition, salary and benefit budgets reflect the impact of position changes shown in the staffing table above. Total sewer utility salaries are budgeted to decrease approximately \$14,958, or 0.65% compared to 2018.
- 4). The decrease in the pension budget (835100 accounts) includes the estimated impact of employer pension contribution rates from the Wisconsin Retirement System (WRS) applied to budgeted wages for eligible employees, reflecting a slight decrease in the contribution rate for utility employees. Changes in contribution rates are shared between the City and all employees.
- 5). Group insurance – health (835700 accounts) reflects an overall 2.5% change from the premium contribution charges in the 2018 budget. 2019 estimated rates were derived based on projections from the City’s insurance consultant reflecting somewhat better recent health claims experience and projection of health care cost trend. Budgets also reflect any changes in plan coverage elections for staff assigned to the utility.
- 6). Transportation expense (823000 accounts) include expected repair and fuel costs for vehicles and equipment assigned to the Wastewater utility, based upon recent repair and fuel costs history, and U.S. Energy Information Administration predictions for 2019 combined with historical usage data.
- 7). Estimated I & I rehab expenses (40181033-836000) for 2019 are 26% lower than the 2018 adopted budget level. 2019 budgeted costs include \$900,000 for manhole and sewer lining rehabilitation and \$500,000 for rehabilitation of private laterals. Repairs related to private properties will be assessed to property owners in 2019, which is reflected in the Miscellaneous Revenue account (401459-460635). Any reimbursable costs from MMSD will be recorded as a grant. The infiltration and inflow detection (40181033-837000) budget has increased due to increased efforts planned in 2019 to investigate and detect weaknesses in the system.
- 8). Milwaukee Metro Sewerage District (MMSD) charge (40182032-822801) is the cost from MMSD for treatment of sewerage by the District, and is increasing slightly primarily due to higher sewerage waste loads and increased costs of operating and maintaining the MMSD

treatment system. The total estimated charges are rising 3.9%, and per household residential charges are estimated to increase by 3.5%.

- 9). Natural gas and electricity budgets have been developed utilizing the WE Energies forecasting tool. Estimates for these budgets are based upon historical consumption and the WE Energies pricing predictions. The treatment plant natural gas budget (40183032-822001) and electricity budget (40183032-822002) reflect an overall decrease in anticipated utility expenses resulting from continued efforts to improve efficiency with projects on the biogas conditioning and anaerobic digester systems.
- 10). Sludge hauling Expense (40183032-822007) is increasing due to a slight increase in the rate in the contract with the utility's bio-solids hauler. The rate changed from \$0.0354/gallon to \$0.0365/gallon, resulting in a budgeted increase of 4.3% in the account.
- 11). Maintenance of plant equipment (40183032-825000) includes \$350,000 in funding for the maintenance portion for an improvement project on two primary clarifiers at the plant. The capital portion (purchase of replacement equipment, etc.) is included in the capital improvement section.
- 12). Non-operating Expense – Milwaukee Metro Capital Charges (40184036-849000) represents the capital costs billed to the City by MMSD on a property value basis per Public Service Commission (PSC) decision. Costs can vary from year to year based on projects undertaken by MMSD, including storm water drainage improvements. The decrease in projected costs from 2018 to 2019 results from a larger credit for green infrastructure improvements as well as a larger watercourse credit against the capital charge for the City as less work is being done in 2019 in watersheds to which the City contributes (e.g. Menomonee River). Actual costs billed and estimates of future costs based upon information from MMSD are as follows:

<b>Year</b>	<b>Capital Charge</b>
<b>2014 (actual)</b>	\$3,902,428
<b>2015 (actual)</b>	\$3,896,564
<b>2016 (actual)</b>	\$3,908,620
<b>2017 (actual)</b>	\$3,966,335
<b>2018 (projected)</b>	\$3,828,865
<b>2019 (projected)</b>	\$3,975,874
<b>2020 (projected)</b>	\$4,050,000

**INSPECTION/SURVEY DIVISION**  
**401-850**

**DEPARTMENT:** Public Works

**DIVISION:** Engineering (Survey/Inspection)

**PROGRAM MANAGER:** City Engineer

**PROGRAM DESCRIPTION:**

The Public Works Department is divided into four (4) divisions, as follows: Engineering, Highway, Water and Wastewater. The Inspection/Survey Division has a separate budget, and is overseen by the City Engineer in the Engineering Division. For accounting purposes, the Inspection/Survey division is included in the Wastewater Utility Fund; however, staff costs for City projects are allocated to other funds/activities as appropriate. The cost of Inspection/Survey services related to development is charged to outside entities and recorded as revenue in the Wastewater Utility Fund.

The Inspection/Survey Division provides the resources to plan, construct, inspect and rehabilitate the public infrastructure which includes such items as the City street system, wastewater collection system (e.g., sanitary sewers and pump stations), water distribution system, storm water management system (e.g., storm sewers, retention ponds and ditches), bicycle and pedestrian pathways, street lighting and traffic signals. It also provides the horizontal and vertical control for all public and private infrastructure improvements and marks City-owned utilities for the Digger's Hotline system.

In order to provide control over the public infrastructure, the Inspections/Survey Division staff issues numerous permits and approvals for excavation permits and inspects the construction of dedicated public improvements. In addition, the Division produces items such as plats of survey, easement documents and right-of-way plats.

**SERVICES:**

- Provide survey related support services to various City divisions and departments.
- Marking of City utilities in support of the Digger's Hotline system.
- Project oversight of all public infrastructure installation including public works construction projects, private developments and subdivisions.
- Respond to citizen inquiries and concerns regarding development construction and public construction.
- Maintain official maps and records, including water, sanitary sewer and storm sewer system plans, inspector's records, as-built drawings and other official maps.

**STAFFING:**

<b>Positions (FTE)</b>	<b>2015 Actual</b>	<b>2016 Actual</b>	<b>2017 Actual</b>	<b>2018 Actual</b>	<b>2019 Budget</b>
<b>Survey Supervisor</b>	1.00	1.00	1.00	1.00	1.00
<b>Engineering Technician III</b>	1.00	1.00	1.00	1.00	1.00
<b>Engineering Technician II</b>	3.00	3.00	3.00	3.00	3.00
<b>Public Works Inspector</b>	1.00	1.00	1.00	1.00	1.00
<b>Survey Assistant</b>	0.26	0.26	0.26	0.26	0.26
<b>Engineering Intern</b>	0.40	0.40	0.40	0.40	0.40
<b>Total</b>	<b>6.66</b>	<b>6.66</b>	<b>6.66</b>	<b>6.66</b>	<b>6.66</b>

**ACTIVITY MEASURES:**

<b>Activity</b>	<b>2015 Actual</b>	<b>2016 Actual</b>	<b>2017 Actual</b>	<b>2018 Projected</b>	<b>2019 Budgeted</b>
<b>Diggers Hotline Requests</b>	6,386	5,953	6,501	6,200	6,500
<b>Street permits issued</b>	235	236	235	270	250
<b>Private Construction Projects</b>	8	3	11	10	6
<b>Public Construction Projects</b>	10	15	10	19	10
<b>Planned Developments</b>	5	-	3	-	1

**OBJECTIVES ACCOMPLISHED IN 2018:**

\* Indicates if associated with one of the City’s Comprehensive Plan short-term focus initiatives.

1. Geo reference the sidewalk/pathway data base with the City’s Geographic Information System (GIS). Re-inspect path segments based on condition rating for defects requiring repair/improvement. Develop a maintenance action plan consistent with adopted sidewalk maintenance policy and defect inspection results.
  - Mobile computer hardware and software systems have been developed to electronically collect field data. Path inspections are anticipated to be completed by late fall.
2. Implement revised and expanded pavement maintenance strategies as approved in the 2018 budget.
  - Approximately four miles of residential streets south of Burleigh and east of Lilly were micro-surfaced in summer 2018. Micro-surfacing is a mixture of polymer modified asphalt emulsion and crushed aggregate that is applied in a slurry form which provides a new riding surface that is about ½” thick. The cost of micro-surfacing is about 1/7<sup>th</sup> the cost of traditional asphalt resurfacing.
3. Adopt revised paving specification for City of Brookfield streets.
  - Work on this objective is anticipated to start in late fall 2018 and continue into 2019.



## **OBJECTIVES TO BE ACCOMPLISHED IN 2019:**

\* Indicates if associated with one of the City's Comprehensive Plan short-term focus initiatives.

1. Develop a pathway maintenance action plan consistent with the adopted sidewalk maintenance policy and the defect inspection results.
2. Evaluate the outcome and cost effectiveness of the micro-surfacing and liquid applied asphalt rejuvenator programs implemented in the summer of 2018. Consider adjustments to the type and scope of pavement surface treatments.
3. Adopt revised paving specification for City of Brookfield streets.

## **BUDGET SUMMARY:**

- 1). Salary budgets include estimated salary adjustments for non-represented staff based on the 2.5% salary adjustment factor established by the Finance Committee as part of the 2019 budget parameters, and the recommendation for the 2019 salary ordinance adopted by the Human Resources and Public Safety Committee and Common Council. Actual salary amounts for individual employees and the impact on department salary budgets depend on the position in salary grades, including the impact of step increases for eligible employees, and determination of satisfactory performance.
- 2). The change in the pension budget includes the impact of employer pension contribution rates from the Wisconsin Retirement System (WRS) applied to budgeted wages for eligible employees, reflecting a slight decrease in the contribution rate for general and elected employees as established by WRS. Changes in contribution rates are shared between the City and all employees.
- 3). Group insurance – health reflects an overall 2.5% change from the premium contribution charges in the 2018 budget. 2019 estimated rates were derived based on projections from the City's insurance consultant reflecting somewhat better recent health claims experience and projection of health care cost trend. Budgets also reflect any changes in plan coverage elections for staff assigned to this division.
- 4). Transportation expenses (823000) include expected repair and fuel costs for vehicles and equipment assigned to this division, based upon recent repair and fuel costs history, and U.S. Energy Information Administration predictions for 2019 combined with historical usage data.
- 5). Other general expenses (832000) include risk management charges which are increasing mainly due to an increase in worker's compensation premium costs for 2019, reflecting an increase in the City's overall experience modification factor due to less favorable claims experience being reflected in the calculation of the experience modification. This account also includes funding in 2019 for replacement of underground utility locating equipment (\$7,000) which is used to locate City utilities in response to Diggers Hotline requests. The existing equipment is over 20 years old and is obsolete.

**CITY OF BROOKFIELD**  
**2019 Wastewater Utility Summary Budget**

WASTEWATER UTILITY FUND - 401	2017 Actual	2018 Adopted	2018 YTD 08/31/18	2018 Estimated	2019 Budgeted	Percent Change
<b>OPERATING REVENUES</b>						
SALES AND SERVICES 100	\$ 8,947,346	\$ 9,021,083	\$ 4,430,581	\$ 8,979,261	\$ 8,992,374	
REVENUES FROM OTHER MUNICIPALITIES 100	1,625,846	1,837,085	905,375	1,576,464	1,813,537	
REVENUES FROM INDUSTRIAL SURCHARGES 100	257,558	194,100	144,244	353,438	225,800	
REVENUES FROM INSPECTION/SURVEY 100	472,785	683,569	295,021	624,245	706,558	
OTHER INCOME 100	89,741	150,000	50,384	160,542	188,900	
<b>TOTAL OPERATING REVENUE</b>	<b>11,393,276</b>	<b>11,885,837</b>	<b>5,825,605</b>	<b>11,693,950</b>	<b>11,927,169</b>	<b>0.3%</b>
<b>OPERATING EXPENSES</b>						
COLLECTION SYSTEM 810	985,458	2,403,688	291,787	2,533,369	2,023,112	
CUSTOMER ACCOUNTS/GENERAL 820	1,310,375	1,435,305	748,269	1,419,412	1,465,465	
FRWPCC - TREATMENT PLANT 830	3,570,209	3,858,803	1,934,614	3,533,221	3,706,577	
INSPECTION/SURVEY 850	636,347	683,569	425,236	625,766	706,558	
Sub-total Operations and Maintenance	6,502,389	8,381,365	3,399,906	8,111,768	7,901,712	-5.7%
DEPRECIATION/TAXES 840	3,761,134	3,871,767	2,005,902	3,870,324	3,903,008	
<b>TOTAL OPERATING EXPENSES</b>	<b>10,263,523</b>	<b>12,253,132</b>	<b>5,405,808</b>	<b>11,982,092</b>	<b>11,804,720</b>	<b>-3.7%</b>
<b>NET OPERATING INCOME</b>	<b>1,129,753</b>	<b>(367,295)</b>	<b>419,797</b>	<b>(288,142)</b>	<b>122,449</b>	<b>-133.3%</b>
<b>NON- OPERATING REVENUE/EXPENSES:</b>						
PLUS - INTEREST INCOME 100	229,890	205,422	211,219	342,405	366,360	
GENERAL PROPERTY TAXES 100	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	
INTERGOVERNMENTAL GRANTS 100	7,755	-	-	-	100,000	
LESS - INTEREST EXPENSE 840	243,850	244,887	109,854	219,705	193,568	
MMSD CAPITAL CHARGES & 840	3,966,335	4,042,461	2,021,232	3,828,865	3,975,874	
<b>WASTEWATER UTILITY NET INCOME (LOSS)</b>	<b>(942,787)</b>	<b>(2,549,221)</b>	<b>399,930</b>	<b>(2,094,307)</b>	<b>(1,680,633)</b>	<b>NM</b>
SPECIAL ASSESSMENTS/CAPITAL CONTRIBUTIONS	1,317,343	507,500			518,000	
<b>TOTAL NET POSITION, JANUARY 1</b>	<b>91,287,362</b>	<b>91,661,918</b>		<b>91,661,918</b>	<b>89,567,611</b>	
<b>TOTAL NET POSITION, DECEMBER 31</b>	<b>91,661,918</b>	<b>89,620,197</b>		<b>89,567,611</b>	<b>88,404,978</b>	
<b>CASH FLOW ADJUSTMENTS</b>						
PLUS:						
DEPRECIATION	3,734,834	3,845,055		3,845,055	3,873,756	
AMORTIZATION OF EXPENSES	(10,129)	15,052		(10,130)	(10,130)	
ASSESSMENTS COLLECTED	92,692	150,000		150,000	100,000	
CAPITAL CONTRIBUTIONS RECEIVED	1,317,343	507,500		507,500	718,000	
LESS:						
EQUIPMENT REPLACEMENT FUND	520,000	520,000		520,000	520,000	
NON-BONDED CAPITAL OUTLAY	797,680	337,221		337,221	1,620,000	
DEBT REDUCTION						
CLEAN WATER FUND - WWTP						
CLEAN WATER FUND - OTHER	473,856	487,341		487,341	501,211	
COLLECTION SYSTEM	915,000	845,000		845,000	840,000	
<b>NET CHANGE IN CASH</b>	<b>1,485,417</b>	<b>(221,176)</b>		<b>208,556</b>	<b>(480,218)</b>	

WASTEWATER UTILITY FUND - 401		2017 Actual	2018 Adopted	2018 YTD 08/31/18	2018 Estimated	2019 Budgeted	Percent Change
<b>OPERATING REVENUES - 100</b>							
<b>SALES AND SERVICES</b>							
RESIDENTIAL	401459 460621	6,413,834	6,466,161	3,184,531	6,430,013	6,443,127	
COMMERCIAL	401459 460622	2,413,788	2,428,694	1,192,635	2,425,200	2,425,198	
INDUSTRIAL	401459 460623	28,792	26,094	14,069	26,961	26,963	
PUBLIC AUTHORITY	401459 460624	90,932	100,134	39,346	97,087	97,086	
Total Sales and Services		8,947,346	9,021,083	4,430,581	8,979,261	8,992,374	-0.3%
<b>OTHER OPERATING INCOME</b>							
FRWPCC CHGS TO OTHER MUNICIPALITIES	401459 460627	1,625,846	1,837,085	905,375	1,576,464	1,813,537	
FRWPCC INDUSTRIAL SURCHARGES	401459 460628	173,712	152,000	125,193	305,636	166,000	
FRWPCC LAB & PERMIT FEES	401459 460629	83,751	42,000	19,003	47,707	59,700	
MMSD INDUSTRIAL SURCHARGES	401459 460631	95	100	48	95	100	
LATE PAYMENTS	401459 460632	84,375	83,500	37,779	94,042	84,700	
MISCELLANEOUS	401459 460635/40	5,366	66,500	12,605	66,500	104,200	
Total Other Income		1,973,145	2,181,185	1,100,003	2,090,444	2,228,237	2.2%
<b>TOTAL OPERATING REVENUE</b>		<b>10,920,491</b>	<b>11,202,268</b>	<b>5,530,584</b>	<b>11,069,705</b>	<b>11,220,611</b>	<b>0.2%</b>
<b>OPERATING EXPENSES</b>							
<b>COLLECTION SYSTEM EXPENSE - 810</b>							
<b>SALARIES</b>							
SUPERVISION AND LABOR	40181030 821000	148,929	156,792	95,210	164,155	156,383	
VACATION, HOLIDAY & SICK PAY	40181030 835000	18,017	20,270	7,514	18,944	16,842	
Sub-total		166,946	177,062	102,724	183,099	173,225	-2.2%
<b>FRINGE BENEFITS</b>							
PENSION	40181031 835100	10,985	11,547	6,890	11,047	11,108	
GROUP INSURANCE-OTHER	40181031 835200	2,285	2,434	1,217	2,119	2,127	
FICA TAX	40181031 835300	12,491	13,054	7,905	12,599	12,783	
RHS PAYMENTS	40181031 835400	6,956	7,393	4,402	7,063	6,850	
GROUP INSURANCE-HEALTH	40181031 835700	33,850	38,319	18,007	34,794	32,398	
Sub-total		66,567	72,747	38,421	67,622	65,266	-10.3%
<b>OPERATING EXPENSES</b>							
OPERATIONS SUPPLIES	40181032 822000	2,955	2,400	3,116	3,373	4,130	
NATURAL GAS	40181032 822001	992	1,024	696	1,014	1,076	
ELECTRICITY	40181032 822002	12,221	12,571	6,373	10,154	9,884	
TELEPHONE	40181032 822003	253	504	142	241	960	
SAFETY EQUIPMENT	40181032 822009	1,000	1,000	-	1,000	1,000	
TRANSPORTATION	40181032 823000	19,769	14,039	18,500	19,877	14,823	
MAINTENANCE BUILDING & GROUNDS	40181032 824000	3	1,000	380	1,000	1,480	
MAINTENANCE COLLECTION SYSTEMS	40181032 826000	15,674	19,800	11,491	16,830	20,800	
OTHER	40181032 832000	22,611	24,857	17,295	24,159	20,468	
Sub-total		75,478	77,195	57,993	77,648	74,621	-3.3%
<b>REHAB EXPENSES</b>							
INFLOW/INFILTRATION REHAB	40181033 836000	632,788	1,916,684	75,595	1,900,000	1,400,000	
INFLOW/INFILTRATION DETECTION	40181033 837000	41,238	150,000	16,571	300,000	300,000	
CONSULTING	40181033 838000	2,441	10,000	483	5,000	10,000	
Sub-total		676,467	2,076,684	92,649	2,205,000	1,710,000	-17.7%
<b>TOTAL COLLECTION SYSTEM</b>		<b>985,458</b>	<b>2,403,688</b>	<b>291,787</b>	<b>2,533,369</b>	<b>2,023,112</b>	<b>-15.8%</b>

WASTEWATER UTILITY FUND - 401				2017 Actual	2018 Adopted	2018 YTD 08/31/18	2018 Estimated	2019 Budgeted	Percent Change
<b>CUSTOMER ACCOUNT/GEN. EXPENSE - 820</b>									
OPERATING SALARIES									
METER READING SALARIES	40182030	827100	35,778	40,920	31,818	39,892	42,003		
GENERAL OFFICE SALARIES	40182030	829000	143,074	148,355	97,097	149,002	153,952		
Sub-total			178,852	189,275	128,915	188,894	195,955		3.5%
FRINGE BENEFITS									
PENSION	40182031	835100	11,450	12,207	8,667	12,369	12,423		
GROUP INSURANCE-OTHER	40182031	835200	1,468	1,469	1,056	1,612	2,276		
FICA TAX	40182031	835300	13,285	14,088	10,097	16,180	14,461		
RHS PAYMENTS	40182031	835400	5,609	5,792	4,009	6,040	5,792		
GROUP INSURANCE-HEALTH	40182031	835700	17,283	18,711	13,910	22,495	29,329		
Sub-total			49,095	52,267	37,739	58,696	64,281		23.0%
OPERATING EXPENSES									
MILWAUKEE METRO SEWERAGE CHARGE	40182032	822801	994,662	1,103,061	537,996	1,089,391	1,132,086		
ACCOUNTING & COLLECTING	40182032	827000	28,660	29,290	15,741	30,531	25,986		
COMPUTER	40182032	827001	7,103	7,459	7,446	7,446	8,610		
METER READING	40182032	827003	48,590	53,953	20,432	44,454	38,547		
UNCOLLECTIBLE ACCOUNTS	40182032	827009	3,413	-	-	-	-		
Sub-total			1,082,428	1,193,763	581,615	1,171,822	1,205,229		1.0%
TOTAL CUSTOMER ACCOUNT/GEN. EXPENSE			1,310,375	1,435,305	748,269	1,419,412	1,465,465		2.1%
<b>FRWPCC - TREATMENT PLANT - 830</b>									
SALARIES									
SUPERVISION AND LABOR	40183030	821000	623,985	687,404	402,267	635,889	655,763		
MAINT. BUILDING & GROUNDS - LABOR	40183030	824100	353,201	401,279	254,269	370,324	384,681		
GENERAL OFFICE SALARIES	40183030	829000	53,003	56,709	37,450	57,861	59,209		
VACATION, HOLIDAY & SICK PAY	40183030	835000	125,581	146,859	84,963	124,380	138,089		
Sub-total			1,155,770	1,292,251	778,949	1,188,454	1,237,742		-4.2%
FRINGE BENEFITS									
PENSION	40183031	835100	236,393	84,371	52,314	124,161	79,871		
GROUP INSURANCE-OTHER	40183031	835200	14,956	17,912	9,448	14,066	16,342		
FICA TAX	40183031	835300	85,349	95,473	61,624	87,412	91,343		
RHS PAYMENTS	40183031	835400	49,927	57,692	35,226	51,330	52,256		
GROUP INSURANCE-HEALTH	40183031	835700	230,149	284,801	139,655	227,312	236,508		
Sub-total			616,774	540,249	298,267	504,281	476,320		-11.8%
OPERATING EXPENSES									
OPERATIONS SUPPLIES	40183032	822000	63,811	74,692	15,326	36,390	37,796		
NATURAL GAS	40183032	822001	116,384	116,045	106,175	140,121	142,478		
ELECTRICITY	40183032	822002	521,468	516,184	284,181	490,455	458,534		
TELEPHONE	40183032	822003	8,712	8,071	5,970	6,923	11,015		
CHEMICALS	40183032	822005	92,938	157,670	59,913	115,461	141,400		
LABORATORY	40183032	822006	36,880	54,650	20,886	47,302	45,700		
SLUDGE HAULING	40183032	822007	182,760	210,000	60,045	170,104	219,000		
FEES & PERMITS	40183032	822008	51,989	55,720	41,866	47,546	53,543		
SAFETY EQUIPMENT	40183032	822009	9,462	9,000	4,111	6,962	15,000		
TRANSPORTATION	40183032	823000	20,383	13,989	19,476	26,118	14,823		
MAINTENANCE BUILDING & GROUNDS	40183032	824000	91,929	106,730	27,654	106,730	105,740		
MAINTENANCE PLANT EQUIPMENT	40183032	825000	460,740	541,135	120,307	499,936	580,000		
GENERAL OFFICE SUPPLIES	40183032	830000	8,871	7,300	3,095	4,876	6,284		
COMPUTER SOFTWARE MAINTENANCE	40183032	830001	37,759	53,949	22,597	45,949	60,908		
EDUCATIONAL TRAINING & TRAVEL	40183032	830002	3,796	5,500	2,461	5,142	5,000		
OTHER	40183032	832000	89,783	95,668	63,335	90,471	95,294		
Sub-total			1,797,665	2,026,303	857,398	1,840,486	1,992,515		-1.7%
TOTAL FRWPCC - TREATMENT PLANT			3,570,209	3,858,803	1,934,614	3,533,221	3,706,577		-3.9%

WASTEWATER UTILITY FUND - 401		2017 Actual	2018 Adopted	2018 YTD 08/31/18	2018 Estimated	2019 Budgeted	Percent Change
<b>OTHER EXPENSES - 840</b>							
OTHER EXPENSES							
DEPRECIATION	40184036 843000	3,734,834	3,845,055	1,992,546	3,845,055	3,873,756	
TAXES	40184036 852000	26,300	26,712	13,356	25,269	29,252	
Sub-total		3,761,134	3,871,767	2,005,902	3,870,324	3,903,008	0.8%
TOTAL OTHER EXPENSES		3,761,134	3,871,767	2,005,902	3,870,324	3,903,008	0.8%
<b>TOTAL OPERATING EXPENSES</b>							
		9,627,176	11,569,563	4,980,572	11,356,326	11,098,162	-4.1%
<b>NET OPERATING INCOME (LOSS)</b>							
		1,293,315	(367,295)	550,012	(286,621)	122,449	-133.3%
<b>NON- OPERATING REVENUE/EXPENSES:</b>							
<b>OTHER INCOME - 000</b>							
GRANT OTHER	401402 408400	7,755	-	-	-	100,000	
INTEREST INCOME ON ASSESSMENTS	401460 466500	14,023	15,400	83	7,438	16,000	
INTEREST INCOME ON INVESTMENTS	401460 466000	200,129	174,100	203,903	320,410	336,400	
INTEREST INCOME OTHER	401460 466700	15,738	15,922	7,233	14,557	13,960	
GENERAL PROPERTY TAXES	401460 401000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	
Sub-total		2,137,645	2,105,422	2,111,219	2,242,405	2,366,360	12.4%
<b>NON-OPERATING EXPENSES - 840</b>							
INTEREST ON REVENUE BONDS	40184036 844000	74,706	60,966	30,484	60,966	46,832	
INTEREST ON GENERAL OBLIGATION BONDS	40184036 845000	179,273	168,869	84,436	168,869	156,866	
AMORTIZATION OF DEBT EXPENSE	40184036 848000	-	24,000	-	-	-	
AMORTIZATION OF PREMIUM ON DEBT	40184036 944500	(10,129)	(8,948)	(5,066)	(10,130)	(10,130)	
MILWAUKEE METRO CAPITAL CHARGES	40184036 849000	3,966,335	4,042,461	2,021,232	3,828,865	3,975,874	
Sub-total		4,210,185	4,287,348	2,131,086	4,048,570	4,169,442	-2.8%
<b>WASTEWATER UTILITY NET INCOME (LOSS)</b>							
		(779,225)	(2,549,221)	530,145	(2,092,786)	(1,680,633)	NM

**CITY OF BROOKFIELD**  
**2019 Sewer Utility PW-Inspection/Survey Expenditure Budget**

WASTEWATER UTILITY FUND 401			2017 Actual	2018 Adopted	2018 YTD 08/31/18	2018 Estimated	2019 Budgeted	Percent Change
<b>INSPECTION/SURVEY - 850</b>								
<b>OPERATING REVENUES</b>								
<b>TRANSFERS</b>								
INSPECTION CHARGES - CITY	40185039	890000	175,080	239,150	74,492	206,524	237,545	
INSPECTION CHARGES - WATER PROJECTS	40185039	890001	148,445	218,285	110,463	191,815	215,369	
INSPECTION CHARGES - SEWER PROJECTS	40185039	890002	77,572	112,392	46,397	119,233	133,873	
INSPECTION CHARGES - DEVELOPERS	40185039	890003	42,422	76,624	37,554	75,460	84,725	
INSPECTION CHARGES - PERMIT FEES	40185039	890004	29,266	37,118	26,115	31,213	35,046	
<b>TOTAL OPERATING REVENUE</b>			<b>472,785</b>	<b>683,569</b>	<b>295,021</b>	<b>624,245</b>	<b>706,558</b>	<b>3.4%</b>
<b>OPERATING EXPENSES</b>								
<b>SALARIES/BENEFITS</b>								
SALARIES	40185001	501000	446,161	484,552	293,563	432,439	485,913	
RHS PAYMENTS	40185001	501400	17,250	17,940	11,625	17,145	17,940	
FICA TAX	40185001	502000	33,051	36,210	23,342	32,377	36,215	
PENSION	40185001	502100	29,401	30,849	20,098	28,205	30,582	
GROUP INSURANCE-OTHER	40185001	502200	5,982	6,090	3,943	5,771	6,648	
GROUP INSURANCE-HEALTH	40185001	502700	49,988	56,063	38,876	63,134	66,304	
Sub-total			581,833	631,704	391,447	579,071	643,602	1.9%
<b>OPERATING EXPENSES</b>								
OPERATING SUPPLIES	40185004	822000	8,584	10,050	9,937	10,050	10,270	
TELEPHONE	40185004	822003	1,504	1,680	672	1,422	2,248	
TRANSPORTATION	40185004	823000	14,194	10,089	8,900	10,089	12,021	
OTHER GENERAL	40185004	832000	15,343	20,051	9,282	15,139	29,401	
Sub-total			39,625	41,870	28,791	36,700	53,940	28.8%
DEPRECIATION	40185036	843000	14,889	9,995	4,998	9,995	9,016	
Sub-total			14,889	9,995	4,998	9,995	9,016	-9.8%
<b>TOTAL EXPENSES</b>			<b>636,347</b>	<b>683,569</b>	<b>425,236</b>	<b>625,766</b>	<b>706,558</b>	<b>3.4%</b>
<b>NET INSPECTIONS/SURVEY</b>			<b>(163,562)</b>	<b>-</b>	<b>(130,215)</b>	<b>(1,521)</b>	<b>-</b>	<b>NM</b>

City of Brookfield, WI  
*Capital Improvement Program*  
2019 thru 2023

**FUNDING SOURCE SUMMARY**

<b>Source</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Total</b>
2020 Sewer bond proceeds		3,500,000				3,500,000
Contract communities contribution	518,000	3,510,500	50,000			4,078,500
Sewer fund balance	1,308,400	45,500	86,000	37,000		1,476,900
<b>GRAND TOTAL</b>	<b>1,826,400</b>	<b>7,056,000</b>	<b>136,000</b>	<b>37,000</b>		<b>9,055,400</b>

City of Brookfield, WI  
*Capital Improvement Program*  
 2019 thru 2023

**PROJECTS BY CATEGORY AND DEPARTMENT**

Department Category	2019	2020	2021	2022	2023	Total	Future
<b>Sanitary Sewer</b>							
<u>Sewer collection system const</u>							
North Ave. sanitary sewer upgrade	750,000					750,000	
<i>Sub-Total</i>	750,000					750,000	
<u>Vehicles</u>							
Sewer vehicles/equipment	40,400	35,000	36,000	37,000		148,400	
<i>Sub-Total</i>	40,400	35,000	36,000	37,000		148,400	
<u>Wastewater Treatment Plant</u>							
Treatment plant roof replacements	200,000					200,000	
Phosphorus reduction	400,000	7,000,000	100,000			7,500,000	
Primary Clarifier Cover Replacement	400,000					400,000	
WPCC HVAC Replacement	36,000	21,000				57,000	
<i>Sub-Total</i>	1,036,000	7,021,000	100,000			8,157,000	
<b>Department Total:</b>	<b>1,826,400</b>	<b>7,056,000</b>	<b>136,000</b>	<b>37,000</b>		<b>9,055,400</b>	
<b>GRAND TOTAL</b>	<b>1,826,400</b>	<b>7,056,000</b>	<b>136,000</b>	<b>37,000</b>		<b>9,055,400</b>	



**CITY OF BROOKFIELD**  
**Wastewater Utility Fund**  
**CIP Project Descriptions**

	<u>Project Name/Funding Source</u>	<u>Project Description</u>
<b>Sewer Collection System</b>		
	North Avenue sanitary sewer (utility fund balance)	Relay the North Avenue sanitary sewer from a point east of Tru Lane to the Underwood Interceptor near Underwood Creek. Includes replacement of 8-inch and 10-inch diameter pipe segments with 10-inch and 12-inch diameter pipe, respectively. Project being done in advance of North Avenue road widening.
<b>Vehicles/Equipment</b>		
	Sewer vehicles/equipment (utility fund balance)	Estimated cost of ongoing vehicle and other large equipment replacements. 2019 includes replacement of one ¾ ton pickup truck.
<b>Wastewater Treatment Plant</b>		
	Treatment plant roof replacements (utility fund balance and contract communities contribution)	Replace portion of roof on Administration building, which is failing and experiencing leaks.
	Phosphorus reduction (utility fund balance, borrowing/Clean Water Fund loan, and contract communities contribution)	According to the latest WPDES permit, the treatment plant is required to further reduce phosphorus from its effluent from current limit of 1 mg/l to 0.075 mg/l, over a ten-fold increase in treatment removal. 2019 includes completion of design with construction following in 2020. Funds shown include costs for compliance at the Water Pollution Control Center.
	Primary clarifier cover replacement (utility fund balance and contract communities contribution)	Replace existing fiberglass launder covers on four primary clarifier weir structure. These covers provide a sealed environment for preliminary odor control exhaust system, and provide structural support accessing weirs for inspection and cleaning. Covers were originally installed in 1999 and are deteriorating. Clarifier rehabilitation and repair project (maintenance) on two of the clarifiers will take place in 2019. Combining rehabilitation project and cover replacement with the same contractor will save money.
	WPCC HVAC replacement (utility fund balance and contract communities contribution)	HVAC system for preliminary building electrical room and control room in 2019. The structural integrity of the existing units are deteriorating. The units are 20 years old, are problematic, and have an extensive repair history.