
Sewer Rate Update

Using a Utility-Basis Revenue Requirement

Prepared for the
City of La Crosse

by Trilogy Consulting, LLC

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INTRODUCTION

The City of La Crosse owns and operates a wastewater collection system, sewer interceptors and lift stations, and a Wastewater Treatment Plant (WWTP) that provides wastewater service to almost 16,000 customers within the City, including several high-strength industrial customers, treatment of hauled waste, and five municipal customers: the City of Onalaska, the Town of Campbell, the City of La Crescent, MN, the Town of Shelby Sanitary District No. 1, and the Town of Shelby Sanitary District No. 2. The City is required to treat for the following loadings at its wastewater treatment plant: organic pollutants (BOD), suspended solids (TSS), phosphorus (P), and ammonia (NH-3).

The Utility is nearing completion of major upgrades to the Wastewater Treatment Plant (WWTP) and has increased its program of sewer main replacement, lift station upgrades and rehabilitation, and equipment replacement.

In early 2019, the City hired Trilogy Consulting to conduct a formal Sanitary Sewer Rate Study. The study consisted of determining recommended user rates based on a cash needs revenue requirement and a detailed cost of service study that incorporated the capital improvements and anticipated changes in operation and maintenance expenses associated with the WWTP upgrades. A ten-year projection of user rate increases based on this cash needs methodology and cash flows was also prepared to develop a plan to complete all necessary capital improvement projects and meet all debt requirements while maintaining the financial health of the Utility. That study, based on the cash needs revenue requirement, is documented in a Draft Sewer Rate Study, dated June 2019.

The June 2019 Draft Sewer Rate Study recommended a significant rate increase to fund the utility's ongoing operating expenses and the projected \$64.3 million capital improvement program over the next five years, including \$54.7 million for WWTP upgrades. The rate increase was also recommended to maintain an adequate level of reserve funds available to cover ongoing equipment replacements, unexpected replacement and rehabilitation needs, or unexpected fluctuations in revenues or expenses.

The June 2019 Draft Sewer Rate Study recommended the La Crosse Common Council consider a plan to increase rates over a three-year period. The recommended rate increases were projected to increase the utility's annual user charge revenues by about \$987,000 in 2020, another \$1,104,000 in 2021, and another \$1,292,000 for 2022.

On September 18, 2019, the La Crosse Common Council approved the first phase of the rate increase described in the June 2019 Draft Sewer Rate Study and directed that the rate increase

be implemented starting January 1, 2020. The La Crosse Common Council also directed that additional rate increases be brought back to the Common Council for approval.

After the adoption of the sewer rates for 2020, the final facility plan for the WWTP upgrades was completed. The final facility plan estimated costs of \$68.0 million, including design engineering and construction management, with construction planned to begin in 2021 with final completion in 2023. In addition to the increased cost estimates for the WWTP, the Utility incurred substantial unplanned capital costs and repairs in 2019 and revised its capital improvement program for 2020 through 2025. Due to these increases in costs, the City retained Trilogy Consulting to prepare an updated sewer rate study in 2020 to re-evaluate the proposed rate increases for 2021 and future years.

As indicated above, the June 2019 Draft Sewer Rate Study was based upon a revenue requirement developed using a cash needs methodology. The updated 2020 Sanitary Sewer Rate Study was prepared using the utility basis method to establish the revenue requirement for the study. The utility basis method, used by the Wisconsin Public Service Commission to set water rates and sewer rates for regulated utilities, allows for recovery of depreciation expense and a return on net investment rate base instead of debt service and cash funded capital outlay. Most wastewater utilities use a cash-basis method, but some use the utility basis method, particularly those with wholesale customers. The advantages of the utility basis method include the stability in the amount and allocation of capital costs because the revenue requirements are based on all utility assets rather than current debt service and cash funded capital projects. Another advantage for utilities serving wholesale customers is the opportunity to generate a return on the investment in utility infrastructure. Finally, using a utility basis method can in some cases generate more revenues than a cash basis method depending on the age of the utility's infrastructure and the amount of annual debt service. Appendix B includes more information regarding the use of the utility basis and setting an appropriate rate of return.

La Crosse's contracts with its wholesale customers provide that user rates would be set based on the methodology (i.e., a cash-based methodology) used by John A. Mayer in his prior rate studies. However, La Crosse's contracts with all its wholesale customers (other than the City of La Crescent, MN) expired at the end of 2019. La Crosse re-negotiated its contracts with Onalaska and La Crescent and is in the process of re-negotiating the terms of its wholesale contracts the Towns of Campbell and Shelby. The 2020 Sewer Rate Update developed rates for wholesale customers with and without contracts. Rates for wholesale customers without contracts included a higher rate of return to the Utility for its investment in sewer system assets.

The 2020 Sewer Rate Update recommended no increase in sewer rates for 2021 in light of the COVID-19 pandemic, followed by rate increases designed to yield overall increases of 18.2 percent in revenues in 2022 and 2023.

Since 2020, the Utility has added new staff and continued to increase its program of system maintenance, rehabilitation, and replacement. In addition, the operation of the new WWTP facilities is expected to result in increases to some operation and maintenance expenses and decreases in other expenses. Operation and maintenance expenses have also increased due to supply chain issues and other factors that have caused significant increases in the costs of materials and supplies needed to operate, maintain, and repair the collection system and WWTP. Wastewater use by customer class has also fluctuated since 2020, impacting utility revenues. Therefore, the City retained Trilogy Consulting to update the sewer rate study, including revenue requirements, allocation of costs, and proposed rates.

STUDY METHODOLOGY

The study calculates proposed rates for 2024 and is generally organized into four sections:

1. An analysis of historical and forecast conditions including historical revenues, expenses, and usage statistics.
2. An analysis of forecast utility plant and depreciation expenses. This section of the study is intended to address the timing of additions and retirements of capital improvements, and the projection of depreciation expense.
3. Establishment of revenue requirement, allocation of costs and detailed rate calculations.
4. Cash flow forecasts with the proposed rates.

SECTION ONE -- HISTORICAL AND FORECAST CONDITIONS

A. HISTORICAL AND FORECAST CUSTOMER DEMANDS

The following tables show the analysis of historical trends in total wastewater treated at the wastewater treatment plant, as well as number of customers, customer volume of wastewater and estimated loadings (BOD, TSS, P, and NH-3) for retail domestic strength customers, wholesale customers, tank truck haulers, and surcharge loadings for high-strength waste.

Wastewater Treatment Plant Influent

The total volume of wastewater treated at the plant fluctuated between 2017 and 2022, peaking in 2019 with high flows in April through October. 'Billable' flow, or wastewater generated by customers, fluctuated between 2017 and 2020, increased in 2021 and 2022, and has been lower

in the first seven months of 2023. The remaining volume is clearwater infiltration and inflow (I/I), which averaged about 16.2 percent for 2017 through 2020 but was estimated at less than 5 percent in 2021 and 2022. Much of this is weather dependent.

Wastewater entering the plant is sampled daily for wastestrengths, so the total pounds of BOD, TSS, P, and NH-3 entering the plant per year can be estimated. Total pounds of these constituents have fluctuated from year to year over the last several years. Forecast influent flows and loadings for the study are the sum of forecast billable flows and loadings for each customer class, plus 17.2 percent I/I based on the average for 2017 through 2020.

Table 1 - Historical and Forecast WWTP Flows and Loadings

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|------------------------------|------------|------------|------------|-----------|------------|------------|------------|------------|
| WWTP Influent | CCF | CCF | CCF | CCF | CCF | CCF | CCF | CCF |
| Total Annual WWTP Influent | 4,741,094 | 4,838,571 | 5,673,427 | 4,636,686 | 4,598,772 | 4,580,236 | 5,065,645 | 5,080,665 |
| Total Billable Flow | 4,060,156 | 4,064,191 | 4,119,028 | 4,086,596 | 4,428,326 | 4,474,309 | 4,196,089 | 4,208,531 |
| Billable Flow as % of Inflow | 85.6% | 84.0% | 72.6% | 88.1% | 96.3% | 97.7% | 82.8% | 82.8% |
| Inflow/Infiltration | 680,938 | 774,380 | 1,554,399 | 550,090 | 170,447 | 105,928 | 869,556 | 872,134 |
| I/I as % of Influent | 14.4% | 16.0% | 27.4% | 11.9% | 3.7% | 2.3% | 17.2% | 17.2% |
| Maximum Flow per Day | 23,316 | 22,366 | 25,695 | 17,914 | 20,352 | 20,270 | 22,418 | 22,485 |
| Average Day Flow | 12,989 | 13,256 | 15,544 | 12,703 | 12,599 | 12,549 | 13,878 | 13,920 |
| Max Day/Average Day Ratio | 1.79 | 1.69 | 1.65 | 1.41 | 1.62 | 1.62 | 1.62 | 1.62 |
| BOD (mg/l) | 320 | 320 | 280 | 243 | 296 | 252 | | |
| TSS (mg/l) | 306 | 276 | 249 | 287 | 296 | 239 | | |
| P (mg/l) | 6.30 | 6.51 | 5.68 | 6.67 | 6.89 | 6.10 | | |
| NH3 (mg/l) | 39.0 | 44.3 | 38.6 | 43.8 | 40.8 | 36.6 | | |
| BOD (lbs) | 9,480,870 | 9,679,616 | 9,921,970 | 7,038,674 | 8,505,854 | 7,190,524 | 10,405,303 | 10,432,485 |
| TSS (lbs) | 9,042,527 | 8,321,644 | 8,804,103 | 8,306,349 | 8,497,095 | 6,825,144 | 8,895,567 | 8,920,807 |
| P (lbs) | 186,492 | 196,743 | 201,193 | 192,972 | 197,672 | 174,369 | 200,345 | 200,889 |
| NH3 (lbs) | 1,155,145 | 1,337,940 | 1,367,539 | 1,268,933 | 1,172,617 | 1,045,962 | 1,087,752 | 1,090,859 |
| Total Sales | | | | | | | | |
| Volume Sold | 4,060,156 | 4,064,191 | 4,119,028 | 4,086,596 | 4,428,326 | 4,474,309 | 4,196,089 | 4,208,531 |
| Estimated BOD (lbs.) | 10,051,340 | 10,080,857 | 10,074,113 | 9,937,093 | 10,906,449 | 11,013,134 | 10,405,303 | 10,432,485 |
| Estimated TSS (lbs.) | 8,883,117 | 9,281,857 | 9,222,129 | 8,975,001 | 9,358,978 | 9,459,982 | 8,895,567 | 8,920,807 |
| Estimated Phos. (lbs.) | 189,361 | 192,224 | 195,018 | 193,971 | 210,477 | 212,502 | 200,345 | 200,889 |
| Estimated NH-3 (lbs.) | 1,047,483 | 1,069,564 | 1,099,601 | 1,082,281 | 1,145,543 | 1,157,219 | 1,087,752 | 1,090,859 |

Domestic Wastewater

The total volume of domestic strength waste fluctuated between 2017 and 2020, increased in 2021 and 2022, and was down through the first seven months of 2023. Residential, multi-family, commercial, and public authority demand have fluctuated. Industrial demand increased between 2017 and 2021 and decreased in 2022 and the first seven months of 2023.

Billable domestic strength wastewater for 2024 is projected to be about the same as projected 2023 sales and about 6 percent lower than 2022 sales.

The estimated pounds of pollutant loadings for domestic strength waste are based on the domestic strength assumptions of 350 mg/l for BOD, 325 mg/l for TSS, 7 mg/l for phosphorus, and 40 mg/l for NH-3, which were revised in 2020.

Table 2 - Historical and Forecast Domestic Strength Sales

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | CCF | CCF | CCF | CCF | CCF | CCF | CCF | CCF |
| Customer Demand | | | | | | | | |
| Residential Sewer Usage | 812,662 | 795,136 | 777,255 | 840,496 | 837,861 | 932,574 | 932,574 | 932,574 |
| Residential Customers | 13,384 | 13,308 | 13,392 | 13,406 | 13,440 | 13,473 | 13,473 | 13,473 |
| Usage / Customer | 61 | 60 | 58 | 63 | 62 | 69 | 69 | 69 |
| Multi-Family Sewer Usage | 338,778 | 334,969 | 333,774 | 340,971 | 350,416 | 346,860 | 348,208 | 349,556 |
| Multi-Family Customers | 757 | 762 | 770 | 768 | 768 | 772 | 775 | 778 |
| Usage / Customer | 448 | 440 | 433 | 444 | 456 | 449 | 449 | 449 |
| Commercial Sewer Usage | 755,647 | 660,164 | 610,380 | 518,460 | 565,408 | 712,924 | 594,400 | 594,400 |
| Commercial Customers | 1,448 | 1,428 | 1,416 | 1,419 | 1,407 | 1,395 | 1,395 | 1,395 |
| Usage / Customer | 522 | 462 | 431 | 365 | 402 | 511 | 426 | 426 |
| Industrial Sewer Usage | 746,135 | 996,940 | 1,038,347 | 1,159,725 | 1,368,083 | 1,145,057 | 986,664 | 996,433 |
| Industrial Customers | 81 | 94 | 96 | 99 | 100 | 101 | 101 | 102 |
| Usage / Customer | 9,212 | 10,578 | 10,816 | 11,714 | 13,681 | 11,337 | 9,769 | 9,769 |
| Public Authority Sewer Usage | 303,826 | 182,076 | 227,152 | 193,025 | 193,918 | 245,141 | 242,491 | 243,816 |
| Public Authority Customers | 179 | 187 | 179 | 184 | 184 | 185 | 183 | 184 |
| Usage / Customer | 1,697 | 972 | 1,269 | 1,049 | 1,054 | 1,325 | 1,325 | 1,325 |
| Onalaska | 741,136 | 721,163 | 713,925 | 692,833 | 754,526 | 743,386 | 743,386 | 743,386 |
| La Crescent | 134,045 | 136,879 | 167,493 | 142,541 | 135,192 | 134,849 | 134,849 | 134,849 |
| Campbell | 155,179 | 163,159 | 171,163 | 118,297 | 147,869 | 140,146 | 140,146 | 140,146 |
| Shelby SD#2 | 65,947 | 65,043 | 65,043 | 65,688 | 61,824 | 61,824 | 61,824 | 61,824 |
| Strength | | | | | | | | |
| Total Domestic Strength Usage (mg/l) | 4,053,355 | 4,055,529 | 4,104,532 | 4,072,036 | 4,415,096 | 4,462,762 | 4,184,543 | 4,196,985 |
| Estimated BOD (lbs.) | 350 | 8,855,449 | 8,860,199 | 8,967,256 | 8,896,262 | 9,645,753 | 9,749,890 | 9,169,241 |
| Estimated TSS (lbs.) | 325 | 8,222,917 | 8,227,328 | 8,326,738 | 8,260,814 | 8,956,771 | 9,053,469 | 8,489,055 |
| Estimated Phos. (lbs.) | 7 | 177,109 | 177,204 | 179,345 | 177,925 | 192,915 | 194,998 | 182,841 |
| Estimated NH-3 (lbs.) | 40 | 1,012,051 | 1,012,594 | 1,024,829 | 1,016,716 | 1,102,372 | 1,114,273 | 1,044,807 |

Note: 2023 sales estimated based on January - July sales for retail customer classes and prior years' sales for wholesale customers.

Hauled Waste

The WWTP accepts three categories of hauled waste: holding tank waste, septic tank waste, and grease trap waste. Hauled waste is categorized into one of the three categories based on self-reporting or random samples of the actual waste strength. The threshold waste strengths of each category of hauled waste are shown in the table. As shown, the number of loads and gallons of waste of each category treated at the WWTP increased between 2017 and 2020 and decreased in 2021. Hauled waste is projected to remain at 2021 levels for purposes of setting sewer rates.

Category "B" Surcharge Loadings

The Utility has several high-strength industrial customers that discharge waste with higher than domestic strength loadings of some or all the treated constituents. Wastewater from these customers is routinely sampled and the total pounds of loadings in excess of what would be found in domestic strength waste is estimated from the samples. These customers are charged the normal domestic strength rate per hundred cubic feet (CCF) of volume, plus a surcharge per pound for loadings in excess of domestic strength waste.

As shown in the following table, surcharge loadings of TSS and NH-3 decreased since 2018 due to pretreatment by some of the high strength customers. Projections are generally set at the levels of 2021, based on discussions with Utility staff that those lower levels are expected to continue.

Table 3 - Historical and Forecast Hauled Waste and High-Strength Industrial Sales

| | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---------------------------------|----------|-----------|-----------|---------|---------|-----------|-----------|-----------|-----------|
| Tank Truck Haulers | | | | | | | | | |
| | Strength | | | | | | | | |
| Holding Tank (Low Strength) | (mg/l) | 3,842 | 4,067 | 8,984 | 9,273 | 7,835 | 5,354 | 5,354 | 5,354 |
| No. Loads | | 977 | 1,073 | 1,592 | 1,617 | 1,631 | 1,631 | 1,631 | 1,631 |
| Estimated BOD (lbs.) | 600 | 14,388 | 15,233 | 33,649 | 34,729 | 29,342 | 20,051 | 20,051 | 20,051 |
| Estimated TSS (lbs.) | 1,800 | 43,164 | 45,700 | 100,947 | 104,187 | 88,027 | 60,154 | 60,154 | 60,154 |
| Estimated Phos. (lbs.) | 25 | 600 | 635 | 1,402 | 1,447 | 1,223 | 835 | 835 | 835 |
| Estimated NH-3 (lbs.) | 50 | 1,199 | 1,269 | 2,804 | 2,894 | 2,445 | 1,671 | 1,671 | 1,671 |
| Septic Tank (Medium Strength) | | 2,075 | 3,503 | 3,972 | 3,780 | 3,540 | 4,257 | 4,257 | 4,257 |
| No. Loads | | 567 | 863 | 923 | 952 | 851 | 851 | 851 | 851 |
| Estimated BOD (lbs.) | 1,800 | 23,316 | 39,359 | 44,625 | 42,470 | 39,776 | 47,828 | 47,828 | 47,828 |
| Estimated TSS (lbs.) | 5,500 | 71,243 | 120,263 | 136,354 | 129,770 | 121,537 | 146,143 | 146,143 | 146,143 |
| Estimated Phos. (lbs.) | 60 | 777 | 1,312 | 1,488 | 1,416 | 1,326 | 1,594 | 1,594 | 1,594 |
| Estimated NH-3 (lbs.) | 100 | 1,295 | 2,187 | 2,479 | 2,359 | 2,210 | 2,657 | 2,657 | 2,657 |
| Grease Trap (High Strength) | | 884 | 1,091 | 1,541 | 1,508 | 1,855 | 1,936 | 1,936 | 1,936 |
| No. Loads | | 320 | 384 | 501 | 479 | 535 | 535 | 535 | 535 |
| Estimated BOD (lbs.) | 7,500 | 41,397 | 51,094 | 72,126 | 70,582 | 86,836 | 90,622 | 90,622 | 90,622 |
| Estimated TSS (lbs.) | 15,000 | 82,795 | 102,187 | 144,252 | 141,164 | 173,672 | 181,244 | 181,244 | 181,244 |
| Estimated Phos. (lbs.) | 120 | 662 | 817 | 1,154 | 1,129 | 1,389 | 1,450 | 1,450 | 1,450 |
| Estimated NH-3 (lbs.) | 200 | 1,104 | 1,362 | 1,923 | 1,882 | 2,316 | 2,417 | 2,417 | 2,417 |
| Category "B" Surcharge Loadings | | | | | | | | | |
| Estimated BOD (lbs.) | | 1,116,789 | 1,114,972 | 956,457 | 893,050 | 1,104,742 | 1,104,742 | 1,104,742 | 1,104,742 |
| Estimated TSS (lbs.) | | 462,998 | 786,379 | 513,838 | 339,066 | 18,971 | 18,971 | 18,971 | 18,971 |
| Estimated Phos. (lbs.) | | 10,213 | 12,256 | 11,629 | 12,054 | 13,624 | 13,624 | 13,624 | 13,624 |
| Estimated NH-3 (lbs.) | | 31,833 | 52,151 | 67,565 | 58,430 | 36,201 | 36,201 | 36,201 | 36,201 |

B. FORECAST REVENUES AT PRESENT RATES

The table below shows the forecast 2024 revenues at current rates based on the forecast number of customers and volume of sewer usage. The current rates for each customer class are shown in the table.

Table 4 - Forecast 2024 User Charge Revenues at Present Rates

| | | Residential | Multi-Family | Commercial | Industrial | Public Authority | Total |
|---------------------------------------|-------------------|-------------|--------------|--------------------|-------------------|-------------------|--------------|
| City of La Crosse (Retail) | | | | | | | |
| <u>Sewer Usage Charges</u> | | | | | | | |
| Volume | CCF | 932,574 | 349,556 | 594,400 | 996,433 | 243,816 | 3,116,779 |
| Current Rates | \$/CCF | \$2.15 | \$2.15 | \$2.15 | \$2.15 | \$2.15 | |
| Revenues | | \$2,005,034 | \$751,545 | \$1,277,961 | \$2,142,330 | \$524,204 | \$6,701,074 |
| <u>Fixed Charges</u> | | | | | | | |
| Meter Size | | 13,473 | 778 | 1,395 | 102 | 184 | 15,932 |
| 5/8 | \$15.00 | 8,709 | 164 | 297 | 3 | 5 | 9,178 |
| 3/4 | \$15.00 | 4,618 | 213 | 552 | 13 | 51 | 5,447 |
| 1 | \$24.00 | 143 | 308 | 343 | 30 | 31 | 855 |
| 1½ | \$39.00 | 2 | 25 | 57 | 10 | 17 | 111 |
| 2 | \$60.00 | 1 | 59 | 103 | 13 | 56 | 232 |
| 3 | \$108.00 | - | 4 | 23 | 9 | 15 | 51 |
| 4 | \$174.00 | - | 4 | 18 | 14 | 9 | 45 |
| 6 | \$342.00 | - | 1 | 2 | 6 | - | 9 |
| 8 | \$543.00 | - | - | - | 4 | - | 4 |
| 10 | \$813.00 | - | - | - | - | - | - |
| 12 | \$1,080.00 | - | - | - | - | - | - |
| Revenues | | \$813,900 | \$76,128 | \$142,680 | \$39,048 | \$35,172 | \$1,106,928 |
| <u>Unmetered</u> | | | | | | | |
| Swr-Flat | \$51.55 | - | - | 2 | 1 | 1 | 4 |
| Wells | \$51.55 | 27 | - | 1 | 1 | 3 | 32 |
| French Is. | \$51.55 | - | - | 2 | - | 3 | 5 |
| Revenues | | \$5,567 | \$0 | \$1,031 | \$206 | \$1,443 | \$8,248 |
| <u>Wholesale</u> | | | Onalaska | La Crescent | Campbell | Shelby SD#2 | Total |
| Volume | MG | | 556.053 | 100.867 | 104.829 | 46.244 | 807.994 |
| Rate | \$/ MG | | \$3,315 | \$3,358 | \$3,698 | \$3,698 | |
| Revenues | \$ | | \$1,843,316 | \$338,713 | \$387,659 | \$171,012 | \$2,740,699 |
| <u>Hauled Waste</u> | | | | Holding Tank Waste | Septic Tank Waste | Grease Trap Waste | Total |
| Volume | 1,000 gallons | | | 4,005 | 3,184 | 1,448 | 8,637 |
| Rate | \$/ 1,000 gallons | | | \$13.82 | \$32.82 | \$82.22 | |
| No. of Loads | Loads | | | 1,631 | 851 | 535 | 3,017 |
| Rate | \$/ load | | | \$15.20 | \$15.20 | \$15.20 | |
| Revenues | \$ | | | \$80,136 | \$117,438 | \$127,181 | \$324,754 |
| <u>Category "B" Surcharges</u> | | | BOD | TSS | Phosphorus | NH-3 | Total |
| Excess Loadings | Pounds | | 1,104,742 | 18,971 | 13,624 | 36,201 | 1,173,538 |
| Rate | \$/ Pound | | \$0.237 | \$0.289 | \$6.755 | \$0.313 | |
| Revenues | \$ | | \$261,824 | \$5,483 | \$92,030 | \$11,331 | \$370,668 |
| | | | | | | Total | \$11,252,371 |

C. HISTORICAL AND FORECAST OPERATION AND MAINTENANCE EXPENSES

The following table shows the actual operation and maintenance expenses by category for 2017 through 2022, the three-year average for 2020 through 2022, and the projected 2023 and 2024 expenses.

The Utility adopted a new chart of accounts in 2020. The purpose of the new chart of accounts is to account for expenses by utility function. Expenses are now grouped by administrative and general, intergovernmental charges for service, pretreatment, solids disposal, laboratory expenses, collector and interceptor main expenses, lift station expenses, customer accounts, and wastewater treatment plant facility operations expenses. Within the collector and interceptor main and lift station categories, expenses are recorded separately for collector mains and collector system lift stations versus interceptor mains and interceptor lift stations.

Operation and maintenance expenses for 2020 through 2022 averaged about \$6.1 million. Expenses for 2023 are projected to be almost \$8.5 million but are projected to decrease to \$7.5 million for 2024. Notable changes to expenses for 2023 and 2024 include the following:

- Salaries – The City completed a salary study in 2022 and has increased salaries for some positions because of the findings of that study. Salaries for Wastewater employees increased by 2.5 percent in July 2023 and will increase another 3.0 percent on January 1, 2024, and another 2.5 percent increase in July 2024 for performance reviews. For 2023 the City reorganized the Public Works Department to oversee utilities and added a Deputy Director of Public Works & Utilities and replaced the Utilities Manager position with a Utilities Finance and Compliance Manager position. The Utility pays a portion of the salaries of the Direct and Deputy Directors of Public Works & Utilities. In 2023, the Utility also added an additional Equipment Operator and a Wastewater Mechanic II. In addition, the Utility had multiple vacant positions that were unfilled or partially filled in prior years that were filled in 2023. The 2024 budget includes three new positions – a clerk at the WWTP, another accountant, and a GIS specialist.
- Consulting services – This budget category includes outside engineering services, rate studies, and legal expenses. The Utility anticipates that these expenses will be higher than in past years to cover engineering studies such as a comprehensive sanitary sewer system plan, emerging contaminants, annual review of the sewer rates, and ongoing legal expenses related to negotiation of new wholesale contracts.
- Training – The Utility is increasing its training program for employees.
- Memberships and subscriptions – The Utility subscribed to Office 365. This budget category covers the subscription charges for each user.

- Repair and Maintenance – Radio and Tower Lease – The Utility has a new contract for its radio system.
- Biosolids disposal – The Utility has been spending over \$1.0 million per year on hauling and disposal of biosolids. With the upgrades to the WWTP, the Utility will be able to reduce the amount of biosolids liquids to nearly zero, substantially reducing costs for disposal. The current agreement for solids disposal expires July 2024. Disposal costs for 2024 were estimated to be \$500,000, or less than half of prior years' expenses.
- Laboratory expenses – The new chart of accounts includes new accounts to track salaries for laboratory personnel. The Utility has increased its sampling efforts and plans to continue increased sampling.
- Sewer main inspection and repairs – The Utility's sewer mains are aging and require an increased program of inspection, repair, and replacement. The 2023 budget reflects increased expenses for inspection, contracted repairs, contracted flatwork, casting, grates, concrete, and other supplies and expenses related to sewer repairs. The Utility intends to continue this increased program of inspection and repairs in future years.
- Lift station natural gas and electricity – Costs are expected to increase by 3.0 percent next year for natural gas and 6.0 percent for electricity.
- Lift station rehabilitation and repairs – The Utility's 26 sanitary sewer lift stations are aging and in need of maintenance and repairs. The Utility has budgeted for a higher level of repairs to buildings, grounds, and equipment for 2023 and plans to continue an increased program of maintenance.
- WWTP electricity – With the upgrades to the WWTP including a new biogas generator, the Utility will be able to produce a substantial share of the electricity needed to operate the WWTP. The biogas generator is expected to begin operation on January 1, 2024. Electricity purchases for the WWTP were estimated to decrease from \$650,000 budgeted for 2023 to \$200,000 for 2024.
- WWTP water – The WWTP is using significantly more water in 2023 as part of the construction process. Water usage is expected to decrease to normal levels in 2024.
- WWTP natural gas – Natural gas costs are expected to increase due to an increase in natural gas purchases for the biogas generator.
- WWTP sewer – With the increase in water usage in the WWTP in 2023, sewer expenses have increased as well. These expenses are expected to decrease in 2024.
- WWTP chemicals – The Utility's expenses for chemicals have increased due to lower limits for Phosphorus and increased chemical purchases to treat wastewater to comply with the lower limits.

- WWTP repair and maintenance of biogas energy generation equipment – This is a new budget account for repair and maintenance of the new biogas generator. The estimated annual expenses are from the WWTP facility plan.

City of La Crosse
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Table 5 - Historical and Forecast Operation and Maintenance Expenses

| New Object | Project No. | Account Description | 2017 (\$) | 2018 (\$) | 2019 (\$) | 2020 (\$) | 2021 (\$) | 2022 (\$) | 3-Year Average (\$) | 2023 (\$) | 2024 (\$) |
|-------------------------------------|----------------|--|--------------|--------------|--------------|--------------|--------------|--------------|---------------------------|--------------|--------------|
| 510000 | | Regular Salaries | 889,393 | 196,233 | 275,127 | 278,492 | 304,739 | 230,798 | 271,343 | 279,490 | 331,035 |
| 510000 | | Reg Salaries - COVID | | | | 51,078 | 1,862 | 0 | 17,647 | 0 | 0 |
| 510000 | W8100 | Reg Salaries - Other City Depts | 175,971 | 206,123 | 89,849 | 10,383 | 10,192 | 11,466 | 10,681 | 12,000 | 12,605 |
| 510000 | W8200 | Reg Salaries - Training | 11,240 | 16,472 | 14,578 | 10,743 | 27,277 | 26,703 | 21,574 | 15,000 | 15,000 |
| 510001 | | Payout of Vacation and Sick Accruals | | | | 0 | 14,282 | 3,280 | 5,854 | 0 | 4,000 |
| 510005 | | Limited Term EE Salaries - Collector | | | | 9,565 | 0 | 0 | 3,188 | 0 | 0 |
| 510005 | W8200 | Part-Time Labor - Training | | | | 2,958 | 0 | 1,130 | 1,362 | 0 | 1,455 |
| 510006 | W8100 | Overtime Wages | 18,738 | 236 | 232 | 253 | 520 | 216 | 330 | 0 | 0 |
| 510006 | W8200 | Overtime Wages - Training | 2,997 | 1,480 | 5,056 | 46 | 368 | 216 | 210 | 50 | 279 |
| 510006 | W9800 | Overtime Wages - Other City Depts | 203 | 89 | 98 | 0 | 0 | 0 | 0 | 0 | 0 |
| 510025 | | Compensated Absences | | | | | (6,172) | 0 | (3,086) | 0 | 0 |
| 510030 | | Cell Phone Reimbursement | | | | 141 | 536 | 681 | 453 | 550 | 0 |
| 511005 | | Health Insurance ⁽¹⁾ | 565,238 | 528,468 | 491,077 | 450,041 | 316,009 | 319,977 | 362,009 | 347,490 | 392,200 |
| 511010 | | Worker Compensation Insur | 54,153 | 61,659 | 59,982 | 59,448 | 44,072 | 45,428 | 49,649 | 41,965 | 39,336 |
| 511015 | | Life Insurance | 4,485 | 4,295 | 9,606 | 5,152 | 5,596 | 4,298 | 5,015 | 9,680 | 5,500 |
| 511020 | | Social Security Taxes | 88,784 | 89,591 | 93,589 | 87,528 | 89,211 | 95,492 | 90,744 | 97,822 | 132,320 |
| 511025 | | Retirement Benefits | 88,548 | 80,927 | 87,180 | 81,313 | 79,896 | 66,376 | 75,861 | 78,257 | 117,810 |
| 511065 | | Employee Recognition | | | | | | | | | 1,000 |
| 520006 | | Regulatory / Permit Fees | 43,508 | 41,702 | 41,201 | 40,239 | 45,499 | 40,785 | 42,174 | 50,000 | 50,500 |
| 520010 | | Audit & Accounting Services | 2,500 | 2,500 | 2,500 | 2,637 | 2,742 | 2,662 | 2,680 | 3,000 | 3,300 |
| 520050 | | Consulting Services ⁽²⁾ | 21,816 | 26,273 | 210,408 | 131,375 | 33,743 | 27,004 | 64,041 | 250,000 | 200,000 |
| 520055 | | Recruitment | 0 | 708 | 637 | 685 | 1,184 | 1,237 | 1,035 | 1,000 | 1,200 |
| 520100 | | Contract Svcs. - Laundering | 1,869 | 1,093 | 1,745 | 1,697 | 1,156 | 889 | 1,247 | 1,700 | 1,700 |
| 520110 | | Fleet Lease Admin. Fees | | | | 662 | 6,346 | 16,783 | 7,930 | 18,000 | 7,850 |
| 520134 | W8100 | Other City Dept Svcs. | 247,655 | 242,920 | 266,715 | 195,344 | 240,771 | 249,031 | 228,382 | 254,964 | 237,500 |
| 520134 | W9030 | Cust. Records and Collection | | | | 24,742 | 21,222 | 21,272 | 22,412 | 30,000 | 30,000 |
| 521005 | | Lodging, transportation, and meals | 2,847 | 4,551 | 4,426 | 3,295 | 0 | 638 | 1,311 | 3,500 | 3,000 |
| 521006 | | Fees for training and conferences | | | | | 14,017 | 10,369 | 12,193 | 15,000 | 25,000 |
| 521101 | | Telephone and cell phone expenses | 4,253 | 7,366 | 13,170 | 11,112 | 16,666 | 20,101 | 15,960 | 20,000 | 22,000 |
| 530200 | | Property Insurance | 57,481 | 56,042 | 56,118 | 62,777 | 78,863 | 95,627 | 79,089 | 100,985 | 100,540 |
| 530250 | | Liability Insurance | 26,312 | 23,980 | 25,534 | 24,443 | 26,581 | 31,687 | 27,570 | 39,401 | 40,101 |
| 532000 | | Office Supplies | 2,145 | 2,035 | 1,934 | 1,743 | 4,296 | 2,782 | 2,940 | 4,000 | 4,040 |
| 532010 | | Operating Supplies | 60,032 | 61,167 | 37,411 | 47,856 | 49,502 | 48,267 | 48,542 | 60,000 | 65,000 |
| 532010 | | COVID - Operating Supplies | | | | 5,748 | 0 | 0 | 1,916 | 0 | 0 |
| 532055 | | Gasoline | 12,770 | 13,298 | 15,897 | 11,727 | 13,043 | 11,901 | 12,223 | 15,000 | 16,100 |
| 532056 | | Diesel Fuel | 24,599 | 17,046 | 32,892 | 20,839 | 20,557 | 16,769 | 19,388 | 30,000 | 26,450 |
| 532060 | | Postage and Freight | 768 | 872 | 1,286 | 1,002 | 851 | 1,257 | 1,037 | 1,500 | 1,581 |
| 532065 | | Printing of Internal Forms | | | | | | | | | 500 |
| 532075 | | Memberships and subscriptions | | | | | 351 | 2,663 | 1,507 | 20,000 | 32,135 |
| 532085 | | Safety Equipment | 1,552 | 2,794 | 9,290 | 12,083 | 12,986 | 5,995 | 10,355 | 10,000 | 20,000 |
| 533010 | | Computer Equip | | | | | 6,159 | 13,985 | 10,072 | 22,000 | 20,000 |
| 533030 | | Mjr Tools and Equip Under \$10,000 | | | | | | 13,699 | 13,699 | 20,000 | 50,000 |
| 533035 | | Small Tools | 2,564 | 1,543 | 4,379 | 0 | 980 | 6,978 | 2,653 | 5,000 | 5,050 |
| 540100 | | R&M - Equip - Flushing Trucks and Portable | | | | 37,898 | 84,454 | 94,126 | 72,159 | 80,000 | 90,000 |
| 540100 | | R&M - Equip / Mach - COVID | | | | 77 | 0 | 0 | 26 | 0 | 0 |
| 540150 | | R&M - Radio and Tower Lease | 1,157 | 788 | 867 | 1,127 | 950 | 902 | 993 | 20,000 | 16,500 |
| 540250 | | R&M - Vehicle | 24,088 | 22,247 | 30,512 | 27,250 | 41,583 | 24,474 | 31,102 | 25,000 | 25,000 |
| 550000 | | Miscellaneous | 8,507 | 6,919 | 3,738 | 4,708 | 8,674 | 33,479 | 15,620 | 10,000 | 10,100 |
| 550250 | | Credit Card Fees | | | | 38 | 0 | 0 | 13 | 0 | 0 |
| 563100 | | Vehicle Fleet Lease Interest | | | | 369 | 5,811 | 9,638 | 5,273 | 9,734 | 10,500 |
| 563200 | | Utility Office Rent | | | | 0 | 6,480 | 6,480 | 4,320 | 6,480 | 6,480 |
| 563250 | | Rental Equipment | 0 | 1,220 | 1,762 | 0 | 0 | 16,911 | 5,637 | 1,000 | 1,010 |
| 580300 | | Equipment and Machinery | | | | 11,843 | 0 | 0 | 3,948 | 0 | 0 |
| SUBTOTAL GENERAL AND ADMINISTRATIVE | | | 2,446,172 | 1,722,633 | 1,888,797 | 1,730,456 | 1,633,856 | 1,634,450 | 1,682,282 | 2,009,568 | 2,175,677 |

City of La Crosse
2023 Sewer Rate Update - Utility Basis

| New Object | Project No. | Account Description | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 3-Year Average | 2023 | 2024 |
|--|-------------|---|---------|---------|-----------|-----------|-----------|-----------|----------------|-----------|---------|
| | | | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| 520135 | W4751 | Intergovt Charges for Service - Onalaska | 107,106 | 114,214 | 111,543 | 78,400 | 85,408 | 9,944 | 57,917 | 10,000 | 10,100 |
| 520135 | W4752 | Intergovt Charges for Service - Shelby | | | | 0 | 7,238 | 0 | 13,402 | 18,101 | 18,282 |
| 520135 | W4753 | Intergovt Charges for Service - Campbell | | | | | 77,280 | 86,496 | 81,888 | 110,000 | 111,100 |
| 521105 | W4752 | Sewer | 6,198 | 6,260 | 7,398 | 11,253 | 7,238 | 14,476 | 10,989 | 0 | 0 |
| SUBTOTAL INTERGOVERNMENTAL CHARGES FOR SERVICE | | | 113,304 | 120,474 | 118,941 | 89,653 | 177,164 | 110,916 | 164,196 | 138,101 | 139,482 |
| 510000 | | Reg Salaries - Industrial PreTrmnt | 3,912 | 56,132 | 57,350 | 55,812 | 59,553 | 50,770 | 55,378 | 64,000 | 67,750 |
| 510006 | | Overtime Wages - Industrial PreTrmnt | 41 | 1,234 | 182 | 112 | 451 | 845 | 469 | 1,500 | 1,088 |
| 532010 | W800 | Pretreatment Supplies | 328 | 100 | 255 | 1,005 | 2,779 | 1,820 | 1,868 | 2,500 | 2,525 |
| SUBTOTAL INDUSTRIAL PRE-TREATMENT | | | 4,282 | 57,467 | 57,787 | 56,928 | 62,783 | 53,434 | 57,715 | 68,000 | 71,363 |
| 510000 | | Reg Salaries - Solids Disposal | 0 | 2,436 | 46,372 | 3,479 | 0 | 0 | 1,160 | 0 | 0 |
| 510006 | | Overtime Wages - Solids Disposal | 205 | 639 | 10,846 | 448 | 0 | 0 | 149 | 0 | 0 |
| 520045 | | Sample Tests Sludge | 4,158 | 11,147 | 9,252 | 394 | 0 | 0 | 131 | 0 | 0 |
| 521132 | | Biosolids dispossal | 841,630 | 682,428 | 1,020,155 | 1,259,610 | 1,269,896 | 1,052,534 | 1,194,013 | 1,000,000 | 500,000 |
| 521132 | | Grit Disposal | 9,302 | 18,308 | 11,119 | 7,112 | 19,021 | 7,451 | 11,195 | 15,000 | 15,150 |
| 521132 | | Screenings Disposal | | | | 1,752 | 5,445 | 6,906 | 4,701 | 10,000 | 10,100 |
| SUBTOTAL SOLIDS DISPOSAL | | | 855,295 | 714,958 | 1,097,743 | 1,272,794 | 1,294,362 | 1,066,892 | 1,211,349 | 1,025,000 | 525,250 |
| 510000 | | Salaries and wages | | | | 0 | 0 | 56,700 | 18,900 | 129,500 | 133,890 |
| 510006 | | Overtime wages | | | | 0 | 0 | 1,657 | 552 | 4,000 | 2,134 |
| 520045 | W8000 | Sample Tests Pretreat | 12,683 | 8,470 | 8,831 | 5,126 | 6,030 | 5,365 | 5,507 | 10,000 | 10,100 |
| 520045 | W8010 | Sample Tests Plant Water | 20,144 | 20,367 | 22,887 | 22,153 | 18,791 | 25,880 | 22,275 | 35,000 | 35,350 |
| 520045 | W8020 | Testing / Sampling Svcs. - Trucked Waste | | | | 2,227 | 2,080 | 988 | 1,765 | 3,000 | 3,030 |
| 520045 | W8150 | Testing / Sampling Svcs. - Biosolids Disposal | | | | 4,965 | 3,220 | 2,677 | 3,621 | 10,000 | 10,100 |
| 532091 | W8010 | Lab Supplies - WWTP | 0 | 0 | 28,272 | 29,392 | 25,374 | 41,554 | 32,107 | 35,000 | 35,350 |
| SUBTOTAL LABORATORY EXPENSES | | | 32,827 | 28,836 | 59,990 | 63,864 | 55,496 | 134,820 | 84,727 | 226,500 | 229,954 |
| 510000 | W3160 | Reg Salaries - Sanitary Collection | 17,793 | 190,371 | 155,725 | 143,018 | 167,960 | 138,158 | 149,712 | 205,000 | 177,897 |
| 510000 | W3430 | Reg Salaries - Sanitary Interceptor | | | | 10,765 | 20,888 | 13,100 | 14,917 | 24,000 | 16,868 |
| 510005 | W3160 | Part-Time Labor - Sanitary Collection | | | | | 2,684 | 5,987 | 4,335 | 10,000 | 7,709 |
| 510006 | W3160 | Overtime Wages - Sanitary Collection | 488 | 9,117 | 22,757 | 1,556 | 5,164 | 4,302 | 3,674 | 7,000 | 5,540 |
| 510006 | W3430 | Overtime Wages - Sanitary Interceptor | | | | 117 | 814 | 408 | 446 | 1,500 | 526 |
| 520100 | W3160 | Contract Svcs. - Cleaning | | | | 123,566 | 38,819 | 59,631 | 74,005 | 62,280 | 62,902 |
| 520100 | W3430 | Contract Svcs. - Cleaning | | | | 22,332 | 2,060 | 3,131 | 9,174 | 7,720 | 7,798 |
| 520106 | W3160 | Contract Svcs. - Tv Inspect | 26,594 | 18,507 | 50,099 | 10,515 | 9,986 | 7,256 | 9,252 | 40,474 | 40,879 |
| 520106 | W3430 | Contract Svcs. - Tv Inspect | | | | 1,856 | 2,620 | 2,058 | 2,178 | 9,526 | 9,621 |
| 520107 | W3160 | Contracted Sewer Repair | 64,044 | 85,004 | 341,506 | 64,015 | 57,980 | 7,613 | 43,203 | 54,754 | 55,302 |
| 520107 | W3430 | Contracted Sewer Repair | | | | 55,379 | 453,935 | 94,871 | 201,395 | 255,246 | 257,798 |
| 520108 | W3160 | Contracted Flatwork | 0 | 0 | 54,629 | 14,069 | 7,805 | 0 | 7,292 | 15,000 | 15,150 |
| 520108 | W3430 | Contracted Flatwork | | | | 4,132 | 18,951 | 0 | 7,694 | 15,000 | 15,150 |
| 532041 | W3160 | Castings, Grates, Covers for MH | 31,254 | 39,810 | 51,074 | 31,075 | 29,265 | 38,784 | 33,041 | 55,427 | 55,981 |
| 532041 | W3430 | Castings, Grates, Covers for MH | | | | 3,841 | 9,755 | 12,466 | 8,687 | 14,573 | 14,719 |
| 532042 | W3160 | Concrete Supplies | 17,766 | 24,581 | 2,268 | 11,662 | 11,143 | 3,928 | 8,911 | 16,128 | 16,289 |
| 532042 | W3430 | Concrete Supplies | | | | 1,441 | 3,714 | 1,263 | 2,140 | 3,872 | 3,911 |
| 540300 | W3430 | Repair/Maint - Infrastructure | | | | 708 | 9,112 | 3,842 | 4,554 | 13,682 | 13,818 |
| 540300 | W3430 | Repair/Maint - Infrastructure | 12,042 | 9,790 | 24,547 | 88 | 4,987 | 1,235 | 2,103 | 6,318 | 6,382 |
| SUBTOTAL COLLECTOR AND INTERCEPTOR | | | 169,981 | 377,179 | 702,605 | 500,134 | 857,643 | 398,032 | 586,715 | 817,500 | 784,240 |

City of La Crosse
2023 Sewer Rate Update - Utility Basis

| New Object | Project No. | Account Description | | | | | | | | Test Year | |
|--|----------------|---|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|
| | | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 3-Year Average | 2023 | 2024 |
| | | | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| 510000 | W3160 | Reg Salaries - Sanitary Lift Sta | 82,111 | 71,145 | 110,296 | 54,844 | 56,854 | 57,026 | 56,241 | 65,000 | 73,450 |
| 510000 | W3430 | Reg Salaries - Sanitary Lift Sta | | | | 69,801 | 43,602 | 86,764 | 66,722 | 65,000 | 75,000 |
| 510005 | W3160 | Part-Time Labor - Sanitary Lift Stations - Collection | | | | | | 1,602 | 1,602 | 1,000 | 2,063 |
| 510006 | W3160 | Overtime Wages - Sanitary Lift Sta | | | | 2,616 | 4,157 | 1,749 | 2,841 | 5,000 | 3,200 |
| 510006 | W3430 | Overtime Wages - Sanitary Lift Sta | | | | 3,330 | 4,774 | 2,654 | 3,586 | 5,000 | 4,000 |
| 521102 | W3160 | Electricity - Collector | | | | 15,185 | 14,745 | 15,484 | 15,138 | 17,000 | 18,020 |
| 521102 | W3430 | Electricity - Interceptor | | | | 66,208 | 67,234 | 77,202 | 70,215 | 73,000 | 77,380 |
| 521104 | W3160 | Water | | | | | 475 | 1,315 | 895 | 1,600 | 1,616 |
| 521104 | W3430 | Water | | | | | 1,008 | 1,979 | 1,493 | 2,000 | 2,020 |
| 521104 | W3160 | Natural Gas | | | | 2,241 | 3,356 | 4,101 | 3,233 | 4,200 | 4,326 |
| 521104 | W3430 | Natural Gas | | | | 3,284 | 3,884 | 5,017 | 4,062 | 5,050 | 5,202 |
| 521105 | W3160 | Sewer | | | | | 150 | 674 | 412 | 1,000 | 1,400 |
| 521105 | W3430 | Sewer | | | | | 638 | 880 | 759 | 1,000 | 1,400 |
| 521106 | W3160 | Storm Water | | | | | 46 | 129 | 88 | 155 | 157 |
| 521106 | W3430 | Storm Water | | | | | 54 | 145 | 100 | 155 | 157 |
| 540000 | W3160 | R&M Buildings - Collection | | | | 251 | 384 | 107 | 247 | 3,500 | 3,535 |
| 540000 | W3430 | R&M Buildings - Interceptors | | | | 409 | 15,294 | 12,879 | 9,528 | 25,000 | 25,250 |
| 540050 | W3160 | R&M Grounds - Collection | | | | 2,327 | 3,109 | 15,827 | 7,088 | 10,000 | 10,100 |
| 540050 | W3430 | R&M Grounds - Interceptors | | | | 2,229 | 4,847 | 8,630 | 5,235 | 7,000 | 7,070 |
| 540100 | W3160 | R&M Equip/Mach | | | | 563 | 18,648 | 19,639 | 12,950 | 25,000 | 25,250 |
| 540100 | W3430 | R&M Equip/Mach | | | | 6,729 | 32,628 | 83,122 | 40,826 | 60,000 | 60,600 |
| SUBTOTAL LIFT STATIONS | | | 82,111 | 71,145 | 110,296 | 230,016 | 275,887 | 396,925 | 303,260 | 376,660 | 401,195 |
| | | | | | | | | | | | |
| 510000 | W6631 | Salaries and wages | | | | 69,381 | 61,753 | 69,887 | 67,007 | 73,381 | 75,000 |
| 510000 | W9030 | Salaries and wages | | | | 0 | 46,359 | 54,822 | 33,727 | 66,000 | 69,670 |
| 510006 | W6631 | Overtime Wages | | | | 9 | 38 | 30 | 26 | 50 | 40 |
| 510006 | W9030 | Overtime Wages | | | | 0 | 706 | 1,228 | 645 | 1,500 | 1,580 |
| 520075 | W9030 | Temporary Labor Services | | | | 0 | 3,832 | 0 | 1,277 | 0 | 0 |
| 520134 | W6631 | Metering Expenses | 193,074 | 277,638 | 294,146 | 264,151 | 265,072 | 260,208 | 263,144 | 275,000 | 277,750 |
| 550150 | | Bad Debt Expense | 2,831 | 73 | 504 | 175 | 0 | 281 | 152 | 2,000 | 2,020 |
| SUBTOTAL CUSTOMER ACCOUNTS | | | 195,904 | 277,711 | 294,650 | 333,717 | 377,760 | 386,456 | 365,978 | 417,931 | 426,060 |
| | | | | | | | | | | | |
| 510000 | W8010 | Reg Salaries - Oper & Mtce | 90,168 | 602,880 | 574,139 | 599,429 | 567,562 | 361,498 | 509,497 | 640,000 | 465,476 |
| 510005 | W8010 | Part-Time Labor - Wastewater Treatment Operations | | | | 0 | 689 | 10,164 | 3,618 | 0 | 13,088 |
| 510006 | W8010 | Overtime Wages - Oper & Mtce | 1,639 | 18,905 | 18,556 | 17,182 | 11,362 | 11,966 | 13,503 | 21,000 | 15,408 |
| 510030 | | Cell Phone Reimbursement | | | | 152 | 0 | 0 | 51 | 2,000 | |
| 521102 | | Electricity | 498,698 | 555,066 | 571,726 | 457,619 | 473,286 | 527,751 | 486,219 | 650,000 | 200,000 |
| 521103 | | Water | 65,558 | 32,376 | 38,449 | 41,315 | 42,363 | 72,622 | 52,100 | 90,000 | 45,000 |
| 521104 | | Natural Gas | 31,661 | 41,970 | 38,662 | 27,905 | 42,200 | 53,273 | 41,126 | 325,000 | 334,750 |
| 521105 | | Sewer | 128,707 | 50,703 | 63,971 | 64,590 | 66,125 | 156,394 | 95,703 | 200,000 | 70,000 |
| 521106 | | Storm Sewer Fee Payments | 8,837 | 8,029 | 4,235 | 1,247 | 1,147 | 984 | 1,126 | 1,300 | 1,313 |
| 532090 | | Chemical Supplies - Ferric Chloride | 143,695 | 171,870 | 181,237 | 159,795 | 94,201 | 115,202 | 123,066 | 700,000 | 707,000 |
| 532090 | | Chemical Supplies - Polymer | | | | 23,083 | 77,952 | 76,211 | 59,082 | 350,000 | 353,500 |
| 532090 | | Chemical Supplies - Misc | | | | 0 | 0 | 0 | 0 | 30,000 | 30,300 |
| 540000 | | R&M Buildings | 29,685 | 15,340 | 12,079 | 15,892 | 19,672 | 26,347 | 20,637 | 25,000 | 25,250 |
| 540050 | | R&M Grounds | 6,443 | 9,130 | 13,064 | 14,795 | 3,711 | 13,358 | 10,621 | 15,000 | 15,150 |
| 540100 | | R&M Equip/Mach | 240,118 | 313,232 | 240,289 | 253,244 | 266,796 | 226,641 | 248,894 | 357,000 | 360,570 |
| 540100 W8030 | | R&M Equip/Mach - Energy Gen. Equip. | | | | | | 0 | | | 110,000 |
| 510030 | | Cell Phone Reimbursement | | | | 18 | 0 | 0 | 6 | 0 | |
| SUBTOTAL FACILITY OPERATIONS | | | 1,245,211 | 1,819,502 | 1,756,407 | 1,676,266 | 1,667,066 | 1,652,411 | 1,665,248 | 3,406,300 | 2,746,805 |
| | | | | | | | | | | | |
| | | Miscellaneous | 12,196 | 9,588 | 13,422 | | | | | | |
| TOTAL OPERATION & MAINTENANCE | | | 5,157,283 | 5,199,493 | 6,100,640 | 5,953,830 | 6,402,016 | 5,834,336 | 6,121,469 | 8,485,561 | 7,500,026 |

SECTION TWO -- FORECAST UTILITY PLANT AND DEPRECIATION EXPENSE

The Utility maintains a detailed list of assets as of end of year 2018 that was categorized by detailed utility function for the 2019 Sewer Rate Study, as shown in Table 6 below. The Utility's Capital Improvement Program for 2019 through 2023 included a total of almost \$80.0 million of improvements, including \$13.7 million of routine main replacements, lift station improvements, WWTP improvements, and other equipment, and the estimated \$66.3 million in utility financed major WWTP improvements constructed in 2021 through 2023 (\$68.1 million total project budget, less \$1,750,000 of principal forgiveness). The Utility did not update the detailed list of assets by utility function as the WWTP project is still in process and the Utility is in the process of developing an asset management system to maintain information on the location, age, and value of each of its assets.

The assets by category as of year-end 2018 and the planned improvements for 2019 through 2023 were used to develop forecast depreciation expense after the WWTP project is completed, as well as the estimated total value of utility financed plant by utility function. The proportionate share of utility plant by function is used to allocate depreciation expense and return on investment by utility function, as described in Section Three of this report. It should be noted that the actual cash outlay for capital projects during this period is expected to total \$82.5 million including approximately \$2.6 million of carryover from prior years' sewer main and lift station projects.

Based on this increase in utility plant, annual depreciation expense is forecast to increase from \$1.2 million in 2022 to over \$3.6 million in 2024 following the completion of the WWTP improvements. The 2024 depreciation expense on existing assets factors in that some existing assets will be fully depreciated by 2024.

Projected utility plant and depreciation are shown in the following figure and tables. It should be noted that these figures are estimates based on the Utility's capital improvement program and the facility plan for the WWTP. The amount of WWTP costs included each year are based on the projected start and completion dates for the project. Costs for construction management are included in WWTP Non-Specific. Actual amounts capitalized each year, and the final classification of assets may vary from the figures shown.

Table 6 - Existing and Projected Utility Plant

| | Balance 12/31/2018 | Balance 12/31/2019 | Projected Balance 12/31/2020 | Projected Balance 12/31/2021 | Projected Balance 12/31/2022 | Projected Balance 12/31/2023 | Change: 2018-2023 | % Change |
|---|-----------------------|-----------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------|-------------|
| Wastewater Treatment Facility | | | | | | | | |
| Prelim.- Raw Sewage Pumping | \$880,640 | \$890,991 | \$890,991 | \$890,991 | \$890,991 | \$890,991 | \$10,351 | 1% |
| Prelim.- Bar Screening / Communion | \$1,030,279 | \$1,030,279 | \$1,030,279 | \$1,030,279 | \$1,030,279 | \$1,030,279 | \$0 | 0% |
| Prelim.- Grit Removal | \$700,526 | \$700,526 | \$736,526 | \$736,526 | \$736,526 | \$736,526 | \$36,000 | 5% |
| Prelim.- Septage Receiving | \$0 | \$0 | \$0 | \$341,811 | \$1,344,499 | \$2,106,143 | \$2,106,143 | |
| Primary Treatment | \$713,874 | \$713,874 | \$713,874 | \$713,874 | \$713,874 | \$713,874 | \$0 | 0% |
| Primary Clarifier | \$1,906,132 | \$1,906,132 | \$1,906,132 | \$1,913,882 | \$1,936,620 | \$1,953,891 | \$47,759 | 3% |
| Secondary - Activated Sludge | \$1,657,019 | \$1,657,019 | \$1,657,019 | \$2,322,427 | \$4,274,372 | \$5,757,074 | \$4,100,055 | 247% |
| Secondary - Phosphorus | \$1,925,461 | \$1,925,461 | \$1,925,461 | \$2,901,308 | \$5,763,913 | \$7,938,354 | \$6,012,893 | 312% |
| Secondary - NH ₃ -N | \$24,023 | \$24,023 | \$24,023 | \$24,023 | \$24,023 | \$24,023 | \$0 | 0% |
| Secondary - Final Clarifier | \$223,995 | \$223,995 | \$223,995 | \$223,995 | \$223,995 | \$223,995 | \$0 | 0% |
| Biosolids Trmnt & Disposal | \$9,561,493 | \$10,496,525 | \$10,496,525 | \$15,875,209 | \$31,653,337 | \$43,638,439 | \$34,076,945 | 356% |
| Disinfection | \$1,121,728 | \$1,121,728 | \$1,121,728 | \$1,121,728 | \$1,121,728 | \$1,121,728 | \$0 | 0% |
| Plant Site Piping & Pumps | \$1,058,128 | \$1,070,138 | \$1,070,138 | \$1,070,138 | \$1,070,138 | \$1,070,138 | \$12,010 | 1% |
| Laboratory & Monitoring | \$65,372 | \$65,372 | \$76,372 | \$76,372 | \$76,372 | \$76,372 | \$11,000 | 17% |
| Flow Monitoring Eqmt. | \$40,134 | \$61,196 | \$61,196 | \$61,196 | \$61,196 | \$61,196 | \$21,062 | 52% |
| Safety Equipment | \$7,094 | \$7,094 | \$7,094 | \$7,094 | \$7,094 | \$7,094 | \$0 | 0% |
| Electrical | \$852,640 | \$861,194 | \$876,194 | \$3,097,818 | \$9,614,851 | \$14,565,205 | \$13,712,565 | 1608% |
| WWTP Non-Specific | \$1,448,942 | \$1,448,942 | \$1,448,942 | \$3,708,499 | \$6,300,289 | \$8,561,323 | \$7,112,382 | 491% |
| Subtotal Wastewater Treatment Facility | \$23,217,480 | \$24,204,489 | \$24,266,489 | \$36,117,171 | \$66,844,096 | \$90,476,644 | \$67,259,164 | 290% |
| Conveyance System | | | | | | | | |
| Interceptor Mains | \$6,948,461 | \$7,195,961 | \$7,245,961 | \$8,132,961 | \$8,484,961 | \$8,484,961 | \$1,536,500 | 22% |
| Interceptor Lift Stations | \$2,415,554 | \$2,420,581 | \$3,225,081 | \$3,225,081 | \$3,225,081 | \$3,525,081 | \$1,109,527 | 46% |
| Collection Mains / Other Eqmt. | \$15,813,586 | \$16,762,872 | \$18,255,181 | \$19,197,181 | \$20,447,181 | \$22,407,781 | \$6,594,195 | 42% |
| Collection Lift Stations (All) | \$754,303 | \$760,194 | \$760,194 | \$1,138,194 | \$3,138,194 | \$3,138,194 | \$2,383,891 | 316% |
| Other Conveyance System - Non Specific | \$1,179,989 | \$1,179,989 | \$1,364,989 | \$1,364,989 | \$1,734,989 | \$1,734,989 | \$555,000 | 47% |
| Subtotal Conveyance System | \$27,111,893 | \$28,319,597 | \$30,851,406 | \$33,058,406 | \$37,030,406 | \$39,291,006 | \$12,179,113 | 45% |
| General Plant Equipment | | | | | | | | |
| Office Furn. & Eqmt.- EDP | \$54,489 | \$54,489 | \$54,489 | \$54,489 | \$54,489 | \$54,489 | \$0 | 0% |
| Transport. Eqmt. | \$1,937,288 | \$2,052,254 | \$2,342,254 | \$2,358,254 | \$2,358,254 | \$2,405,754 | \$468,466 | 24% |
| Communications Eqmt. | \$5,699 | \$5,699 | \$5,699 | \$5,699 | \$5,699 | \$5,699 | \$0 | 0% |
| Tools, Shop & Misc. | \$64,261 | \$64,261 | \$64,261 | \$64,261 | \$64,261 | \$64,261 | \$0 | 0% |
| Other Genrl. Eqmt. | \$102,912 | \$151,811 | \$151,811 | \$151,811 | \$151,811 | \$151,811 | \$48,899 | 48% |
| Subtotal General Plant Equipment | \$2,164,649 | \$2,328,513 | \$2,618,513 | \$2,634,513 | \$2,634,513 | \$2,682,013 | \$517,365 | 24% |
| Total Utility Plant | \$52,494,022 | \$54,852,599 | \$57,736,408 | \$71,810,090 | \$106,509,015 | \$132,449,663 | \$79,955,641 | 152% |

Figure 1 - Existing and Projected Utility Plant, 2019-2023

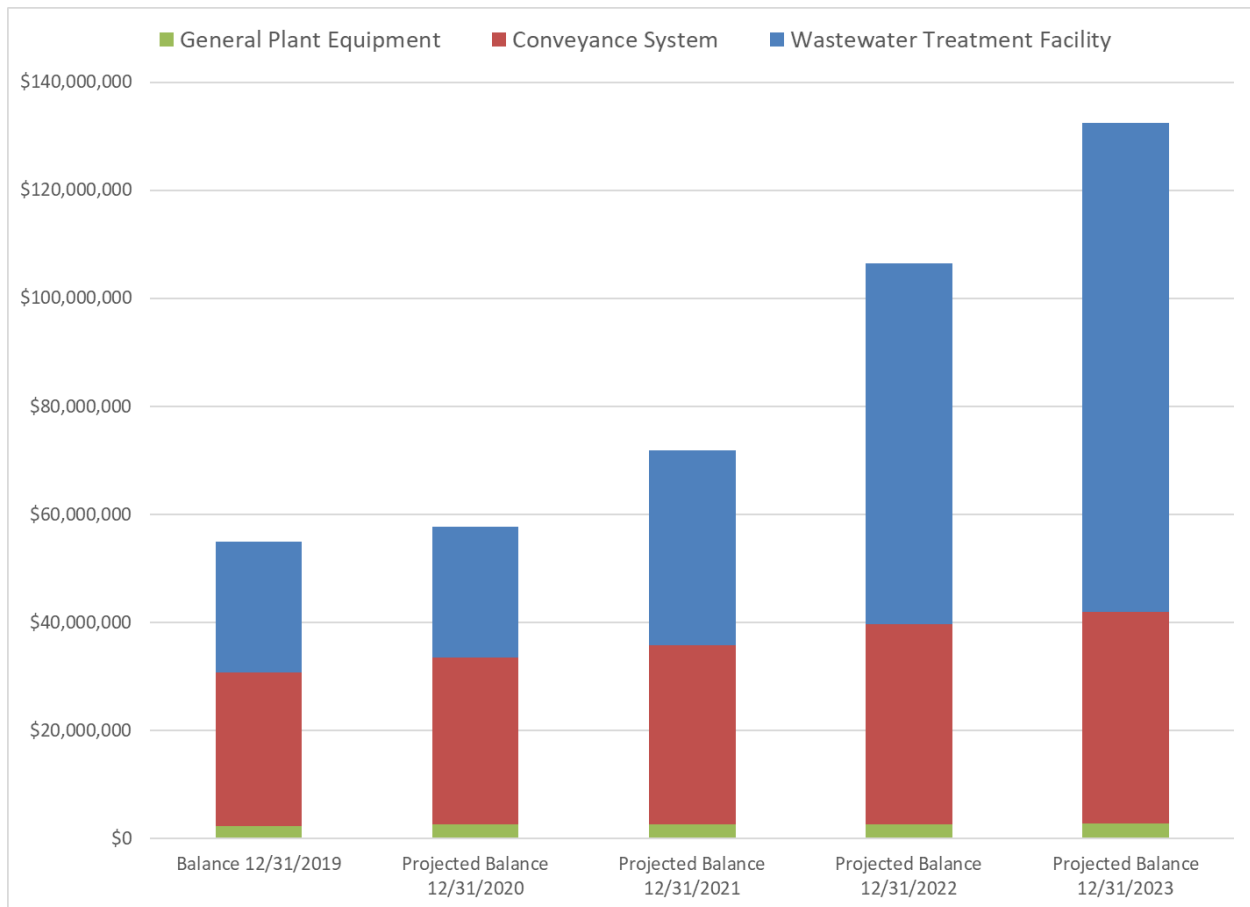


Table 7 - Projected Depreciation Expense, 2024

| Acct No. | Account Description | 2024 Forecast | | | | | 2024 | |
|---------------------------------------|--|-------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|------------------------------|------------------|
| | | Depr on Existing Assets | Depreciation on 2020 Additions | Depreciation on 2021 Additions | Depreciation on 2022 Additions | Depreciation on 2023 Additions | Total Projected Depreciation | Percent Increase |
| | | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | |
| WASTEWATER TREATMENT FACILITY: | | | | | | | | |
| 1.1 | Prelim.- Raw Sewage Pumping | 18,719 | 0 | 0 | 0 | 0 | 18,719 | 0% |
| 1.2 | Prelim.- Bar Screening / Communion | 25,000 | 0 | 0 | 0 | 0 | 25,000 | 0% |
| 1.3 | Prelim.- Grit Removal | 10,659 | 1,200 | 0 | 0 | 0 | 11,859 | 11% |
| 1.4 | Prelim.- Septage Receiving | 0 | 0 | 6,836 | 20,054 | 15,233 | 42,123 | - |
| 2 | Primary Treatment | 750 | 0 | 0 | 0 | 0 | 750 | 0% |
| 2.1 | Primary Clarifier | 90,958 | 0 | 258 | 758 | 576 | 92,550 | 2% |
| 3 | Secondary Treatment | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 3.1 | Secondary - Activated Sludge | 63,452 | 0 | 22,180 | 65,065 | 49,423 | 200,121 | 215% |
| 3.6 | Secondary - Phosphorus | 65,401 | 0 | 32,528 | 95,420 | 72,481 | 265,831 | 306% |
| 3.7 | Secondary - NH ₃ -N | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 3.8 | Secondary - Return Sludge Pumping | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 3.9 | Secondary - Final Clarifier | 3,153 | 0 | 0 | 0 | 0 | 3,153 | 0% |
| 4 | Advanced Treatment | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 5 | Biosolids Trmnt & Disposal | 256,694 | 0 | 176,164 | 516,768 | 392,538 | 1,342,164 | 423% |
| 6 | Disinfection | 29,511 | 0 | 0 | 0 | 0 | 29,511 | 0% |
| 7 | Plant Site Piping & Pumps | 28,856 | 0 | 0 | 0 | 0 | 28,856 | 0% |
| 8 | Laboratory & Monitoring | 3,845 | 550 | 0 | 0 | 0 | 4,395 | 14% |
| 8.1 | Flow Monitoring Eqmt. | 2,007 | 0 | 0 | 0 | 0 | 2,007 | 0% |
| 8.2 | Safety Equipment | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 9 | Electrical | 12,640 | 150 | 84,969 | 249,254 | 189,334 | 536,347 | 4143% |
| 10 | WWTP Non-Specific | 43,620 | 25,873 | 55,196 | 100,202 | 86,079 | 310,970 | 613% |
| | SUBTOTAL | 655,264 | 27,773 | 378,132 | 1,047,521 | 805,664 | 2,914,354 | 345% |
| CONVEYANCE SYSTEM: | | | | | | | | |
| 15 | Interceptor Mains | 69,485 | 500 | 8,870 | 3,520 | 0 | 82,375 | 19% |
| 16 | Interceptor Lift Stations | 48,471 | 34,958 | 0 | 0 | 15,000 | 98,430 | 103% |
| 17 | Force Mains | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 20 | Collection Mains / Other Eqmt. | 160,038 | 14,923 | 10,420 | 13,500 | 20,606 | 219,487 | 37% |
| 21 | Collection Lift Stations (All) | 3,822 | 0 | 12,600 | 66,667 | 0 | 83,089 | 2074% |
| 25 | Service Connections / Laterals | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 26 | Other Conveyance System - Non Specific | 36,139 | 12,333 | 0 | 12,333 | 0 | 60,806 | 68% |
| | SUBTOTAL | 317,955 | 62,715 | 31,890 | 96,020 | 35,606 | 544,186 | 71% |
| GENERAL PLANT EQUIPMENT: | | | | | | | | |
| 28.1 | Land & Land Rights | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 28.2 | Struct. & Improv. | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 28.3 | Office Furn. & Eqmt. | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 28.4 | Office Furn. & Eqmt.- EDP | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 28.5 | Transport. Eqmt. | 119,182 | 19,333 | 1,067 | 0 | 3,167 | 142,748 | 20% |
| 28.6 | Communications Eqmt. | 570 | 0 | 0 | 0 | 0 | 570 | 0% |
| 28.7 | Tools, Shop & Misc. | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 28.8 | Safety Eqmt. | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 28.9 | Other Genrl. Eqmt. | 5,664 | 0 | 0 | 0 | 0 | 5,664 | 0% |
| | SUBTOTAL | 125,416 | 19,333 | 1,067 | 0 | 3,167 | 148,982 | 19% |
| | TOTAL | 1,098,635 | 109,821 | 411,089 | 1,143,541 | 844,437 | 3,607,522 | 228% |

SECTION THREE -- REVENUE REQUIREMENTS, COST-OF-SERVICE ANALYSIS AND RATE DESIGN

The process of determining user charge rates involves three basic steps:

- Revenue Requirements – In the first step, the amount of revenues that the Utility needs to recover from user charge rates is determined.
- Cost of Service Analysis – In the second step, each category of costs within the revenue requirements is allocated to various utility functions, and then to each customer class.
- Rate Design – In the third step, rates per unit of service are calculated to recover the total amount needed and the appropriate amount from each customer class.

The tables attached to this report as an appendix show the detailed revenue requirements, the cost-of-service analysis, the rate calculations, and the estimated revenues at the projected rates for 2024.

A. REVENUE REQUIREMENT

Under the utility-basis method, utility revenue requirements include operation and maintenance expense, depreciation expense, and a return on investment. For the purposes of this study, revenue requirements were calculated for 2024.

The revenue requirements for 2024 include projected O&M expenses for 2024, estimated depreciation expense for capital improvements planned to be completed through 2023, including WWTP improvements, and return on investment on the projected average net investment rate base for 2024, including WWTP improvements expected to be completed in 2023. Other operating revenues, including late payment fees, sewer deduct meter charges, and pretreatment charges, were deducted from user charge revenue requirements.

The following table summarizes the revenue requirements that were used in the 2020 Rate Study to develop the current (2023) rates and the projected revenue requirements for 2024. The 2024 revenue requirements include \$3.6 million of depreciation expense and \$3.8 million of return on investment, equal to a 4.55 percent average rate of return on investment. The rate of return was evaluated to determine if it would provide sufficient revenues to cover the Utility's cash needs for debt service and capital outlay, as described in Section Four. The current benchmark rate of return used by the PSC to establish water rates is 6.20 percent, so the Utility could generate additional revenues by increasing the rate of return.

As shown, revenue requirements for 2024 are 33.3 percent higher than the projected 2023 revenue requirements developed in the 2020 rate study. However, projected 2024 revenues at current rates are about 3.2 percent higher than were projected in the 2020 rate study, so the net overall rate increase needed is about 29.4 percent. The rate increase is driven by increases in operation and maintenance expenses and a higher return on investment needed to cover the

Utility's increased level of capital improvements to replace and rehabilitate sewer mains, lift stations, and other equipment.

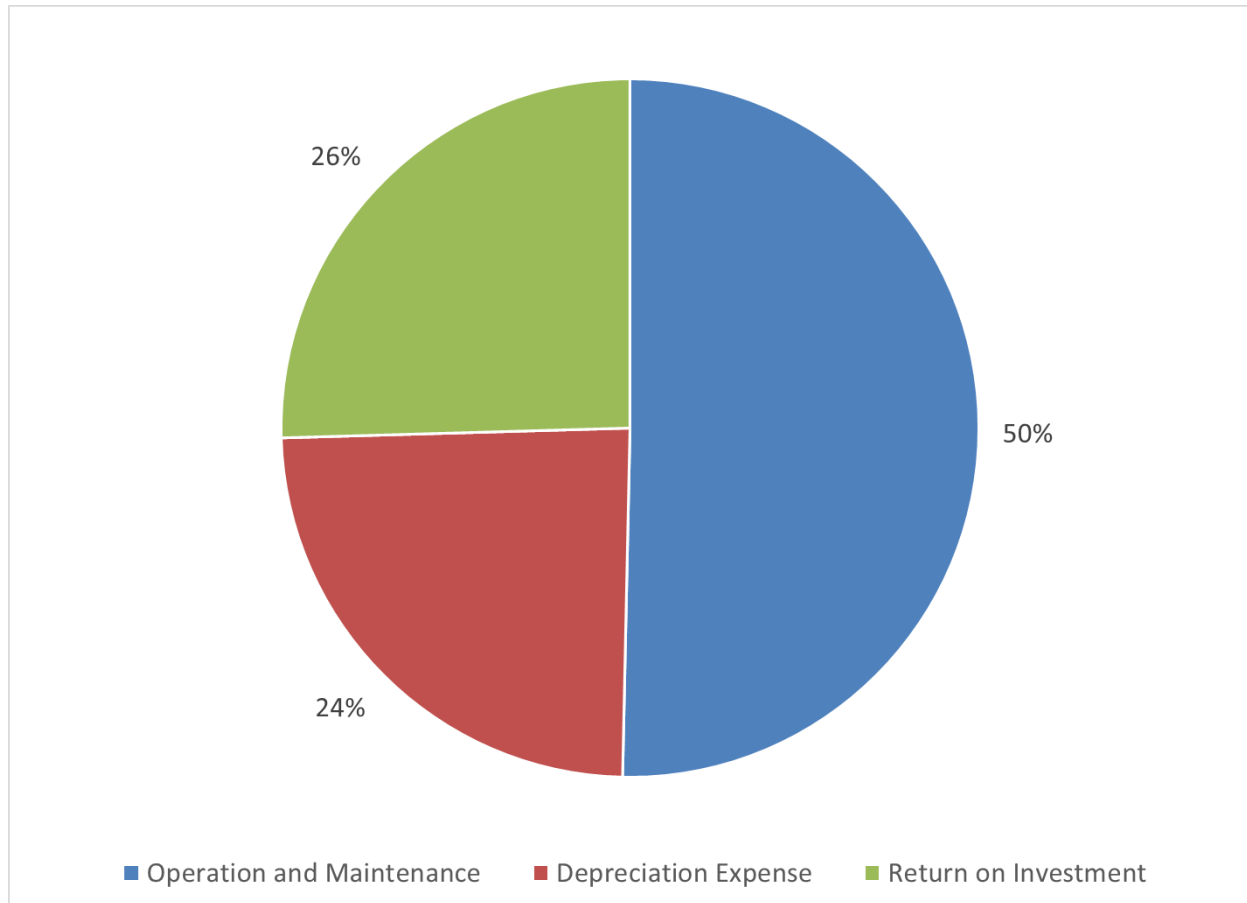
In total, depreciation expense and return on investment will provide the Utility with \$7.4 million per year to cover debt service, cash funded capital outlay, and replenishment of cash reserves, which have dropped below the recommended minimum amounts due to higher than projected capital outlay. The cash needs of the Utility are discussed in more detail in Section 4.

Table 8 – 2024 Revenue Requirements

| | 2023 Rates - Utility Basis | Projected 2024 - Utility Basis | Difference | % Difference |
|--|-------------------------------|--------------------------------------|-------------|--------------|
| Operation and Maintenance | \$6,037,277 | \$7,500,026 | \$1,462,749 | 24.2% |
| Depreciation Expense | \$3,557,658 | \$3,607,522 | \$49,864 | 1.4% |
| Return on Investment | \$1,589,641 | \$3,791,646 | \$2,202,005 | 138.5% |
| Total Revenue Requirements | \$11,184,576 | \$14,899,194 | \$3,714,618 | 33.2% |
| Less: Shelby SD#1 Revenues | (\$78,244) | (\$79,934) | (\$1,690) | 2.2% |
| Less: Other Revenues | (\$203,055) | (\$260,065) | (\$57,010) | 28.1% |
| Net Revenue Requirements | \$10,903,277 | \$14,559,195 | \$3,655,918 | 33.5% |
| Projected User Charge Revenues at 2023 Rates | \$10,903,277 | \$11,252,371 | \$349,094 | 3.2% |
| Required Increase in Revenues | | \$3,306,824 | \$3,306,824 | |
| Percentage Increase in User Charge Revenues | | 29.4% | | |

Revenue requirements for 2024 are comprised of 50 percent for operation and maintenance, 24 percent for depreciation, and 26 percent for return on investment.

Figure 2 - 2024 Revenue Requirements



B. COST OF SERVICE ANALYSIS

Costs were first allocated to the functions served by the utility. Each category of the utility's costs was split between costs to provide collector and interceptor sewer conveyance, wastewater treatment for average daily volume, costs to treat pollutant loadings (BOD, TSS, P, and NH-3), billing costs, connection costs that are relatively fixed per customer or meter, costs for the Utility's industrial pretreatment program, and costs specifically to receive hauled waste.

Most costs were allocated to utility functions using the methodology and formulas developed by John A. Mayer in prior rate studies and used in the 2020 Rate Study. However, certain adjustments to the formulas and methods were made based on more detailed information available or the change in the Utility's chart of accounts for operation and maintenance expenses.

Utility Plant

The percentage of Utility Plant allocated to each utility function is used to allocate return on investment to each utility function (collection system, interceptor system, flow, BOD, TSS, Phosphorus, NH-3, billing, meters/connections, hauled waste) under this method.

Depreciation Expense

Depreciation expense for each category of assets was allocated to each utility function using the same percentages as the allocation of utility plant.

Return on Net Investment Rate Base

- Return on investment is calculated as a rate of return applied to the Utility's net investment rate base. Net investment rate base is the total original cost of utility assets in service, net of accumulated depreciation. Net investment rate base for year-end 2023 was estimated based on the Utility's capital improvement program.
- Return on investment was calculated separately for collection system assets and other system assets since the wholesale customers do not share in costs related to the collection system.
- For all non-collection system assets, a rate of return of 5.90 percent was used for determining the return on investment for wholesale customers with contracts. This rate is slightly less than the current benchmark rate of return used by the Wisconsin Public Service Commission for municipal water utilities. The PSC benchmark rate of return, as adjusted from time to time, is a reasonable rate of return to charge wholesale customers on the investment that the City and the Utility have made in the infrastructure needed to serve Utility customers.
- For wholesale customers without a contract, a rate of return of 7.90 percent was applied to non-collection system assets to reflect the higher level of risk to the City and the Utility of serving customers outside of the City without a contract.
- For retail customers, the rate of return used for non-collection system assets was 5.70 percent. For collection system assets, no return on investment was included in retail rates. As the Utility (or any utility) is not obligated to collect the full benchmark rate of return, this rate can be adjusted as needed to generate sufficient revenues while also providing retail customers some benefit from being residents and property owners of the City that owns the wastewater infrastructure.
- Return on investment was allocated between the various utility functions using the same allocation percentages as those developed for utility plant.

Costs for Operation and Maintenance of the La Crescent Forcemain

La Crosse and La Crescent jointly paid for the construction of a forcemain to carry La Crescent sewage and La Crosse sewage from Barron Island, Pettibone Park, and South Pettibone Drive under the Mississippi River to a connection point in Riverside Park ('La Crescent Forcemain' or 'Barron Island Force Main'). La Crosse paid for 15 percent of the construction cost and La Crescent paid for 85 percent. The La Crescent Forcemain is owned and maintained by the City of La Crosse. The Agreement for the Design, Construction and Maintenance of Sanitary Sewer Forcemains Between the City of La Crosse, WI and the City of La Crescent, MN, dated February 8, 2007, stated that the costs of repairing and maintaining the forcemain were to be included in the wholesale rates charged to La Crescent.

The Utility incurred substantial costs in 2019 to repair manholes and anticipates significant costs for 'pigging' the line every 5 years, in addition to annual maintenance inspections. The costs for pigging and intermittent repairs were annualized based on the expected frequency of such costs and were added to the annual maintenance inspection costs to determine an average annual cost for repairing and maintaining the La Crescent Forcemain. Based on this analysis, the 2020 Rate Study developed, and the City adopted, a La Crescent Forcemain Rate for 2021 through 2023 to recover the expected average annual cost for repair and maintenance of the forcemain.

On September 25, 2023, the City approved a new sanitary sewer service agreement with La Crescent. This agreement provides that the costs for maintaining the force main shall be shared between La Crosse and La Crescent, with La Crosse responsible for 15 percent of the cost and La Crescent responsible for 85 percent. La Crescent's share of the cost is to be calculated annually and added to the invoice for January treatment service.

To be consistent with the new sewer service agreement, this current rate study eliminates the La Crescent Forcemain Rate. In place of this rate, the Utility will bill La Crescent for actual costs incurred on an annual basis.

The following table shows the summary of the allocation of costs to utility functions for 2024.

Table 3 - Summary of Allocation of Revenue Requirements to Utility Functions, 2024

| | | | | | | | | | | | |
|--|-------------------|-------------------|------------------|------------------|------------------------|------------------|------------------|----------------|-----------------------|----------------|---------------------|
| Retail Rate of Return - Collection System | | 0.00% | | | | | | | | | |
| Retail Rate of Return - Non-Collection | | 5.70% | | | | | | | | | |
| NIRB - Collection System | | 18,301,637 | | | | | | | | | |
| NIRB - Non-Collection | | 64,945,352 | | | | | | | | | |
| | | <u>CONVEYANCE</u> | | | <u>WASTE TREATMENT</u> | | | | <u>CUSTOMER COSTS</u> | | <u>HAULED WASTE</u> |
| | | | Collection | Interceptor | | | | | Meter / | | |
| <u>Operating Cost</u> | Total | System | System | Flow | BOD | TSS | P | NH-3 | Billing | Connection | |
| | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operation and Maintenance | 7,239,961 | 1,313,301 | 895,974 | 606,228 | 1,151,429 | 1,292,377 | 1,020,749 | 212,349 | 140,565 | 585,044 | 21,944 |
| Depreciation | 3,607,522 | 252,215 | 212,316 | 386,705 | 960,466 | 1,050,660 | 488,685 | 109,441 | 38,661 | 64,435 | 43,937 |
| Return on NIRB - Collection System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Return on NIRB - Non-Collection | 3,701,885 | 0 | 433,810 | 410,540 | 1,015,796 | 1,160,455 | 500,060 | 105,149 | 0 | 0 | 76,075 |
| Total | 14,549,368 | 1,565,516 | 1,542,101 | 1,403,473 | 3,127,691 | 3,503,492 | 2,009,494 | 426,939 | 179,226 | 649,479 | 141,957 |

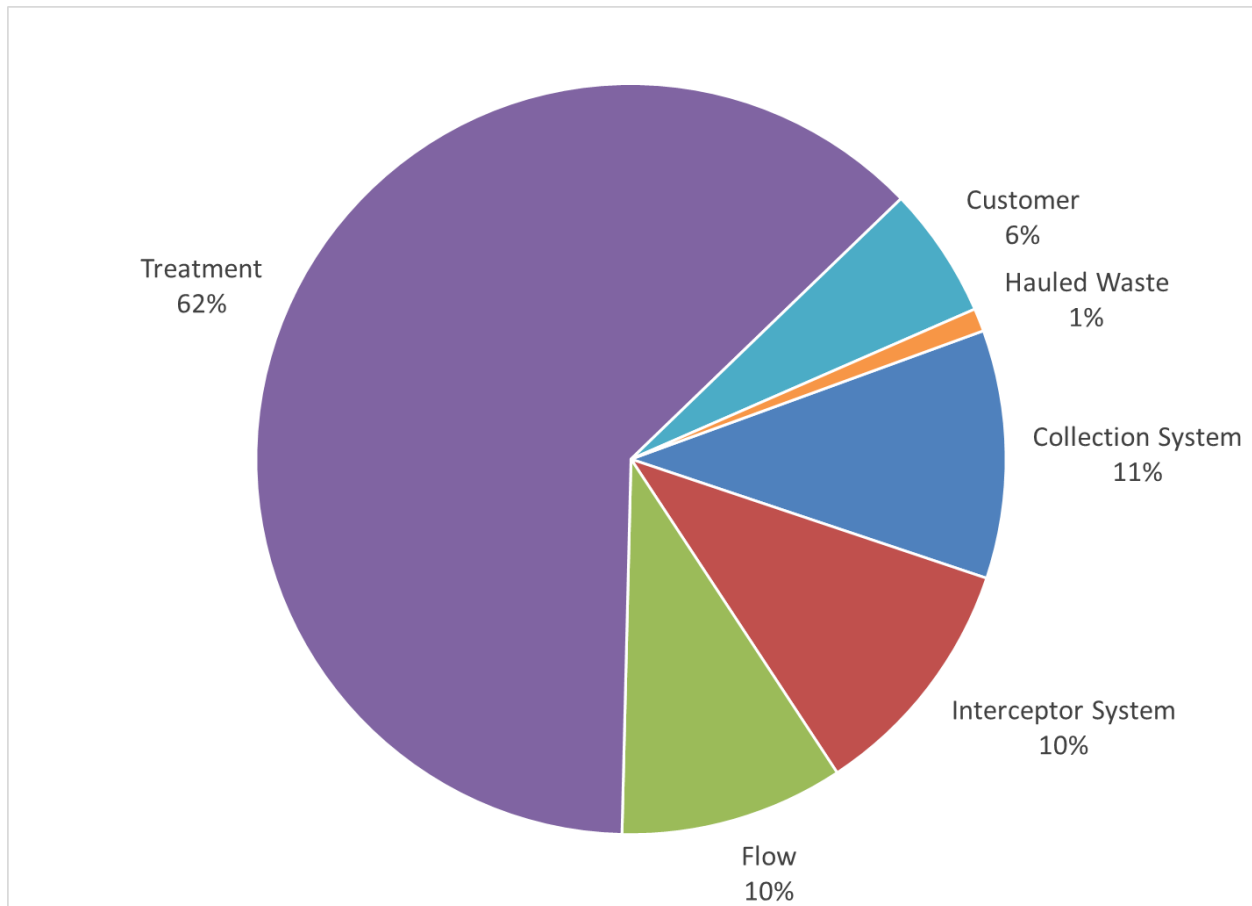
| | | | | | | | | | | | |
|--|-------------------|-------------------|------------------|------------------|------------------------|------------------|------------------|----------------|-----------------------|----------------|---------------------|
| Wholesale ROR - Collection System | | 0.00% | | | | | | | | | |
| Wholesale ROR - Non-Collection | | 5.90% | | | | | | | | | |
| NIRB - Collection System | | 18,301,637 | | | | | | | | | |
| NIRB - Non-Collection | | 64,945,352 | | | | | | | | | |
| | | <u>CONVEYANCE</u> | | | <u>WASTE TREATMENT</u> | | | | <u>CUSTOMER COSTS</u> | | <u>HAULED WASTE</u> |
| | | | Collection | Interceptor | | | | | Meter / | | |
| <u>Operating Cost</u> | Total | System | System | Flow | BOD | TSS | P | NH-3 | Billing | Connection | |
| | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operation and Maintenance | 7,239,961 | 1,313,301 | 895,974 | 606,228 | 1,151,429 | 1,292,377 | 1,020,749 | 212,349 | 140,565 | 585,044 | 21,944 |
| Depreciation | 3,607,522 | 252,215 | 212,316 | 386,705 | 960,466 | 1,050,660 | 488,685 | 109,441 | 38,661 | 64,435 | 43,937 |
| Return on NIRB - Collection System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Return on NIRB - Non-Collection | 3,831,776 | 0 | 449,032 | 424,945 | 1,051,438 | 1,201,173 | 517,606 | 108,839 | 0 | 0 | 78,745 |
| Total | 14,679,259 | 1,565,516 | 1,557,322 | 1,417,878 | 3,163,333 | 3,544,209 | 2,027,040 | 430,628 | 179,226 | 649,479 | 144,626 |

| | | | | | | | | | | | |
|---|-------------------|-------------------|------------------|------------------|------------------------|------------------|------------------|----------------|-----------------------|----------------|---------------------|
| Non-Contract ROR - Collection System | | 0.00% | | | | | | | | | |
| Non-Contract ROR - Non-Collection | | 7.90% | | | | | | | | | |
| NIRB - Collection System | | 18,301,637 | | | | | | | | | |
| NIRB - Non-Collection | | 64,945,352 | | | | | | | | | |
| | | <u>CONVEYANCE</u> | | | <u>WASTE TREATMENT</u> | | | | <u>CUSTOMER COSTS</u> | | <u>HAULED WASTE</u> |
| | | | Collection | Interceptor | | | | | Meter / | | |
| <u>Operating Cost</u> | Total | System | System | Flow | BOD | TSS | P | NH-3 | Billing | Connection | |
| | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operation and Maintenance | 7,239,961 | 1,313,301 | 895,974 | 606,228 | 1,151,429 | 1,292,377 | 1,020,749 | 212,349 | 140,565 | 585,044 | 21,944 |
| Depreciation | 3,607,522 | 252,215 | 212,316 | 386,705 | 960,466 | 1,050,660 | 488,685 | 109,441 | 38,661 | 64,435 | 43,937 |
| Return on NIRB - Collection System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Return on NIRB - Non-Collection | 5,130,683 | 0 | 601,246 | 568,994 | 1,407,857 | 1,608,350 | 693,065 | 145,733 | 0 | 0 | 105,438 |
| Total | 15,978,166 | 1,565,516 | 1,709,536 | 1,561,927 | 3,519,753 | 3,951,387 | 2,202,500 | 467,523 | 179,226 | 649,479 | 171,319 |

| | | | | | | | | | | | |
|-------------------------------|-------------------|-------------------|------------------|------------------|------------------------|------------------|------------------|----------------|-----------------------|----------------|---------------------|
| Overall Rate of Return | | 4.55% | | | | | | | | | |
| NIRB - Collection System | | 18,301,637 | | | | | | | | | |
| NIRB - Non-Collection | | 64,945,352 | | | | | | | | | |
| | | <u>CONVEYANCE</u> | | | <u>WASTE TREATMENT</u> | | | | <u>CUSTOMER COSTS</u> | | <u>HAULED WASTE</u> |
| | | | Collection | Interceptor | | | | | Meter / | | |
| <u>Operating Cost</u> | Total | System | System | Flow | BOD | TSS | P | NH-3 | Billing | Connection | |
| | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operation and Maintenance | 7,239,961 | 1,313,301 | 895,974 | 606,228 | 1,151,429 | 1,292,377 | 1,020,749 | 212,349 | 140,565 | 585,044 | 21,944 |
| Depreciation | 3,607,522 | 252,215 | 212,316 | 386,705 | 960,466 | 1,050,660 | 488,685 | 109,441 | 38,661 | 64,435 | 43,937 |
| Return on NIRB - Combined | 3,791,646 | 0 | 443,119 | 419,362 | 1,039,475 | 1,190,928 | 512,229 | 107,790 | 0 | 0 | 78,745 |
| Total | 14,639,129 | 1,565,516 | 1,551,409 | 1,412,295 | 3,151,370 | 3,533,964 | 2,021,663 | 429,579 | 179,226 | 649,479 | 144,626 |

As shown in the following charts, treatment costs for loadings such as BOD, TSS and Phosphorus will be 62 percent of the Utility’s revenue requirements once the WWTP project is completed due to the increase in depreciation expense and return on investment related to the WWTP.

Figure 3 - Percentage of Costs by Utility Function, 2024



Costs for each utility function were next allocated to each customer class (residential, multi-family, commercial, industrial, public authority, wholesale customers, hauled waste, and surcharge loadings) based on the demand characteristics of each customer class. A portion of the conveyance system and WWTP flow costs were allocated to infiltration and inflow (I/I) based on forecast percentage of I/I on an average day basis.

The following table shows the summary of the allocation of costs to each customer class and the projected amount of revenues from each class at the proposed rates for 2024. The amount of ‘Revenues at Present Rates’ shown in each table is the projected revenues at the current (2023) rates.

Table 10 - Comparison of Revenues at Present Rates, Cost of Service, and Proposed Rates, 2024

| Customer Class | Revenue at Current | Cost of Service | | Proposed Rates | | Percent of Cost of Service |
|--------------------------------------|--------------------|------------------|-----------------------------|----------------|-----------------------------|----------------------------|
| | | Revenue Required | Increase Over Current Rates | Revenue | Increase Over Current Rates | |
| Retail | | | | | | |
| Residential | \$2,824,502 | \$3,681,351 | 30.3% | \$3,791,930 | 34.3% | 103.0% |
| Multi-Family | \$827,673 | \$1,156,909 | 39.8% | \$1,146,315 | 38.5% | 99.1% |
| Commercial | \$1,421,672 | \$1,982,485 | 39.4% | \$1,966,420 | 38.3% | 99.2% |
| Industrial | \$2,181,584 | \$3,099,334 | 42.1% | \$3,047,747 | 39.7% | 98.3% |
| Public Authority | \$560,820 | \$789,162 | 40.7% | \$779,335 | 39.0% | 98.8% |
| Subtotal Retail | \$7,816,250 | \$10,709,241 | 37.0% | \$10,731,747 | 37.3% | 100.2% |
| Wholesale | | | | | | |
| Onalaska | \$1,843,316 | \$2,007,359 | 8.9% | \$2,007,357 | 8.9% | 100.0% |
| La Crescent | \$338,713 | \$364,133 | 7.5% | \$364,132 | 7.5% | 100.0% |
| Campbell | \$387,659 | \$418,057 | 7.8% | \$418,057 | 7.8% | 100.0% |
| Shelby SD#2 | \$171,012 | \$184,421 | 7.8% | \$184,421 | 7.8% | 100.0% |
| Subtotal Wholesale | \$2,740,699 | \$2,973,970 | 8.5% | \$2,973,967 | 8.5% | 100.0% |
| Hauled Waste | | | | | | |
| Holding Tank Waste | \$80,136 | \$118,100 | 47.4% | \$117,180 | 46.2% | 99.2% |
| Septic Tank Waste | \$117,438 | \$130,964 | 11.5% | \$130,901 | 11.5% | 100.0% |
| Grease Trap Waste | \$127,181 | \$140,486 | 10.5% | \$140,479 | 10.5% | 100.0% |
| Subtotal Hauled Waste | \$324,754 | \$389,550 | 20.0% | \$388,561 | 19.6% | 99.7% |
| "Category B" Industrial Waste | \$370,668 | \$486,435 | 31.2% | \$488,498 | 31.8% | 100.4% |
| Total | \$11,252,371 | \$14,559,195 | 29.4% | \$14,582,773 | 29.6% | 100.2% |

Statement on Meeting Statutory Requirements

When utilizing the Wisconsin DNR's Clean Water Fund loan program, there are certain administrative code requirements that must be met regarding the recipient's user charge system¹. Each of these are shown below, along with a discussion of how this study and proposed rate structure address the requirements.

¹ Wisconsin Administrative Code NR 162.08

- *Require that each user or user class pays its proportionate share of operation and maintenance costs, including replacement costs, of the treatment works or BMP within the recipient's service area.²*
 - This study, as in previous studies, prepared a detailed analysis of operation and maintenance costs using established methodology for allocating costs among user classes. Rates were calculated to recover each user class's proportionate share of costs, according to the detailed cost allocation.
- *Provide that the costs of operation and maintenance for all flow not directly attributable to users be distributed proportionally among all users of the recipient's treatment works or BMP.³*
 - This study specifically establishes an allocation for indirect flow, or inflow and infiltration, by distributing it to user classes based on proportional flow in each type of facility (collection, interceptor, treatment plant) that each user class contributes.
- *Require that the charges for users or user classes generate sufficient revenue to pay costs identified in par. (e) 2. and 3.⁴*
 - As shown in Table 10 the study has calculated rates to generate revenues at 100 percent of the revenue requirements and 100 percent of the cost allocation of each user class connected to the wastewater system. The revenue requirements include operation and maintenance costs, plus annual depreciation expense and a return on investment that is sufficient to maintain the required equipment replacement fund balance and provide the required debt coverage.
- *Require that the recipient establish an equipment replacement fund, maintain the equipment replacement fund as a separate fund of the municipality, and make deposits to this fund on an annual basis or maintain a balance acceptable to the department.⁵*
 - The Utility currently maintains an equipment replacement fund (ERF) based on existing assets. Historically, it has made annual deposits to this fund; however, this study recommends changing the method of funding to a minimum balance approach as this will minimize the annual revenue requirements for the Utility and its user classes. The equipment replacement fund will remain a restricted fund that can only be used for specified uses. The balance will need to be re-evaluated once the WWTP is completed and the Utility compiles a detailed list of the equipment subject to the ERF fund requirements. Deposits to this fund to increase

² Wisconsin Administrative Code NR 162.08(3)(a)

³ Wisconsin Administrative Code NR 162.08(3)(b)

⁴ Wisconsin Administrative Code NR 162.08(3)(c)

⁵ Wisconsin Administrative Code NR 162.08(3)(d)

the balance to the minimum required level will be funded from depreciation and return on investment.

- *Require that each user that discharges any toxic pollutants or high strength wastes to a wastewater treatment works pay for any increased costs associated with the discharge.*⁶
 - The study used a similar methodology to allocate costs among the various pollutants as previous studies. As shown in Table 10, “Category B” high strength waste industrial customers generate revenue of at least 100 percent of their allocated costs, which reflects the increases in rates for high strength waste discharges.
- *Be based on actual or estimated use except as provided for under s. [281.58 \(14\) \(b\) 7., Stats.](#)*⁷
 - Rates were calculated using either the most recent 12 months of actual use or estimated use based on recent trends in use by user class. Actual and forecast use by customer class are detailed in Tables 2 and 3, on pages 7 and 8 of this report.

C. RATE SCHEDULE

Rate increases for specific types of charges vary from the overall rate increase, as shown in the following detailed schedule of projected rates. The rates for 2020 were adopted by the City Council on September 18, 2019, based on the Draft Sewer Rate Study, dated June 2019. The rates for 2021 through 2023 were adopted by the City Council on November 12, 2020, based on the 2020 Sewer Rate Update, dated October 2020. The proposed 2024 rates are based on the assumptions described in preceding sections of this report and should be re-evaluated after the WWTP project is completed and all the new assets are classified and recorded and after the Utility has some history with operation and maintenance costs for the upgraded WWTP processes.

⁶ Wisconsin Administrative Code NR 162.08(3)(g)

⁷ Wisconsin Administrative Code NR 162.08(3)(i)

Table 11 - Current and Proposed Rates

| | Connection | 2019 | 2020 | | | | Proposed 2024 |
|---|------------------------|-------------------|-------------------|--------------------|--------------------|--------------------|-------------------------------|
| Flat Charges | Size | Charge | Charge | 2021 Charge | 2022 Charge | 2023 Charge | Charge |
| | 5/8 | \$15.00 | \$15.00 | \$15.00 | \$15.00 | \$15.00 | \$18.00 |
| | 3/4 | \$15.00 | \$15.00 | \$15.00 | \$15.00 | \$15.00 | \$18.00 |
| | 1 | \$24.00 | \$24.00 | \$24.00 | \$24.00 | \$24.00 | \$30.00 |
| | 1 1/2 | \$39.00 | \$39.00 | \$39.00 | \$39.00 | \$39.00 | \$51.00 |
| | 2 | \$60.00 | \$60.00 | \$60.00 | \$60.00 | \$60.00 | \$75.00 |
| | 3 | \$108.00 | \$108.00 | \$108.00 | \$108.00 | \$108.00 | \$133.00 |
| | 4 | \$174.00 | \$174.00 | \$174.00 | \$174.00 | \$174.00 | \$215.00 |
| | 6 | \$342.00 | \$342.00 | \$342.00 | \$342.00 | \$342.00 | \$420.00 |
| | 8 | \$543.00 | \$543.00 | \$543.00 | \$543.00 | \$543.00 | \$666.00 |
| | 10 | \$813.00 | \$813.00 | \$813.00 | \$813.00 | \$813.00 | \$994.00 |
| | 12 | \$1,080.00 | \$1,080.00 | \$1,080.00 | \$1,080.00 | \$1,080.00 | \$1,322.00 |
| | | | | | | | |
| Usage Charges | Units | 2019 Rate | 2020 Rate | 2021 Rate | 2022 Rate | 2023 Rate | Proposed 2024 Rate |
| Domestic Sewage | \$/CCF | \$1.26 | \$1.52 | \$1.52 | \$1.90 | \$2.15 | \$3.01 |
| Unmetered | Per Quarter | \$36.42 | \$40.84 | \$40.84 | \$47.30 | \$51.55 | \$69.17 |
| | | | | | | | |
| Surcharge Rates | | | | | | | |
| BOD | \$/pound | \$0.224 | \$0.226 | \$0.226 | \$0.226 | \$0.237 | \$0.300 |
| TSS | \$/pound | \$0.211 | \$0.239 | \$0.239 | \$0.239 | \$0.289 | \$0.390 |
| Phosphorus | \$/pound | \$4.177 | \$4.867 | \$4.867 | \$4.867 | \$6.755 | \$9.950 |
| NH-3 | \$/pound | \$0.559 | \$0.451 | \$0.451 | \$0.451 | \$0.313 | \$0.390 |
| | | | | | | | |
| Holding Tank Waste | \$ / 1,000 gal. | \$5.70 | \$7.22 | \$7.22 | \$7.22 | \$13.82 | \$21.93 |
| Septic Tank Waste | \$ / 1,000 gal. | \$15.90 | \$18.50 | \$18.50 | \$18.50 | \$32.82 | \$36.30 |
| Grease Trap Waste | \$ / 1,000 gal. | \$46.00 | \$51.41 | \$51.41 | \$51.41 | \$82.22 | \$90.37 |
| Admin. Charge | \$ / load | \$11.00 | \$14.00 | \$14.00 | \$14.00 | \$15.20 | \$18.00 |
| | | | | | | | |
| Wholesale Rates with Contract: | | | | | | | |
| Rate per CCF | \$ / CCF | \$1.22 | \$1.47 | \$1.47 | \$1.77 | \$2.48 | \$2.70 |
| Rate per MG | \$ / MG | | \$1,970.00 | \$1,970.00 | \$2,365.00 | \$3,315.00 | \$3,610.01 |
| | | | | | | | |
| Wholesale Rates without Contract: ⁽¹⁾ | | | | | | | |
| Rate per CCF | \$ / CCF | | | NA | \$1.98 | \$2.77 | \$2.98 |
| Rate per MG | \$ / MG | | | NA | \$2,650.00 | \$3,698.00 | \$3,987.97 |
| | | | | | | | |
| Onalaska | \$ / MG | \$1,631.00 | \$1,970.00 | \$1,970.00 | \$2,365.00 | \$3,315.00 | \$3,610.01 |
| La Crescent | \$ / MG | \$1,631.00 | \$1,970.00 | \$1,970.00 | \$2,365.00 | \$3,315.00 | \$3,610.01 |
| La Crescent Force Main | \$ / MG | | | \$42.00 | \$43.00 | \$43.00 | \$0.00 |
| Campbell | \$ / MG | \$1,631.00 | \$1,970.00 | \$1,970.00 | \$2,650.00 | \$3,698.00 | \$3,987.97 |
| Shelby | \$ / MG | \$1,631.00 | \$1,970.00 | \$1,970.00 | \$2,650.00 | \$3,698.00 | \$3,987.97 |

(1) Non-contract rates were calculated using the same cost allocation methods and percentages, and with a 7.9% rate of return on net investment rate base. For an explanation of the basis for the non-contract rate of return, see Appendix B.

The following table shows the projected increase in monthly sewer bills for example customers of various sizes in each of the La Crosse retail customer classes. As shown, the average residential customer would experience an increase of about \$15.90 per quarter at the proposed 2024 rates. Customers with higher usage will experience larger increases due to the increase in the volumetric rates.

Table 12 - Comparison of Quarterly Bills for City of La Crosse Customers at Current and 2024 Proposed Rates

Billing Units - CCF
Billing Cycle - Quarterly

| Customer Class | Customer Size | Meter Size (Inches) | Billed Volume | Customer Bill | | |
|------------------|---------------|---------------------|---------------|--------------------|--------------------|--------------|
| | | | | Bill at 2023 Rates | Bill at 2024 Rates | Change |
| Residential | Small | 5/8 | 8 | \$32.20 | \$42.08 | \$9.88 |
| Residential | Average | 5/8 | 15 | \$47.25 | \$63.15 | \$15.90 |
| Residential | Large | 5/8 | 30 | \$79.50 | \$108.30 | \$28.80 |
| Residential | Very Large | 1 | 60 | \$153.00 | \$210.60 | \$57.60 |
| | | | | | | |
| Multi-Family | Small | 5/8 | 200 | \$445.00 | \$620.00 | \$175.00 |
| Multi-Family | Average | 1 | 450 | \$991.50 | \$1,384.50 | \$393.00 |
| Multi-Family | Large | 2 | 800 | \$1,780.00 | \$2,483.00 | \$703.00 |
| Multi-Family | Very Large | 4 | 2,000 | \$4,474.00 | \$6,235.00 | \$1,761.00 |
| | | | | | | |
| Commercial | Small | 5/8 | 50 | \$122.50 | \$168.50 | \$46.00 |
| Commercial | Average | 3/4 | 460 | \$1,004.00 | \$1,402.60 | \$398.60 |
| Commercial | Large | 3 | 1,500 | \$3,333.00 | \$4,648.00 | \$1,315.00 |
| Commercial | Very Large | 6 | 2,500 | \$5,717.00 | \$7,945.00 | \$2,228.00 |
| | | | | | | |
| Industrial | Small | 1 | 1,000 | \$2,174.00 | \$3,040.00 | \$866.00 |
| Industrial | Average | 2 | 10,500 | \$22,635.00 | \$31,680.00 | \$9,045.00 |
| Industrial | Large | 4 | 20,000 | \$43,174.00 | \$60,415.00 | \$17,241.00 |
| Industrial | Very Large | 8 | 150,000 | \$323,043.00 | \$452,166.00 | \$129,123.00 |
| | | | | | | |
| Public Authority | Small | 3/4 | 500 | \$1,090.00 | \$1,523.00 | \$433.00 |
| Public Authority | Average | 1 | 1,100 | \$2,389.00 | \$3,341.00 | \$952.00 |
| Public Authority | Large | 2 | 2,000 | \$4,360.00 | \$6,095.00 | \$1,735.00 |
| Public Authority | Very Large | 4 | 4,000 | \$8,774.00 | \$12,255.00 | \$3,481.00 |

D. COMMUNITY RATE COMPARISON

To provide context for the proposed rates for La Crosse, a comparison with the sewer user rates charged by other communities in the region and peer communities around the state was prepared. The basis of the charges, and the estimated total annual bill for a residential customer for each community are shown in the following tables. As shown, for a residential City of La Crosse customer using 44,880 gallons or 6,000 cubic feet of water per year, the estimated annual sewer bill under the current rates for 2023 would be \$189.00. The proposed rates for 2024 would result in an annual bill of \$252.60, or an increase of \$15.90 per quarter over current rates. Even with the increase, the average bill would remain well below the average or median bill for the other regional communities.

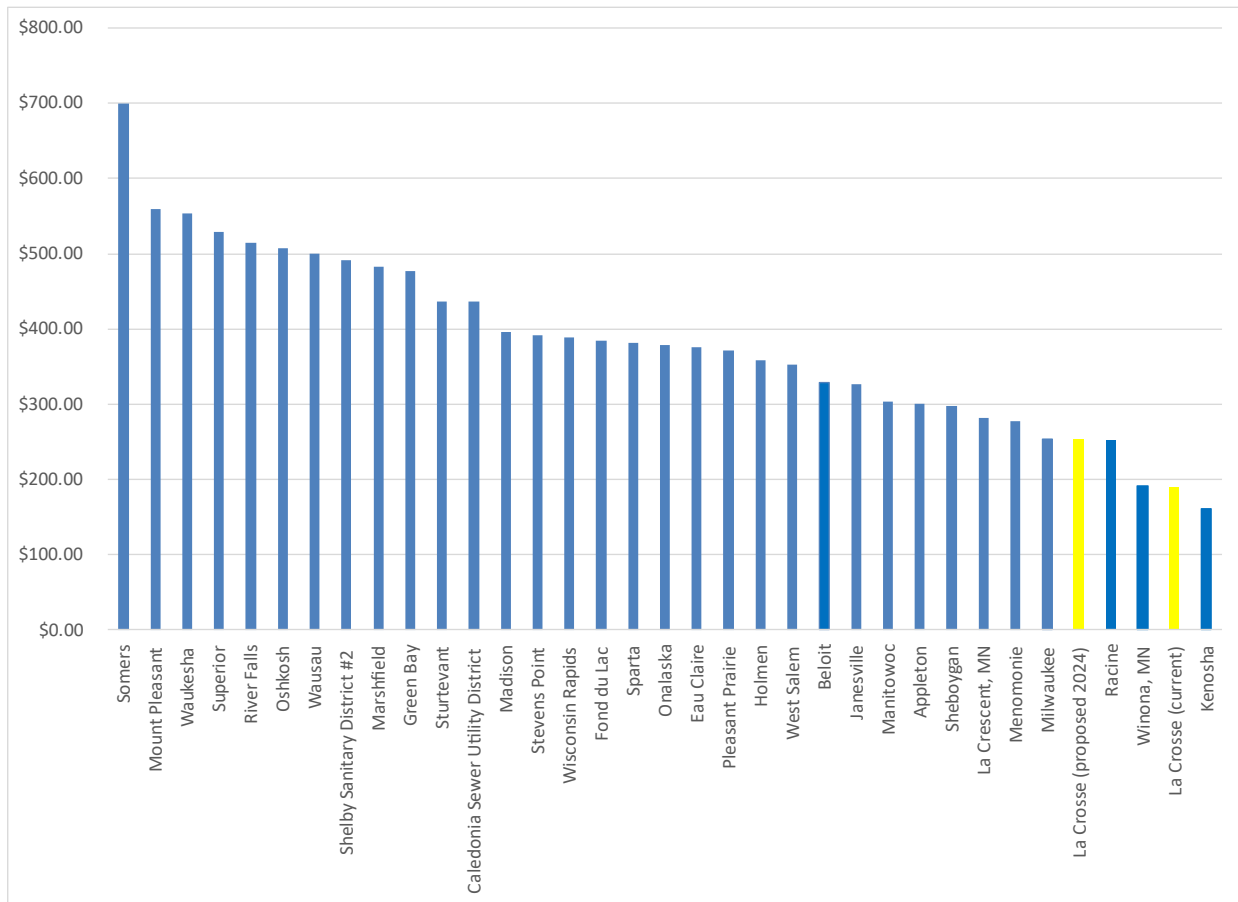
Table 13 - Comparison of Average Annual Residential Bills with UW Communities

| Community | Fixed Charge | Bills per Year | Volume Rate | Annual Usage | Units | Annual Bill |
|----------------------------------|----------------|----------------|---------------|--------------|-----------------------|-----------------|
| Whitewater | \$12.75 | 12 | \$11.99 | 44,880 | gallons | \$691.11 |
| Superior | \$5.50 | 12 | \$7.71 | 6,000 | ft ³ | \$528.60 |
| River Falls | \$16.50 | 12 | \$7.04 | 44,880 | gallons | \$513.96 |
| Oshkosh | \$11.36 | 12 | \$6.18 | 6,000 | ft ³ | \$507.12 |
| Platteville | \$16.22 | 12 | \$4.99 | 6,000 | ft ³ | \$494.04 |
| Green Bay | \$14.50 | 12 | \$5.04 | 6,000 | ft ³ | \$476.40 |
| Madison | \$15.23 | 12 | \$4.75 | 44,880 | gallons | \$395.94 |
| Stevens Point | \$36.42 | 4 | \$4.09 | 6,000 | ft ³ | \$391.08 |
| Fond du Lac | \$37.50 | 4 | \$3.91 | 6,000 | ft ³ | \$384.60 |
| Eau Claire | \$9.54 | 4 | \$5.63 | 6,000 | ft ³ | \$375.96 |
| Menomonie | \$21.50 | 4 | \$3.20 | 6,000 | ft ³ | \$278.00 |
| Milwaukee | \$15.84 | 4 | \$3.18 | 6,000 | ft ³ | \$254.16 |
| La Crosse (proposed 2024) | \$18.00 | 4 | \$3.01 | 6,000 | ft³ | \$252.60 |
| La Crosse (current) | \$15.00 | 4 | \$2.15 | 6,000 | ft³ | \$189.00 |
| Average w/o La Crosse | | | | | | \$440.91 |
| Median w/o La Crosse | | | | | | \$436.17 |

Table 14 - Comparison of Average Annual Residential Bills with Regional and Peer Communities

| Community | Fixed Charge | Bills per Year | Volume Rate | Annual Usage | Units | Annual Bill |
|----------------------------------|----------------|----------------|---------------|--------------|-----------------------|-----------------|
| Somers | \$175.00 | 4 | | | | \$700.00 |
| Mount Pleasant | \$140.00 | 4 | | 44,880 | gallons | \$560.00 |
| Waukesha | \$6.88 | 12 | \$10.48 | 44,880 | gallons | \$552.90 |
| Superior | \$5.50 | 12 | \$7.71 | 6,000 | ft ³ | \$528.60 |
| River Falls | \$16.50 | 12 | \$7.04 | 44,880 | gallons | \$513.96 |
| Oshkosh | \$11.36 | 12 | \$6.18 | 6,000 | ft ³ | \$507.12 |
| Wausau | \$36.31 | 4 | \$5.91 | 6,000 | ft ³ | \$499.84 |
| Shelby Sanitary District #2 | \$123.00 | 4 | | | | \$492.00 |
| Marshfield | \$18.90 | 12 | \$4.26 | 6,000 | ft ³ | \$482.40 |
| Green Bay | \$14.50 | 12 | \$5.04 | 6,000 | ft ³ | \$476.40 |
| Sturtevant | \$40.00 | 4 | \$6.15 | 44,880 | gallons | \$436.01 |
| Caledonia Sewer Utility District | \$109.00 | 4 | | | | \$436.00 |
| Madison | \$15.23 | 12 | \$4.75 | 44,880 | gallons | \$395.94 |
| Stevens Point | \$36.42 | 4 | \$4.09 | 6,000 | ft ³ | \$391.08 |
| Wisconsin Rapids | \$14.39 | 12 | \$3.60 | 6,000 | ft ³ | \$388.68 |
| Fond du Lac | \$37.50 | 4 | \$3.91 | 6,000 | ft ³ | \$384.60 |
| Sparta | \$12.09 | 12 | \$3.95 | 6,000 | ft ³ | \$382.08 |
| Onalaska | \$6.50 | 4 | \$5.88 | 6,000 | ft ³ | \$378.80 |
| Eau Claire | \$9.54 | 4 | \$5.63 | 6,000 | ft ³ | \$375.96 |
| Pleasant Prairie | \$14.10 | 12 | \$4.49 | 44,880 | gallons | \$370.71 |
| Holmen | \$15.50 | 4 | \$6.60 | 44,880 | gallons | \$358.21 |
| West Salem | \$61.34 | 4 | \$2.40 | 44,880 | gallons | \$353.07 |
| Beloit | \$8.21 | 12 | \$3.84 | 6,000 | ft ³ | \$328.92 |
| Janesville | \$46.10 | 4 | \$2.38 | 6,000 | ft ³ | \$327.20 |
| Manitowoc | \$11.28 | 12 | \$2.81 | 6,000 | ft ³ | \$303.96 |
| Appleton | \$16.60 | 4 | \$3.90 | 6,000 | ft ³ | \$300.40 |
| Sheboygan | \$49.00 | 4 | \$1.70 | 6,000 | ft ³ | \$298.00 |
| La Crescent, MN | \$70.37 | 4 | | | | \$281.48 |
| Menomonie | \$21.50 | 4 | \$3.20 | 6,000 | ft ³ | \$278.00 |
| Milwaukee | \$15.84 | 4 | \$3.18 | 6,000 | ft ³ | \$254.16 |
| La Crosse (proposed 2024) | \$18.00 | 4 | \$3.01 | 6,000 | ft² | \$252.60 |
| Racine | \$21.10 | 4 | \$2.77 | 6,000 | ft ³ | \$250.60 |
| Winona, MN | \$18.03 | 4 | \$1.99 | 6,000 | ft ³ | \$191.52 |
| La Crosse (current) | \$15.00 | 4 | \$2.15 | 6,000 | ft³ | \$189.00 |
| Kenosha | \$2.69 | 12 | \$2.15 | 6,000 | ft ³ | \$161.28 |
| Average w/o La Crosse | | | | | | \$388.01 |
| Median w/o La Crosse | | | | | | \$380.44 |

Figure 4 - Comparison of Average Annual Residential Bills with Regional and Peer Communities



SECTION FOUR – CASH FLOW FORECASTS

Cash flows were projected for 2023 through 2024 based on the proposed rates for 2024 and inflationary increases in subsequent years. The following criteria were used to evaluate the adequacy of cash flows with the proposed rate increases:

- Increase operating revenues to levels sufficient to cover operation and maintenance costs, debt service, and debt coverage equal to at least 10 percent of annual revenue debt service payments.
- Fund routine capital improvements and equipment replacements from current revenues or reserves to the extent possible.
- Increase reserves to at least 250 days of operating expenses.
- Avoid or mitigate rate spikes to the extent possible.

| | | 2023 | 2024 | 2025 |
|--|---|--|----------------|----------------|
| Debt coverage – Clean Water Fund program | Operating revenues less O&M $\geq 1.10x$ revenue debt service | 4.07x | 1.63x | 1.79x |
| Funding for routine capital outlay | Generate \$2.5 - \$3.5 million of cash funding per year for routine capital replacements and outlay | \$1.3 million | \$1.3 million | \$2.8 million |
| Cash operating reserves | Maintain cash unrestricted reserves ≥ 250 days operating expenses | 151 | 184 | 220 |
| Rate spikes | Mitigate to the extent possible | 29.4% is the minimum required to fund capital and build up cash reserves | 3.0% projected | 3.0% projected |

The cash flow forecasts were based on the following assumptions:

- The forecast flows and loadings and O&M expense forecasts shown in Section 1 of this report.
- A decrease of \$475,000 in biosolids expenses from 2024 to 2025.
- Inflation of future O&M expenses by 1.0 percent per year except for health insurance, which is inflated by 2.0 percent per year.
- Other operating revenues based on the average of the previous six years, a decrease in investment income on cash reserve balances, and an increase in the costs allocated to pretreatment charges in this study.
- Capital outlay of just under \$50.3 million for 2023-2027, including the Utility's CIP projects, \$5.0 million in 2023 for carryover projects from prior years, and \$200,000 per year for unplanned capital projects for 2024-2027. This total is comprised of \$22.7 million in 2023 for the completion of the WWTP upgrade and \$27.6 million, or \$5.5 million per year for routine capital projects and equipment replacement.
- Projected capital improvements of \$3.5 million per year, increased by 3 percent per year, for 2028-2032, plus an allowance of \$200,000 per year for miscellaneous unplanned capital expenses.

- Funding of routine capital improvements will be funded through current utility revenues to the extent possible.
- The cash flow forecast includes borrowing of \$12.0 million in 2023 to finance most of the \$14.1 million of capital improvements in 2023 and 2024 (including \$5.0 million of carryover projects from prior years). The interest rate and payment schedule for this borrowing is not known currently. An interest rate of 4.0 percent and level annual payments were used for planning purposes. If some of the 2023/2024 capital projects are delayed to future years, the amount of the borrowing should be reduced accordingly.
- Recommended minimum reserve levels include the following:
 - Operating reserve equal to 3 months of annual operating expenses;
 - Additional unrestricted capital reserves in an amount to provide the Utility with a total of 250 days cash on hand in unrestricted reserves;
 - A capital reserve equal to the average planned capital outlay per year as shown in the Utility's Capital Improvement Program; and
 - Restricted ERF funds in amounts required by the WDNR. The balance as of year-end 2022 was \$1.8 million. For planning purposes, the minimum required balance post-WWTP project was estimated at \$3.3 million, and the cash flow forecasts reflect increases of \$300,000 per year in the ERF until the balance reaches \$3.3 million. The minimum required balance should be re-evaluated following completion of the WWTP project.

As noted in Section 3, the depreciation expense and return on investment included in the 2024 revenue requirements are projected to generate about \$7.4 million per year for debt service, cash funded capital outlay, and replenishment of cash reserves. The Utility is projecting the following annual funding needs for these purposes over the next five years:

- \$4.6 million per year of debt service (\$3.7 million for the CWF loan and \$890,000 for the new borrowing in 2023).
- \$2.8 million per year for cash funded capital outlay and/or replenishment of reserves.

The projected reduction in O&M expenses in 2025 due to the decrease in biosolids disposal will also help replenish the Utility's cash reserves.

The Agreement for Sanitary Sewage Conveyance and Treatment Between the City of La Crosse and the City of Onalaska and the Agreement for Sanitary Sewage Conveyance and Treatment Between the City of La Crosse and the City of La Crescent allow the City of La Crosse to appropriate excess sewer revenues from the Utility's undesignated reserve funds. There are not projected to be any undesignated reserve funds or transfers to City General Fund through at least 2032, as reserves are not projected to meet the recommended minimum until 2031 or 2032.

The following table and chart show the cash flows, total reserves, and projected minimum recommended reserves for 2023 through 2032 with the proposed rate increase for 2024 and future inflationary increases of 3.0 percent per year. These forecasts are based on numerous assumptions as described in this report. The Utility should review actual performance at least annually to determine if additional rate adjustments are needed to maintain adequate debt coverage and reserve levels or to fund additional capital improvements.

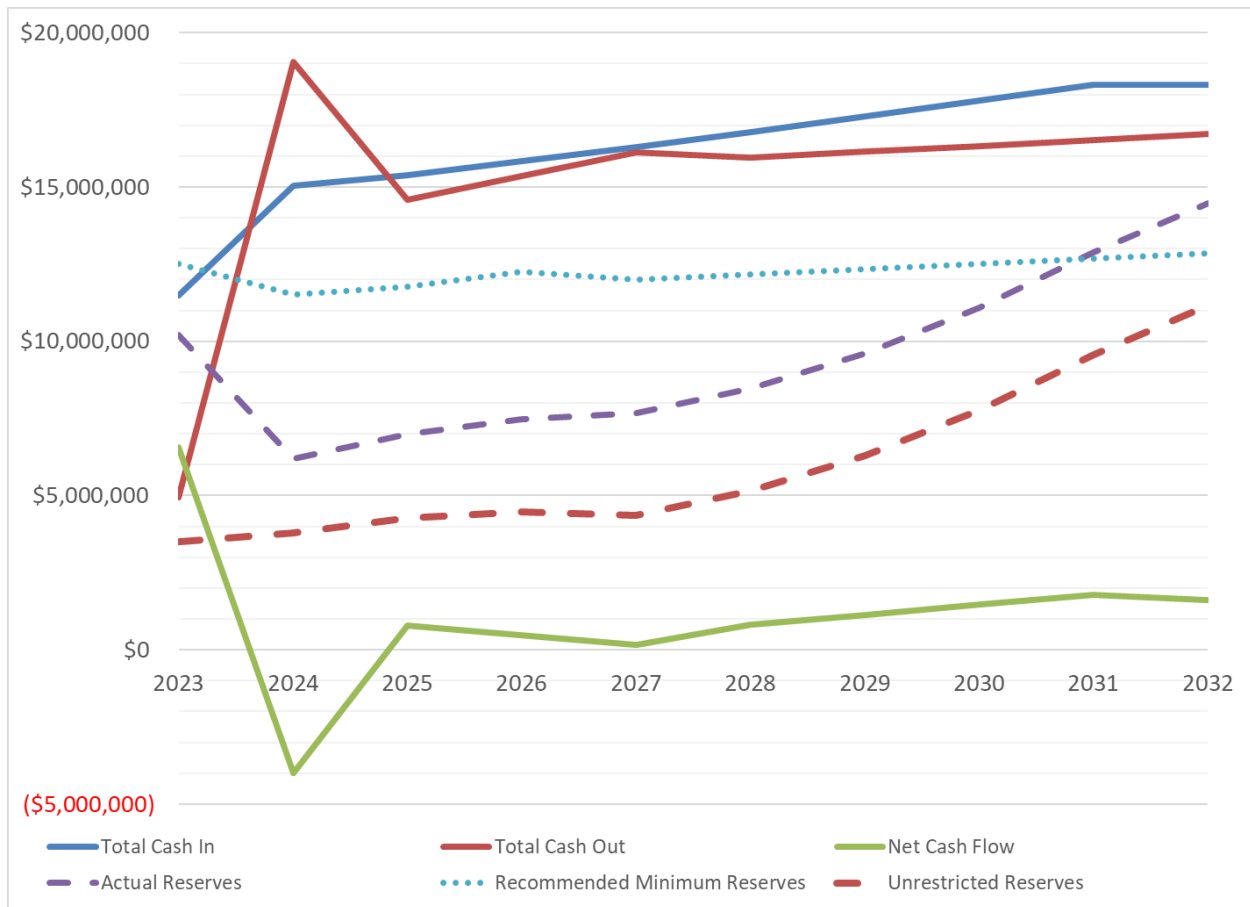
Table 15 - Forecast Cash Flow with Proposed Rate Increases

| | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|-----------------------|----------------------|---------------------|---------------------|----------------------|
| Projected Rate Increase | 18.2% | 29.6% | 3.0% | 3.0% | 3.0% |
| Revenues | | | | | |
| User Charge Revenues - Retail | \$7,788,876 | \$10,731,747 | \$11,053,700 | \$11,385,311 | \$11,726,870 |
| User Charge Revenues - Wholesale | \$2,740,699 | \$2,973,967 | \$3,063,186 | \$3,155,081 | \$3,249,734 |
| User Charge Revenues - Hauled Waste | \$324,754 | \$388,561 | \$400,218 | \$412,224 | \$424,591 |
| User Charge Revenues - High Strength | \$370,668 | \$488,498 | \$503,153 | \$518,248 | \$533,795 |
| User Charge Revenues - Shelby SD#1 | \$79,934 | \$79,934 | \$82,332 | \$84,802 | \$87,346 |
| Other Operating Revenues | \$151,074 | \$260,065 | \$239,007 | \$245,834 | \$246,773 |
| Non-Operating Revenues | \$27,500 | \$128,970 | \$27,500 | \$27,500 | \$27,500 |
| Total Cash In | \$11,483,504 | \$15,051,742 | \$15,369,096 | \$15,829,001 | \$16,296,610 |
| Expenses | | | | | |
| <i>Subtotal O&M</i> | <i>\$8,485,561</i> | <i>\$7,500,026</i> | <i>\$7,098,948</i> | <i>\$7,173,938</i> | <i>\$7,249,758</i> |
| <i>Debt Service</i> | <i>\$737,203</i> | <i>\$4,626,065</i> | <i>\$4,626,065</i> | <i>\$4,626,065</i> | <i>\$4,626,065</i> |
| <i>Capital Outlay - Non WWTP</i> | <i>\$7,443,925</i> | <i>\$6,635,000</i> | <i>\$2,560,400</i> | <i>\$3,254,000</i> | <i>\$6,913,800</i> |
| <i>Capital Outlay - WWTP</i> | <i>\$22,677,249</i> | | | | |
| <i>Capital Outlay - Misc. Unplanned</i> | | <i>\$200,000</i> | <i>\$200,000</i> | <i>\$200,000</i> | <i>\$200,000</i> |
| <i>Capital Outlay - Vehicle Lease</i> | <i>\$87,000</i> | <i>\$87,000</i> | <i>\$87,000</i> | <i>\$87,000</i> | <i>\$87,000</i> |
| <i>Less: New Borrowing</i> | <i>(\$12,000,000)</i> | | | | <i>(\$3,000,000)</i> |
| <i>Less: CWF Loan</i> | <i>(\$22,677,249)</i> | | | | |
| <i>Bond Issuance Expense</i> | <i>\$180,000</i> | <i>\$0</i> | <i>\$0</i> | <i>\$0</i> | <i>\$45,000</i> |
| Total Cash Out | \$4,933,688 | \$19,048,090 | \$14,572,412 | \$15,341,002 | \$16,121,622 |
| Net Cash Flow | \$6,549,816 | (\$3,996,348) | \$796,683 | \$487,998 | \$174,987 |
| Operating Fund | | | | | |
| Ending Balance | \$3,499,025 | \$3,786,252 | \$4,282,935 | \$4,470,933 | \$4,345,921 |
| Days Cash on Hand | 151 | 184 | 220 | 227 | 219 |
| CIP Fund | | | | | |
| Ending Balance | \$4,583,575 | \$0 | \$0 | \$0 | \$0 |
| Equipment Replacement Fund | | | | | |
| Ending Balance | \$2,114,455 | \$2,414,455 | \$2,714,455 | \$3,014,455 | \$3,314,455 |
| Total Beginning Balance | \$3,647,238 | \$10,197,054 | \$6,200,707 | \$6,997,390 | \$7,485,388 |
| Net Change | \$6,549,816 | (\$3,996,348) | \$796,683 | \$487,998 | \$174,987 |
| Total Ending Balance | \$10,197,054 | \$6,200,707 | \$6,997,390 | \$7,485,388 | \$7,660,376 |
| Recommended Minimum Reserve | | | | | |
| Operating Reserve | \$5,812,028 | \$5,137,004 | \$4,862,293 | \$4,913,656 | \$4,965,587 |
| Capital Reserve | \$4,572,640 | \$3,966,640 | \$4,197,190 | \$4,311,299 | \$3,716,395 |
| Equipment Replacement Fund | \$2,114,455 | \$2,414,455 | \$2,714,455 | \$3,014,455 | \$3,314,455 |
| Total Recommended Minimum Reserve | \$12,499,123 | \$11,518,099 | \$11,773,938 | \$12,239,410 | \$11,996,437 |
| Days Cash on Hand | 447 | 443 | 466 | 469 | 437 |
| Revenue Debt Coverage - Total Revenue: | 4.07 | 1.63 | 1.79 | 1.87 | 1.96 |

City of La Crosse
2023 Sewer Rate Update - Utility Basis

| | 2028 | 2029 | 2030 | 2031 | 2032 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Projected Rate Increase | 3.0% | 3.0% | 3.0% | 3.0% | 0.0% |
| Revenues | | | | | |
| User Charge Revenues - Retail | \$12,078,676 | \$12,441,036 | \$12,814,267 | \$13,198,695 | \$13,198,695 |
| User Charge Revenues - Wholesale | \$3,347,226 | \$3,447,643 | \$3,551,072 | \$3,657,604 | \$3,657,604 |
| User Charge Revenues - Hauled Waste | \$437,329 | \$450,448 | \$463,962 | \$477,881 | \$477,881 |
| User Charge Revenues - High Strength | \$549,809 | \$566,304 | \$583,293 | \$600,792 | \$600,792 |
| User Charge Revenues - Shelby SD#1 | \$89,966 | \$92,665 | \$95,445 | \$98,309 | \$98,309 |
| Other Operating Revenues | \$248,666 | \$251,635 | \$252,544 | \$255,319 | \$257,285 |
| Non-Operating Revenues | \$27,500 | \$27,500 | \$27,500 | \$27,500 | \$27,500 |
| Total Cash In | \$16,779,172 | \$17,277,231 | \$17,788,083 | \$18,316,100 | \$18,318,066 |
| Expenses | | | | | |
| <i>Subtotal O&M</i> | <i>\$7,326,417</i> | <i>\$7,403,927</i> | <i>\$7,482,296</i> | <i>\$7,561,536</i> | <i>\$7,641,656</i> |
| <i>Debt Service</i> | <i>\$4,846,810</i> | <i>\$4,846,810</i> | <i>\$4,846,810</i> | <i>\$4,846,810</i> | <i>\$4,846,810</i> |
| <i>Capital Outlay - Non WWTP</i> | <i>\$3,500,000</i> | <i>\$3,605,000</i> | <i>\$3,713,150</i> | <i>\$3,824,545</i> | <i>\$3,939,281</i> |
| <i>Capital Outlay - WWTP</i> | | | | | |
| <i>Capital Outlay - Misc. Unplanned</i> | <i>\$200,000</i> | <i>\$200,000</i> | <i>\$200,000</i> | <i>\$200,000</i> | <i>\$200,000</i> |
| <i>Capital Outlay - Vehicle Lease</i> | <i>\$87,000</i> | <i>\$87,000</i> | <i>\$87,000</i> | <i>\$87,000</i> | <i>\$87,000</i> |
| <i>Less: New Borrowing</i> | | | | | |
| <i>Less: CWF Loan</i> | | | | | |
| <i>Bond Issuance Expense</i> | <i>\$0</i> | <i>\$0</i> | <i>\$0</i> | <i>\$0</i> | <i>\$0</i> |
| Total Cash Out | \$15,960,227 | \$16,142,736 | \$16,329,256 | \$16,519,890 | \$16,714,747 |
| Net Cash Flow | \$818,945 | \$1,134,495 | \$1,458,827 | \$1,796,209 | \$1,603,319 |
| Operating Fund | | | | | |
| Ending Balance | \$5,164,866 | \$6,299,361 | \$7,758,188 | \$9,554,397 | \$11,157,716 |
| Days Cash on Hand | 257 | 311 | 378 | 461 | 533 |
| CIP Fund | | | | | |
| Ending Balance | \$0 | \$0 | \$0 | \$0 | \$0 |
| Equipment Replacement Fund | | | | | |
| Ending Balance | \$3,314,455 | \$3,314,455 | \$3,314,455 | \$3,314,455 | \$3,314,455 |
| Total Beginning Balance | \$7,660,376 | \$8,479,321 | \$9,613,816 | \$11,072,643 | \$12,868,852 |
| Net Change | \$818,945 | \$1,134,495 | \$1,458,827 | \$1,796,209 | \$1,603,319 |
| Total Ending Balance | \$8,479,321 | \$9,613,816 | \$11,072,643 | \$12,868,852 | \$14,472,171 |
| Recommended Minimum Reserve | | | | | |
| Operating Reserve | \$5,018,094 | \$5,071,183 | \$5,124,860 | \$5,179,134 | \$5,234,011 |
| Capital Reserve | \$3,827,887 | \$3,942,724 | \$4,061,005 | \$4,182,835 | \$4,308,320 |
| Equipment Replacement Fund | \$3,314,455 | \$3,314,455 | \$3,314,455 | \$3,314,455 | \$3,314,455 |
| Total Recommended Minimum Reserve | \$12,160,436 | \$12,328,361 | \$12,500,321 | \$12,676,424 | \$12,856,787 |
| Days Cash on Hand | 441 | 444 | 448 | 452 | 456 |
| Revenue Debt Coverage - Total Revenue: | 1.95 | 2.04 | 2.13 | 2.22 | 2.20 |

Figure 5 - Forecast Cash Flow and Reserves with Proposed Rate Increases



**APPENDIX A – SEWER UTILITY COST OF SERVICE STUDY AND PROPOSED RATE
DESIGN FOR 2024**

Historical and Forecast Operation and Maintenance Expenses

| New Object | Project No. | Account Description | | | | | | | | Test Year | |
|----------------------------|----------------|---|---------|---------|---------|---------|---------|---------|-------------------|-----------|---------|
| | | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 3-Year Average | 2023 | 2024 |
| | | | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| 510000 | W3160 | Reg Salaries - Sanitary Lift Sta | 82,111 | 71,145 | 110,296 | 54,844 | 56,854 | 57,026 | 56,241 | 65,000 | 73,450 |
| 510000 | W3430 | Reg Salaries - Sanitary Lift Sta | | | | 69,801 | 43,602 | 86,764 | 66,722 | 65,000 | 75,000 |
| 510005 | W3160 | Part-Time Labor - Sanitary Lift Stations - Collection | | | | | | 1,602 | 1,602 | 1,000 | 2,063 |
| 510006 | W3160 | Overtime Wages - Sanitary Lift Sta | | | | 2,616 | 4,157 | 1,749 | 2,841 | 5,000 | 3,200 |
| 510006 | W3430 | Overtime Wages - Sanitary Lift Sta | | | | 3,330 | 4,774 | 2,654 | 3,586 | 5,000 | 4,000 |
| 521102 | W3160 | Electricity - Collector | | | | 15,185 | 14,745 | 15,484 | 15,138 | 17,000 | 18,020 |
| 521102 | W3430 | Electricity - Interceptor | | | | 66,208 | 67,234 | 77,202 | 70,215 | 73,000 | 77,380 |
| 521104 | W3160 | Water | | | | | 475 | 1,315 | 895 | 1,600 | 1,616 |
| 521104 | W3430 | Water | | | | | 1,008 | 1,979 | 1,493 | 2,000 | 2,020 |
| 521104 | W3160 | Natural Gas | | | | 2,241 | 3,356 | 4,101 | 3,233 | 4,200 | 4,326 |
| 521104 | W3430 | Natural Gas | | | | 3,284 | 3,884 | 5,017 | 4,062 | 5,050 | 5,202 |
| 521105 | W3160 | Sewer | | | | | 150 | 674 | 412 | 1,000 | 1,400 |
| 521105 | W3430 | Sewer | | | | | 638 | 880 | 759 | 1,000 | 1,400 |
| 521106 | W3160 | Storm Water | | | | | 46 | 129 | 88 | 155 | 157 |
| 521106 | W3430 | Storm Water | | | | | 54 | 145 | 100 | 155 | 157 |
| 540000 | W3160 | R&M Buildings - Collection | | | | 251 | 384 | 107 | 247 | 3,500 | 3,535 |
| 540000 | W3430 | R&M Buildings - Interceptors | | | | 409 | 15,294 | 12,879 | 9,528 | 25,000 | 25,250 |
| 540050 | W3160 | R&M Grounds - Collection | | | | 2,327 | 3,109 | 15,827 | 7,088 | 10,000 | 10,100 |
| 540050 | W3430 | R&M Grounds - Interceptors | | | | 2,229 | 4,847 | 8,630 | 5,235 | 7,000 | 7,070 |
| 540100 | W3160 | R&M Equip/Mach | | | | 563 | 18,648 | 19,639 | 12,950 | 25,000 | 25,250 |
| 540100 | W3430 | R&M Equip/Mach | | | | 6,729 | 32,628 | 83,122 | 40,826 | 60,000 | 60,600 |
| SUBTOTAL LIFT STATIONS | | | 82,111 | 71,145 | 110,296 | 230,016 | 275,887 | 396,925 | 303,260 | 376,660 | 401,195 |
| 510000 | W6631 | Salaries and wages | | | | 69,381 | 61,753 | 69,887 | 67,007 | 73,381 | 75,000 |
| 510000 | W9030 | Salaries and wages | | | | 0 | 46,359 | 54,822 | 33,727 | 66,000 | 69,670 |
| 510006 | W6631 | Overtime Wages | | | | 9 | 38 | 30 | 26 | 50 | 40 |
| 510006 | W9030 | Overtime Wages | | | | 0 | 706 | 1,228 | 645 | 1,500 | 1,580 |
| 520075 | W9030 | Temporary Labor Services | | | | 0 | 3,832 | 0 | 1,277 | 0 | 0 |
| 520134 | W6631 | Metering Expenses | 193,074 | 277,638 | 294,146 | 264,151 | 265,072 | 260,208 | 263,144 | 275,000 | 277,750 |
| 550150 | | Bad Debt Expense | 2,831 | 73 | 504 | 175 | 0 | 281 | 152 | 2,000 | 2,020 |
| SUBTOTAL CUSTOMER ACCOUNTS | | | 195,904 | 277,711 | 294,650 | 333,717 | 377,760 | 386,456 | 365,978 | 417,931 | 426,060 |

| New Object | Project No. | Account Description | 2017 (\$) | 2018 (\$) | 2019 (\$) | 2020 (\$) | 2021 (\$) | 2022 (\$) | 3-Year Average (\$) | 2023 (\$) | 2024 (\$) |
|--|----------------|---|------------------|------------------|------------------|------------------|------------------|------------------|---------------------------|------------------|------------------|
| 510000 | W8010 | Reg Salaries - Oper & Mtce | 90,168 | 602,880 | 574,139 | 599,429 | 567,562 | 361,498 | 509,497 | 640,000 | 465,476 |
| 510005 | W8010 | Part-Time Labor - Wastewater Treatment Operations | | | | 0 | 689 | 10,164 | 3,618 | 0 | 13,088 |
| 510006 | W8010 | Overtime Wages - Oper & Mtce | 1,639 | 18,905 | 18,556 | 17,182 | 11,362 | 11,966 | 13,503 | 21,000 | 15,408 |
| 510030 | | Cell Phone Reimbursement | | | | 152 | 0 | 0 | 51 | 2,000 | |
| 521102 | | Electricity | 498,698 | 555,066 | 571,726 | 457,619 | 473,286 | 527,751 | 486,219 | 650,000 | 200,000 |
| 521103 | | Water | 65,558 | 32,376 | 38,449 | 41,315 | 42,363 | 72,622 | 52,100 | 90,000 | 45,000 |
| 521104 | | Natural Gas | 31,661 | 41,970 | 38,662 | 27,905 | 42,200 | 53,273 | 41,126 | 325,000 | 334,750 |
| 521105 | | Sewer | 128,707 | 50,703 | 63,971 | 64,590 | 66,125 | 156,394 | 95,703 | 200,000 | 70,000 |
| 521106 | | Storm Sewer Fee Payments | 8,837 | 8,029 | 4,235 | 1,247 | 1,147 | 984 | 1,126 | 1,300 | 1,313 |
| 532090 | | Chemical Supplies - Ferric Chloride | 143,695 | 171,870 | 181,237 | 159,795 | 94,201 | 115,202 | 123,066 | 700,000 | 707,000 |
| 532090 | | Chemical Supplies - Polymer | | | | 23,083 | 77,952 | 76,211 | 59,082 | 350,000 | 353,500 |
| 532090 | | Chemical Supplies - Misc | | | | 0 | 0 | 0 | 0 | 30,000 | 30,300 |
| 540000 | | R&M Buildings | 29,685 | 15,340 | 12,079 | 15,892 | 19,672 | 26,347 | 20,637 | 25,000 | 25,250 |
| 540050 | | R&M Grounds | 6,443 | 9,130 | 13,064 | 14,795 | 3,711 | 13,358 | 10,621 | 15,000 | 15,150 |
| 540100 | | R&M Equip/Mach | 240,118 | 313,232 | 240,289 | 253,244 | 266,796 | 226,641 | 248,894 | 357,000 | 360,570 |
| 540100 | W8030 | R&M Equip/Mach - Energy Gen. Equip. | | | | | | 0 | | | 110,000 |
| 510030 | | Cell Phone Reimbursement | | | | 18 | 0 | 0 | 6 | 0 | |
| SUBTOTAL FACILITY OPERATIONS | | | 1,245,211 | 1,819,502 | 1,756,407 | 1,676,266 | 1,667,066 | 1,652,411 | 1,665,248 | 3,406,300 | 2,746,805 |
| | | Miscellaneous | 12,196 | 9,588 | 13,422 | | | | | | |
| TOTAL OPERATION & MAINTENANCE | | | 5,157,283 | 5,199,493 | 6,100,640 | 5,953,830 | 6,402,016 | 5,834,336 | 6,121,469 | 8,485,561 | 7,500,026 |

Allocation of Collector and Interceptor Mains

| Gravity Mains | | | | | | Force Mains | | | | |
|----------------------------------|------------------|--------------------|------------|------------|-------------|--------------------|------------|-----------|-------------|---------|
| Function | Size (Inches) | Quantity (Feet) | Inch-Feet | | | Quantity (Feet) | Inch-Feet | | | |
| | | | Total | Collector | Interceptor | | Total | Collector | Interceptor | |
| C | 1.5 | | - | - | - | 237 | 356 | 356 | - | |
| C | 2 | | - | - | - | 410 | 820 | 820 | - | |
| C | 2.5 | | - | - | - | 1,000 | 2,500 | 2,500 | - | |
| C | 3 | | - | - | - | 3,700 | 11,100 | 11,100 | - | |
| C | 4 | | 481 | 1,924 | 1,924 | - | 2,390 | 9,560 | 9,560 | - |
| C | 6 | | 2,471 | 14,826 | 14,826 | - | 3,824 | 22,944 | 22,944 | - |
| C | 8 | | 441,093 | 3,528,742 | 3,528,742 | - | 3,377 | 27,016 | 27,016 | - |
| C | 10 | | 117,061 | 1,170,605 | 1,170,605 | - | 430 | 4,300 | 4,300 | - |
| C | 12 | | 219,470 | 2,633,638 | 2,633,638 | - | 10,052 | 120,624 | 120,624 | - |
| C | 14 | | | - | - | - | 17,374 | 243,236 | 243,236 | - |
| C | 15 | 62,437 | 936,552 | 936,552 | - | - | - | - | - | |
| C | 16 | 234 | 3,742 | 3,742 | - | 16,810 | 268,960 | 268,960 | - | |
| I | 18 | 60,459 | 1,088,267 | - | 1,088,267 | 6,634 | 119,412 | - | 119,412 | |
| I | 20 | 16,937 | 338,730 | - | 338,730 | - | - | - | - | |
| I | 21 | 5,113 | 107,365 | - | 107,365 | - | - | - | - | |
| I | 24 | 24,577 | 589,855 | - | 589,855 | 6,290 | 150,960 | - | 150,960 | |
| I | 27 | 1,721 | 46,464 | - | 46,464 | - | - | - | - | |
| I | 30 | 19,356 | 580,686 | - | 580,686 | - | - | - | - | |
| I | 33 | 1,058 | | - | - | - | - | - | - | |
| I | 36 | 9,931 | | - | - | - | - | - | - | |
| I | 39 | 1,565 | 61,035 | - | 61,035 | - | - | - | - | |
| I | 42 | 527 | 22,134 | - | 22,134 | - | - | - | - | |
| I | 48 | 4,217 | | - | - | - | - | - | - | |
| I | 50 | 16,523 | 826,150 | - | 826,150 | - | - | - | - | |
| | | | 1,005,229 | 11,950,716 | 8,290,029 | 3,660,687 | 72,528 | 981,788 | 711,416 | 270,372 |
| | | | | | 69.37% | 30.63% | | | 72.46% | 27.54% |
| Combined Gravity and Force Mains | | | | | | 1,077,757 | 12,932,503 | 9,001,445 | 3,931,059 | |
| Use for Allocation | | | | | | | | 69.60% | 30.40% | |
| | | | UF Plant / | | | | | | | |
| | | | O&M | Dep | Total Plant | | | | | |
| Interceptor Mains | | | 16.28% | 30.40% | 30.40% | | | | | |
| Collector Mains | | | 83.72% | 69.60% | 69.60% | | | | | |

Labor, Power, Chemical Cost Allocation Factor Development

| Process Code | | Allocation Percents | | | | | | | | | Collection System | Interceptor System | Treatment Plant | | | | | Customer | | |
|--------------|---|---------------------|------|------|-----|-----|------|-----------------|-----|-----|-------------------|--------------------|-----------------|-----------|-----------|-----------|-----------|--------------------|---------|------------|
| | | Coll | Intr | Flow | BOD | TSS | P | NH ₃ | Cst | Cnn | | | Total | Flow | B.O.D. | T.S.S. | Phos. | NH ₃ -N | Billing | Meter/Conn |
| | Labor Allocation | | | | | | | | | | | | | | | | | | | |
| 2 | Primary Treatment | 0% | 0% | 30% | 10% | 55% | 5% | 0% | 0% | 0% | 39.92% | 0.00% | 0.00% | 11.98% | 3.99% | 21.96% | 2.00% | 0.00% | 0.00% | 0.00% |
| 3 | Secondary Treatment | 0% | 0% | 20% | 45% | 10% | 5% | 20% | 0% | 0% | 36.73% | 0.00% | 0.00% | 7.35% | 16.53% | 3.67% | 1.84% | 7.35% | 0.00% | 0.00% |
| 5 | Biosolids Trmnt & Disposal | 0% | 0% | 0% | 40% | 55% | 5% | 0% | 0% | 0% | 23.34% | 0.00% | 0.00% | 0.00% | 9.34% | 12.84% | 1.17% | 0.00% | 0.00% | 0.00% |
| | Total Facility Operations Labor Expense | 0% | 0% | 19% | 30% | 38% | 5% | 7% | 0% | 0% | 100.00% | 0.00% | 0.00% | 19.32% | 29.86% | 38.47% | 5.00% | 7.35% | 0.00% | 0.00% |
| | Electric Power Allocation | | | | | | | | | | | | | | | | | | | |
| 1.1 | Prelim.- Raw Sewage Pumping | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 903,886 | 0 | 0 | 903,886 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.2 | Prelim.- Bar Screening / Communion | 0% | 0% | 70% | 0% | 30% | 0% | 0% | 0% | 0% | 80 | 0 | 0 | 56 | 0 | 24 | 0 | 0 | 0 | 0 |
| 1.3 | Prelim.- Grit Removal | 0% | 0% | 70% | 0% | 30% | 0% | 0% | 0% | 0% | 37,962 | 0 | 0 | 26,573 | 0 | 11,389 | 0 | 0 | 0 | 0 |
| 2.1 | Primary Clarifier | 0% | 0% | 50% | 20% | 28% | 3% | 0% | 0% | 0% | 64,224 | 0 | 0 | 32,112 | 12,845 | 17,661 | 1,606 | 0 | 0 | 0 |
| 3.1 | Secondary - Activated Sludge | 0% | 0% | 20% | 45% | 10% | 5% | 20% | 0% | 0% | 6,953,268 | 0 | 0 | 1,390,654 | 3,128,970 | 695,327 | 347,663 | 1,390,654 | 0 | 0 |
| 3.6 | Secondary - Phosphorus | 0% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | 0% | 1,273,399 | 0 | 0 | 0 | 0 | 1,273,399 | 0 | 0 | 0 | 0 |
| 3.9 | Secondary - Final Clarifier | 0% | 0% | 20% | 32% | 44% | 4% | 0% | 0% | 0% | 15,368 | 0 | 0 | 3,074 | 4,918 | 6,762 | 615 | 0 | 0 | 0 |
| 5 | Biosolids Trmnt & Disposal | 0% | 0% | 0% | 40% | 55% | 5% | 0% | 0% | 0% | 2,968,699 | 0 | 0 | 0 | 1,187,480 | 1,632,784 | 148,435 | 0 | 0 | 0 |
| 6 | Disinfection | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 1,985,472 | 0 | 0 | 1,985,472 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8.1 | Flow Monitoring Eqmt. | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | Electrical | 0% | 0% | 31% | 31% | 17% | 12% | 10% | 0% | 0% | -1,992,200 | 0 | 0 | -609,039 | -607,971 | -331,597 | -248,523 | -195,070 | 0 | 0 |
| 10 | WWTP Non-Specific | 0% | 0% | 31% | 31% | 17% | 12% | 10% | 0% | 0% | 143,782 | 0 | 0 | 43,956 | 43,879 | 23,932 | 17,936 | 14,079 | 0 | 0 |
| | Total Electric Power | 0% | 0% | 31% | 31% | 17% | 12% | 10% | 0% | 0% | 12,353,939 | 0 | 0 | 3,776,743 | 3,770,120 | 2,056,282 | 1,541,131 | 1,209,662 | 0 | 0 |
| | % of Total | | | | | | | | | | | 0% | 0% | 31% | 31% | 17% | 12% | 10% | 0% | 0% |
| | Chemical Allocation | | | | | | | | | | | | | | | | | | | |
| 70.3 | Polymer (Sludge) | 0% | 0% | 0% | 40% | 55% | 5% | 0% | 0% | 0% | 56.59% | 0.00% | 0.00% | 0.00% | 22.63% | 31.12% | 2.83% | 0.00% | 0.00% | 0.00% |
| 70.4 | Ferric Cl ₂ (Phos.) | 0% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | 0% | 43.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 43.00% | 0.00% | 0.00% | 0.00% |
| 70 | Other Sup. & Chem. | 0% | 0% | 13% | 32% | 36% | 16% | 3% | 0% | 0% | 0.42% | 0.00% | 0.00% | 0.05% | 0.13% | 0.15% | 0.07% | 0.01% | 0.00% | 0.00% |
| | Total Chemicals | 0% | 0% | 0% | 23% | 31% | 46% | 0% | 0% | 0% | 100.00% | 0.00% | 0.00% | 0.05% | 22.77% | 31.27% | 45.89% | 0.01% | 0.00% | 0.00% |
| | Natural Gas Allocation | | | | | | | | | | | | | | | | | | | |
| 66.1 | Building Heat | 0% | 0% | 19% | 30% | 38% | 5% | 7% | 0% | 0% | 70.00% | 0.00% | 0.00% | 13.53% | 20.90% | 26.93% | 3.50% | 5.14% | 0.00% | 0.00% |
| 66.2 | Sludge Heating | 0% | 0% | 0% | 40% | 55% | 5% | 0% | 0% | 0% | 30.00% | 0.00% | 0.00% | 0.00% | 12.00% | 16.50% | 1.50% | 0.00% | 0.00% | 0.00% |
| | Total Natural Gas | 0% | 0% | 14% | 33% | 43% | 5% | 5% | 0% | 0% | 100.00% | 0.00% | 0.00% | 13.53% | 32.90% | 43.43% | 5.00% | 5.14% | 0.00% | 0.00% |

Allocation of Operation and Maintenance Expenses

| New Object No. | Account Description | Coll System | | Int System | | WWTP | | | | Cust Costs | | | | COLLECTION | | | INTERCEPTORS | | WASTEWATER TREATMENT PLANT | | | | | | CUSTOMER COSTS | | | |
|----------------------------------|--------------------------------------|-------------|---------|------------|--------|--------|--------|--------|--------|------------|---------|--------|----------------|--------------|---------|--------|---------------|--------|----------------------------|--------|--------|--------|--------|--------|----------------|--------------------|----------------------|--------------|
| | | Coll Main | Coll LS | Int Main | Int LS | Flow | BOD | TSS | Phos | NH-3 | Billing | Conn | Ind. Pre-Treat | Hauled Waste | Total | Mains | Lift Stations | Mains | Lift Stations | Flow | BOD | TSS | P | NH-3 | Billing | Meter / Connection | Industrial Pretreat. | Hauled Waste |
| | | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| GENERAL ADMINISTRATION - 6306310 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 510000 | Regular Salaries | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 331,035 | 52,052 | 21,224 | 4,936 | 21,875 | 35,377 | 53,317 | 59,365 | 10,467 | 13,634 | 19,471 | 20,506 | 18,811 | 0 |
| 510000 | Reg Salaries - Other City Depts | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 12,605 | 1,982 | 808 | 188 | 833 | 1,347 | 2,030 | 2,260 | 399 | 519 | 741 | 781 | 716 | 0 |
| 510000 | Reg Salaries - Training | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 15,000 | 2,359 | 962 | 224 | 991 | 1,603 | 2,416 | 2,690 | 474 | 618 | 882 | 929 | 852 | 0 |
| 510001 | Payout of Vacation and Sick Accruals | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 4,000 | 629 | 256 | 60 | 264 | 427 | 644 | 717 | 126 | 165 | 235 | 248 | 227 | 0 |
| 510005 | Limited Term EE Salaries - Collector | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 510005 | Part-Time Labor - Training | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 1,455 | 229 | 93 | 22 | 96 | 155 | 234 | 261 | 46 | 60 | 86 | 90 | 83 | 0 |
| 510006 | Overtime Wages | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 510006 | Overtime Wages - Training | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 279 | 44 | 18 | 4 | 18 | 30 | 45 | 50 | 9 | 11 | 16 | 17 | 16 | 0 |
| 510006 | Overtime Wages - Other City Depts | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 510025 | Compensated Absences | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 510030 | Cell Phone Reimbursement | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 511005 | Health Insurance | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 392,200 | 61,670 | 25,145 | 5,848 | 25,916 | 41,914 | 63,168 | 70,334 | 12,400 | 16,153 | 23,068 | 24,295 | 22,287 | 0 |
| 511010 | Worker Compensation Insur | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 39,336 | 6,185 | 2,522 | 587 | 2,599 | 4,204 | 6,336 | 7,054 | 1,244 | 1,620 | 2,314 | 2,437 | 2,235 | 0 |
| 511015 | Life Insurance | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 5,500 | 865 | 353 | 82 | 363 | 588 | 886 | 986 | 174 | 227 | 323 | 341 | 313 | 0 |
| 511020 | Social Security Taxes | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 132,320 | 20,806 | 8,484 | 1,973 | 8,744 | 14,141 | 21,312 | 23,729 | 4,184 | 5,450 | 7,783 | 8,197 | 7,519 | 0 |
| 511025 | Retirement Benefits | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 117,810 | 18,525 | 7,553 | 1,757 | 7,785 | 12,590 | 18,975 | 21,127 | 3,725 | 4,852 | 6,929 | 7,298 | 6,695 | 0 |
| 511065 | Employee Recognition | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 1,000 | 157 | 64 | 15 | 66 | 107 | 161 | 179 | 32 | 41 | 59 | 62 | 57 | 0 |
| 520006 | Regulatory / Permit Fees | 0.00% | 0.00% | 0.00% | 0.00% | 12.56% | 31.08% | 35.51% | 15.30% | 3.22% | 0.00% | 0.00% | 0.00% | 2.33% | 50,500 | 0 | 0 | 0 | 0 | 6,344 | 15,697 | 17,932 | 7,727 | 1,625 | 0 | 0 | 0 | 1,176 |
| 520010 | Audit & Accounting Services | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 3,300 | 519 | 212 | 49 | 218 | 353 | 532 | 592 | 104 | 136 | 194 | 204 | 188 | 0 |
| 520050 | Consulting Services | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 200,000 | 36,201 | 9,708 | 15,986 | 12,842 | 17,059 | 27,893 | 30,461 | 8,025 | 6,080 | 7,019 | 20,907 | 7,117 | 703 |
| 520055 | Recruitment | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 1,200 | 217 | 58 | 96 | 77 | 102 | 167 | 183 | 48 | 36 | 42 | 125 | 43 | 4 |
| 520100 | Contract Svcs. - Laundering | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 1,700 | 308 | 83 | 136 | 109 | 145 | 237 | 259 | 68 | 52 | 60 | 178 | 60 | 6 |
| 520110 | Fleet Lease Admin. Fees | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 7,850 | 1,421 | 381 | 627 | 504 | 670 | 1,095 | 1,196 | 315 | 239 | 275 | 821 | 279 | 28 |
| 520134 | Other City Dept Svcs. | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 237,500 | 37,345 | 15,227 | 3,541 | 15,694 | 25,381 | 38,252 | 42,591 | 7,509 | 9,782 | 13,969 | 14,712 | 13,496 | 0 |
| 520140 | Cust. Records and Collection | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 16.80% | 83.20% | 0.00% | 0.00% | 30,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,041 | 24,959 | 0 | 0 | 0 |
| 521005 | Lodging, transportation, and meals | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 3,000 | 543 | 146 | 240 | 193 | 256 | 418 | 457 | 120 | 91 | 105 | 314 | 107 | 11 |
| 521006 | Fees for training and conferences | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 25,000 | 4,525 | 1,213 | 1,998 | 1,605 | 2,132 | 3,487 | 3,808 | 1,003 | 760 | 877 | 2,613 | 890 | 88 |
| 521101 | Telephone and cell phone expenses | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 22,000 | 3,982 | 1,068 | 1,758 | 1,413 | 1,876 | 3,068 | 3,351 | 883 | 669 | 772 | 2,300 | 783 | 77 |
| 530200 | Property Insurance | 0.00% | 5.31% | 0.00% | 9.69% | 10.68% | 26.42% | 30.18% | 13.01% | 2.73% | 0.00% | 0.00% | 0.00% | 1.98% | 100,540 | 0 | 5,340 | 0 | 9,741 | 10,735 | 26,563 | 30,345 | 13,076 | 2,750 | 0 | 0 | 0 | 1,989 |
| 530250 | Liability Insurance | 17.71% | | | 32.29% | 9.66% | 14.93% | 19.24% | 2.50% | 3.67% | 0.00% | 0.00% | 0.00% | 0.00% | 40,101 | 0 | 7,100 | 0 | 12,950 | 3,874 | 5,987 | 7,714 | 1,003 | 1,473 | 0 | 0 | 0 | 0 |
| 532000 | Office Supplies | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 4,040 | 731 | 196 | 323 | 259 | 345 | 563 | 615 | 162 | 123 | 142 | 422 | 144 | 14 |
| 532010 | Operating Supplies | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 65,000 | 11,765 | 3,155 | 5,195 | 4,174 | 5,544 | 9,065 | 9,900 | 2,608 | 1,976 | 2,281 | 6,795 | 2,313 | 228 |
| 532055 | Gasoline | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 16,100 | 2,914 | 781 | 1,287 | 1,034 | 1,373 | 2,245 | 2,452 | 646 | 489 | 565 | 1,683 | 573 | 57 |
| 532056 | Diesel Fuel | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 26,450 | 4,788 | 1,284 | 2,114 | 1,698 | 2,256 | 3,689 | 4,028 | 1,061 | 804 | 928 | 2,765 | 941 | 93 |
| 532060 | Postage and Freight | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 1,581 | 286 | 77 | 126 | 102 | 135 | 220 | 241 | 63 | 48 | 55 | 165 | 56 | 6 |
| 532065 | Printing of Internal Forms | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 500 | 91 | 24 | 40 | 32 | 43 | 70 | 76 | 20 | 15 | 18 | 52 | 18 | 2 |
| | Memberships and subscriptions | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 32,135 | 5,817 | 1,560 | 2,568 | 2,063 | 2,741 | 4,482 | 4,894 | 1,289 | 977 | 1 | | | |

| New Object No. | Account Description | Coll Main | Coll LS | Int Main | Int LS | Flow | BOD | TSS | Phos | NH-3 | Billing | Conn | Ind. Pre-Treat | Hauled Waste | Total | Mains | Lift Stations | Mains | Lift Stations | Flow | BOD | TSS | P | NH-3 | Billing | Meter / Connection | Industrial Pretreat. | Hauled Waste | | | | | | | | | | | | | | |
|--|---|-----------|---------|----------|---------|--------|--------|--------|--------|--------|---------|--------|----------------|--------------|---------|---------|---------------|---------|---------------|--------|--------|--------|--------|---------|---------|--------------------|----------------------|--------------|---------|---------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| | | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | | | | | | | | | | | | | | |
| SUBTOTAL INTERGOVERNMENTAL CHARGES FOR SERVI | | | | | | | | | | | | | | | 100.00% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | 139,482 | 139,482 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| INDUSTRIAL PRE-TREATMENT - 6306320 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 510000 | Reg Salaries - Industrial PreTrmnt | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | 67,750 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67,750 | 0 | | | | | | | | | | | | | | |
| 510006 | Overtime Wages - Industrial PreTrmnt | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | 1,088 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,088 | 0 | | | | | | | | | | | | | | |
| 532010 | Pretreatment Supplies | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | 2,525 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,525 | 0 | | | | | | | | | | | | | | |
| SUBTOTAL INDUSTRIAL PRE-TREATMENT | | | | | | | | | | | | | | | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | | 71,363 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71,363 | 0 | |
| SOLIDS DISPOSAL - 6306330 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 510000 | Reg Salaries - Solids Disposal | 0.00% | 0.00% | 0.00% | 0.00% | 40.00% | 55.00% | 5.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510006 | Overtime Wages - Solids Disposal | 0.00% | 0.00% | 0.00% | 0.00% | 40.00% | 55.00% | 5.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520045 | Sample Tests Sludge | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 521120 | Recycling Services | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 500,000 | 90,502 | 24,269 | 39,964 | 32,106 | 42,647 | 69,733 | 76,152 | 20,063 | 15,200 | 17,547 | 52,267 | 17,793 | 1,756 | | | | | | | | | | | | | | |
| 521132 | Grit Disposal | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 15,150 | 2,742 | 735 | 1,211 | 973 | 1,292 | 2,113 | 2,307 | 608 | 461 | 532 | 1,584 | 539 | 53 | | | | | | | | | | | | | | |
| 521132 | Screenings Disposal | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 10,100 | 1,828 | 490 | 807 | 649 | 861 | 1,409 | 1,538 | 405 | 307 | 354 | 1,056 | 359 | 35 | | | | | | | | | | | | | | |
| SUBTOTAL SOLIDS DISPOSAL | | | | | | | | | | | | | | | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | | 525,250 | 95,073 | 25,494 | 41,982 | 33,727 | 44,801 | 73,255 | 79,998 | 21,076 | 15,967 | 18,433 | 54,907 | 18,692 | 1,845 |
| LABORATORY EXPENSES - 6306332 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 510000 | Salaries and wages | 0.00% | 0.00% | 0.00% | 0.00% | 25.00% | 35.00% | 20.00% | 10.00% | 10.00% | 0.00% | 0.00% | 0.00% | 0.00% | 133,890 | 0 | 0 | 0 | 0 | 33,473 | 46,862 | 26,778 | 13,389 | 13,389 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510006 | Overtime wages | 0.00% | 0.00% | 0.00% | 0.00% | 25.00% | 35.00% | 20.00% | 10.00% | 10.00% | 0.00% | 0.00% | 0.00% | 0.00% | 2,134 | 0 | 0 | 0 | 0 | 534 | 747 | 427 | 213 | 213 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520045 | Sample Tests Pretreat | | | | | | | | | | | | 100.00% | | 10,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,100 | 0 | | | | | | | | | | | | | | |
| 520045 | Sample Tests Plant Water | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 35,350 | 6,399 | 1,716 | 2,825 | 2,270 | 3,015 | 4,930 | 5,384 | 1,418 | 1,075 | 1,241 | 3,695 | 1,258 | 124 | | | | | | | | | | | | | | |
| 520045 | Testing / Sampling - Trucked Waste | | | | | | | | | | | | 100.00% | | 3,030 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,030 | | | | | | | | | | | | | | |
| 520045 | Testing / Sampling - Biosolids Disposal | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 10,100 | 1,828 | 490 | 807 | 649 | 861 | 1,409 | 1,538 | 405 | 307 | 354 | 1,056 | 359 | 35 | | | | | | | | | | | | | | |
| 532091 | Lab Equipment | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 35,350 | 6,399 | 1,716 | 2,825 | 2,270 | 3,015 | 4,930 | 5,384 | 1,418 | 1,075 | 1,241 | 3,695 | 1,258 | 124 | | | | | | | | | | | | | | |
| SUBTOTAL LABORATORY EXPENSES | | | | | | | | | | | | | | | 6.36% | 1.71% | 2.81% | 2.26% | 17.79% | 25.60% | 17.18% | 7.33% | 6.98% | 1.23% | 3.67% | 5.64% | 1.44% | | 229,954 | 14,625 | 3,922 | 6,458 | 5,188 | 40,898 | 58,877 | 39,511 | 16,845 | 16,059 | 2,836 | 8,446 | 12,975 | 3,314 |
| COLLECTOR AND INTERCEPTOR - 6306334 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 510000 | Reg Salaries - Sanitary Collection | 100.00% | | | | | | | | | | | | | 177,897 | 177,897 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510000 | Reg Salaries - Sanitary Interceptor | | | 100.00% | | | | | | | | | | | 16,868 | 0 | 0 | 16,868 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510005 | Limited Term EE Salaries | 91.34% | | 8.66% | | | | | | | | | | | 7,709 | 7,041 | 0 | 668 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510006 | Overtime Wages - Sanitary Collection | 100.00% | | | | | | | | | | | | | 5,540 | 5,540 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510006 | Overtime Wages - Sanitary Interceptor | | | 100.00% | | | | | | | | | | | 526 | 0 | 0 | 526 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520100 | Contract Svcs. - Cleaning | 100.00% | | | | | | | | | | | | | 62,902 | 62,902 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520100 | Contract Svcs. - Cleaning | | | 100.00% | | | | | | | | | | | 7,798 | 0 | 0 | 7,798 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520106 | Contract Svcs. - Tv Inspect | 100.00% | | | | | | | | | | | | | 40,879 | 40,879 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520106 | Contract Svcs. - Tv Inspect | | | 100.00% | | | | | | | | | | | 9,621 | 0 | 0 | 9,621 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520107 | Contracted Sewer Repair | 100.00% | | | | | | | | | | | | | 55,302 | 55,302 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520107 | Contracted Sewer Repair | | | 100.00% | | | | | | | | | | | 257,798 | 0 | 0 | 257,798 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520108 | Contracted Flatwork | 100.00% | | | | | | | | | | | | | 15,150 | 15,150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 520108 | Contracted Flatwork | | | 100.00% | | | | | | | | | | | 15,150 | 0 | 0 | 15,150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 532041 | Castings, Grates, Covers for MH | 100.00% | | | | | | | | | | | | | 55,981 | 55,981 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 532041 | Castings, Grates, Covers for MH | | | 100.00% | | | | | | | | | | | 14,719 | 0 | 0 | 14,719 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 532042 | Concrete Supplies - Sewer | 100.00% | | | | | | | | | | | | | 16,289 | 16,289 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 532042 | Concrete Supplies - Sewer | | | 100.00% | | | | | | | | | | | 3,911 | 0 | 0 | 3,911 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 540300 | Repair/Maint - Infrastructure | 100.00% | | | | | | | | | | | | | 13,818 | 13,818 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 540300 | Repair/Maint - Infrastructure | | | 100.00% | | | | | | | | | | | 6,382 | 0 | 0 | 6,382 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| SUBTOTAL COLLECTOR AND INTERCEPTOR | | | | | | | | | | | | | | | 57.48% | 0.00% | 42.52% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | 784,240 | 450,800 | 0 | 333,440 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| LIFT STATIONS - 6306336 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 510000 | Reg Salaries - Sanitary Lift Sta | | 100.00% | | | | | | | | | | | | 73,450 | 0 | 73,450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510000 | Reg Salaries - Sanitary Lift Sta | | | | 100.00% | | | | | | | | | | 75,000 | 0 | 0 | 0 | 75,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510005 | Limited Term EE Salaries | | 49.24% | | 50.75% | | | | | | | | | | 2,063 | 0 | 1,016 | 0 | 1,047 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510006 | Overtime Wages - Sanitary Lift Sta | | 100.00% | | | | | | | | | | | | 3,200 | 0 | 3,200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 510006 | Overtime Wages - Sanitary Lift Sta | | | | 100.00% | | | | | | | | | | 4,000 | 0 | 0 | 0 | 4,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 521102 | Electricity | | 100.00% | | | | | | | | | | | | 18,020 | 0 | 18,020 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 521102 | Electricity | | | | 100.00% | | | | | | | | | | 77,380 | 0 | 0 | 0 | 77,380 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 521104 | Water | | 100.00% | | | | | | | | | | | | 1,616 | 0 | 1,616 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | |
| 521104 | Water | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| New Object No. | Account Description | Coll Main | Coll LS | Int Main | Int LS | Flow | BOD | TSS | Phos | NH-3 | Billing | Conn | Ind. Pre- Treat | Hauled Waste | Total | Mains | Lift Stations | Mains | Lift Stations | Flow | BOD | TSS | P | NH-3 | Billing | Meter / Connection | Industrial Pretreat. | Hauled Waste |
|-------------------------------------|------------------------------|-----------|---------|----------|---------|--------|--------|--------|--------|-------|---------|---------|--------------------|-----------------|-----------|-----------|------------------|---------|------------------|---------|-----------|-----------|-----------|---------|----------|-----------------------|-------------------------|-----------------|
| | | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| 521105 | Sewer | | 100.00% | | | | | | | | | | | | 1,400 | 0 | 1,400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 521105 | Sewer | | | | 100.00% | | | | | | | | | | 1,400 | 0 | 0 | 0 | 1,400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 521106 | Storm Water | | 100.00% | | | | | | | | | | | | 157 | 0 | 157 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 521106 | Storm Water | | | | 100.00% | | | | | | | | | | 157 | 0 | 0 | 0 | 157 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 540000 | R&M Buildings | | 100.00% | | | | | | | | | | | | 3,535 | 0 | 3,535 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 540000 | R&M Buildings | | | | 100.00% | | | | | | | | | | 25,250 | 0 | 0 | 0 | 25,250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 540050 | R&M Grounds | | 100.00% | | | | | | | | | | | | 10,100 | 0 | 10,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 540050 | R&M Grounds | | | | 100.00% | | | | | | | | | | 7,070 | 0 | 0 | 0 | 7,070 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 540100 | R&M Equip/Mach | | 100.00% | | | | | | | | | | | | 25,250 | 0 | 25,250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 540100 | R&M Equip/Mach | | | | 100.00% | | | | | | | | | | 60,600 | 0 | 0 | 0 | 60,600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SUBTOTAL LIFT STATIONS | | 0.00% | 35.41% | 0.00% | 64.59% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 401,195 | 0 | 142,069 | 0 | 259,125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CUSTOMER ACCOUNTS - 6306338 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 510000 | Salaries and wages | | | | | | | | | | | 100.00% | | | 75,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75,000 | 0 | 0 |
| 510000 | Salaries and wages | | | | | | | | | | 100.00% | | | | 69,670 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69,670 | 0 | 0 | 0 |
| 510006 | Overtime Wages | | | | | | | | | | | 100.00% | | | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 |
| 510006 | Overtime Wages | | | | | | | | | | | 100.00% | | | 1,580 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,580 | 0 | 0 | 0 |
| 520075 | Temporary Labor Services | | | | | | | | | | | 100.00% | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 520134 | Metering Expenses | | | | | | | | | | | | 100.00% | | 277,750 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 277,750 | 0 | 0 |
| 550150 | Bad Debt Expense | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 16.80% | 83.20% | 0.00% | 0.00% | 2,020 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 339 | 1,681 | 0 | 0 |
| SUBTOTAL CUSTOMER ACCOUNTS | | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 16.80% | 83.20% | 0.00% | 0.00% | 426,060 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71,589 | 354,471 | 0 | 0 |
| FACILITY OPERATIONS - 6306340 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 510000 | Reg Salaries - Oper & Mtce | 0.00% | 0.00% | 0.00% | 0.00% | 19.32% | 29.86% | 38.47% | 5.00% | 7.35% | 0.00% | 0.00% | 0.00% | 0.00% | 465,476 | 0 | 0 | 0 | 0 | 89,946 | 138,989 | 179,071 | 23,274 | 34,196 | 0 | 0 | 0 | 0 |
| 510005 | Limited Term EE Salaries | 0.00% | 0.00% | 0.00% | 0.00% | 19.32% | 29.86% | 38.47% | 5.00% | 7.35% | 0.00% | 0.00% | 0.00% | 0.00% | 13,088 | 0 | 0 | 0 | 0 | 2,529 | 3,908 | 5,035 | 654 | 962 | 0 | 0 | 0 | 0 |
| 510006 | Overtime Wages - Oper & Mtce | 0.00% | 0.00% | 0.00% | 0.00% | 19.32% | 29.86% | 38.47% | 5.00% | 7.35% | 0.00% | 0.00% | 0.00% | 0.00% | 15,408 | 0 | 0 | 0 | 0 | 2,977 | 4,601 | 5,928 | 770 | 1,132 | 0 | 0 | 0 | 0 |
| 510030 | Cell Phone Reimbursement | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 521102 | Electricity | 0.00% | 0.00% | 0.00% | 0.00% | 30.57% | 30.52% | 16.64% | 12.47% | 9.79% | 0.00% | 0.00% | 0.00% | 0.00% | 200,000 | 0 | 0 | 0 | 0 | 61,142 | 61,035 | 33,290 | 24,950 | 19,583 | 0 | 0 | 0 | 0 |
| 521103 | Water | 0.00% | 0.00% | 0.00% | 0.00% | 12.56% | 31.08% | 35.51% | 15.30% | 3.22% | 0.00% | 0.00% | 0.00% | 2.33% | 45,000 | 0 | 0 | 0 | 0 | 5,653 | 13,987 | 15,979 | 6,886 | 1,448 | 0 | 0 | 0 | 1,048 |
| 521104 | Natural Gas | 0.00% | 0.00% | 0.00% | 0.00% | 13.53% | 32.90% | 43.43% | 5.00% | 5.14% | 0.00% | 0.00% | 0.00% | 0.00% | 334,750 | 0 | 0 | 0 | 0 | 45,280 | 110,138 | 145,380 | 16,738 | 17,215 | 0 | 0 | 0 | 0 |
| 521105 | Sewer | 0.00% | 0.00% | 0.00% | 0.00% | 12.56% | 31.08% | 35.51% | 15.30% | 3.22% | 0.00% | 0.00% | 0.00% | 2.33% | 70,000 | 0 | 0 | 0 | 0 | 8,793 | 21,758 | 24,856 | 10,711 | 2,252 | 0 | 0 | 1,629 | 0 |
| 521106 | Storm Sewer Fee Payments | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 1,313 | 238 | 64 | 105 | 84 | 112 | 183 | 200 | 53 | 40 | 46 | 137 | 47 | 5 |
| 532090 | Chemical Supplies | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | ##### | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 707,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 707,000 | 0 | 0 | 0 | 0 | 0 |
| 532090 | Chemical Supplies | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 40.00% | 55.00% | 5.00% | 0.00% | 0.00% | 0.00% | 0.00% | 353,500 | 0 | 0 | 0 | 0 | 0 | 141,400 | 194,425 | 17,675 | 0 | 0 | 0 | 0 | 0 |
| 532090 | Chemical Supplies | 0.00% | 0.00% | 0.00% | 0.00% | 12.86% | 31.82% | 36.36% | 15.67% | 3.29% | 0.00% | 0.00% | 0.00% | 0.00% | 30,300 | 0 | 0 | 0 | 0 | 3,897 | 9,642 | 11,016 | 4,747 | 998 | 0 | 0 | 0 | 0 |
| 540000 | R&M Buildings | 0.00% | 0.00% | 0.00% | 0.00% | 12.56% | 31.08% | 35.51% | 15.30% | 3.22% | 0.00% | 0.00% | 0.00% | 2.33% | 25,250 | 0 | 0 | 0 | 0 | 3,172 | 7,848 | 8,966 | 3,864 | 812 | 0 | 0 | 0 | 588 |
| 540050 | R&M Grounds | 0.00% | 0.00% | 0.00% | 0.00% | 12.56% | 31.08% | 35.51% | 15.30% | 3.22% | 0.00% | 0.00% | 0.00% | 2.33% | 15,150 | 0 | 0 | 0 | 0 | 1,903 | 4,709 | 5,380 | 2,318 | 487 | 0 | 0 | 0 | 353 |
| 540100 | R&M Equip/Mach | 0.00% | 0.00% | 0.00% | 0.00% | 12.56% | 31.08% | 35.51% | 15.30% | 3.22% | 0.00% | 0.00% | 0.00% | 2.33% | 360,570 | 0 | 0 | 0 | 0 | 45,295 | 112,074 | 128,034 | 55,172 | 11,601 | 0 | 0 | 0 | 8,393 |
| | R&M Biogas Cogeneration | 0.00% | 0.00% | 0.00% | 0.00% | 30.57% | 30.52% | 16.64% | 12.47% | 9.79% | 0.00% | 0.00% | 0.00% | 0.00% | 110,000 | 0 | 0 | 0 | 0 | 33,628 | 33,569 | 18,309 | 13,722 | 10,771 | 0 | 0 | 0 | 0 |
| 510030 | Cell Phone Reimbursement | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SUBTOTAL FACILITY OPERATIONS | | 0.01% | 0.00% | 0.00% | 0.00% | 11.08% | 24.17% | 28.25% | 32.35% | 3.70% | 0.00% | 0.00% | 0.06% | 0.38% | 2,746,805 | 238 | 64 | 105 | 84 | 304,329 | 663,842 | 775,867 | 888,533 | 101,497 | 46 | 137 | 1,676 | 10,386 |
| Subtotal for G & A Labor Allocation | | 15.72% | 6.41% | 1.49% | 6.61% | 10.69% | 16.11% | 17.93% | 3.16% | 4.12% | 5.88% | 6.19% | 5.68% | 0.00% | 1,211,377 | 190,478 | 77,666 | 18,062 | 80,047 | 129,459 | 195,106 | 217,238 | 38,301 | 49,892 | 71,250 | 75,040 | 68,838 | 0 |
| Subtotal for G & A Allocation | | 18.10% | 4.85% | 7.99% | 6.42% | 8.53% | 13.95% | 15.23% | 4.01% | 3.04% | 3.51% | 10.45% | 3.56% | 0.35% | 4,420,740 | 800,174 | 214,573 | 353,342 | 283,863 | 377,064 | 616,544 | 673,297 | 177,388 | 134,388 | 155,142 | 462,118 | 157,317 | 15,529 |
| TOTAL OPERATION & MAINTENANCE | | 13.55% | 3.97% | 6.01% | 5.94% | 8.09% | 15.37% | 17.25% | 13.62% | 2.83% | 2.63% | 7.80% | 2.66% | 0.29% | 7,500,026 | 1,015,887 | 297,414 | 450,545 | 445,429 | 606,698 | 1,152,590 | 1,293,703 | 1,021,321 | 212,469 | 197,485 | 585,044 | 199,410 | 22,031 |
| Less: Non-Sewer Deduct Charges | | | | | | | | | | | | 100.00% | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Less: Late Payment Charges | | | | | | | | | | | 100.00% | | | | (56,920) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (56,920) | 0 | 0 | 0 |
| Less: All Other Revenues | | | | | | 12.56% | 31.08% | 35.51% | 15.30% | 3.22% | 0.00% | 0.00% | | 2.33% | (3,735) | 0 | 0 | 0 | 0 | (469) | (1,161) | (1,326) | (572) | (120) | 0 | 0 | 0 | (87) |
| Less: Pre-Treatment Charges | | | | | | | | | | | | 100.00% | | | (199,410) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (199,410) | 0 |
| NET OPERATION & MAINTENANCE | | 14.03% | 4.11% | 6.22% | 6.15% | 8.37% | 15.90% | 17.85% | 14.10% | 2.93% | 1.94% | 8.08% | 0.00% | 0.30% | 7,239,961 | 1,015,887 | 297,414 | 450,545 | 445,429 | 606,228 | 1,151,429 | 1,292,377 | 1,020,749 | 212,349 | 140,565 | 585,044 | 0 | 21,944 |

Allocation of Utility-Financed Plant to Service Cost Functions

| | | Allocation Percents | | | | | | | | | | CONVEYANCE | | TREATMENT PLANT | | | | | CUSTOMER COSTS | | HAULED WASTE | |
|--------------------------------|--|---------------------|------|------|------|-----|-----|------|------|------|------|------------|------------|-----------------|------------|------------|------------|------------|----------------|-----------|--------------|-----------|
| Acct No. | Account Description | YE Balance | Coll | Int | Flow | BOD | TSS | P | NH-3 | Cust | Conn | HW | Collection | Interceptor | Flow | BOD | TSS | P | NH-3 | Billing | Meter / | |
| | | 2023 | | | | | | | | | | | System | System | | | | | | | Conn | |
| | | (\$) | | | | | | | | | | | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| WASTEWATER TREATMENT FACILITY: | | | | | | | | | | | | | | | | | | | | | | |
| 1.1 | Prelim.- Raw Sewage Pumping | 890,991 | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 890,991 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.2 | Prelim.- Bar Screening / Communion | 1,030,279 | 0% | 0% | 70% | 0% | 30% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 721,195 | 0 | 309,084 | 0 | 0 | 0 | 0 | 0 |
| 1.3 | Prelim.- Grit Removal | 736,526 | 0% | 0% | 70% | 0% | 30% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 515,568 | 0 | 220,958 | 0 | 0 | 0 | 0 | 0 |
| 1.4 | Prelim.- Septage Receiving | 2,106,143 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,106,143 |
| 2 | Primary Treatment | 713,874 | 0% | 0% | 30% | 10% | 55% | 5% | 0% | 0% | 0% | 0% | 0 | 0 | 214,162 | 71,387 | 392,631 | 35,694 | 0 | 0 | 0 | 0 |
| 2.1 | Primary Clarifier | 1,953,891 | 0% | 0% | 50% | 20% | 28% | 3% | 0% | 0% | 0% | 0% | 0 | 0 | 976,945 | 390,778 | 537,320 | 48,847 | 0 | 0 | 0 | 0 |
| 3 | Secondary Treatment | 0 | 0% | 0% | 20% | 45% | 10% | 5% | 20% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3.1 | Secondary - Activated Sludge | 5,757,074 | 0% | 0% | 20% | 45% | 10% | 5% | 20% | 0% | 0% | 0% | 0 | 0 | 1,151,415 | 2,590,683 | 575,707 | 287,854 | 1,151,415 | 0 | 0 | 0 |
| 3.6 | Secondary - Phosphorus | 7,938,354 | 0% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 7,938,354 | 0 | 0 | 0 | 0 |
| 3.7 | Secondary - NH3-N | 24,023 | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 24,023 | 0 | 0 | 0 |
| 3.8 | Secondary - Return Sludge Pumping | 0 | 0% | 0% | 20% | 32% | 44% | 4% | 0% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3.9 | Secondary - Final Clarifier | 223,995 | 0% | 0% | 20% | 32% | 44% | 4% | 0% | 0% | 0% | 0% | 0 | 0 | 44,799 | 71,678 | 98,558 | 8,960 | 0 | 0 | 0 | 0 |
| 4 | Advanced Treatment | 0 | 0% | 0% | 30% | 30% | 30% | 10% | 0% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | Biosolids Trmnt & Disposal | 43,638,439 | 0% | 0% | 0% | 40% | 55% | 5% | 0% | 0% | 0% | 0% | 0 | 0 | 0 | 17,455,375 | 24,001,141 | 2,181,922 | 0 | 0 | 0 | 0 |
| 6 | Disinfection | 1,121,728 | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 1,121,728 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | Plant Site Piping & Pumps | 1,070,138 | 0% | 0% | 9% | 32% | 41% | 16% | 2% | 0% | 0% | 0% | 0 | 0 | 94,210 | 343,958 | 436,809 | 175,517 | 19,645 | 0 | 0 | 0 |
| 8 | Laboratory & Monitoring | 76,372 | 0% | 0% | 25% | 35% | 20% | 10% | 10% | 0% | 0% | 0% | 0 | 0 | 19,093 | 26,730 | 15,274 | 7,637 | 7,637 | 0 | 0 | 0 |
| 8.1 | Flow Monitoring Eqmt. | 61,196 | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 61,196 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8.2 | Safety Equipment | 7,094 | 0% | 0% | 9% | 32% | 41% | 16% | 2% | 0% | 0% | 0% | 0 | 0 | 625 | 2,280 | 2,896 | 1,164 | 130 | 0 | 0 | 0 |
| 9 | Electrical | 14,565,205 | 0% | 0% | 31% | 31% | 17% | 12% | 10% | 0% | 0% | 0% | 0 | 0 | 4,452,753 | 4,444,945 | 2,424,342 | 1,816,983 | 1,426,183 | 0 | 0 | 0 |
| 10 | WWTP Non-Specific | 8,561,323 | 0% | 0% | 13% | 32% | 36% | 16% | 3% | 0% | 0% | 0% | 0 | 0 | 1,101,117 | 2,724,485 | 3,112,479 | 1,341,220 | 282,023 | 0 | 0 | 0 |
| SUBTOTAL | | 90,476,644 | 0% | 0% | 13% | 31% | 36% | 15% | 3% | 0% | 0% | 2% | 0 | 0 | 11,365,796 | 28,122,301 | 32,127,199 | 13,844,150 | 2,911,056 | 0 | 0 | 2,106,143 |
| PERCENTAGE | | | | | | | | | | | | | 0.00% | 0.00% | 12.56% | 31.08% | 35.51% | 15.30% | 3.22% | 0.00% | 0.00% | 2.33% |
| CONVEYANCE SYSTEM: | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Interceptor Mains | 8,484,961 | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | 0 | 8,484,961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16 | Interceptor Lift Stations | 3,525,081 | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | 0 | 3,525,081 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | Force Mains | 0 | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 | Collection Mains / Other Eqmt. | 22,407,781 | 60% | 0% | 0% | 0% | 0% | 0% | 0% | 15% | 25% | | 13,444,669 | 0 | 0 | 0 | 0 | 0 | 0 | 3,361,167 | 5,601,945 | 0 |
| 21 | Collection Lift Stations (All) | 3,138,194 | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | 3,138,194 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 | Service Connections / Laterals | 0 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 26 | Other Conveyance System - Non Specific | 1,734,989 | 44% | 32% | 0% | 0% | 0% | 0% | 0% | 9% | 15% | | 766,085 | 554,832 | 0 | 0 | 0 | 0 | 0 | 155,277 | 258,795 | 0 |
| SUBTOTAL | | 39,291,006 | 44% | 32% | 0% | 0% | 0% | 0% | 0% | 9% | 15% | | 17,348,947 | 12,564,874 | 0 | 0 | 0 | 0 | 0 | 3,516,444 | 5,860,740 | 0 |
| PERCENTAGE | | | | | | | | | | | | | 44.16% | 31.98% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 8.95% | 14.92% | 0.00% |
| SUBTOTAL WWTP AND INTERCEPTORS | | | | | | | | | | | | | 0 | 12,010,041 | 11,365,796 | 28,122,301 | 32,127,199 | 13,844,150 | 2,911,056 | 0 | 0 | 2,106,143 |
| | | | | | | | | | | | | | 0.00% | 11.72% | 11.09% | 27.44% | 31.35% | 13.51% | 2.84% | 0.00% | 0.00% | 2.06% |
| SUBTOTAL WWTP AND CONVEYANCE | | 129,767,650 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 17,348,947 | 12,564,874 | 11,365,796 | 28,122,301 | 32,127,199 | 13,844,150 | 2,911,056 | 3,516,444 | 5,860,740 | 2,106,143 |

| | | Allocation Percents | | | | | | | | | | | | CONVEYANCE | | TREATMENT PLANT | | | | CUSTOMER COSTS | | HAULED WASTE |
|--------------------------|---------------------------|---------------------|------|-----|------|-----|-----|-----|------|------|------|----|------------|-------------|------------|-----------------|------------|------------|-----------|----------------|-----------|-----------------|
| Acct No. | Account Description | YE Balance | Coll | Int | Flow | BOD | TSS | P | NH-3 | Cust | Conn | HW | Collection | Interceptor | Flow | BOD | TSS | P | NH-3 | Billing | Meter / | |
| | | 2023 | | | | | | | | | | | System | System | | | | | | | Conn | |
| | | (\$) | | | | | | | | | | | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| | | | | | | | | | | | | | 13.37% | 9.68% | 8.76% | 21.67% | 24.76% | 10.67% | 2.24% | 2.71% | 4.52% | 1.62% |
| GENERAL PLANT EQUIPMENT: | | | | | | | | | | | | | | | | | | | | | | |
| 28.1 | Land & Land Rights | 0 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28.2 | Struct. & Improv. | 0 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28.3 | Office Furn. & Eqmt. | 0 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28.4 | Office Furn. & Eqmt.- EDP | 54,489 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 7,285 | 5,276 | 4,772 | 11,809 | 13,490 | 5,813 | 1,222 | 1,477 | 2,461 | 884 |
| 28.5 | Transport. Eqmt. | 2,405,754 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 321,631 | 232,939 | 210,710 | 521,357 | 595,604 | 256,656 | 53,968 | 65,191 | 108,652 | 39,046 |
| 28.6 | Communications Eqmt. | 5,699 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 762 | 552 | 499 | 1,235 | 1,411 | 608 | 128 | 154 | 257 | 92 |
| 28.7 | Tools, Shop & Misc. | 64,261 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 8,591 | 6,222 | 5,628 | 13,926 | 15,909 | 6,856 | 1,442 | 1,741 | 2,902 | 1,043 |
| 28.8 | Safety Eqmt. | 0 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28.9 | Other Genrl. Eqmt. | 151,811 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 20,296 | 14,699 | 13,296 | 32,899 | 37,584 | 16,196 | 3,406 | 4,114 | 6,856 | 2,464 |
| | SUBTOTAL | 2,682,013 | 13% | 10% | 9% | 22% | 25% | 11% | 2% | 3% | 5% | 2% | 358,565 | 259,688 | 234,906 | 581,226 | 663,999 | 286,128 | 60,165 | 72,677 | 121,129 | 43,529 |
| | TOTAL | 132,449,663 | | | | | | | | | | | 17,707,512 | 12,824,562 | 11,600,702 | 28,703,527 | 32,791,197 | 14,130,278 | 2,971,221 | 3,589,121 | 5,981,869 | 2,149,672 |
| | | | | | | | | | | | | | 13.4% | 9.7% | 8.8% | 21.7% | 24.8% | 10.7% | 2.2% | 2.7% | 4.5% | 1.6% |

Allocation of Depreciation to Service Cost Functions

| | | 2024 | Allocation Percents | | | | | | | | | | CONVEYANCE | | | TREATMENT PLANT | | | | | CUSTOMER COSTS | | HAULED WASTE |
|--------------------------------|--|------------------------------------|---------------------|------|------|-----|-----|------|------|------|------|------|----------------------|-----------------------|---------|-----------------|-----------|---------|---------|---------|-----------------|--------|-----------------|
| Acct No. | Account Description | Total Projected Depreciation | Coll | Int | Flow | BOD | TSS | P | NH-3 | Cust | Conn | HW | Collection System | Interceptor System | Flow | BOD | TSS | P | NH-3 | Billing | Meter / Conn | | |
| | | (\$) | | | | | | | | | | | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | |
| WASTEWATER TREATMENT FACILITY: | | | | | | | | | | | | | | | | | | | | | | | |
| 1.1 | Prelim.- Raw Sewage Pumping | 18,719 | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 18,719 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.2 | Prelim.- Bar Screening / Communion | 25,000 | 0% | 0% | 70% | 0% | 30% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 17,500 | 0 | 7,500 | 0 | 0 | 0 | 0 | 0 | |
| 1.3 | Prelim.- Grit Removal | 11,859 | 0% | 0% | 70% | 0% | 30% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 8,301 | 0 | 3,558 | 0 | 0 | 0 | 0 | 0 | |
| 1.4 | Prelim.- Septage Receiving | 42,123 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42,123 | |
| 2 | Primary Treatment | 750 | 0% | 0% | 30% | 10% | 55% | 5% | 0% | 0% | 0% | 0% | 0 | 0 | 225 | 75 | 413 | 38 | 0 | 0 | 0 | 0 | |
| 2.1 | Primary Clarifier | 92,550 | 0% | 0% | 50% | 20% | 28% | 3% | 0% | 0% | 0% | 0% | 0 | 0 | 46,275 | 18,510 | 25,451 | 2,314 | 0 | 0 | 0 | 0 | |
| 3 | Secondary Treatment | 0 | 0% | 0% | 20% | 45% | 10% | 5% | 20% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.1 | Secondary - Activated Sludge | 200,121 | 0% | 0% | 20% | 45% | 10% | 5% | 20% | 0% | 0% | 0% | 0 | 0 | 40,024 | 90,054 | 20,012 | 10,006 | 40,024 | 0 | 0 | 0 | |
| 3.6 | Secondary - Phosphorus | 265,831 | 0% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 265,831 | 0 | 0 | 0 | 0 | |
| 3.7 | Secondary - NH ₃ -N | 0 | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.8 | Secondary - Return Sludge Pumping | 0 | 0% | 0% | 20% | 32% | 44% | 4% | 0% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.9 | Secondary - Final Clarifier | 3,153 | 0% | 0% | 20% | 32% | 44% | 4% | 0% | 0% | 0% | 0% | 0 | 0 | 631 | 1,009 | 1,387 | 126 | 0 | 0 | 0 | 0 | |
| 4 | Advanced Treatment | 0 | 0% | 0% | 30% | 30% | 30% | 10% | 0% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5 | Biosolids Trmnt & Disposal | 1,342,164 | 0% | 0% | 0% | 40% | 55% | 5% | 0% | 0% | 0% | 0% | 0 | 0 | 0 | 536,866 | 738,190 | 67,108 | 0 | 0 | 0 | 0 | |
| 6 | Disinfection | 29,511 | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 29,511 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | Plant Site Piping & Pumps | 28,856 | 0% | 0% | 8% | 32% | 40% | 17% | 2% | 0% | 0% | 0% | 0 | 0 | 2,338 | 9,376 | 11,552 | 5,010 | 580 | 0 | 0 | 0 | |
| 8 | Laboratory & Monitoring | 4,395 | 0% | 0% | 25% | 35% | 20% | 10% | 10% | 0% | 0% | 0% | 0 | 0 | 1,099 | 1,538 | 879 | 440 | 440 | 0 | 0 | 0 | |
| 8.1 | Flow Monitoring Eqmt. | 2,007 | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 | 0 | 2,007 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8.2 | Safety Equipment | 0 | 0% | 0% | 8% | 32% | 40% | 17% | 2% | 0% | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9 | Electrical | 536,347 | 0% | 0% | 31% | 31% | 17% | 12% | 10% | 0% | 0% | 0% | 0 | 0 | 163,967 | 163,680 | 89,274 | 66,908 | 52,518 | 0 | 0 | 0 | |
| 10 | WWTP Non-Specific | 310,970 | 0% | 0% | 13% | 32% | 35% | 16% | 4% | 0% | 0% | 0% | 0 | 0 | 40,139 | 99,693 | 109,055 | 50,724 | 11,360 | 0 | 0 | 0 | |
| SUBTOTAL | | 2,914,354 | 0% | 0% | 13% | 32% | 35% | 16% | 4% | 0% | 0% | 1% | 0 | 0 | 370,735 | 920,801 | 1,007,270 | 468,504 | 104,921 | 0 | 0 | 42,123 | |
| CONVEYANCE SYSTEM: | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Interceptor Mains | 82,375 | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | 0 | 82,375 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16 | Interceptor Lift Stations | 98,430 | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | 0 | 98,430 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 17 | Force Mains | 0 | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 20 | Collection Mains / Other Eqmt. | 219,487 | 60% | 0% | 0% | 0% | 0% | 0% | 0% | 15% | 25% | | 131,692 | 0 | 0 | 0 | 0 | 0 | 0 | 32,923 | 54,872 | 0 | |
| 21 | Collection Lift Stations (All) | 83,089 | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | 83,089 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 25 | Service Connections / Laterals | 0 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 26 | Other Conveyance System - Non Specific | 60,806 | 44% | 37% | 0% | 0% | 0% | 0% | 0% | 7% | 11% | | 27,018 | 22,744 | 0 | 0 | 0 | 0 | 0 | 4,141 | 6,902 | 0 | |
| SUBTOTAL | | 544,186 | 44% | 37% | 0% | 0% | 0% | 0% | 0% | 7% | 11% | | 241,799 | 203,548 | 0 | 0 | 0 | 0 | 0 | 37,065 | 61,774 | 0 | |

| | | 2024 | Allocation Percents | | | | | | | | | | CONVEYANCE | | | | | TREATMENT PLANT | | | | | CUSTOMER COSTS | | HAULED WASTE |
|--------------------------|---------------------------|------------------------------------|---------------------|-----|------|-----|-----|-----|------|------|------|----|----------------------|-----------------------|---------|---------|-----------|-----------------|---------|---------|-----------------|--------|----------------|------|-----------------|
| Acct No. | Account Description | Total Projected Depreciation | Coll | Int | Flow | BOD | TSS | P | NH-3 | Cust | Conn | HW | Collection System | Interceptor System | Flow | BOD | TSS | P | NH-3 | Billing | Meter / Conn | | | | |
| | | (\$) | | | | | | | | | | | | | | | | | | | (\$) | | (\$) | (\$) | (\$) |
| GENERAL PLANT EQUIPMENT: | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28.1 | Land & Land Rights | 0 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 28.2 | Struct. & Improv. | 0 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 28.3 | Office Furn. & Eqmt. | 0 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 28.4 | Office Furn. & Eqmt.- EDP | 0 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 28.5 | Transport. Eqmt. | 142,748 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 9,980 | 8,401 | 15,302 | 38,005 | 41,574 | 19,337 | 4,331 | 1,530 | 2,550 | 1,739 | | | |
| 28.6 | Communications Eqmt. | 570 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 40 | 34 | 61 | 152 | 166 | 77 | 17 | 6 | 10 | 7 | | | |
| 28.7 | Tools, Shop & Misc. | 0 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 28.8 | Safety Eqmt. | 0 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 28.9 | Other Genrl. Eqmt. | 5,664 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 396 | 333 | 607 | 1,508 | 1,650 | 767 | 172 | 61 | 101 | 69 | | | |
| | SUBTOTAL | 148,982 | 7% | 6% | 11% | 27% | 29% | 14% | 3% | 1% | 2% | 1% | 10,416 | 8,768 | 15,970 | 39,665 | 43,390 | 20,182 | 4,520 | 1,597 | 2,661 | 1,815 | | | |
| | TOTAL | 3,607,522 | | | | | | | | | | | 252,215 | 212,316 | 386,705 | 960,466 | 1,050,660 | 488,685 | 109,441 | 38,661 | 64,435 | 43,937 | | | |

Summary of Allocation of Operating Costs to Service Cost Functions

Retail Rate of Return - Collection System

0.00%

Retail Rate of Return - Non-Collection

5.70%

NIRB - Collection System

18,301,637

NIRB - Non-Collection

64,945,352

CONVEYANCE

WASTE TREATMENT

CUSTOMER COSTS

HAULED
WASTE

| <u>Operating Cost</u> | Total | Collection System | Interceptor System | Flow | BOD | TSS | P | NH-3 | Billing | Meter / Connection | |
|------------------------------------|------------|----------------------|-----------------------|-----------|-----------|-----------|-----------|---------|---------|-----------------------|---------|
| | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operation and Maintenance | 7,239,961 | 1,313,301 | 895,974 | 606,228 | 1,151,429 | 1,292,377 | 1,020,749 | 212,349 | 140,565 | 585,044 | 21,944 |
| Depreciation | 3,607,522 | 252,215 | 212,316 | 386,705 | 960,466 | 1,050,660 | 488,685 | 109,441 | 38,661 | 64,435 | 43,937 |
| Return on NIRB - Collection System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Return on NIRB - Non-Collection | 3,701,885 | 0 | 433,810 | 410,540 | 1,015,796 | 1,160,455 | 500,060 | 105,149 | 0 | 0 | 76,075 |
| Total | 14,549,368 | 1,565,516 | 1,542,101 | 1,403,473 | 3,127,691 | 3,503,492 | 2,009,494 | 426,939 | 179,226 | 649,479 | 141,957 |

Wholesale ROR - Collection System

0.00%

Wholesale ROR - Non-Collection

5.90%

NIRB - Collection System

18,301,637

NIRB - Non-Collection

64,945,352

CONVEYANCE

WASTE TREATMENT

CUSTOMER COSTS

HAULED
WASTE

| <u>Operating Cost</u> | Total | Collection System | Interceptor System | Flow | BOD | TSS | P | NH-3 | Billing | Meter / Connection | |
|------------------------------------|------------|----------------------|-----------------------|-----------|-----------|-----------|-----------|---------|---------|-----------------------|---------|
| | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operation and Maintenance | 7,239,961 | 1,313,301 | 895,974 | 606,228 | 1,151,429 | 1,292,377 | 1,020,749 | 212,349 | 140,565 | 585,044 | 21,944 |
| Depreciation | 3,607,522 | 252,215 | 212,316 | 386,705 | 960,466 | 1,050,660 | 488,685 | 109,441 | 38,661 | 64,435 | 43,937 |
| Return on NIRB - Collection System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Return on NIRB - Non-Collection | 3,831,776 | 0 | 449,032 | 424,945 | 1,051,438 | 1,201,173 | 517,606 | 108,839 | 0 | 0 | 78,745 |
| Total | 14,679,259 | 1,565,516 | 1,557,322 | 1,417,878 | 3,163,333 | 3,544,209 | 2,027,040 | 430,628 | 179,226 | 649,479 | 144,626 |

Non-Contract ROR - Collection System

0.00%

Non-Contract ROR - Non-Collection

7.90%

NIRB - Collection System

18,301,637

NIRB - Non-Collection

64,945,352

CONVEYANCE

WASTE TREATMENT

CUSTOMER COSTS

HAULED
WASTE

| <u>Operating Cost</u> | Total | Collection System | Interceptor System | Flow | BOD | TSS | P | NH-3 | Billing | Meter / Connection | |
|------------------------------------|------------|----------------------|-----------------------|-----------|-----------|-----------|-----------|---------|---------|-----------------------|---------|
| | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operation and Maintenance | 7,239,961 | 1,313,301 | 895,974 | 606,228 | 1,151,429 | 1,292,377 | 1,020,749 | 212,349 | 140,565 | 585,044 | 21,944 |
| Depreciation | 3,607,522 | 252,215 | 212,316 | 386,705 | 960,466 | 1,050,660 | 488,685 | 109,441 | 38,661 | 64,435 | 43,937 |
| Return on NIRB - Collection System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Return on NIRB - Non-Collection | 5,130,683 | 0 | 601,246 | 568,994 | 1,407,857 | 1,608,350 | 693,065 | 145,733 | 0 | 0 | 105,438 |
| Total | 15,978,166 | 1,565,516 | 1,709,536 | 1,561,927 | 3,519,753 | 3,951,387 | 2,202,500 | 467,523 | 179,226 | 649,479 | 171,319 |

Overall Rate of Return

4.55%

NIRB - Collection System

18,301,637

NIRB - Non-Collection

64,945,352

CONVEYANCE

WASTE TREATMENT

CUSTOMER COSTS

HAULED
WASTE

| <u>Operating Cost</u> | Total | Collection System | Interceptor System | Flow | BOD | TSS | P | NH-3 | Billing | Meter / Connection | |
|---------------------------|------------|----------------------|-----------------------|-----------|-----------|-----------|-----------|---------|---------|-----------------------|---------|
| | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operation and Maintenance | 7,239,961 | 1,313,301 | 895,974 | 606,228 | 1,151,429 | 1,292,377 | 1,020,749 | 212,349 | 140,565 | 585,044 | 21,944 |
| Depreciation | 3,607,522 | 252,215 | 212,316 | 386,705 | 960,466 | 1,050,660 | 488,685 | 109,441 | 38,661 | 64,435 | 43,937 |
| Return on NIRB - Combined | 3,791,646 | 0 | 443,119 | 419,362 | 1,039,475 | 1,190,928 | 512,229 | 107,790 | 0 | 0 | 78,745 |
| Total | 14,639,129 | 1,565,516 | 1,551,409 | 1,412,295 | 3,151,370 | 3,533,964 | 2,021,663 | 429,579 | 179,226 | 649,479 | 144,626 |

Customer Class Demand Allocation

| Billing Units - CCF | | BASE DEMAND | | | | | EXTRA-CAPACITY MAX DAY DEMAND | | | | BOD | | | |
|---------------------------------|---------------------|-------------------------|--------------------|------------------------|-------------------------|--------------------|-------------------------------|-------------------------------------|-------------------------------|------------------------------|-----------------------|----------------|-------------|--------------------|
| Customer Class | Annual Volume (CCF) | Average Day Volume (CF) | System Percent (%) | Collection Percent (%) | Interceptor Percent (%) | Retail Percent (%) | Extra Capacity Ratio | Extra Capacity Volume Per Day (CCF) | System Adjust. Percentage (%) | Coll. Adjust. Percentage (%) | Waste Strength (mg/l) | Loadings (lbs) | Percent (%) | Retail Percent (%) |
| Residential | 932,574.0 | 255,500 | 18.36% | 23.38% | 18.40% | 23.31% | 0.62 | 157,215 | 18.36% | 23.38% | 350 | 2,037,414 | 19.53% | 25.24% |
| Multi-Family | 349,555.8 | 95,769 | 6.88% | 8.76% | 6.90% | 8.74% | 0.62 | 58,929 | 6.88% | 8.76% | 350 | 763,682 | 7.32% | 9.46% |
| Commercial | 594,400.4 | 162,849 | 11.70% | 14.90% | 11.73% | 14.86% | 0.62 | 100,205 | 11.70% | 14.90% | 350 | 1,298,599 | 12.45% | 16.09% |
| Industrial | 996,432.7 | 272,995 | 19.61% | 24.98% | 19.66% | 24.91% | 0.62 | 167,981 | 19.61% | 24.98% | 350 | 2,176,927 | 20.87% | 26.97% |
| Public Authority | 243,815.9 | 66,799 | 4.80% | 6.11% | 4.81% | 6.09% | 0.62 | 41,103 | 4.80% | 6.11% | 350 | 532,670 | 5.11% | 6.60% |
| Onalaska | 743,386.4 | 203,667 | 14.63% | 0.00% | 14.67% | 0.00% | 0.62 | 125,322 | 14.63% | 0.00% | 350 | 1,624,092 | 15.57% | 0.00% |
| La Crescent | 134,849.4 | 36,945 | 2.65% | 0.00% | 2.66% | 0.00% | 0.62 | 22,733 | 2.65% | 0.00% | 350 | 294,608 | 2.82% | 0.00% |
| Campbell | 140,146.3 | 38,396 | 2.76% | 0.00% | 2.76% | 0.00% | 0.62 | 23,626 | 2.76% | 0.00% | 350 | 306,181 | 2.93% | 0.00% |
| Shelby SD#2 | 61,824.0 | 16,938 | 1.22% | 0.00% | 1.22% | 0.00% | 0.62 | 10,422 | 1.22% | 0.00% | 350 | 135,068 | 1.29% | 0.00% |
| Holding Tank Waste | 5,353.8 | 1,467 | 0.11% | 0.00% | 0.00% | 0.13% | 0.62 | 903 | 0.11% | 0.00% | 600 | 20,051 | 0.19% | 0.25% |
| Septic Tank Waste | 4,256.8 | 1,166 | 0.08% | 0.00% | 0.00% | 0.11% | 0.62 | 718 | 0.08% | 0.00% | 1,800 | 47,828 | 0.46% | 0.59% |
| Grease Trap Waste | 1,935.7 | 530 | 0.04% | 0.00% | 0.00% | 0.05% | 0.62 | 326 | 0.04% | 0.00% | 7,500 | 90,622 | 0.87% | 1.12% |
| Category "B" Surcharge Loadings | - | - | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | - | 0.00% | 0.00% | | 1,104,742 | 10.59% | 13.69% |
| Inflow / Infiltration | 872,133.9 | 238,941 | 17.17% | 21.86% | 17.20% | 21.80% | 0.62 | 147,026 | 17.17% | 21.86% | - | - | 0.00% | 0.00% |
| Total | 5,080,665.1 | 1,391,963 | 100.0% | 100.0% | 100.0% | 100.0% | | 856,510 | 100.0% | 100.0% | | 10,432,485 | 100.0% | 100.0% |

Customer Class Demand Allocation

| Billing Units - CCF | | TREATMENT CATEGORIES | | | | | | | | | | | |
|---------------------------------|---------------------|-----------------------|----------------|-------------|--------------------|-----------------------|----------------|-------------|--------------------|-----------------------|----------------|-------------|--------------------|
| Customer Class | Annual Volume (CCF) | TSS | | | | P | | | | NH3 | | | |
| | | Waste Strength (mg/l) | Loadings (lbs) | Percent (%) | Retail Percent (%) | Waste Strength (mg/l) | Loadings (lbs) | Percent (%) | Retail Percent (%) | Waste Strength (mg/l) | Loadings (lbs) | Percent (%) | Retail Percent (%) |
| Residential | 932,574.0 | 325 | 1,891,884 | 21.21% | 28.11% | 7.0 | 40,748 | 20.28% | 26.51% | 40.0 | 232,847 | 21.35% | 28.36% |
| Multi-Family | 349,555.8 | 325 | 709,133 | 7.95% | 10.54% | 7.0 | 15,274 | 7.60% | 9.94% | 40.0 | 87,278 | 8.00% | 10.63% |
| Commercial | 594,400.4 | 325 | 1,205,842 | 13.52% | 17.92% | 7.0 | 25,972 | 12.93% | 16.90% | 40.0 | 148,411 | 13.60% | 18.07% |
| Industrial | 996,432.7 | 325 | 2,021,433 | 22.66% | 30.04% | 7.0 | 43,539 | 21.67% | 28.33% | 40.0 | 248,792 | 22.81% | 30.30% |
| Public Authority | 243,815.9 | 325 | 494,622 | 5.54% | 7.35% | 7.0 | 10,653 | 5.30% | 6.93% | 40.0 | 60,877 | 5.58% | 7.41% |
| Onalaska | 743,386.4 | 325 | 1,508,085 | 16.91% | 0.00% | 7.0 | 32,482 | 16.17% | 0.00% | 40.0 | 185,610 | 17.02% | 0.00% |
| La Crescent | 134,849.4 | 325 | 273,565 | 3.07% | 0.00% | 7.0 | 5,892 | 2.93% | 0.00% | 40.0 | 33,670 | 3.09% | 0.00% |
| Campbell | 140,146.3 | 325 | 284,311 | 3.19% | 0.00% | 7.0 | 6,124 | 3.05% | 0.00% | 40.0 | 34,992 | 3.21% | 0.00% |
| Shelby SD#2 | 61,824.0 | 325 | 125,420 | 1.41% | 0.00% | 7.0 | 2,701 | 1.34% | 0.00% | 40.0 | 15,436 | 1.42% | 0.00% |
| Holding Tank Waste | 5,353.8 | 1,800 | 60,154 | 0.67% | 0.89% | 25.0 | 835 | 0.42% | 0.54% | 50.0 | 1,671 | 0.15% | 0.20% |
| Septic Tank Waste | 4,256.8 | 5,500 | 146,143 | 1.64% | 2.17% | 60.0 | 1,594 | 0.79% | 1.04% | 100.0 | 2,657 | 0.24% | 0.32% |
| Grease Trap Waste | 1,935.7 | 15,000 | 181,244 | 2.03% | 2.69% | 120.0 | 1,450 | 0.72% | 0.94% | 200.0 | 2,417 | 0.22% | 0.29% |
| Category "B" Surcharge Loadings | - | | 18,971 | 0.21% | 0.28% | | 13,624 | 6.78% | 8.86% | | 36,201 | 3.32% | 4.41% |
| Inflow / Infiltration | 872,133.9 | - | - | 0.00% | 0.00% | - | - | 0.00% | 0.00% | - | - | 0.00% | 0.00% |
| Total | 5,080,665.1 | | 8,920,807 | 100.0% | 100.0% | | 200,889 | 100.0% | 100.0% | | 1,090,859 | 100.0% | 100.0% |

Consumer Costs Allocation Factors

| Customer Class | Number of Meters | | | | | | | | | | | | Total Meters | Percent Total |
|------------------|------------------|-------|-----|-------|-------|-----|----|----|---|---|----|----|--------------|---------------|
| | 5/8 | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 | 3 | 4 | 6 | 8 | 10 | 12 | | |
| Residential | 8,736 | 4,618 | 143 | | 2 | 1 | | | | | | | 13,500 | 84.52% |
| Multi-Family | 164 | 213 | 308 | | 25 | 59 | 4 | 4 | 1 | | | | 778 | 4.87% |
| Commercial | 302 | 552 | 343 | | 57 | 103 | 23 | 18 | 2 | | | | 1,400 | 8.77% |
| Industrial | 4 | 14 | 29 | | 10 | 13 | 9 | 14 | 6 | 4 | | | 103 | 0.64% |
| Public Authority | 12 | 52 | 31 | | 17 | 55 | 15 | 9 | | | | | 191 | 1.20% |
| Total | 9,218 | 5,449 | 854 | 0 | 111 | 231 | 51 | 45 | 9 | 4 | 0 | 0 | 15,972 | |

| Equivalent Meters | | | | | | | | | | | | | | Total Equiv. Meters | Percent Total |
|--------------------|----------------------|-----|-----|-----|-------|-------|---|----|----|----|----|-----|-----|---------------------|---------------|
| Allocation factor: | Meter Size (Inches): | 5/8 | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 | 3 | 4 | 6 | 8 | 10 | 12 | | |
| | Equiv. Meters Ratio: | 1 | 1.0 | 2.5 | 3.7 | 5 | 8 | 15 | 25 | 50 | 80 | 120 | 160 | | |

| Customer Class | 5/8 | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 | 3 | 4 | 6 | 8 | 10 | 12 | Total | Percent |
|------------------|-------|-------|-------|-------|-------|-------|-----|-------|-----|-----|----|----|--------|---------|
| Residential | 8,736 | 4,618 | 358 | - | 10 | 8 | - | - | - | - | - | - | 13,730 | 62.79% |
| Multi-Family | 164 | 213 | 770 | - | 125 | 472 | 60 | 100 | 50 | - | - | - | 1,954 | 8.94% |
| Commercial | 302 | 552 | 858 | - | 285 | 824 | 345 | 450 | 100 | - | - | - | 3,716 | 16.99% |
| Industrial | 4 | 14 | 73 | - | 50 | 104 | 135 | 350 | 300 | 320 | - | - | 1,350 | 6.17% |
| Public Authority | 12 | 52 | 78 | - | 85 | 440 | 225 | 225 | - | - | - | - | 1,117 | 5.11% |
| Total | 9,218 | 5,449 | 2,135 | 0 | 555 | 1,848 | 765 | 1,125 | 450 | 320 | 0 | 0 | 21,865 | 100.00% |

| Equivalent Services | | | | | | | | | | | | | | Total Equiv. Services | Percent Total |
|---------------------|------------------------|-----|-----|-----|-------|-------|---|---|---|---|---|----|----|-----------------------|---------------|
| Allocation factor: | Meter Size (Inches): | 5/8 | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 | 3 | 4 | 6 | 8 | 10 | 12 | | |
| | Equiv. Services Ratio: | 1 | 1.0 | 1.3 | 1.7 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |

| Customer Class | 5/8 | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 | 3 | 4 | 6 | 8 | 10 | 12 | Total | Percent |
|------------------|-------|-------|-------|-------|-------|-----|-----|-----|----|----|----|----|--------|---------|
| Residential | 8,736 | 4,618 | 186 | - | 4 | 3 | - | - | - | - | - | - | 13,547 | 78.75% |
| Multi-Family | 164 | 213 | 400 | - | 50 | 177 | 16 | 20 | 6 | - | - | - | 1,046 | 6.08% |
| Commercial | 302 | 552 | 446 | - | 114 | 309 | 92 | 90 | 12 | - | - | - | 1,917 | 11.14% |
| Industrial | 4 | 14 | 38 | - | 20 | 39 | 36 | 70 | 36 | 28 | - | - | 285 | 1.65% |
| Public Authority | 12 | 52 | 40 | - | 34 | 165 | 60 | 45 | - | - | - | - | 408 | 2.37% |
| Total | 9,218 | 5,449 | 1,110 | 0 | 222 | 693 | 204 | 225 | 54 | 28 | 0 | 0 | 17,203 | 100.00% |

Allocation of Service Cost Functions to Customer Classes - Combined Retail and Wholesale Return on Investment

| | C | | | | C | | | | N | | | | N | | | |
|-----------------------------|------------|-------------|--------------|------------|------------|------------------|-----------|-------------|----------|-------------|--------------------|-------------------|-------------------|---------------------------------|-----------------------|--|
| | | | | | | | | | | | | | | | | |
| | Total | Residential | Multi-Family | Commercial | Industrial | Public Authority | Onalaska | La Crescent | Campbell | Shelby SD#2 | Holding Tank Waste | Septic Tank Waste | Grease Trap Waste | Category "B" Surcharge Loadings | Infiltration / Inflow | |
| CONVEYANCE COSTS: | | | | | | | | | | | | | | | | |
| Collection | 1,565,516 | 366,004 | 137,189 | 233,282 | 391,067 | 95,690 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 342,284 | |
| La Crescent Forcemain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Interceptor | 1,551,409 | 283,703 | 106,340 | 180,825 | 303,129 | 74,172 | 228,381 | 41,428 | 47,264 | 20,850 | 0 | 0 | 0 | 0 | 265,316 | |
| FLOW COSTS: | | | | | | | | | | | | | | | | |
| Flow | 1,412,295 | 257,612 | 96,561 | 164,196 | 275,253 | 67,351 | 207,459 | 37,633 | 43,085 | 19,006 | 1,494 | 1,188 | 540 | 0 | 240,917 | |
| TREATMENT COSTS: | | | | | | | | | | | | | | | | |
| BOD | 3,151,370 | 610,823 | 228,954 | 389,324 | 652,650 | 159,696 | 492,456 | 89,331 | 103,300 | 45,570 | 6,080 | 14,503 | 27,478 | 331,205 | 0 | |
| TSS | 3,533,964 | 743,005 | 278,500 | 473,573 | 793,882 | 194,254 | 599,158 | 108,687 | 125,933 | 55,554 | 23,899 | 58,062 | 72,008 | 7,451 | 0 | |
| P | 2,021,663 | 407,606 | 152,783 | 259,799 | 435,517 | 106,566 | 327,754 | 59,454 | 67,138 | 29,617 | 8,430 | 16,087 | 14,631 | 136,281 | 0 | |
| NH-3 | 429,579 | 91,131 | 34,159 | 58,085 | 97,372 | 23,826 | 73,272 | 13,291 | 14,997 | 6,616 | 660 | 1,049 | 954 | 14,168 | 0 | |
| CUSTOMER COSTS: | | | | | | | | | | | | | | | | |
| Billing | 179,226 | 151,487 | 8,730 | 15,710 | 1,156 | 2,143 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Equivalent Meters | 649,479 | 407,822 | 58,042 | 110,365 | 40,086 | 33,165 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| HAULED WASTE | 144,626 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78,185 | 40,794 | 25,646 | 0 | 0 | |
| SUBTOTAL COST before I/I | 14,639,129 | 3,319,194 | 1,101,257 | 1,885,160 | 2,990,112 | 756,863 | 1,928,480 | 349,824 | 401,716 | 177,213 | 118,748 | 131,683 | 141,257 | 489,105 | 848,516 | |
| Collection | | 270,713 | 20,152 | 37,043 | 6,937 | 7,439 | | | | | | | | | | |
| Interceptor | | 58,527 | 21,938 | 37,304 | 62,534 | 15,301 | 47,114 | 8,546 | 9,750 | 4,301 | | | | | | |
| Flow | | 53,129 | 19,914 | 33,863 | 56,767 | 13,890 | 42,786 | 7,761 | 8,886 | 3,920 | | | | | | |
| I/I Adjustment Allocation % | | 45% | 7% | 13% | 15% | 4% | 11% | 2% | 2% | 1% | 0% | 0% | 0% | 0% | | |
| I/I Adjustment | 0 | 382,369 | 62,004 | 108,210 | 126,239 | 36,631 | 89,900 | 16,308 | 18,636 | 8,221 | 0 | 0 | 0 | 0 | (848,516) | |
| SUBTOTAL COST after I/I | 14,639,129 | 3,701,563 | 1,163,260 | 1,993,369 | 3,116,350 | 793,495 | 2,018,380 | 366,132 | 420,352 | 185,434 | 118,748 | 131,683 | 141,257 | 489,105 | 0 | |
| LESS: SHELBY SD#1 REVENUES | (79,934) | (20,212) | (6,352) | (10,884) | (17,016) | (4,333) | (11,021) | (1,999) | (2,295) | (1,013) | (648) | (719) | (771) | (2,671) | | |
| COST OF SERVICES | 14,559,195 | 3,681,351 | 1,156,909 | 1,982,485 | 3,099,334 | 789,162 | 2,007,359 | 364,133 | 418,057 | 184,421 | 118,100 | 130,964 | 140,486 | 486,435 | | |
| REVENUE AT PRESENT RATES | 11,252,371 | 2,824,502 | 827,673 | 1,421,672 | 2,181,584 | 560,820 | 1,843,316 | 338,713 | 387,659 | 171,012 | 80,136 | 117,438 | 127,181 | 370,668 | | |
| DIFFERENCE | 3,306,824 | 856,850 | 329,236 | 560,813 | 917,749 | 228,342 | 164,043 | 25,420 | 30,398 | 13,410 | 37,964 | 13,526 | 13,305 | 115,767 | | |
| PERCENT INCREASE/DECREASE | 29.39% | 30.34% | 39.78% | 39.45% | 42.07% | 40.72% | 8.90% | 7.50% | 7.84% | 7.84% | 47.37% | 11.52% | 10.46% | 31.23% | | |

General Service Charge Calculation

| | Cost of Service | Allocated I/I | Units | Annual Billing Periods | Cost per Billing Cycle (\$/Unit) |
|-------------------|-----------------|---------------|--------|------------------------|----------------------------------|
| Billing Cost | \$179,226 | \$536,589 | 15,972 | 4 | \$11.20 |
| Equivalent Meters | \$649,479 | \$178,863 | 21,865 | 4 | \$9.47 |
| | \$828,705 | \$715,452 | | | |

Billing Cycle - Quarterly

| Size of Connection | Billing Cost (\$/unit) | Equivalent Meter Ratio | Meter Cost (\$/unit) | Equivalent Service Ratio | Calculated Charge (\$/unit) | Present Charge (\$/unit) | Proposed Service Charge (\$/unit) | No. Connections | Revenues at Present Rates | Revenues at Proposed Rates |
|--------------------|------------------------|------------------------|----------------------|--------------------------|-----------------------------|--------------------------|-----------------------------------|-----------------|---------------------------|----------------------------|
| 5/8-inch | \$11.20 | 1.0 | \$9.47 | 1.0 | \$20.68 | \$15.00 | \$18.00 | 9,218 | \$553,080 | \$663,696 |
| 3/4-inch | \$11.20 | 1.0 | \$9.47 | 1.0 | \$20.68 | \$15.00 | \$18.00 | 5,449 | \$326,940 | \$392,328 |
| 1-inch | \$11.20 | 2.5 | \$23.68 | 1.3 | \$34.88 | \$24.00 | \$30.00 | 854 | \$81,984 | \$102,480 |
| 1 1/4-inch | \$11.20 | 3.7 | \$35.04 | 1.7 | \$46.25 | | \$40.00 | - | \$0 | \$0 |
| 1 1/2-inch | \$11.20 | 5.0 | \$47.36 | 2.0 | \$58.56 | \$39.00 | \$51.00 | 111 | \$17,316 | \$22,644 |
| 2-inch | \$11.20 | 8.0 | \$75.77 | 3.0 | \$86.97 | \$60.00 | \$75.00 | 231 | \$55,440 | \$69,300 |
| 2 1/2-inch | \$11.20 | 12.0 | \$113.65 | 3.5 | \$124.86 | | \$108.00 | - | \$0 | \$0 |
| 3-inch | \$11.20 | 15.0 | \$142.07 | 4.0 | \$153.27 | \$108.00 | \$133.00 | 51 | \$22,032 | \$27,132 |
| 4-inch | \$11.20 | 25.0 | \$236.78 | 5.0 | \$247.98 | \$174.00 | \$215.00 | 45 | \$31,320 | \$38,700 |
| 6-inch | \$11.20 | 50.0 | \$473.55 | 6.0 | \$484.76 | \$342.00 | \$420.00 | 9 | \$12,312 | \$15,120 |
| 8-inch | \$11.20 | 80.0 | \$757.69 | 7.0 | \$768.89 | \$543.00 | \$666.00 | 4 | \$8,688 | \$10,656 |
| 10-inch | \$11.20 | 120.0 | \$1,136.53 | 8.0 | \$1,147.74 | \$813.00 | \$994.00 | - | \$0 | \$0 |
| 12-inch | \$11.20 | 160.0 | \$1,515.38 | 9.0 | \$1,526.58 | \$1,080.00 | \$1,322.00 | - | \$0 | \$0 |
| Total | | | | | | | | 15,972 | \$1,109,112 | \$1,342,056 |
| Cost of Service | | | | | | | | | | \$1,544,157 |
| Percent of Cost | | | | | | | | | | 86.9% |

Volumetric and Surcharge Rate Calculation

| | | Total | Residential | Multi-Family | Commercial | Industrial | Public Authority | Onalaska | La Crescent | Campbell | Shelby SD#2 | Holding Tank Waste | Septic Tank Waste | Grease Trap Waste | Category "B" Surcharge Loadings |
|-----------------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|------------------|--------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|---------------------------------|
| Allocated Cost - Volumetric | | \$13,076,505 | \$2,759,885 | \$1,034,485 | \$1,759,085 | \$2,948,870 | \$721,555 | \$2,007,359 | \$364,133 | \$418,057 | \$184,421 | \$118,100 | \$130,964 | \$140,486 | \$489,105 |
| Billable Units | CCF | 4,208,531 | 932,574 | 349,556 | 594,400 | 996,433 | 243,816 | 743,386 | 134,849 | 140,146 | 61,824 | 5,354 | 4,257 | 1,936 | |
| Calculated Rate | \$ / CCF | | \$2.96 | \$2.96 | \$2.96 | \$2.96 | \$2.96 | \$2.70 | \$2.70 | \$2.98 | \$2.98 | \$22.06 | \$30.77 | \$72.58 | |
| Proposed Rate | \$ / CCF | | \$3.01 | \$3.01 | \$3.01 | \$3.01 | \$3.01 | \$2.70 | \$2.70 | \$2.98 | \$2.98 | \$16.40 | \$27.15 | \$67.60 | |
| Proposed Rate | \$ / M gals | | | | | | | \$3,610.01 | \$3,610.01 | \$3,987.97 | \$3,987.97 | | | | |
| Proposed Rate | \$ / K gals | | | | | | | | | | | \$21.93 | \$36.30 | \$90.37 | |
| Allocated Cost - BOD | | \$3,127,691 | | | | | | | | | | | | | |
| Billable Units | Pounds | 10,405,303 | | | | | | | | | | | | | 1,104,742 |
| Calculated Rate | \$ / lb. | \$0.3006 | | | | | | | | | | | | | |
| Proposed Rate | | \$0.300 | | | | | | | | | | | | | |
| Allocated Cost - TSS | | \$3,503,492 | | | | | | | | | | | | | |
| Billable Units | Pounds | 8,895,567 | | | | | | | | | | | | | 18,971 |
| Calculated Rate | \$ / lb. | \$0.3938 | | | | | | | | | | | | | |
| Proposed Rate | | \$0.390 | | | | | | | | | | | | | |
| Allocated Cost - Phosphorus | | \$2,009,494 | | | | | | | | | | | | | |
| Billable Units | Pounds | 200,345 | | | | | | | | | | | | | 13,624 |
| Calculated Rate | \$ / lb. | \$10.0302 | | | | | | | | | | | | | |
| Proposed Rate | | \$9.950 | | | | | | | | | | | | | |
| Allocated Cost - NH-3 | | \$426,939 | | | | | | | | | | | | | |
| Billable Units | Pounds | 1,087,752 | | | | | | | | | | | | | 36,201 |
| Calculated Rate | \$ / lb. | \$0.3925 | | | | | | | | | | | | | |
| Proposed Rate | | \$0.390 | | | | | | | | | | | | | |
| Estimated Revenues | | \$13,178,224 | \$2,807,048 | \$1,052,163 | \$1,789,145 | \$2,999,262 | \$733,886 | \$2,007,357 | \$364,132 | \$418,057 | \$184,421 | \$87,822 | \$115,583 | \$130,849 | \$488,498 |

APPENDIX B – BASIS OF RISK PREMIUM FOR NON-CONTRACT VS. CONTRACT COMMUNITIES

INTRODUCTION

This updated study proposed to determine revenue requirements using the utility basis method. This is the standard approach for water and sewer utilities regulated by the Public Service Commission of Wisconsin and is common nationwide for utilities that provide service to customers outside of their municipal boundaries, whether on retail or wholesale basis. It is a reasonable and appropriate approach to setting rates because the municipal owner carries certain burdens and risks that the outside communities do not have to bear. If there is not a current agreement for sewer service, the risk is even greater to the municipal utility owner. This appendix explains how the utility basis is appropriate for the La Crosse Sewer Utility, in particular a risk premium for communities lacking current sewer service contracts.

LITERATURE REVIEW

A number of publications discuss the utility basis of setting revenue requirements and rates for sewer utilities. The following excerpts can be found in the manual on rate-setting, "Financing and Charges for Wastewater Systems," published by the Water Environment Federation.⁸

On the general applicability of the utility basis for sewer utilities with wholesale customers:

"The approach works particular well for allocating costs to those customers located outside the corporate limits of a municipality owned utility. In such situations, the service relationship parallels that of an investor-owned utility because the owner (municipality) serves non-owner customers (those outside the corporate limits).

Customers inside the municipal corporate limits may be considered to be the utility's stockholders. They are ultimately responsible for paying all operating and capital costs of the utility should outside customers decide to no longer be served by the municipality. Thus, the municipality is entitled to a reasonable return from the non-owner customers, based on the value of the assets that are used and useful in providing service to them and the business risks inherent in municipal service to non-owner customers."⁹

This has particular application to La Crosse as outside city customers have no obligation to pay any capital costs directly from their own funding or via a direct payment on share of the loan for treatment plant improvements. The La Crosse Sewer Utility is carrying the entire burden of construction, debt, ownership, and replacement, without any guarantee of a certain level of sales

⁸ Water Environment Federation, Financing and Charges for Wastewater Systems, WEF Manual of Practice No. 27, 2004

⁹ Page 234, WEF Manual of Practice No. 27

or even that outside city customers will remain customers, and receiving a return on their investment is a perfectly reasonable expectation for the inside city owner customers. This approach is also of benefit to the outside city customers:

“...the utility basis provides a measure of protection for the non-owner customers against inconsistent capital financing choices or inequitable rate-setting practices of the municipal owner. The utility basis often stabilizes periodic rate changes compared with the cash basis as revenue- or debt-financed capital improvements may fluctuate significantly from year to year.”¹⁰

This is especially true in Wisconsin, which has a regulatory body that maintains a benchmark rate of return on investment for water and sewer utilities. By utilizing this as its own standard, the Utility ensures that outside city customers will not be charged an unfair rate, and any shortfall in revenues must be made up by inside city customers.

Additional risk exists where wholesale customers do not have current contracts for service. It is to the owner utility’s discretion to determine the amount of risk that warrants a higher rate of return for wholesale customers without contracts. On the level of risk regarding wholesale customers and contracts:

“If the municipality serves retail and wholesale customers outside its corporate limits, the utility would probably assess the level of risk involved in serving outside customers and charge a higher rate of return than the rate of return for inside customers.

To derive a higher outside rate of return, municipalities generally either add a fixed percentage in the range of 2 to 4%, or apply a multiplier in the range of 1.25 to 2.00, to the system rate of return as an allowance for cost associated with risk.”¹¹

For contract customers, the Utility is limiting its rate of return to the benchmark set by the Public Service Commission of Wisconsin at the time of setting rates, or to the same rate of return as retail customers if a higher return is needed. This rate is deemed to be a reasonable rate of return by the regulatory body of the State of Wisconsin, regardless of the actual cost of capital obtained by a utility or municipality. However, non-contract customers carry additional risk and can be reasonably charged a higher rate of return:

“Table A.1 shows an outside rate of return of 7.25%, which equates to approximately a 1.74 multiplier applied to the system return. A multiplier this high

¹⁰ Page 234, WEF Manual of Practice No. 27.

¹¹ Page 238, WEF Manual of Practice No. 27.

may be indicative of a service situation where the municipal utility has no means of terminating service to outside retail customers when they fail to pay. The situation could also apply where wholesale service is provided without contract.”¹²

Both of these hypothetical situations exist currently for the City of La Crosse Sewer Utility. It cannot legally terminate service as per the approved Sewer Service Area Plan, and it is currently providing wholesale service without contract.

Another publication discussing issues of wholesale service of wastewater treatment is “Water and Wastewater Finance and Pricing,” written by George A. Raftelis.¹³ To wit:

“The concept of inside-city customer ownership provides a fundamental explanation why the water and wastewater rates paid by outside city retail customers are often higher than those of inside-city retail customers for the same level of service. It also explains why, when industry standard cost-of-service principles are used to calculate outside-city rates (retail or wholesale), the outside revenue requirement generally includes an explicit return on invested capital component.

A secondary justification often used for charging higher rates to outside-city wholesale customers is that such customers create a higher level of risk for the providing utility. For example, a utility providing service to an outside-city wholesale customer may invest in new water or wastewater treatment plant capacity in order to provide service. If the wholesale customer elects to cancel service after the initial contract term, the providing utility may lose a significant source of rate revenue and find that it is left with unused excess treatment plant capacity.”¹⁴

This is the case with the La Crosse Sewer Utility. It is planning to invest in major improvements to its wastewater treatment plant, partially to provide capacity to its outside-city wholesale customers and is shouldering the entire burden of funding construction and the associated debt. At this time, it does not have current contracts to provide service for three of its wholesale customers and so is carrying 100 percent of the risk of providing capacity for these non-captive customers. While the utility does not believe it is in the best interests of its outside-city customers to cancel service, it recognizes that it is a possible outcome, and deems it reasonable to apply a higher rate of return of 2% to the rate of return in order to compensate the utility and its

¹² Page 238, WEF Manual of Practice No. 27.

¹³ Raftelis, George A., CRC Press, Water and Wastewater Finance and Pricing, 2015

¹⁴ Pages 255-256, Raftelis.

municipal owners for the risk and burden of carrying capacity that might go unused and the costs that are associated with such risk.

CONCLUSION

It is the recommendation of this study that it is appropriate to use the utility basis methodology to establish the revenue requirements of the La Crosse Sewer Utility, to charge no more than the PSC benchmark rate of return for wholesale customers, and to apply a risk premium of 2.0% to the rate of return for wholesale customers without a contract for the reasons described within this appendix. Proposed non-contract wholesale customer rates were developed using a rate of return of 7.90% (contract wholesale rate of return of 5.90% plus a 2.0% risk premium) for non-contract customers, as shown in Table 9.