

Lakeland Sanitary District

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Photo of Class A biosolids from an ATAD process. The WWTF currently produces Class A product, which is distributed to the public.



WASTEWATER FACILITY PLAN

As discussed in the Wastewater Facility Plan Project Update on September 27, 2022, preliminary cost estimates for the proposed upgrades at the Lakeland Sanitary District WWTF have been prepared. The Facility Plan evaluated three alternatives for sludge and solids processing, including Alkaline Stabilization, Low Temperature Sludge Drying, and new ATAD (what is currently in place) for providing Class A biosolids. The New ATAD alternative is the recommended biosolids processing option based on monetary and non-monetary considerations.

In addition to biosolids processing upgrades, a collection system debris drying bed and retrofitting the existing primary clarifiers to operate as anaerobic selector tanks for biological phosphorus removal (Bio-P) are also recommended. While the entire WWTF was evaluated and costs prepared for additional upgrades, the above items were identified as being the most critical per WWTF staff input. Costs for these selected upgrades are presented below with the estimated average sewer rate based on funding through WDNr's Clean Water Fund Program (CWFP). Note that significant water/sewer users will pay sewer rates respective to their usage, as typical for utilities. The sewer rates presented are per month per residential equivalent unit (REU). The current average monthly sewer rate per REU is approximately \$25/month.

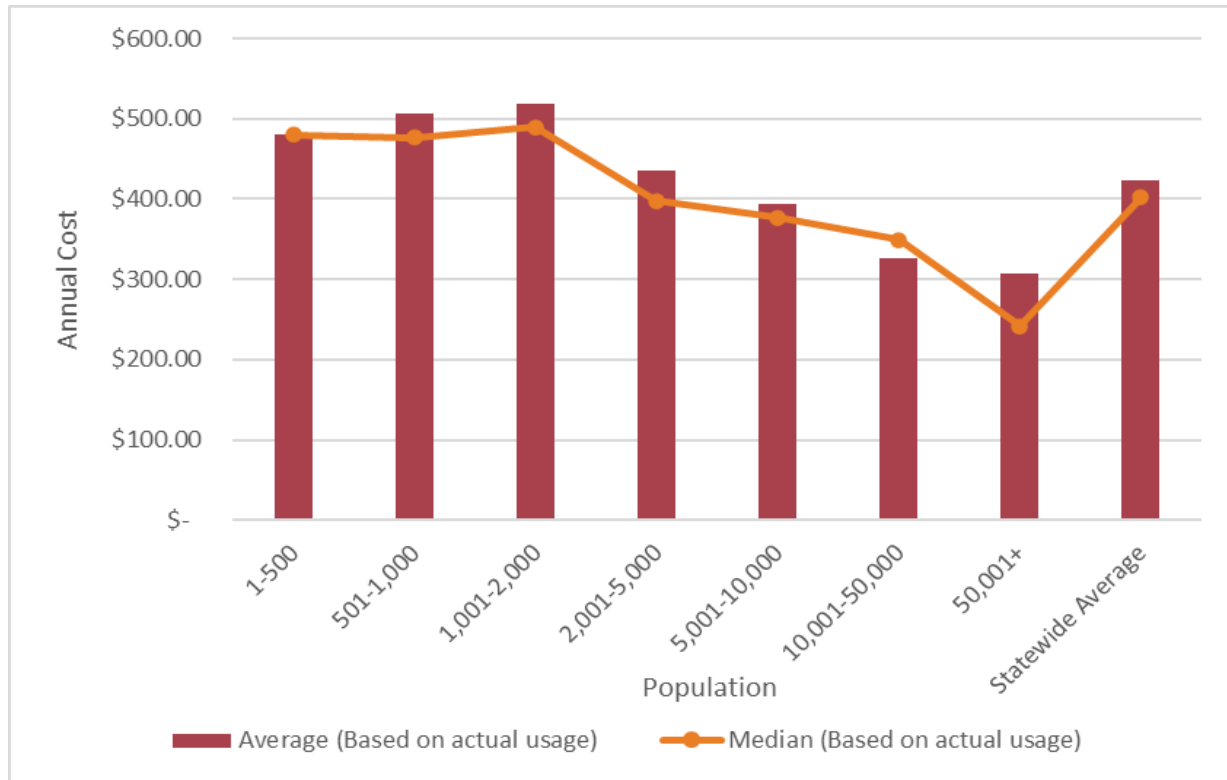
The Sanitary District is eligible for funding through WDNr's Clean Water Fund Program (CWFP) and up to 20% principal forgiveness on a subsidized interest rate loan. Recently, WDNr released their Intended Use Plan (IUP) for State Fiscal Year 2023. As part of the extensive infrastructure funding provided by the Bipartisan Infrastructure Law (BIL), CWFP funding has increased. The general Principal Forgiveness (PF) cap per municipality has increased from \$750,000 to \$2,000,000. Based on the estimated project costs and eligible percentage, the Sanitary District would be expected to receive general Principal Forgiveness on a CWF loan up to \$2,000,000. This PF is reflected in the sewer rate estimates in the table below.

The Sanitary District may receive additional PF for the Bio-P upgrade or septage receiving related incentives such as 0% interest on the CWF Loan portion that is tied to septage receiving and treatment of hauled wastes (this would consider the hauled waste capacity of the upgraded biosolids process). For the purposes of conservatism, these additional incentives have not been included on this sewer rate estimate.

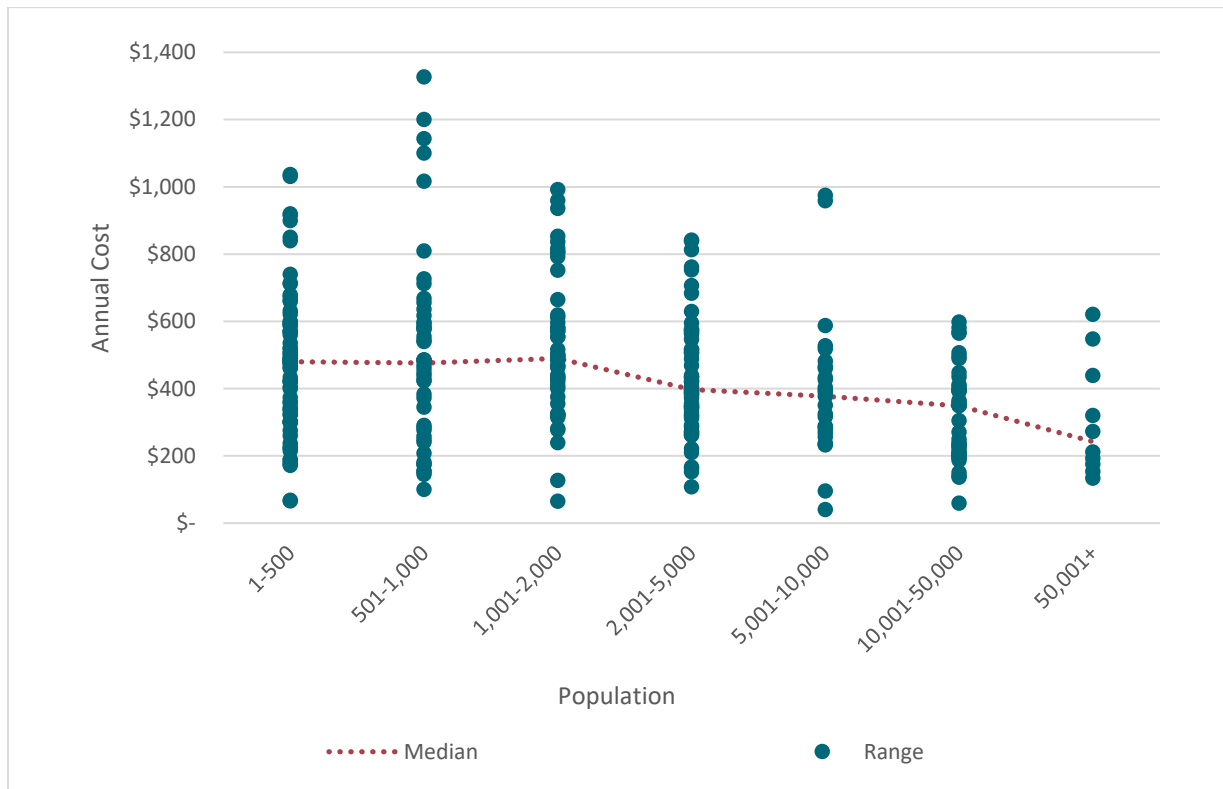
Preliminary Cost Comparison: Selected Upgrades	
ATAD (including thickening, dewatering, electrical service upgrade, new concrete ATAD tank, etc.)	\$16,458,000
Collection System Debris Drying Bed	+\$236,000
Bio-P Retrofit	+\$940,000
Total Capital Cost	\$17,598,000
General Principal Forgiveness	-\$2,000,000
Amount Financed	\$15,598,000
Additional O&M and Replacement Costs (Annual Costs)	\$146,000
Estimated Average Monthly Sewer Rate (per REU)	\$50 - \$55 / month
% of MHI	~1.1%

How does this compare to other communities?

In general, residents of smaller communities pay significantly more than those living in larger communities. MSA’s 2022 Sewer User Charge Survey illustrates this trend.



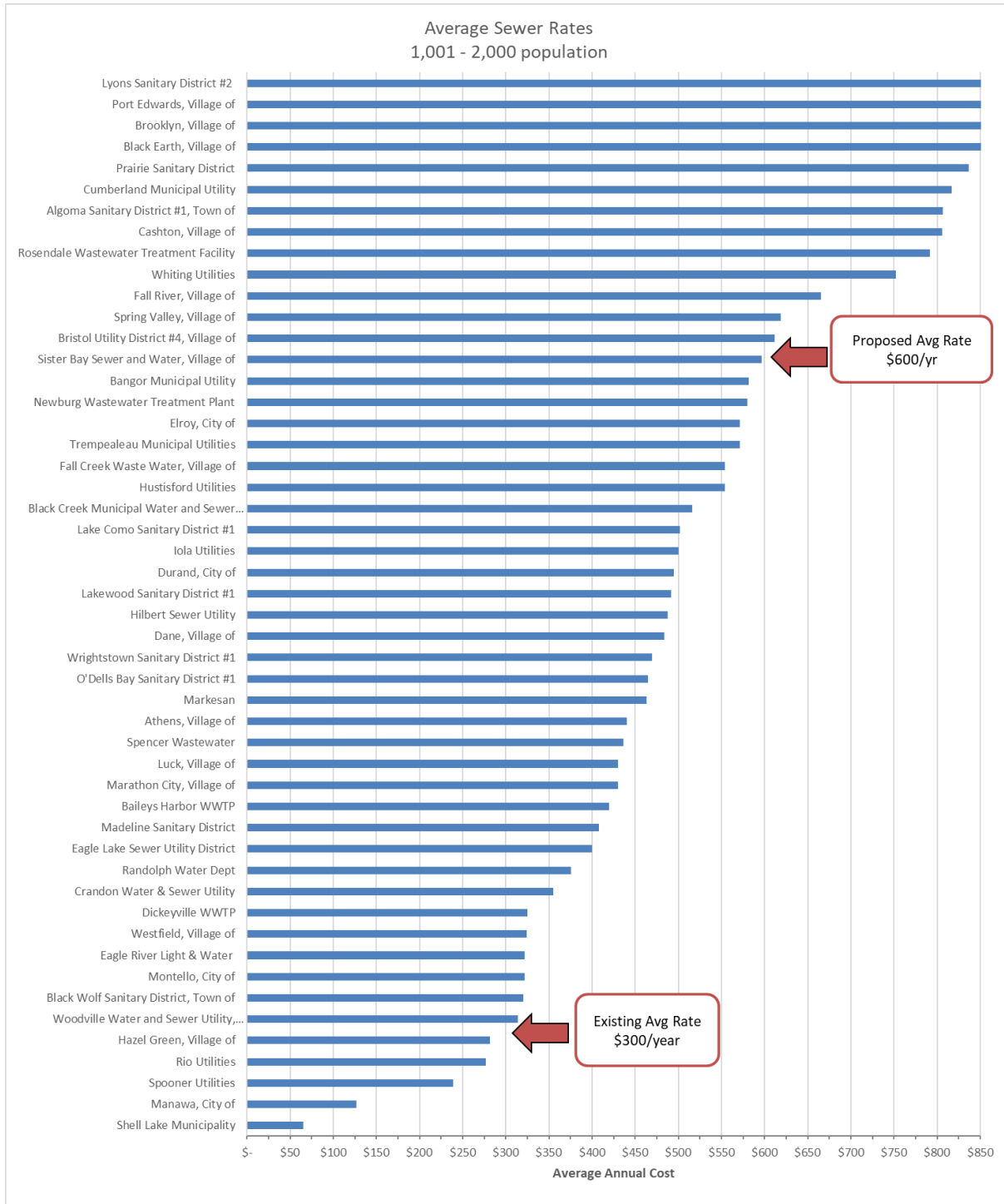
At an average annual cost of about \$288 per household and an estimated population of 2,043, the District’s current sewer rate of \$288 per year is below the state-wide average of \$519. The median value for communities with populations of 1,001 – 2,000 is \$490. And the median value for communities with populations of 2,001 – 5,000 is \$398. However, as with any average value, a significant spread in the data exists. Annual sewer rates of individual similarly sized communities ranged from \$65 - \$992. This is shown in the figure that follows, which is also taken from MSA’s 2022 Wisconsin Sewer User Charge Survey.

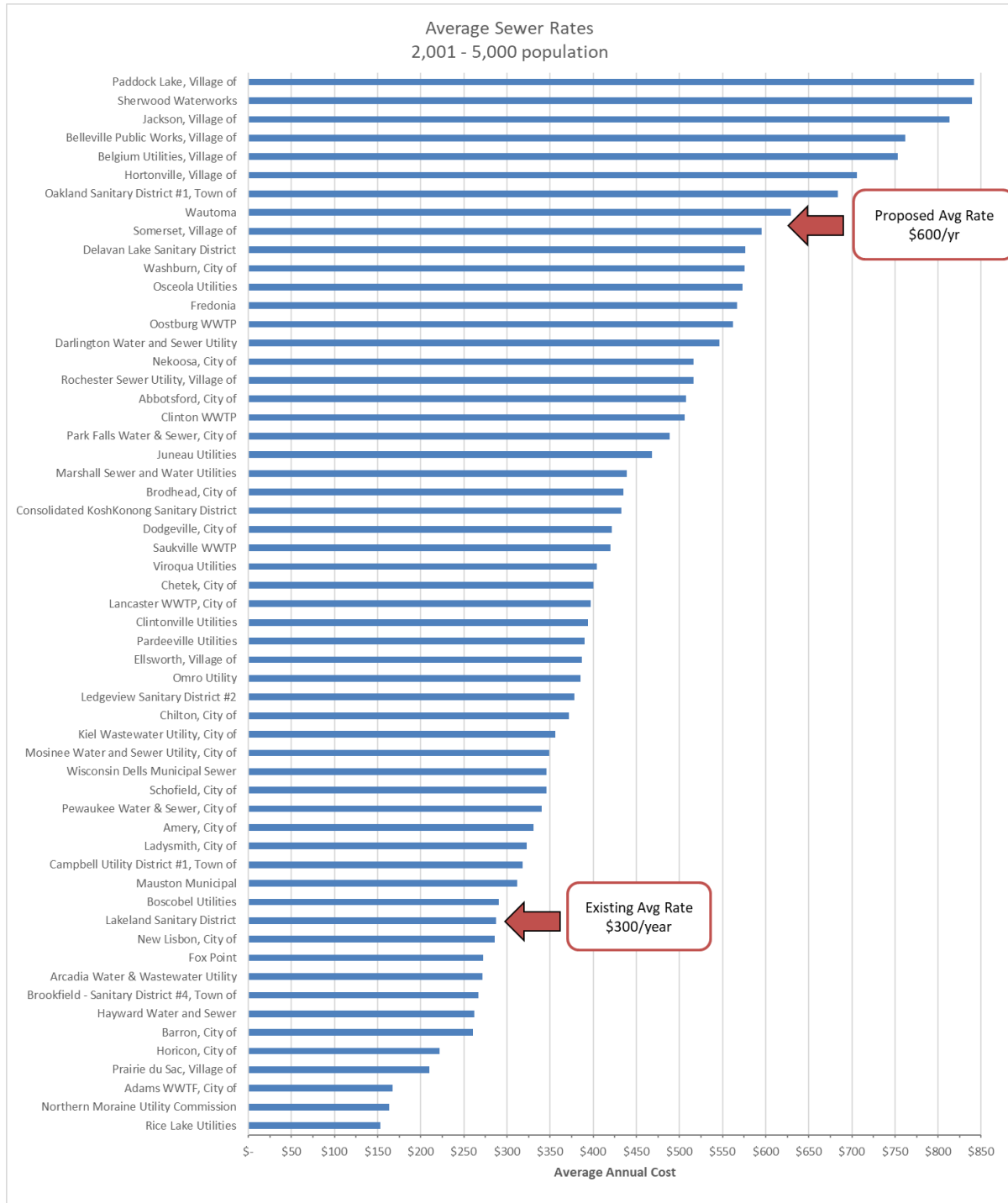


While each community has their own individual circumstances, the most valid rate comparison is made between communities of similar size. The following table summarizes the high, low, and average rates in communities of similar size to the Lakeland Sanitary District service population.

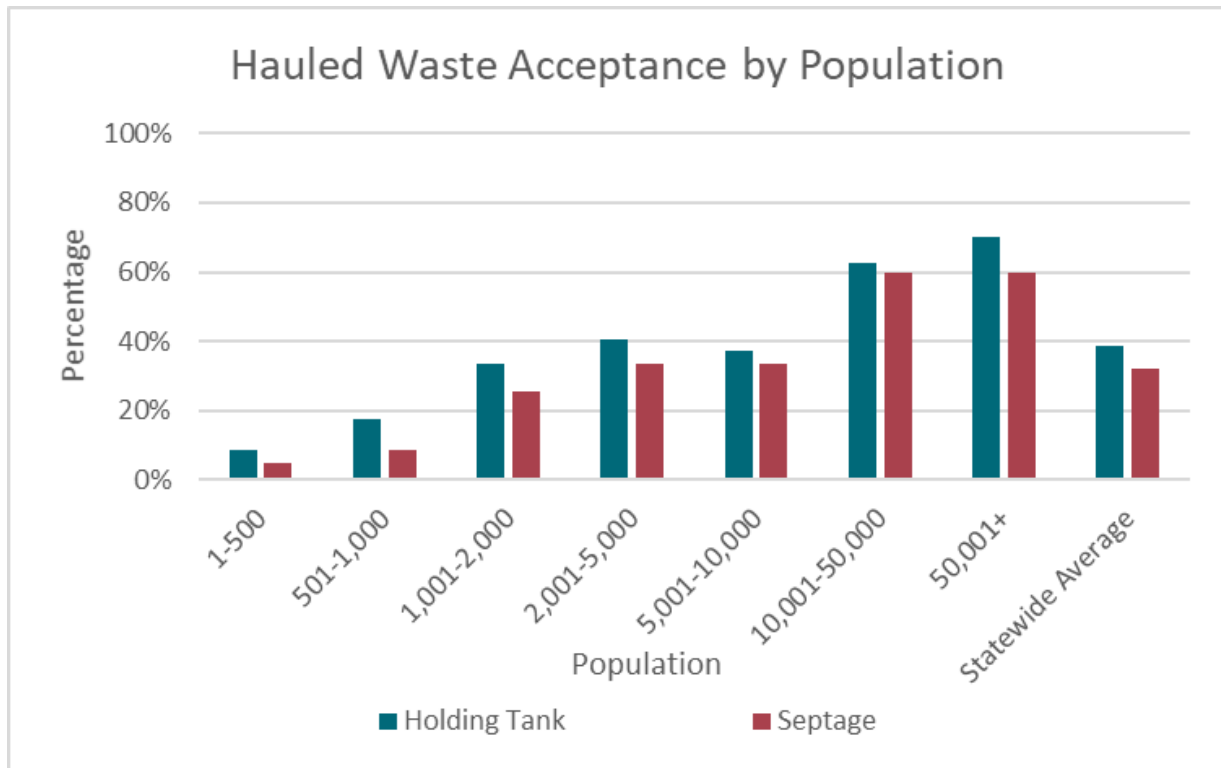
State of Wisconsin 2022 Annual Sewer User Charge			
Population Category	High	Low	Average
1,001 – 2,000 People	\$992	\$65	\$519
2,001 – 5,000 People	\$842	\$153	\$435

A comparison of the Sanitary District’s current and proposed sewer rates to other similar sized communities surveyed in the 2022 Sewer User Charge Survey is provided in the following figures. Note that the first figure provides a comparison for service populations of 1,001 to 2,000 and the second figure provides a comparison for service populations of 2,001 to 5,000.

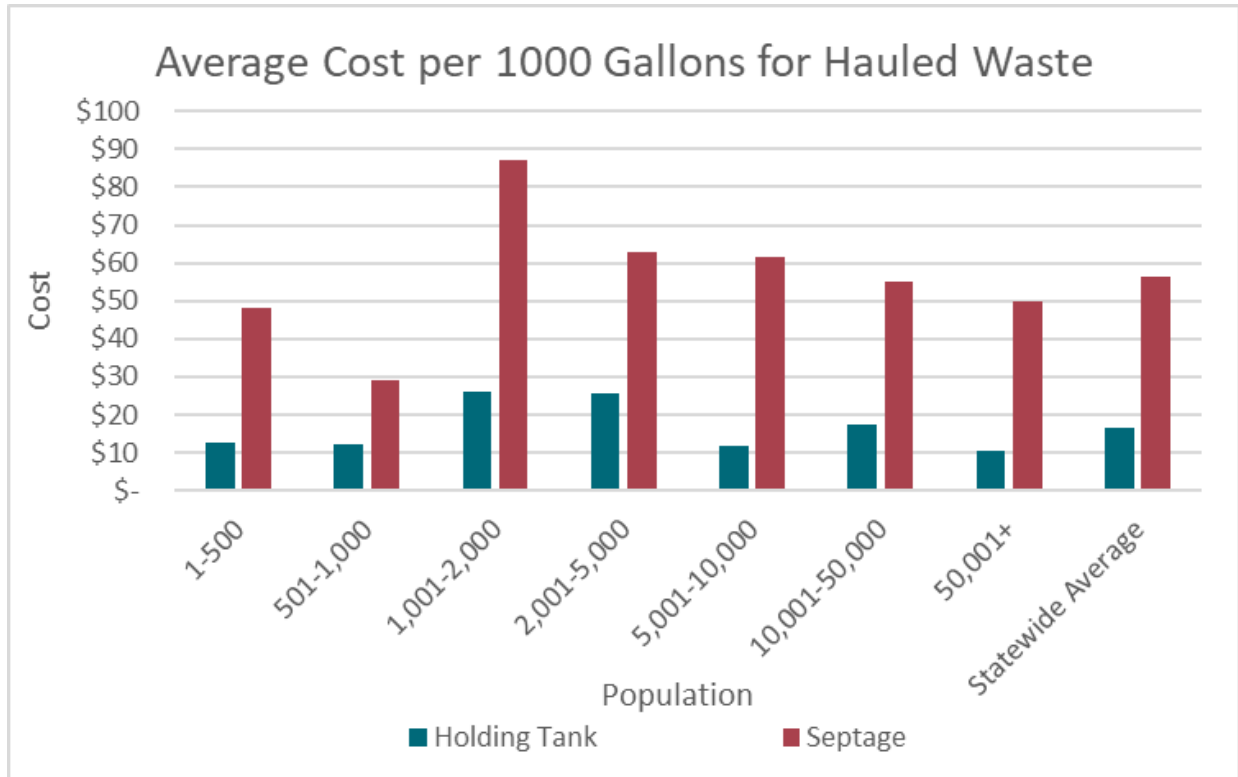




The Lakeland Sanitary District accepted an average of 556,550 gallons of septage per year (approximately 10,700 gallons per week) from 2016 – 2020. Larger communities are most likely to accept hauled waste. The figure below shows the percent of communities that accept holding and septic tank waste.



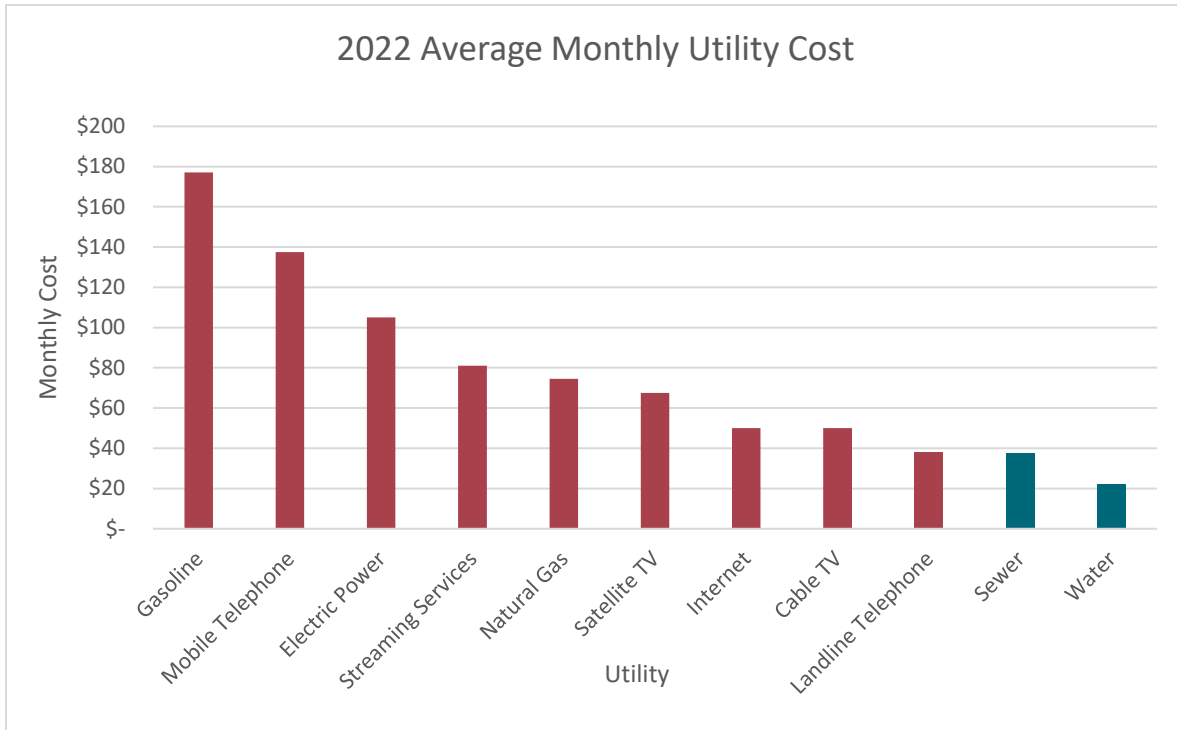
The District charges septage and holding tank wastes at the same rate of \$65 per 1000 gallons. Based on the figure provided below, this is below the average of \$87 per 1000 gallons of septage for communities with populations of 1,001 – 2,000 and just above the average of \$63 per 1000 gallons of septage for communities with populations of 2,001 – 5,000. The statewide average for septage waste is \$56 per 1000 gallons. Note that rates for holding tank waste are consistently less than rates for septage waste. The statewide average rate for holding tank waste is approximately \$17 per 1000 gallons.



Population	Holding Tank	Septage
1,001-2,000	\$26.16	\$86.99
2,001-5,000	\$25.80	\$62.78
Statewide Average	\$16.62	\$56.27
Lakeland SD (Current)	\$65.00	\$65.00

As mentioned, after the final funding package is established and the new sewer rates are set, the District’s projected average sewer rates would be above the respective averages for similar sized communities, likely in the range of \$50-\$55 per month (per REU) or approximately \$600-\$660 per year if funding is awarded through the WDNR CWFPP.

A comparison of sewer and water rates to other essential (and non-essential) services is provided in the figure on the following page. As seen in the figure, average sewer and water costs remain considerably less than other utilities and services. A preliminary schedule for the proposed upgrades is also provided and may change per the Sanitary District’s discretion as the project moves forward.



Preliminary Project Schedule

Item	Approximate Date
Facility Plan Public Hearing	November 29, 2022
Receive and Incorporate Comments from Public Hearing into Facility Plan	December 27, 2022
Submit Facility Plan to DNR	December 31, 2022
Receive DNR Comments / Discuss Report Recommendations	March 31, 2023
Submit Plans and Specs to DNR	September 30, 2023
Receive DNR Comments / Feedback	December 31, 2023
Bid Project	February 2024
Commence Construction	April 2024
Complete Construction	August 2025