

TOWN OF LAKE CITY PUBLIC WORKS FINANCIAL PROJECTION AND RATE RECOMMENDATIONS

JANUARY 2025

Introduction

The Town of Lake City Public Works (later referred to as ‘Lake City’ or ‘the Town’) aimed to restructure its rate system to ensure customers pay their proportionate share based on their strain on the wastewater treatment facility. Particularly, the Town serves several industrial and high-strength commercial users that discharge particularly strong waste streams that are major contributors to the wastewater treatment facility’s lagoon sizing and operations, which is undergoing a major capital project to meet current and future demands. To maintain balanced finances for Lake City Public Works and support necessary sewer system upgrades, restructuring all local customers by discharge strength and increasing overall rates is recommended.

In addition to sustaining finances and reserves, Lake City is also looking to finance a 2025 lagoon rehabilitation project with total project costs of around 5.6 million dollars. The expected annual loan payments are an estimated \$227,000 annually and the current sewer budget is around \$481,000, indicating the Town’s revenue must increase a minimum of 47% to make the new loan payments. Conducting a rate study will also strengthen current and future funding applications through the State Revolving Fund (SRF) from the Colorado Department of Public Health and Environment (CDPHE) and the United States Department of Agriculture (USDA).

This financial projection and rate study should help Lake City restructure its rate system and develop rate recommendations to fully support its projected revenues and expenses. The overall objective is that Lake City becomes financially sustainable with revenues projected to cover expenses and savings needs, and to inform Lake City and support stakeholders of realistic financial scenarios for the current treatment facility and required upgrades.

Methodology

This study is guided by the following three principles: Sustainability, Fairness, and Justifiability. Rates should cover the costs of the system to allow it to provide services now and in the foreseeable future. The staff and board should stay aware of the changes to existing laws, community growth, and demand which will require further treatment and therefore keep their capital replacement plan current. Rates should be fair to all ratepayers. No single ratepayer or group of ratepayers should be singled out for different rates without logic & justification. Lake City should not charge more for services than the cost to provide the service and save appropriately for future expenses, nor should customers be charged

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more for the sewer service than the reasonable cost to provide that service now and into the future. Unreasonably low rates for current customers will require unreasonably high rates for future customers, which should be avoided. To keep up with inflation, all scenarios considered in this study included an annual increase to the base rate year over year.

The following assumptions for these financial projections were made based on information provided by Lake City staff:

- A community growth factor of 1% over the next 5 years based on expected development
- An inflation factor of 3.0%
- A funding schedule as follows for how to assume future capital assets will be funded was developed based on the town’s and RCAC’s recent experience with projects of various sizes for similar municipalities

Default Funding of Asset Replacements		Cash	Grant	Loan
Replacement Value From To				
\$0	\$100,000	100%	0%	0%
\$100,001	\$500,000	25%	50%	25%
\$500,001	\$1,500,000	10%	50%	40%
\$1,500,001	\$9,999,999	2%	48%	50%
\$10,000,000	\$99,999,999	1%	35%	64%

This study was made available at no cost to Lake City, was supported through a grant from the USEPA National Environmental Finance Center.

Disclaimer: The recommendations in this study are based on financial information provided to RCAC by Lake City. While every effort was made to ensure the reliability of this information, no guarantee is expressed or implied regarding its accuracy, completeness, or correctness. Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the authors and do not necessarily represent the official view of the EPA. A CPA should be consulted for accounting advice. For legal advice, Lake City should seek the advice of their attorney.

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Reserves

RCAC recommends that the system maintains adequate reserves for various needs: 1. Operating reserves, 2. Debt Service reserves, 3. Emergency reserves, and 4. Capital Asset reserves. The recommended values for these various reserve accounts are shown below according to the cash and investments on hand as of fall 2024. The operating reserve is considered the Town’s checking account and should contain between 1.5-3 months of operating expenses. The debt service reserve is required by funders and should contain one year’s annual loan payments. The emergency reserve is the amount of cash the Town should have on hand to replace or repair a catastrophic failure that would inhibit the system’s operations. The capital reserve account should be the savings account to replace future capital assets.

Reserve Targets	Amount
Debt Reserve	\$255,954
Operating Reserve	\$29,304
Emergency Reserve	\$100,000
Available for Capital Reserve	\$371,807

The Capital Improvement Plan conducted as part of this rate study recommends an annual contribution to the capital reserves of \$91,768 to maintain full funding for future anticipated needs. The Capital Improvement Plan has been included as an attachment made available to the Town.

Budget

To develop a realistic budget, 3 years of past budgets were summarized, and future projections were developed using historical budget information and estimated adjustments for inflation and expected operational changes coming in future years. The budget for 2024-2029 is shown below.

The future budget shown reflects anticipated 3% adjustments for inflation for all expenses. Note that the “General and Administrative Expenses” line item also includes the new loan payments and the full capital reserve recommendations in addition to administrative expenses.

EXPENSES AND SOURCES OF FUNDS	2022	2023	2024	% Belonging to Sewer	2025	2026	2027	2028	2029
Total Operation and Maintenance Expenses:	94,321	85,601	113,800		117,214	123,075	129,228	135,690	142,474
Total General and Administrative Expenses:	308,101	380,546	397,387		561,943	568,063	569,367	593,136	621,355
TOTAL EXPENSES	402,422	466,147	511,187		679,157	691,138	698,595	728,826	763,829

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Scenario 0: Existing

The current water base rates and usage rates are shown below.

Current Fee Charges – Monthly Water Charges

Class	Base Rate (monthly)	Usage Rate (per 1k gal)
Residential In-Town	\$57.50	
Residential Out-Of-Town	\$69.00	
Commercial In-Town	\$57.50	\$4.25 after 14k gal
Commercial Out-Of-Town	\$69.00	\$4.25 after 14k gal

Under this structure, the 5-year financial projection is as follows:

Results of the new rates	2025	2026	2027	2028	2029	5 Years
TOTAL EXPENSES	\$655,341	\$666,857	\$673,835	\$703,591	\$716,554	\$3,416,178
TOTAL REVENUE	\$430,720	\$431,272	\$431,841	\$432,427	\$433,031	\$2,159,292
NET LOSS OR GAIN: (Short/Over to Reserves)	-\$224,621	-\$235,584	-\$241,994	-\$271,164	-\$283,524	-\$1,256,886
NET CASH FLOW (Contribution to Reserves)	-\$138,123	-\$149,086	-\$155,495	-\$190,990	-\$203,350	-\$837,045
Affordability assuming MHI of \$57548 for residential meters.	1.20%	1.20%	1.20%	1.20%	1.20%	

Under the existing rates, there is a \$837k deficit in paying the ongoing expenses for the enterprise over 5 years.

Scenario I

This scenario demonstrates the continuation of Lake City’s previously implemented rate structure while allocating funding for 30% of capital reserve requirements. The base and usage rates will increase by 43%, and the overcharge usage threshold has been reduced from 14,000 gallons to 10,000 gallons, as requested by Lake City. RCAC recommended lowering the usage tier as a best practice to promote conservation and affordability for low-use households. The 30% funding level for capital reserves, requested by Lake City, has been incorporated into all scenarios in this report.

Class	Base Rate (monthly)	Usage Rate (per 1k gal)
Residential In-Town	\$81.50	
Residential Out-of-Town	\$97.50	
Commercial In-Town	\$81.50	\$7.25 after 10k gal
Commercial Out-of-Town	\$97.50	\$7.25 after 10k gal

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Results of the new rates	2025	2026	2027	2028	2029	5 Years
TOTAL EXPENSES	\$678,936	\$690,917	\$698,374	\$728,605	\$763,608	\$3,560,441
TOTAL REVENUE	\$615,418	\$633,880	\$652,897	\$672,484	\$692,658	\$3,267,337
NET LOSS OR GAIN: (Short/Over to Reserves)	-\$63,518	-\$57,036	-\$45,477	-\$56,121	-\$70,950	-\$293,103
NET CASH FLOW (Contribution to Reserves)	\$28,250	\$34,732	\$46,291	\$29,303	\$3,304	\$141,880
Affordability assuming MHI of \$57548 for residential meters.	1.70%	1.75%	1.80%	1.86%	1.91%	

By year 5, -\$293k of fully funded reserve goal, \$141k contributed to reserves

Scenario 2

This scenario includes industrial user charges with lower residential and commercial increases of 24%, while funding 30% of reserve requirements.

The RV parks and brewery were classified as Industrial Users due to their disproportionate loading on the wastewater treatment plant. This determination was based on measured influent levels of Biochemical Oxygen Demand (BOD) and Total Kjeldhal Nitrogen (TKN) from the plant's Discharge Monitoring Report (DMR) data. While direct sampling data from the industrial users is not available, assumptions can be made using DMR data to account for BOD/TKN loading from both year-round and seasonal residential and commercial use, and excess BOD during RV park operation that cannot be easily attributed to residential and commercial was assumed to come from industrial use.

In the case of the brewery, typical brewery production information was combined with typical brewery waste strengths to assume a BOD loading. The rate increase was calculated based on treatment costs of \$5.03 per lb of BOD during the summer months and estimate that RV parks collectively contributed approximately 21,118 lbs of BOD during the 2023 season. To offset the proposed financial increase, we recommend that RV parks generate an additional \$960 annually per RV space. This revenue can be achieved by implementing a fee of approximately \$8 per night per space, assuming 100% occupancy over four months. Additionally, we advise prohibiting the practice of allowing customers to dispose of wastewater from their RVs after multiple days of camping, as this could place unnecessary strain on the treatment system.

Class	Base Rate (monthly)	Usage Rate (per 1k gal)
Residential In-Town	\$71.50	
Residential Out-of-Town	\$85.80	
Commercial In-Town	\$71.50	\$5.40 after 10k gal
Commercial Out-of-Town	\$85.80	\$5.40 after 10k gal
Industrial User – RV Park	\$2,150 - \$2,900	
Industrial User - Brewery	\$173 base rate surcharge on top of commercial charges	
3.0% Annual Increases to Base & Usage Rates through 2029		

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Results of the new rates	2025	2026	2027	2028	2029	5 Years
TOTAL EXPENSES	\$678,936	\$690,917	\$698,374	\$728,605	\$763,608	\$3,560,441
TOTAL REVENUE	\$617,092	\$635,604	\$654,673	\$674,313	\$694,542	\$3,276,223
NET LOSS OR GAIN: (Short/Over to Reserves)	-\$61,845	-\$55,312	-\$43,702	-\$54,292	-\$69,066	-\$284,218
NET CASH FLOW (Contribution to Reserves)	\$29,924	\$36,456	\$48,067	\$31,132	\$5,187	\$150,765
Affordability assuming MHI of \$57548 for residential meters.	1.49%	1.54%	1.58%	1.63%	1.68%	

By year 5, -\$284k of fully funded reserve goal, \$151k contributed to reserves

Scenario 3: Recommendation

This scenario is recommended to Lake City to meet the demands for sustainable wastewater treatment by discharge strength from local businesses and includes:

- Base rates increase to both residential and commercial rates.
- An annual increase of 3.0% to both base and usage rates is best practice to keep up with inflation.
- Commercial rates are broken down to Low, Medium, High-Strength and Industrial Users by type of business. If a business disagrees with their classification, it is recommended that the Town work with them to develop a sampling port and schedule. This will be at the expense of the business and if sampling results prove reclassification is justified, the Town may decide to change the business’s rate or classification at their discretion.
- Multiplexes should be billed based on the number of units, with each unit charged at the rate applicable to a Single-Family Residential unit, even if on a shared meter. This approach is best practice and should be implemented regardless of the scenario chosen from this report.
- RV parks should ban the practice of allowing customers to dispose of wastewater after multiple days of camping.
- Because commercial accounts are charged for usage in this new structure, it is recommended that the Town allow a business to install an additional meter on their irrigation system to be read with all other meters, and that any irrigation usage be excluded from their bimonthly charges.

The commercial strength rate was chosen based on wastewater strength in parts-per-million Biochemical Oxygen Demand (BOD) and parts-per-million Suspended Solids (SS). Customers should generally be classified according to the table below, but any individual customer’s classification or charges can be made at the discretion of the Town.

- Commercial Low-Strength use (assumed to use max 150 ppm BOD/150 ppm SS)
- Commercial Mid-Strength use (assumed to use max 350 ppm BOD/ 350 ppm SS)
- Commercial High-Strength use (assumed to use max 700 ppm BOD/ 700 ppm SS)

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Sewer Rate Customer Classifications

Low Commercial	Medium Commercial	High Commercial
Retail	Schools	Restaurants
Office	Gas stations	Bakeries
Hostels - no kitchen	Hotel/Motel without dining	Grocery with deli, bakery, or butcher shop
Churches	Grocery without dining	Hotels/Motels with dining
Museums	Hospital without dining	Hospitals with dining
Fire stations	Mini-mart without dining	Bars without dining
Daycares	Offices - medical/dental/veterinary	Mini-mart with dining
Banks	Nail Salons	Butcher Shops
Government Buildings	Machine Shops	Eateries
Post Office	Coffee Shops (baked goods only)	Deli's
Library	Pet Groomers	Coffee shops with dining
Theaters	Medical Centers	Car washes
Liquor stores	Hostel with kitchen	Auto Repair Shops
Storage	Barber shops/hair salons	Auto Service stations
Coffee shop with no food	Laundromats	Service Stations/Garages
General Stores		Bars without dining
Hardware stores		Ice Cream shops

Rates: Scenario 3

Class	Base Rate (monthly)	Usage Rate (per 1k gal)
Residential In-Town	\$66.00	
Residential Out-of-Town	\$79.20	
Commerical Low-Strength	\$66.00	\$4.25 after 10k gal
Commerical Mid-Strength	\$95.70	\$6.16 after 10k gal
Commerical High-Strength	\$200.64	\$12.93 after 10k gal
Industrial User – RV Park	\$2150-\$2900	
Industrial User - Brewery	\$173 base rate surcharge on top of commercial charges	
3.0% Annual Increases to Base & Usage Rates		

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Results of the new rates	2025	2026	2027	2028	2029	5 Years
TOTAL EXPENSES	\$679,157	\$691,138	\$698,595	\$728,826	\$763,829	\$3,561,546
TOTAL REVENUE	\$610,328	\$628,637	\$647,497	\$666,921	\$686,929	\$3,240,312
NET LOSS OR GAIN: (Short/Over to Reserves)	-\$68,829	-\$62,500	-\$51,099	-\$61,905	-\$76,900	-\$321,233
NET CASH FLOW (Contribution to Reserves)	\$22,939	\$29,268	\$40,670	\$23,520	-\$2,647	\$113,750
Affordability assuming MHI of \$57548 for residential meters.	1.38%	1.42%	1.46%	1.50%	1.55%	

By year 5, -\$321k of fully funded reserve goal, \$114k contributed to reserves

Conclusion

At the time of this report, Lake City has demonstrated a proactive and committed approach to increasing rates to achieve financial sustainability while prioritizing the needs of its community members and facilitating necessary system upgrades. RCAC presented the results of this study to the Board of Trustees and several community members at the October 2024 Board Meeting and expects that the Board will likely adopt a new rate structure in February 2025 with minor edits from the recommended scenario.

If the recommended scenario 3 is adopted, the impact will be:

- Equitable and justifiable charges to different customer types that currently disproportionately strain the wastewater treatment plant as compared to single family residences.
- An estimated \$3.24M is expected to be generated in revenue over 5 years, which should allow Lake City to remain financially solvent and save \$20,000-40,000 annually to reserves in 2025 and beyond. While this savings is a positive step forward for the Town’s sewer enterprise, this represents a fraction of the annual savings that RCAC has deemed adequate to fully cover future capital expenses. RCAC recommends the Town revisit rates in the future and consider other savings avenues to more fully cover capital reserves in the coming years and decades.
- Affordability rates rise to just over 1.5%, which is at the higher end of what is typically considered affordable by industry standards. This positions the Town well to qualify for future grants and loans. It’s important to note that most funders prefer affordability rates between 1.5% and 5.0%, so increasing rates to over 1.5% by 2029 is a positive outcome of this scenario.