

# **FY 2024 Cost of Service / Rate Design Study**

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## **City of Hickman Wastewater Utility**

### Final Report

September 25, 2024

**JKEC**

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## Executive Summary

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This study was prepared by JK Energy Consulting, LLC (JKEC) for the City of Hickman and its wastewater Utility (Utility). The purpose of the study was to review the Utility's revenues and expenses and ensure sewer rates are adequate to pay for projected expenses.

Based on the analysis completed, existing rates do not collect sufficient revenue to cover projected expenses in fiscal year (FY) 2024 through FY 2027. Projected retail revenues for FY 2024 were approximately \$820,000, while projected test year expenses were approximately \$862,000 (see Table 6, Line 6). This indicates a rate increase of 5% would be necessary in FY 2024 to ensure sufficient revenue to cover projected expenses (see Table 6, Line 16).

The proposed rate plan includes two rate increases of 5% for FY 2025 and FY 2026 (see Table 3, Line 20). Implementing 5% rate increases in FY 2025 and FY 2026 should provide adequate revenue to cover projected operating expenses, debt service costs and the cost of capital improvements not being funded from issuing new debt. Rate increases beyond FY 2026 will be dependent on future expenses and the cost of capital improvements.

The cost of service analysis was completed to assess the amount that each rate class should be paying compared to the revenue that is being collected from existing rates. The cost of service indicated that all rate classes were paying less than the cost of service. The indicated rate increases varied between 4.8% and 8.6%, depending on the rate class and usage profile (see Table 6).

The purpose of rate design is to develop rates that reflect the cost of service and accomplish other goals established by the Utility. Based on the cost of service results, it was proposed to implement the rate change by increasing all rate components a similar percentage. The proposed rates would increase the average monthly residential sewer bill from \$62.26 under existing rates to \$65.37 in FY 2025, or approximately \$3.11 (see Table 7, Line 1). In FY 2026, the average residential sewer bill would increase by \$3.27 per month. The Utility's sewer rate tends to be higher than its peer group (see Table 10); however, the Utility has been proactive with regard to funding needed capital improvements and ensuring that the sewer system is capable of serving future growth. In addition, there are multiple factors affecting rates that are outside the control of the City, including geography and customer base characteristics.

## Conclusions

The following conclusions were reached, based on the information provided and analyses completed:

1. The projected test year budget for FY 2024 was approximately \$862,000.

2. Projected revenues from existing rates are approximately \$820,000 for FY 2024.
3. Existing rates would need to increase by approximately \$41,000, or 5%, to provide sufficient revenue to pay projected FY 2024 test year expenses.
4. Existing rates would need to increase an additional 5% in FY 2026 to ensure adequate revenue to cover projected operating costs, debt service and capital improvements through FY 2027.

## **Recommendations**

The following recommendations were developed based on the analyses completed and conclusions reached:

1. Sewer rates should be increased 5% on October 1, 2024 (for FY 2025) and 5% on October 1, 2025 (for FY 2026). The rate ordinance included in Appendix A implements these rate increases.
2. The Utility should evaluate its rates prior to FY 2027 or if there are any significant changes to the system, including load growth, capital improvements or operating expense increases.

## **Purpose and Approach**

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The purpose of this study was to review the sewer rates charged by the Utility. The goal of future sewer rates was to collect sufficient revenue to cover projected expenses and provide an adequate return on rate base.

The approach to the study involved completing several tasks. Sewer discharges (based on water sales), operating expenses, capital improvement programs, non-retail revenues, and other financial information was collected. Test year expenses for FY 2024 and future expenses through FY 2027 were projected. A rate plan was developed to meet the financial goals established by the Utility. The allocated cost of service for each rate class was calculated and compared to revenue from existing rates. The existing rate ordinance was reviewed and new rates were developed. A written report was prepared and presented to the City Council on September 24, 2024.

## **Background**

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### **City of Hickman – Sewer Utility**

The City of Hickman operates its sewer utility, which serves customers located within Hickman and in rural areas adjacent to Hickman. The Utility serves approximately 1,100 customers. The City is located south of Lincoln and has experienced higher-than-normal growth over the last several years. This growth has resulted in significant capital expenditures to add treatment capacity and expand its collection system to serve future customer growth.

## Projected Financial Results

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The purpose of preparing projected financial results is to compare projected revenues with expenses and determine the need for future rate increases. Projections were prepared for the period FY 2024 through FY 2027 based on information provided by the Utility.

### Parameters

The following parameters were used to develop the test year budget and the projected financial results.

1. Historical and projected results were prepared based on the Utility's fiscal year (October 1 through September 30).
2. The FY 2024 sewer department budget was used as the basis for the FY 2024 test year budget.
3. Approximately \$80,000 per year in capital expenditures would be funded from ongoing revenue.
4. Operating and maintenance expenses, administrative costs, and other internal expenses were projected to increase at a rate of 3% annually.
5. Sewer billing units, based on water sales, were projected to increase 5% annually based on recent growth patterns for the City.
6. Projected financial results were presented on an "accrual basis" and "cash basis" and projected debt service coverage was calculated. Accrual basis accounting is consistent with Generally Accepted Accounting Principles (GAAP) and cash basis results were intended to reflect actual cash flow. Each approach is important for ratemaking purposes, since the Utility's rates should ensure positive cash flow, positive net income, and adequate debt service coverage.
7. The cost of service was prepared on a cash basis, including capital improvements and debt service principal payments, while excluding depreciation.
8. Existing debt service requirements were based on the outstanding debt allocated to the wastewater fund.
9. The minimum debt service coverage target was set at 1.10 (110%).
10. Depreciation expense of \$300,000 in FY 2024 and increasing 5% each year through FY 2027 was included in the accrual-based financial results.

### Projected Financial Results

Table 1 (see page 6) shows projected financial results for FY 2024 through FY 2027 without any rate changes. Without a rate change, the Utility does not collect sufficient revenue throughout the study period to cover projected expenses. The projected deficit on a cash basis ranges from approximately \$148,000 in FY 2024 to \$287,000 in FY 2027.

The Utility would have positive net income on an accrual basis during the study period, ranging from approximately \$153,000 in FY 2024 to \$258,000 in FY 2027.

Table 2 (see page 7) shows the projected debt service coverage for the study period. The debt service coverage ratio appears to be insufficient in FY 2025. With future load growth, debt service coverage improves in FY 2026 and beyond to a ratio of 1.10 (110% or greater). Based on the analysis completed, maintaining adequate revenue to cover projected operating costs, debt service and capital expenditures on a cash basis as shown in Table 1 appears to be the primary driver of future rate changes.

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**Table 1**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Projected Financial Results**  
**Existing Rates**

Line	Description	Actual (1)		Test Year			Projected		
		2022	2023	2024	2025	2026	2027		
1	<b>Operating Revenues</b>								
2	Retail Sales - Existing Rates	\$ 692,748	\$ 801,774	\$ 820,401	\$ 861,421	\$ 904,493	\$ 949,717		
3	Rate Changes			-	-	-	-		
4	Other Operating Revenue	108,245	38,559	48,924	48,924	48,924	48,924		
5	<b>Total Operating Revenue</b>	<b>\$ 800,993</b>	<b>\$ 840,333</b>	<b>\$ 869,325</b>	<b>\$ 910,345</b>	<b>\$ 953,417</b>	<b>\$ 998,641</b>		
6	<b>Operating Expenses</b>								
7	Salaries & Wages	\$ 50,030	\$ 128,279	\$ 128,848	\$ 132,713	\$ 136,695	\$ 140,795		
8	Other Operating Expenses	125,234	133,301	141,449	145,692	150,063	154,565		
9	Depreciation	177,741	226,598	300,000	309,000	318,270	327,818		
10	<b>Total Operating Expenses</b>	<b>\$ 353,005</b>	<b>\$ 488,178</b>	<b>\$ 570,297</b>	<b>\$ 587,406</b>	<b>\$ 605,028</b>	<b>\$ 623,179</b>		
11	<b>Operating Income - GAAP Basis</b>	<b>\$ 447,988</b>	<b>\$ 352,155</b>	<b>\$ 299,029</b>	<b>\$ 322,940</b>	<b>\$ 348,389</b>	<b>\$ 375,462</b>		
12	<b>Non-Operating Expense/(Revenue)</b>								
13	Interest Income	\$ (220)	\$ (18,927)	\$ -	\$ -	\$ -	\$ -		
14	Interest Expense	63,070	56,323	145,562	132,845	125,090	116,090		
15	Debt Issuance Expense	11,438	-	-	1,834	1,629	1,422		
16	Interfund Transfers	(2,698)	(160,979)	-	-	-	-		
17	Grant Income	-	-	-	-	-	-		
18	<b>Total Non-Operating Expense/(Revenue)</b>	<b>\$ 71,590</b>	<b>\$ (123,583)</b>	<b>\$ 145,562</b>	<b>\$ 134,679</b>	<b>\$ 126,719</b>	<b>\$ 117,512</b>		
19	<b>Net Income - GAAP Basis</b>	<b>\$ 376,398</b>	<b>\$ 475,738</b>	<b>\$ 153,467</b>	<b>\$ 188,260</b>	<b>\$ 221,670</b>	<b>\$ 257,951</b>		
20	<b>Cash Basis</b>								
21	Net Income			\$ 153,467	\$ 188,260	\$ 221,670	\$ 257,951		
22	Plus Depreciation			300,000	309,000	318,270	327,818		
23	Less Principal			(441,718)	(449,473)	(482,529)	(472,435)		
24	Less Capital Expenditures			(80,000)	(84,000)	(88,200)	(200,000)		
25	<b>Net Income - Cash Basis</b>			<b>\$ (148,252)</b>	<b>\$ (120,213)</b>	<b>\$ (118,989)</b>	<b>\$ (286,667)</b>		
26	<b>Rate Change Needed (2)</b>			18.1%	14.0%	13.2%	30.2%		

Notes:  
(1) Based on audited financial statements.

**Table 2**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Projected Financial Results - Debt Service Coverage**  
**Existing Rates**

Line	Description	Test Year	Projected		
		2024	2025	2026	2027
1	<b>Retail Revenue - Existing Rates</b>	\$ 820,401	\$ 861,421	\$ 904,493	\$ 949,717
2	<b>Debt Service Coverage</b>				
3	Net Revenue (1)	\$ 599,029	\$ 631,940	\$ 666,659	\$ 703,281
4	Debt Service Expense	\$ 587,281	\$ 582,318	\$ 607,619	\$ 588,525
5	<b>Debt Service Coverage (2)</b>	<b>1.02</b>	<b>1.09</b>	<b>1.10</b>	<b>1.19</b>
6	<b>Revenue Increase for 1.1x Coverage</b>	<b>46,980</b>	<b>8,610</b>	<b>1,722</b>	<b>(55,903)</b>
7	<b>Rate Increase for 1.1x Coverage (%) (3)</b>	<b>5.7%</b>	<b>1.0%</b>	<b>0.2%</b>	<b>-5.9%</b>

Note:

1. Operating revenue, less operating and maintenance expenses (excluding depreciation).
2. Net revenue divided by debt service expense.
3. Line 6 divided by Line 1. Represents total cumulative rate change from existing rates required.

### **Future Rate Changes**

Tables 3 (see page 8) and 4 (see page 9) show the projected operating results with 5% rate increases in FY 2025 and FY 2026. These increases would provide sufficient revenue to cover projected operating expenses, debt service costs, and a majority of planned capital improvements. These rate increases would increase debt service coverage to 1.16 in FY 2025, 1.24 in FY 2026 and 1.35 in FY 2027, which provides flexibility to issue additional bonds in the future. The primary driver for the rate increases is not projected debt service coverage, but rather ensuring adequate revenue to maintain positive cash flow.

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**Table 3**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Projected Financial Results**  
**Proposed Rates - Cash Basis**

Line	Description	Test Year	Projected		
		2024	2025	2026	2027
1	<b>Operating Revenues</b>				
2	Retail Sales - Existing Rates	\$ 820,401	\$ 861,421	\$ 904,493	\$ 949,717
3	Rate Changes	-	41,020	88,296	92,710
4	Other Operating Revenue	48,924	48,924	48,924	48,924
5	<b>Total Operating Revenue</b>	<b>\$ 869,325</b>	<b>\$ 951,366</b>	<b>\$ 1,041,712</b>	<b>\$ 1,091,352</b>
6	<b>Operating Expenses</b>				
7	Salaries & Wages	128,848	132,713	136,695	140,795
8	Other Operating Expenses	141,449	145,692	150,063	154,565
9	Depreciation	300,000	309,000	318,270	327,818
10	<b>Total Operating Expenses</b>	<b>\$ 570,297</b>	<b>\$ 587,406</b>	<b>\$ 605,028</b>	<b>\$ 623,179</b>
11	<b>Operating Income - GAAP Basis</b>	<b>\$ 299,029</b>	<b>\$ 363,960</b>	<b>\$ 436,684</b>	<b>\$ 468,173</b>
12	<b>Non-Operating Expense/(Revenue)</b>				
13	Interest Income	\$ -	\$ -	\$ -	\$ -
14	Interest Expense	145,562	132,845	125,090	116,090
15	Debt Issuance Expense	-	1,834	1,629	1,422
16	Interfund Transfers	-	-	-	-
17	Grant Income	-	-	-	-
18	<b>Total Non-Operating Expense/(Revenue)</b>	<b>\$ 145,562</b>	<b>\$ 134,679</b>	<b>\$ 126,719</b>	<b>\$ 117,512</b>
19	<b>Net Income - GAAP Basis</b>	<b>\$ 153,467</b>	<b>\$ 229,280</b>	<b>\$ 309,965</b>	<b>\$ 350,661</b>
20	<b>Rate Change</b>	0.00%	5.00%	5.00%	0.00%
21	<b>Cash Basis</b>				
22	Net Income	\$ 153,467	\$ 229,280	\$ 309,965	\$ 350,661
23	Plus Depreciation	300,000	309,000	318,270	327,818
24	Less Principal	(441,718)	(449,473)	(482,529)	(472,435)
25	Less Capital Expenditures	(80,000)	(84,000)	(88,200)	(200,000)
26	<b>Net Income - Cash Basis</b>	<b>\$ (68,252)</b>	<b>\$ 4,807</b>	<b>\$ 57,507</b>	<b>\$ 6,044</b>

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**Table 4**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Projected Financial Results - Debt Service Coverage**  
**Proposed Rates**

Line	Description	Projected		
		2025	2026	2027
1	<b>Debt Service Coverage</b>			
2	Net Revenue (1)	\$ 672,960	\$ 754,954	\$ 795,991
3	Use of Reserves	-	-	-
4	Debt Service Expense	\$ 582,318	\$ 607,619	\$ 588,525
5	<b>Debt Service Coverage (2)</b>	<b>1.16</b>	<b>1.24</b>	<b>1.35</b>
6	<b>Implemented Rate Change</b>	5.00%	5.00%	0.00%

Note:

1. Operating revenue, less operating and maintenance expenses (excluding depreciation).
2. Net revenue divided by debt service expense.

## Cost of Service

The purpose of the cost of service analysis is to identify the costs related to serving each class of customers. Several steps were completed to prepare the cost of service analysis. A FY 2024 test year budget was prepared based on the FY 2024 operating budget, with adjustments for known changes. Each expense item was identified and assigned to a utility function, and further classified as volume or extra capacity (peak day or peak hour), and customer related expense. This process is called “functionalization” and “classification.”

The costs related to each function were allocated to customer classes based on generally accepted cost allocation principles for municipal sewer utilities. The allocated costs were compared to revenues collected from existing rates. The comparison of the cost of service to revenue from existing rates was used as a factor in designing rates.

## Test Year Budget

The FY 2024 operating budget was used as the basis for the test year budget. The purpose of preparing a test year budget is to create a scenario that is as close to “normal” operating conditions as possible, reflecting known changes for the Utility. The test year budget for FY 2024 included the following adjustments:

1. Normalized sewer discharges based on typical historical water sales.
2. Exclusion of sales tax revenues and expenses.
3. Rates would recover 5% of additional revenue to match the proposed rate plan.

The test year budget for FY 2024 was approximately \$862,000 and is summarized in Table 5. The test year budget represents the amount that needs to be collected from retail rates. It includes all operating expenses, debt service payments, capital improvements funded from rates and is reduced for revenue from interest income and other non-retail revenue. It also includes an adjustment for net margin to ensure the test year budget is 5% greater than revenues from current rates.

**Table 5**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Test Year Budget by Function**

Line	Rate Class	Volume Related	Capacity Related	Customer Related	Total
1	Residential	\$ 489,595	\$ 211,325	\$ 97,493	\$ 798,413
3	Multi-Family	6,208	1,786	1,027	9,022
4	Commercial and Municipal Use	38,550	11,093	4,444	54,087
5	Lift Station/Pumping	-	-	-	-
6	<b>Total</b>	<b>\$ 534,354</b>	<b>\$ 224,204</b>	<b>\$ 102,964</b>	<b>\$ 861,522</b>
7	<b>Percentage</b>	<b>62.0%</b>	<b>26.0%</b>	<b>12.0%</b>	<b>100.0%</b>

### **Functionalization and Classification**

Functionalization and classification involve assigning the expense items to function, and classifying those expenses on the basis of a reasonable allocation method. The following functions were used for the Utility:

1. Sewage collection
2. Sewage treatment
3. Customer service
4. Other (interest income, other charges)

Treatment and collection costs were split between base costs, which vary in proportion to sewer discharge, extra capacity costs, and customer costs that do not vary based on sewage volumes. Extra capacity costs vary in proportion to the amount peak discharge exceeds the average usage. Customer and metering costs include those costs associated with serving a particular customer, regardless of the customer's sewer discharges. Customer-related costs include a portion of collection expense, customer billing, meter reading, customer accounting expense and maintenance costs related to

these functions. Other expenses cannot easily be assigned to the base cost or customer cost category, including administrative expenses. These costs were split between volume-related and customer-related allocations in the cost of service analysis.

Table 5 (see page 10) summarizes the classification of test year expenses and the allocation to the various retail rate classes. Approximately \$534,000 was classified as volume-related, \$224,000 was classified as capacity related, and \$103,000 was classified as customer related expenses. Based on these classifications, 62% of the Utility's test year budget was volume-related, 26% was capacity-related, and 12% was customer-related.

### ***Cost Allocation***

The functionalized costs were allocated to the various rate classes using generally accepted methods for preparing sewer cost of service studies. There is no standard cost of service methodology that the Utility is required to follow, although there are a number of guidelines that municipal utilities typically follow to establish sewer rates. The Utility currently differentiates its rates based only on rate class and meter size, which based on the Utility's customer base is a reasonable approach.

### ***Comparison of Revenues to Cost of Service***

Revenues collected from existing rates were compared to the allocated cost of service. The purpose of this comparison was to assess the adequacy of existing rates for each rate class. This comparison can be used to assess the general magnitude of rate changes needed for each rate class and is one factor in determining the need for rate adjustments for individual rate classes.

Table 6 (see page 12) compares the revenue from existing rates to the calculated cost of service. Overall, the cost of service was 5% more than revenues from existing rates. The cost of service was 4.8% higher than existing revenues for residential customers, 7.3% higher than existing revenues for multi-family customers, and 8.6% higher than existing revenues for commercial and municipal use customers, depending on the usage profile and meter size.

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**Table 6**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Comparison of Cost of Service**  
**to Revenue from Existing Rates**

Line	Rate Class	Revenue Existing Rates	Cost of Service	Difference	
				\$	%
1	Residential	\$ 762,204	\$ 798,413	\$ 36,209	4.8%
2	Not Used	-	-	-	0.0%
3	Multi-Family	8,409	9,022	614	7.3%
4	Commercial and Municipal Use	49,789	54,087	4,298	8.6%
5	Lift Station/Pumping	-	-	-	0.0%
6	<b>Total</b>	<b>\$ 820,401</b>	<b>\$ 861,522</b>	<b>\$ 41,120</b>	<b>5.0%</b>

## Rate Design

The proposed rate plan would increase rates by a cumulative total of approximately 10% through FY 2027. An across-the-board approach was used to increase the monthly customer charge and flow-based charge. Under this approach, all customers will experience a similar percentage rate increase.

The proposed rate change would increase the average monthly residential sewer bill by \$3.11 per month in FY 2025 and \$3.27 per month in FY 2026. Tables 7 and 8 (see page 13) show the proposed rate increases by rate class for FY 2025 and FY 2026.

**Table 7**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Proposed Rate Change by Rate Class - FY 2025**

Line	Rate Class	Revenue Existing Rates	Revenue FY 2025 Rates	Difference		
				\$	Bill (1)	%
1	Residential	\$ 762,204	\$ 800,314	\$ 38,110	\$ 3.11	5.0%
3	Multi-Family	8,409	8,829	420	3.26	5.0%
4	Commercial and Municipal Use	49,789	52,279	2,489	4.46	5.0%
5	Lift Station/Pumping	-	-	-	-	0.0%
6	<b>Total</b>	<b>\$ 820,401</b>	<b>\$ 861,421</b>	<b>\$ 41,020</b>	<b>\$ 3.17</b>	<b>5.0%</b>

Note:

1. Change in average monthly bill for customers within rate class.

**Table 8**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Proposed Rate Change by Rate Class - FY 2026**

Line	Rate Class	Revenue	Revenue	Difference		
		FY 2025 Rates	FY 2026 Rates	\$	Bill (1)	%
1	Residential	\$ 800,314	\$ 840,330	\$ 40,016	\$ 3.27	5.0%
3	Multi-Family	8,829	9,270	441	3.42	5.0%
4	Commercial and Municipal Use	52,279	54,892	2,614	4.68	5.0%
5	Lift Station/Pumping	-	-	-	-	0.0%
6	<b>Total</b>	<b>\$ 861,421</b>	<b>\$ 904,493</b>	<b>\$ 43,071</b>	<b>\$ 3.33</b>	<b>5.0%</b>

Note:

1. Change in average monthly bill for customers within rate class.

With the proposed rate increases, the Utility’s residential sewer rate in FY 2025 is higher than the identified peer group. Table 9 (see page 14) provides a comparison of existing rates for the cities of Beatrice, Lincoln, Nebraska City, Seward, and Wahoo to the recommended FY 2025 rates for Hickman. The comparisons were prepared for usage of 5,000 gallons, 7,000 gallons and 10,000 gallons. The typical monthly residential sewer bill was 4,200 gallons per customer, based on typical winter usage.

Rate comparisons do not consider factors such as geography, how pro-active a given utility is regarding capital improvement budgets, expected customer growth and differences in customer base. The rate comparison indicates the projected sewer rates are somewhat higher compared to similarly situated municipal utilities in eastern Nebraska after implementing the proposed rate changes. Other municipal utilities are experiencing similar rate pressures related to capital expenditures and compliance with environmental regulations, especially those utilities expected to experience significant growth over the next several years.

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**Table 9**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Typical Bill Comparison**  
**Rate Comparisons - Proposed FY 2025 Rates**

<b>Residential</b>			
<b>Utility</b>	<b>5,000 gal</b>	<b>7,000 gal</b>	<b>10,000 gal</b>
Beatrice (1)	\$ 27.00	\$ 33.00	\$ 42.00
<b>Hickman (2)</b>	<b>\$ 68.67</b>	<b>\$ 76.02</b>	<b>\$ 87.05</b>
Lincoln (3)	\$ 25.66	\$ 32.34	\$ 42.35
Nebraska City (4)	\$ 39.37	\$ 45.52	\$ 54.74
Seward (5)	\$ 59.75	\$ 71.10	\$ 88.11
Wahoo (6)	\$ 41.99	\$ 48.69	\$ 58.74

1. Rates effective October 2021.
2. Proposed rates, effective FY 2025.
3. Rates from City of Lincoln website as of August 15, 2024.
4. Rates effective March 1, 2019.
5. Rates effective October 2023.
6. Rates effective February 2024.

## Conclusions

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The following conclusions were reached, based on the information provided and analyses completed:

1. The projected test year budget for FY 2024 was approximately \$862,000.
2. Projected revenues from existing rates are approximately \$820,000 for FY 2024.
3. Existing rates would need to increase by approximately \$41,000, or 5%, to provide sufficient revenue to pay projected FY 2024 test year expenses.
4. Existing rates would need to increase an additional 5% in FY 2026 to ensure adequate revenue to cover projected operating costs, debt service and capital improvements through FY 2027.

## Recommendations

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The following recommendations were developed based on the analyses completed and conclusions reached:

1. Sewer rates should be increased 5% on October 1, 2024 (for FY 2025) and 5% on October 1, 2025 (for FY 2026). The rate ordinance included in Appendix A implements these rate increases.

2. The Utility should evaluate its rates prior to FY 2027 or if there are any significant changes to the system, including load growth, capital improvements or operating expense increases.



# Appendix A – Rate Ordinance

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**ORDINANCE NO. 2024-\_\_\_\_\_**

AN ORDINANCE TO ESTABLISH CHARGES AND FEES FOR USE OF THE CITY SEWER SYSTEM PER §7-321 OF THE MUNICIPAL CODE OF HICKMAN, NEBRASKA; TO CHANGE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL CUSTOMER BASE AND USAGE RATES FOR SEWER SERVICE; TO REPEAL ORDINANCE 2022-18; AND TO PROVIDE FOR THE EFFECTIVE DATE HEREOF AND ORDERING THE PUBLICATION OF THE ORDINANCE IN PAMPHLET FORM.

BE IT ORDAINED BY THE MEMBERS OF THE GOVERNING BODY OF THE CITY OF HICKMAN, NEBRASKA:

**Section 1.** Charges and Fees for Sewer Use by Customers of the City Sewer Department per Section 7-321 of the Municipal Code of the City of Hickman be as follows:

MUNICIPAL SEWER DEPARTMENT; RATE SETTING: Customers of Municipal Sewer Department shall be charged a base rate and a rate based on metered water usage for the use of sewer service. Rates shall be set by ordinance of the Governing Body:

**A. Residential Rates**

1. Base Rate. Each customer shall be charged a Base Rate per month per sewer hook-up.
2. Monthly Rate Based on Water Usage. The monthly rate based on metered water usage per one thousand (1,000) gallons, or any portion thereof, during the Base Period by the customer.
3. Minimum Bill. The Minimum Bill shall be the Base Rate.

Rates:

<b>Effective Date:</b>	<b><u>October 1, 2024</u></b>	<b><u>October 1, 2025</u></b>
Base Rate	\$50.30	\$52.81
Water Usage Rate	<u>\$/1000 gal.</u> \$3.68	<u>\$/1000 gal.</u> \$3.86

**B. Multi-Family Rate**

1. The Multi-Family rate shall be applicable in cases where more than one residential dwelling is served by a single meter.
2. Base Rate. A Base Rate shall be charged per month based on customer meter size.

3. Monthly Rate Based on Water Usage. The monthly rate based on metered water usage per one thousand (1,000) gallons, or any portion thereof, during the Base Period by the customer.
4. Minimum Bill. The Minimum Bill shall be the Base Rate.

Rates:

<b>Effective Date:</b>	<b><u>October 1, 2024</u></b>	<b><u>October 1, 2025</u></b>
Base Rate, per water meter size		
Less than 2"	\$50.30	\$52.81
3"	\$75.92	\$79.71
4"	\$96.92	\$101.76
6"	\$280.67	\$294.70
 Water Usage Rate	 <u>\$/1000 gal.</u> \$3.68	 <u>\$/1000 gal.</u> \$3.86

#### C. Commercial and Municipal Use

1. Base Rate. Each customer shall be charged a Base Rate per month per sewer hook-up.
2. Monthly Rate Based on Water Use. The monthly rate based on metered water usage per one thousand (1,000) gallons, or any portion thereof, during the Base Period by the customer.
3. Minimum Bill. The Minimum Bill shall be the Base Rate.

Rates:

<b>Effective Date:</b>	<b><u>October 1, 2024</u></b>	<b><u>October 1, 2025</u></b>
Base Rate	\$70.25	\$73.76
 Water Usage Rate	 <u>\$/1000 gal.</u> \$3.31	 <u>\$/1000 gal.</u> \$3.47

#### D. Base Period Definition

1. For Residential users (including Multi-Family) and non-profit education, charitable, religious, or service organization users, the metered water used during the Base Period is December 20 through March 20 and will be determined by calculating the average monthly metered water usage for the period; or if a recording of such monthly water billing period is not available, the monthly rate shall be calculated

on the basis of five thousand (5,000) gallons metered water use until the date of the above monthly water billing period is available.

2. For Commercial users, the Base Period usage will be the last preceding monthly water billing period.

**E. Lift Station/Pumping Rates**

1. The Lift Station/Pumping rate shall be applicable in cases where more than one customer is served by a single meter and non-municipal water is being discharged into the municipal sewer system.
2. Base Rate. A Base Rate shall be charged per month based on customer meter size.
3. Monthly Rate Based on Water Outflows. The monthly rate based on metered water discharge per one thousand (1,000) gallons, or any portion thereof.

Rates:

<b>Effective Date:</b>	<b><u>October 1, 2024</u></b>	<b><u>October 1, 2025</u></b>
Base Rate, per water meter size		
Less than 2"	\$50.30	\$52.81
3"	\$75.92	\$79.71
4"	\$96.92	\$101.76
6"	\$280.67	\$294.70
Water Usage Rate	<u>\$/1000 gal.</u> \$4.46	<u>\$/1000 gal.</u> \$4.69

- F. When the billing period of a customer's first or final bill is less than thirty (30) days in length, the applicable monthly base rate above, on the customer's first or final bill, shall be prorated based on the number of days service is provided divided by thirty (30) days.

**Section 2.** That Ordinance 2022-18 of Hickman, Nebraska, is hereby repealed.

**Section 3.** This ordinance will become effective and operative with the first billing date occurring on or after October 1, 2024.

**Section 4.** This ordinance will be in full force and effect from and after its passage, approval, and publication or posting in pamphlet form as required by law.

PASSED AND APPROVED THIS \_\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Doug Wagner, Mayor

ATTEST:

\_\_\_\_\_  
Jaala Johnson, City Clerk

(SEAL)

## Appendix B – Cost of Service Worksheets

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**Appendix Table B-1**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Summary of Parameters for Financial Projections**

Line	Category	Year				
		2024	2025	2026	2027	2028
1	<b>Revenue Escalation</b>					
2	Sales Growth	0.00%	0.00%	5.00%	5.00%	5.00%
3	Retail Rate Increases	0.00%	5.00%	5.00%	0.00%	0.00%
4	Non-Retail Revenue Increase	0.00%	0.00%	0.00%	0.00%	0.00%
5	<b>Expense Escalation Rates</b>					
6	Operation and Maintenance	3.00%	3.00%	3.00%	3.00%	3.00%
7	Capital Improvements	0.00%	5.00%	5.00%	5.00%	5.00%
8	Non-Operating Revenue	3.00%	3.00%	3.00%	3.00%	3.00%
9	Interest Income	0.00%	0.00%	0.00%	0.00%	0.00%
10	General and Administrative	2.50%	3.00%	3.00%	3.00%	3.00%
11	Transfers	3.00%	3.00%	3.00%	3.00%	3.00%
12	<b>Total Debt Service</b>					
13	<b>NDEE</b>					
14	Principal	\$ 40,868	\$ 41,073	\$ 41,279	\$ 41,485	\$41,693
15	Interest	2,039	1,834	1,629	1,422	1,214
16	Admin. Fee	2,039	1,834	1,629	1,422	1,214
17	<b>NDEE Debt Service</b>	\$ 44,947	\$ 44,742	\$ 44,536	\$ 44,330	\$ 44,122
18	<b>Terrace View Project - 24%</b>					
19	Principal	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 13,200
20	Interest	8,272	7,960	7,630	7,288	6,928
21	<b>Terrace View Debt Service</b>	\$ 20,272	\$ 19,960	\$ 19,630	\$ 19,288	\$ 20,128
22	<b>Combined Utility - 51%</b>					
23	Principal	\$ 68,850	\$ 71,400	\$ 89,250	\$ 73,950	\$ 107,100
24	Interest	11,776	10,055	8,127	5,539	3,320
25	<b>Combined Utility Debt Service</b>	\$ 80,626	\$ 81,455	\$ 97,377	\$ 79,489	\$ 110,420
26	<b>GO Sewer Bonds - 100%</b>					
27	Principal	\$ 95,000	\$ 100,000	\$ 105,000	\$ 110,000	\$ 110,000
28	Interest	110,555	106,898	103,048	99,005	94,770
29	<b>GO Sewer Bonds Debt Service</b>	\$ 205,555	\$ 206,898	\$ 208,048	\$ 209,005	\$ 204,770
30	<b>GO Refund Bonds - 100%</b>					
31	Principal	\$ 225,000	\$ 225,000	\$ 235,000	\$ 235,000	\$ 175,000
32	Interest	7,224	6,099	4,658	2,836	919
33	<b>GO Refund Bonds Debt Service</b>	\$ 232,224	\$ 231,099	\$ 239,658	\$ 237,836	\$ 175,919
34	<b>TOTAL DEBT SERVICE</b>					
35	Principal	\$ 441,718	\$ 449,473	\$ 482,529	\$ 472,435	\$ 446,993
36	Interest	139,866	132,845	125,090	116,090	107,151
37	Administrative Fee	2,039	1,834	1,629	1,422	1,214
38	<b>TOTAL DEBT SERVICE</b>	\$ 583,623	\$ 584,152	\$ 609,248	\$ 589,947	\$ 555,358

**Appendix Table B-2**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Total Budgeted Cost and Adjustments**  
**Test Year FY 2024**

Line	Budget Item	Functionalization Factor	Category for Operating Results	FY2023	Test Year	FY2024
				Est. Dollars	Adjustment	Test Year Budget
1	<b>Operating Expenses</b>					
2	Salaries & Wages	Treatment Allocation	Salaries & Wages	116,358	12,490	128,848
3	Consulting Services	Treatment Allocation	Professional Services	5,669	4,331	10,000
4	Schooling/Professional Development	Treatment Allocation	Schooling	1,748	252	2,000
5	Uniforms & Clothing	Treatment Allocation	Uniforms & Clothing	1,139	(139)	1,000
6	Supplies & Small Tools	Direct - Base	Operating Supplies	3,415	1,585	5,000
7	Capital Improvements	Allocation - Capital Projects	Capital Improvement	15,457	(15,457)	-
8	Insurance	Treatment Allocation	Insurance	21,569	931	22,500
9	Utilities	Treatment Allocation	Utilities	33,208	(1,477)	31,731
10	Repairs & Maintenance	Collection Allocation	Repairs & Maintenance	16,653	(1,653)	15,000
11	Testing	Collection Allocation	Testing	3,464	178	3,642
12	Printing & Publishing	Collection Allocation	Printing & Publishing	1,048	65	1,113
13	Computer Expense	Direct - Other	Computer & Software	110	11,690	11,800
14	Telephone-Internet	Direct - Other	Telephone	1,433	48	1,481
15	Postage	Direct - Other	Postage	2,100	210	2,310
16	Office Supplies	Direct - Customer Costs	Office Supplies	720	288	1,008
17	Professional Services	Direct - Customer Costs	Professional Services	-	1,864	1,864
18	Capital Outlay	Allocation - Capital Projects	Capital Outlay	429,354	(349,354)	80,000
19	Bad Debt	Direct - Other	Bad Debt	880	14,620	15,500
20	Dues & Subscriptions	Direct - Other	Dues & Subscriptions	1,912	13,588	15,500
21	<b>Other Expenses/(Revenue)</b>					
22	Building Permit Fee	Direct - Other	Other/Misc. Income	(13,050)	(2,950)	(16,000)
23	Infrastructure Fees	Direct - Other	Other/Misc. Income	(15,600)	(8,400)	(24,000)
24	Service Charge/Penalty	Direct - Other	Other/Misc. Income	(8,490)	(434)	(8,924)
25	Grant Income	Direct - Other	Grant Income	-	-	-
26	Bond Principal	Allocation - Capital Projects	Bond Principal	333,050	108,668	441,718
27	Bond Interest	Allocation - Capital Projects	Bond Interest	36,557	106,966	143,523
28	Debt Issuance Expense	Allocation - Capital Projects	Bond Interest	-	2,039	2,039
29	Interest Income	Direct - Other	Interest Income	(18,927)	18,927	-
30	Miscellaneous Income	Direct - Other	Other/Misc. Income	(7,839)	7,839	-
31	Services	Direct - Other	Other/Misc. Income	(4,012)	4,012	-
32	Bond Issuance Costs	Direct - Other	Bond Issuance Costs	43,680	(43,680)	-
33	Rate Stabilization Adjustment	Direct - Other				(27,131)
34	CWSRF Note Principal	Direct - Other	Bond Principal	40,665	(40,665)	-
35	CWSRF Note Interest Expense	Direct - Other	Bond Interest	4,485	(4,485)	-
36	<b>Total Test Year Expenses</b>			<b>\$ 1,046,756</b>	<b>\$ (158,103)</b>	<b>\$ 861,522</b>



**Appendix Table B-3**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Classification / Functionalization Factors**

Line	Functionalization Factor	Extra					Total
		Base	Capacity - Max Day	Customer Billing	Facility Capacity	Other	
1	Allocation - Capital Projects	60%	25%	15%	0%	0%	100.00%
2	Collection Allocation	70%	30%	0%	0%	0%	100.00%
3	Cost of Service	0%	0%	0%	0%	0%	0.00%
4	Direct - Base	100%	0%	0%	0%	0%	100.00%
5	Direct - Customer Costs	0%	0%	100%	0%	0%	100.00%
6	Direct - Other	75%	25%	0%	0%	0%	100.00%
7	Treatment Allocation	70%	30%	0%	0%	0%	100.00%

**Appendix Table B-4  
City of Hickman  
2024 Wastewater Cost of Service Study  
Allocated Cost of Service**

Line		Base	Extra Capacity Max Day	Extra Capacity Max Hour	Customer	Customer	Customer	
	<b>Cost of Service</b>	\$ 534,354	\$ 224,204	\$ -	\$ 102,964	\$ -	\$ -	<b>\$861,522</b>
1	Residential	\$ 489,595	\$ 211,325	\$ -	\$ 97,493	\$ -	\$ -	798,413
3	Multi-Family	6,208	1,786	-	1,027	-	-	9,022
4	Commercial and Municipal Use	38,550	11,093	-	4,444	-	-	54,087
5	Lift Station/Pumping	-	-	-	-	-	-	-
6	<b>Total Cost of Service</b>	\$ 534,354	\$ 224,204	\$ -	\$ 102,964	\$ -	\$ -	<b>\$861,522</b>

**Appendix Table B-5**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Total Budgeted Cost Allocation by Category**

Line	Budget Item	Total	Production Cost			Customer Billing	Total
			Base	Extra Capacity - Max Day	Extra Capacity - Max Hour		
1	<b><u>Operating Expenses</u></b>						
2	Salaries & Wages	128,848	90,193	38,654	-	-	128,848
3	Consulting Services	10,000	7,000	3,000	-	-	10,000
4	Schooling/Professional Development	2,000	1,400	600	-	-	2,000
5	Uniforms & Clothing	1,000	700	300	-	-	1,000
6	Supplies & Small Tools	5,000	5,000	-	-	-	5,000
7	Capital Improvements	-	-	-	-	-	-
8	Insurance	22,500	15,750	6,750	-	-	22,500
9	Utilities	31,731	22,212	9,519	-	-	31,731
10	Repairs & Maintenance	15,000	10,500	4,500	-	-	15,000
11	Testing	3,642	2,549	1,093	-	-	3,642
12	Printing & Publishing	1,113	779	334	-	-	1,113
13	Computer Expense	11,800	8,850	2,950	-	-	11,800
14	Telephone-Internet	1,481	1,111	370	-	-	1,481
15	Postage	2,310	1,733	578	-	-	2,310
16	Office Supplies	1,008	-	-	-	1,008	1,008
17	Professional Services	1,864	-	-	-	1,864	1,864
18	Capital Outlay	80,000	48,000	20,000	-	12,000	80,000
19	Bad Debt	15,500	11,625	3,875	-	-	15,500
20	Dues & Subscriptions	15,500	11,625	3,875	-	-	15,500
21	<b><u>Other Expenses/(Revenue)</u></b>	-	-	-	-	-	-
22	Building Permit Fee	(16,000)	(12,000)	(4,000)	-	-	(16,000)
23	Infrastructure Fees	(24,000)	(18,000)	(6,000)	-	-	(24,000)
24	Service Charge/Penalty	(8,924)	(6,693)	(2,231)	-	-	(8,924)
25	Grant Income	-	-	-	-	-	-
26	Bond Principal	441,718	265,031	110,430	-	66,258	441,718
27	Bond Interest	143,523	86,114	35,881	-	21,528	143,523
28	Debt Issuance Expense	2,039	1,223	510	-	306	2,039
29	Interest Income	-	-	-	-	-	-
30	Miscellaneous Income	-	-	-	-	-	-
31	Services	-	-	-	-	-	-
32	Bond Issuance Costs	-	-	-	-	-	-
33	Rate Stabilization Adjustment	(27,131)	(20,348)	(6,783)	-	-	(27,131)
34	CWSRF Note Principal	-	-	-	-	-	-
35	CWSRF Note Interest Expense	-	-	-	-	-	-
36	<b>Total Test Year Expenses</b>	<b>\$ 861,522</b>	<b>\$ 534,354</b>	<b>\$ 224,204</b>	<b>\$ -</b>	<b>\$ 102,964</b>	<b>\$ 861,522</b>

**Appendix Table B-6**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Development of Allocation Factors**  
**Annual Wastewater Sales**

<b>Rate Class</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Total Usage (gal)</b>	<b>Allocation Factor (%)</b>
Residential	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	50,232	91.62%
Multi-Family	53	53	53	53	53	53	53	53	53	53	53	53	637	1.16%
Commercial and Municipal Use	360	(13)	54	147	182	214	222	367	637	598	539	649	3,955	7.21%
Lift Station/Pumping	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
<b>Total Water Sales</b>	<b>4,599</b>	<b>4,226</b>	<b>4,293</b>	<b>4,386</b>	<b>4,422</b>	<b>4,453</b>	<b>4,461</b>	<b>4,606</b>	<b>4,876</b>	<b>4,837</b>	<b>4,778</b>	<b>4,888</b>	<b>54,824</b>	<b>100.00%</b>

**Appendix Table B-7**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Development of Allocation Factors**  
**Extra Capacity Factors**

Rate Class	Demand Factors		Max Usage		Extra Usage		Allocation Factors	
	Pk. Day	Pk. Hr.	Day	Hour	Day	Hour	Day	Hour
Residential	1.50	-	206	-	69	(3)	94.26%	0.00%
Not Used	1.20	2.50	-	-	-	-	0.00%	0.00%
Multi-Family	1.00	1.00	2	0	-	0	0.80%	13.87%
Commercial and Municipal Use	1.00	1.00	11	0	-	0	4.95%	86.13%
Not Used	1.80	2.50	-	-	-	-	0.00%	0.00%
Lift Station/Pumping	1.00	1.00	-	-	-	-	0.00%	0.00%
<b>Total</b>			219	1	69	(2)	100.00%	100.00%

**Appendix Table B-8**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Development of Allocation Factors**  
**Number of Customers**

<b>Rate Class</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Annual Average</b>
Residential	990	998	1,002	1,005	996	1,010	1,054	1,013	1,048	1,024	1,038	1,064	1,020
Multi-Family	11	11	11	11	11	11	11	11	11	11	11	11	11
Commercial and Municipal Use	46	47	49	46	45	46	45	48	48	46	46	46	47
Lift Station/Pumping	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Number of Customers</b>	<b>1,047</b>	<b>1,056</b>	<b>1,062</b>	<b>1,062</b>	<b>1,052</b>	<b>1,067</b>	<b>1,110</b>	<b>1,072</b>	<b>1,107</b>	<b>1,081</b>	<b>1,095</b>	<b>1,121</b>	<b>1,077</b>

**Appendix Table B-9**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Development of Allocation Factors**  
**Weighted Number of Customers and Customer Allocation Factors**

<b>Rate Class</b>	<b>Number of Customers</b>	<b>Meter Charge Weighting Factor</b>	<b>Rural Weighting Factor</b>	<b>Weighted Meters</b>	<b>Allocated Customers</b>
Residential	1,020.17	1.00	1.00	1,020.17	94.69%
Multi-Family	10.75	1.00	1.00	10.75	1.00%
Commercial and Municipal Use	46.50	1.00	1.00	46.50	4.32%
Lift Station/Pumping	-	1.00	1.00	-	0.00%
<b>Total Number of Weighted Customers</b>	<b>1,077.42</b>			<b>1,077.42</b>	<b>100.00%</b>

**Appendix Table B-10**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Revenue - Existing Rates**

<b>Rate Class</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Annual Total</b>
Residential	62,072	62,455	62,647	62,791	62,359	63,030	65,138	63,174	64,850	63,701	64,371	65,617	762,204
Multi-Family	701	701	701	701	701	701	701	701	701	701	701	701	8,409
Commercial and Municipal Use	4,210	3,102	3,449	3,541	3,585	3,751	3,709	4,366	5,219	4,961	4,775	5,121	49,789
Lift Station/Pumping	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenue</b>	<b>66,983</b>	<b>66,258</b>	<b>66,796</b>	<b>67,032</b>	<b>66,645</b>	<b>67,482</b>	<b>69,548</b>	<b>68,240</b>	<b>70,770</b>	<b>69,362</b>	<b>69,847</b>	<b>71,438</b>	<b>820,401</b>



**Appendix Table B-11**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Revenue - Proposed Rates**

<b>Rate Class</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Annual Total</b>
Residential	65,176	65,578	65,779	65,930	65,477	66,182	68,394	66,332	68,093	66,886	67,590	68,897	800,314
Multi-Family	736	736	736	736	736	736	736	736	736	736	736	736	8,829
Commercial and Municipal Use	4,420	3,257	3,621	3,718	3,764	3,938	3,895	4,584	5,480	5,209	5,014	5,377	52,279
Lift Station/Pumping	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenue</b>	<b>70,332</b>	<b>69,571</b>	<b>70,136</b>	<b>70,383</b>	<b>69,978</b>	<b>70,856</b>	<b>73,025</b>	<b>71,652</b>	<b>74,308</b>	<b>72,830</b>	<b>73,339</b>	<b>75,010</b>	<b>861,421</b>

**Appendix Table B-12**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Revenue - Proposed Rates - Year Two**

<b>Rate Class</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Annual Total</b>
Residential	68,434	68,857	69,068	69,227	68,751	69,491	71,814	69,649	71,497	70,230	70,969	72,342	840,330
Multi-Family	773	773	773	773	773	773	773	773	773	773	773	773	9,270
Commercial and Municipal Use	4,641	3,420	3,802	3,904	3,953	4,135	4,089	4,814	5,754	5,470	5,265	5,646	54,892
Lift Station/Pumping	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenue</b>	<b>73,848</b>	<b>73,050</b>	<b>73,643</b>	<b>73,903</b>	<b>73,476</b>	<b>74,398</b>	<b>76,676</b>	<b>75,235</b>	<b>78,024</b>	<b>76,472</b>	<b>77,006</b>	<b>78,761</b>	<b>904,493</b>

**Appendix Table B-13**  
**City of Hickman**  
**Development of Allocation Factors**

<b>Line</b>	<b>Rate Class</b>	<b>Base</b>	<b>Capacity</b>	<b>Capacity</b>	<b>Customer</b>	<b>Other</b>
1	Residential	91.62%	94.26%	0.00%	94.69%	92.67%
2	Multi-Family	1.16%	0.80%	13.87%	1.00%	1.05%
3	Commercial and Municipal Use	7.21%	4.95%	86.13%	4.32%	6.28%
4	Lift Station/Pumping	0.00%	0.00%	0.00%	0.00%	0.00%
5	<b>Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%

# Appendix C – Revenue Calculation Worksheets

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**Appendix Table C-1**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Existing Rates**  
**Residential**

Rate	
Minimum Bill	\$ -
Customer Charge	\$ 47.90
Customer Capacity Charge	\$ -
Usage Rate	\$/1000 gal
First            1000 gal	-
Excess	3.5000

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>	990	998	1,002	1,005	996	1,010	1,054	1,013	1,048	1,024	1,038	1,064	<b>1,020</b>
<b>Water Usage (gal)</b>													
First 1000 gal													
Excess	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	<b>50,232</b>
<b>Total Water Usage</b>	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	<b>50,232</b>
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	47,421	47,804	47,996	48,140	47,708	48,379	50,487	48,523	50,199	49,050	49,720	50,966	<b>586,392</b>
Usage Charges													
First 1000 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	<b>175,812</b>
Total Usage Charges	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	14,651	<b>175,812</b>
Total Revenues	62,072	62,455	62,647	62,791	62,359	63,030	65,138	63,174	64,850	63,701	64,371	65,617	<b>762,204</b>
<b>Total Revenues</b>	62,072	62,455	62,647	62,791	62,359	63,030	65,138	63,174	64,850	63,701	64,371	65,617	<b>762,204</b>

**Appendix Table C-2**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Proposed Rates**  
**Residential**

Rate	
Minimum Bill	\$ -
Customer Charge	\$ 50.30
Customer Capacity Charge	\$ -
Usage	\$/1000 gal
First            1000 gal	-
Excess	3.68

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>	990	998	1,002	1,005	996	1,010	1,054	1,013	1,048	1,024	1,038	1,064	<b>1,020</b>
<b>Water Usage</b>													
First 1000 gal													-
Excess	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	<b>50,232</b>
<b>Total Water Usage (gal)</b>	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	<b>50,232</b>
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	49,792	50,194	50,396	50,546	50,094	50,798	53,011	50,949	52,709	51,502	52,206	53,514	<b>615,711</b>
Usage Charges													
First 1000 gal													-
Excess	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	<b>184,603</b>
Total Usage Charges	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	15,384	<b>184,603</b>
Total Revenues	65,176	65,578	65,779	65,930	65,477	66,182	68,394	66,332	68,093	66,886	67,590	68,897	<b>800,314</b>
<b>Total Revenues</b>	65,176	65,578	65,779	65,930	65,477	66,182	68,394	66,332	68,093	66,886	67,590	68,897	<b>800,314</b>
													Rate Increase / (Decrease) <b>5.00%</b>

**Appendix Table C-3**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Proposed Rates**  
**Residential**

Rate		
Minimum Bill		\$ -
Customer Charge		\$ 52.81
Customer Capacity Charge		\$ -
Usage		\$/1000 gal
First	1000 gal	-
Excess		3.8588

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>	990	998	1,002	1,005	996	1,010	1,054	1,013	1,048	1,024	1,038	1,064	<b>1,020</b>
<b>Water Usage</b>													
First 1000 gal													-
Excess	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	<b>50,232</b>
<b>Total Water Usage (gal)</b>	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186	<b>50,232</b>
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	52,282	52,704	52,915	53,074	52,599	53,338	55,661	53,496	55,345	54,077	54,817	56,190	<b>646,497</b>
Usage Charges													
First 1000 gal													-
Excess	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	<b>193,833</b>
Total Usage Charges	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	16,153	<b>193,833</b>
Total Revenues	68,434	68,857	69,068	69,227	68,751	69,491	71,814	69,649	71,497	70,230	70,969	72,342	<b>840,330</b>
<b>Total Revenues</b>	68,434	68,857	69,068	69,227	68,751	69,491	71,814	69,649	71,497	70,230	70,969	72,342	<b>840,330</b>
													Rate Increase / (Decrease)
													<b>5.00%</b>





**Appendix Table C-5**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Proposed Rates**  
**Multi-Family**

Rate	
Minimum Bill	\$ -
Customer Charge	\$ -
Water Meter Size	
<2"	\$ 50.30
3"	\$ 75.92
4"	\$ 96.92
6"	\$ 280.67
Usage	\$/1000 gal
First 1000 gal	-
Excess	3.6750

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>													
<2"	11	11	11	11	11	11	11	11	11	11	11	11	11
3"													
4"													
6"													
<b>Total Number of Customers</b>	11	11	11	11	11	11	11	11	11	11	11	11	11
<b>Water Usage</b>													
First 1000 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	53	53	53	53	53	53	53	53	53	53	53	53	637
<b>Total Water Usage (gal)</b>	53	53	53	53	53	53	53	53	53	53	53	53	637
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	541	541	541	541	541	541	541	541	541	541	541	541	6,488
Usage Charges													
First 1000 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	195	195	195	195	195	195	195	195	195	195	195	195	2,341
Total Usage Charges	195	195	195	195	195	195	195	195	195	195	195	195	2,341
Total Revenues	736	736	736	736	736	736	736	736	736	736	736	736	8,829
Discount	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenues</b>	736	736	736	736	736	736	736	736	736	736	736	736	8,829

Rate Increase / (Decrease) **5.00%**

**Appendix Table C-6**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Proposed Rates**  
**Multi-Family**

Rate	
Minimum Bill	\$ -
Customer Charge	\$ -
Water Meter Size	
<2"	\$ 52.81
3"	\$ 79.71
4"	\$ 101.76
6"	\$ 294.70
Usage	\$/1000 gal
First      1000 gal	-
Excess	3.8588

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>													
<2"	11	11	11	11	11	11	11	11	11	11	11	11	11
3"													
4"													
6"													
<b>Total Number of Customers</b>	11	11	11	11	11	11	11	11	11	11	11	11	11
<b>Water Usage</b>													
First 1000 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	53	53	53	53	53	53	53	53	53	53	53	53	637
<b>Total Water Usage (gal)</b>	53	53	53	53	53	53	53	53	53	53	53	53	637
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	568	568	568	568	568	568	568	568	568	568	568	568	6,812
Usage Charges													
First 1000 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	205	205	205	205	205	205	205	205	205	205	205	205	2,458
Total Usage Charges	205	205	205	205	205	205	205	205	205	205	205	205	2,458
Total Revenues	773	773	773	773	773	773	773	773	773	773	773	773	9,270
Discount	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenues</b>	773	773	773	773	773	773	773	773	773	773	773	773	9,270

Rate Increase / (Decrease)      **5.00%**

**Appendix Table C-7**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Existing Rates**  
**Commercial and Municipal Use**

Rate	
Minimum Bill	\$ -
Customer Charge	\$ 66.90
Customer Capacity Charge	\$ -
Usage Rate	\$/gal
First            1000 gal	-
Excess	3.1500

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>	46	47	49	46	45	46	45	48	48	46	46	46	<b>47</b>
<b>Water Usage</b>													
First 1000 gal													-
Excess	360	(13)	54	147	182	214	222	367	637	598	539	649	<b>3,955</b>
<b>Total Water Usage (gal)</b>	360	(13)	54	147	182	214	222	367	637	598	539	649	<b>3,955</b>
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	3,077	3,144	3,278	3,077	3,011	3,077	3,011	3,211	3,211	3,077	3,077	3,077	<b>37,330</b>
Usage Charges													
First 1000 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	1,133	(42)	171	463	575	673	699	1,155	2,008	1,884	1,698	2,044	<b>12,459</b>
Total Usage Charges	1,133	(42)	171	463	575	673	699	1,155	2,008	1,884	1,698	2,044	<b>12,459</b>
Total Revenues	4,210	3,102	3,449	3,541	3,585	3,751	3,709	4,366	5,219	4,961	4,775	5,121	<b>49,789</b>
<b>Total Revenues</b>	4,210	3,102	3,449	3,541	3,585	3,751	3,709	4,366	5,219	4,961	4,775	5,121	<b>49,789</b>

**Appendix Table C-8**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Proposed Rates**  
**Commercial and Municipal Use**

Summer	
Minimum Bill	\$ -
Customer Charge	\$ 70.25
Customer Capacity Charge	\$ -
Usage	\$/gal
First gal	-
Excess	3.3075

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>	46	47	49	46	45	46	45	48	48	46	46	46	<b>47</b>
<b>Water Usage</b>													
First 0 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	360	(13)	54	147	182	214	222	367	637	598	539	649	<b>3,955</b>
<b>Total Water Usage (gal)</b>	360	(13)	54	147	182	214	222	367	637	598	539	649	<b>3,955</b>
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	3,231	3,302	3,442	3,231	3,161	3,231	3,161	3,372	3,372	3,231	3,231	3,231	<b>39,197</b>
Usage Charges													
First 0 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	1,189	(44)	179	486	603	707	734	1,213	2,108	1,978	1,783	2,146	<b>13,082</b>
Total Usage Charges	1,189	(44)	179	486	603	707	734	1,213	2,108	1,978	1,783	2,146	<b>13,082</b>
Total Revenues	4,420	3,257	3,621	3,718	3,764	3,938	3,895	4,584	5,480	5,209	5,014	5,377	<b>52,279</b>
Discount	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenues</b>	4,420	3,257	3,621	3,718	3,764	3,938	3,895	4,584	5,480	5,209	5,014	5,377	<b>52,279</b>
													Rate Increase / (Decrease)
													<b>5.00%</b>

**Appendix Table C-9**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Proposed Rates**  
**Commercial and Municipal Use**

Rate	
Minimum Bill	\$ -
Customer Charge	\$ 73.76
Customer Capacity Charge	\$ -
Usage	\$/gal
First            1000 gal	-
Excess	3.4729

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>	46	47	49	46	45	46	45	48	48	46	46	46	<b>47</b>
<b>Water Usage</b>													
First 1000 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	360	(13)	54	147	182	214	222	367	637	598	539	649	<b>3,955</b>
<b>Total Water Usage (gal)</b>	360	(13)	54	147	182	214	222	367	637	598	539	649	<b>3,955</b>
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	3,393	3,467	3,614	3,393	3,319	3,393	3,319	3,540	3,540	3,393	3,393	3,393	<b>41,157</b>
Usage Charges													
First 1000 gal	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	1,249	(46)	188	511	634	743	770	1,273	2,214	2,077	1,872	2,253	<b>13,736</b>
Total Usage Charges	1,249	(46)	188	511	634	743	770	1,273	2,214	2,077	1,872	2,253	<b>13,736</b>
Total Revenues	4,641	3,420	3,802	3,904	3,953	4,135	4,089	4,814	5,754	5,470	5,265	5,646	<b>54,892</b>
Discount	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenues</b>	4,641	3,420	3,802	3,904	3,953	4,135	4,089	4,814	5,754	5,470	5,265	5,646	<b>54,892</b>
													Rate Increase / (Decrease)
													<b>5.00%</b>



**Appendix Table C-11**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Proposed Rates**  
**Lift Station/Pumping**

		Rate
Customer Charge		\$ -
Customer Capacity Charge		
Water Meter Size		\$ -
	<2"	\$ 50.30
	3"	\$ 75.92
	4"	\$ 96.92
	6"	\$ 280.67
Usage Rate		\$/1000 gal
First	1000 gal	-
Excess		4.4625

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>													
<2"	-	-	-	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Customers</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Usage by Block</b>													
First 1000	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Usage gal</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	-	-	-	-	-	-	-	-	-	-	-	-	-
Usage Charges													
First 1000	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Usage Charges	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenues</b>	-	-	-	-	-	-	-	-	-	-	-	-	-

Rate Increase / (Decrease)

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**Appendix Table C-12**  
**City of Hickman**  
**2024 Wastewater Cost of Service Study**  
**Calculation of Revenue from Proposed Rates**  
**Lift Station/Pumping**

		Rate	
Customer Charge		\$	-
Customer Capacity Charge			
Water Meter Size			
	<2"	\$	52.81
	3"	\$	79.71
	4"	\$	101.76
	6"	\$	294.70
Usage		\$/1000 gal	
First	1000 gal		
Excess			4.6856

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Number of Customers</b>													
<2"	-	-	-	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Customers</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Usage by Block</b>													
First 1000	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Usage gal</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Revenue</b>													
Minimum Bill	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Charges	-	-	-	-	-	-	-	-	-	-	-	-	-
Usage Charges													
First 1000	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Usage Charges	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenues</b>	-	-	-	-	-	-	-	-	-	-	-	-	-

Rate Increase / (Decrease)

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