# RATE SUFFICIENCY ANALYSIS FOR SEWER RATES

## JESSAMINE-SOUTH ELKHORN WATER DISTRICT

April 21, 2025

Prepared by Robert K. Miller



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### **EXECUTIVE SUMMARY**

The Final Order from the Kentucky Public Service Commission in Case No. 2024-00206 regarding its rates pursuant to the treated sewage adjustment procedure recommended that Jessamine-South Elkhorn Water District file a revenue sufficiency analysis for its sewer division no later than June 30, 2025 based on 2024 financial results and that it consider filing a rate adjustment application soon thereafter if the result is negative.

Jessamine-South Elkhorn requested assistance from the Kentucky Rural Water Association with performing the revenue sufficiency analysis and with filing the report. The analysis is complete, and the results are presented in this report.

In accordance with PSC's Order, the study is based on the 2024 Annual Report that is on file with the Commission. The Schedule of Adjusted Operations (SAO) lists the reported revenues and expenses for 2024 and applies required adjustments. The adjustments are to recognize certain items that are commonly required by the PSC. The specific adjustments for Jessamine-South Elkhorn are shown in the SAO with notes for each provided on the Reference pages. Total pro forma operating revenues for the District are \$1,867,819 and total pro forma operating expenses are \$1,788,246.

The SAO also shows the computations for Revenue Requirements. Utilizing the Debt Service method accepted by the PSC, the total Revenue Required from Sewer Sales comes to \$1,835,112. That amount is \$3,249 more than existing pro forma sales of \$1,831,863. The analysis shows that without a rate increase the current operations comply with the debt service requirements of the lending agencies and should generate working capital of \$284,884.

Revenues From Sales	\$1,831,863
Other Operating Revenue	35,956
Interest & Investment Income	3,388
Total Revenue & Income	1,871,207
Less: Pro Forma Operating Expenses	(1,788,246)
Less: Principal & Interest	(71,842)

Subtotal	11,119
Add: Pro Forma Depreciation	273,765
Working Capital	\$284,884

Therefore, this analysis indicates that Jessamine-South Elkhorn's current sewer division rates are sufficient.

Computations from this analysis are included in the Schedule of Adjusted Operations with details provided on the Reference page and in Tables A, B, and C.

# SCHEDULE OF ADJUSTED OPERATIONS Jessamine-South Elkhorn Water District Sewer Division

	Test Year	<u>Adjustments</u>	Ref.	<u>Pro Forma</u>
Operating Revenues				
Total Sewer Sales	1,820,710	11,153	Α	1,831,863
Other Sewer Revenues	35,956			35,956
Total Operating Revenues	1,856,666	11,153		1,867,819
Operating Expenses				
Operation Expenses				
Management Fee	33,040	_		33,040
Collection - Labor, Materials and Expenses	1,025,072	_		1,025,072
Maintenance Expenses	_,0_0,0.			_,0_0,0.
Maintenance of Collection Sewer System	203,048	-		203,048
Customer Account Expenses	•			,
Flat Rate Inspections	-	-		-
Uncollectable Accounts	5,606	-		5,606
Administrative and General Expenses				
Salaries	127,277	-		127,277
Office Supplies and Other Expenses	12,547	-		12,547
Outside Services Employed	7,259	-		7,259
Insurance	14,056	-		14,056
<b>Employee Pensions and Benefits</b>	23,668	-		23,668
Transportation Expense	24,948	-		24,948
Miscellaneous General Expenses	37,960			37,960
Total Sewer Operation and Mnt. Expenses	1,514,481	-		1,514,481
Depreciation Expense	342,369	(68,604)	В	273,765
Taxes Other Than Income				
Total Operating Expenses	1,856,850	(68,604)		1,788,246
Net Utility Operating Income	(184)	79,758		79,574
REVENUE REQUIR	EMENTS			
Pro Forma Operating Expenses	LIVILIVIS			\$ 1,788,246
Plus: Avg. Annual Principal and Interest Pmts.			С	71,842
Additional Working Capital			С	14,368
Total Revenue Requirement				\$ 1,874,456
Less: Other Operating Revenue				35,956
Interest & Investment Income				3,388
Revenue Required From Sewer Sales				\$ 1,835,112
-				
Less: Revenue from Sales at Present Rates				(1,831,863)
Required Revenue Increase				\$ 3,249
Percent Increase				0.18%

### REFERENCES

- A. The Current Billing Analysis results in pro forma sewer sales revenue of \$1,831,863. This reflects a full year at the retail rates that were effective in 2024 and indicates an addition to sewer sales of \$11,153 is required as shown in Table C.
- B. The PSC requires adjustments to a utility's depreciation expense when asset lives fall outside the ranges recommended by the Commission on Rural Water in its publication titled "<u>Average Service Lifetimes, Major Systems Components Wastewater Systems</u>". Therefore, adjustments are included to bring asset lives to the midpoint of the recommended ranges resulting in a decrease in depreciation expense of \$11,153 for the sewer system, as shown in Table A.
- C. The annual debt service payments for the District's Series 2009A Sewer Bonds and the sewer portion of the Series 2021A Bonds are shown in Table B. The five-year average of these payments is added in the revenue requirement calculation. The amount shown in Table B for coverage on long-term debt is required by the bond documents. This is included in the revenue requirement as Additional Working Capital.

Table A <u>DEPRECIATION EXPENSE ADJUSTMENTS</u> Jessamine-South Elkhorn Water District Sewer Division	Table A DEPRECIATION EXPENSE ADJUSTMENTS ne-South Elkhorn Water District Sewer I	Table A EXPENSE orn Water	ADJUSTN District S	<u>AENTS</u> ewer Divisi	u O		
Asset	Date in <u>Service</u>	Original Cost *	Reported <u>Life</u>	<b>Depr. Ехр.</b>	Pro Life	<u>Proforma</u> <u>Depr. Exp.</u>	Depreciation Expense Adjustment
Sewer Lines Collection Sewers - Force	various	9,039,916	varies	241,778	52.5	172,189	-69,589
Collection Sewers - Gravity	various	1,056,891	varies	30,197	52.5	20,131	-10,066
Other Collection Facilities	various	2,147,592	varies	61,295	35.0	61,360	64
Septic Systems	various	193,258	varies	5,522	35.0	5,522	0
Transportation Equipment	various	49,351	varies	1,645	4.0	12,338	10,693
Tools Shop and Garage	various	38,942	varies	1,932	17.5	2,225	293
Communications Equipment	various	1	varies	1	12.5	0	0
TOTALS - SEWER SYSTEM		12,525,949		342,369		273,765	(68,604)

\* Includes only costs associated with assets that contributed to depreciation expense in the test year.

# Table B <u>DEBT SERVICE SCHEDULE</u> Jessamine-South Elkhorn Water District Sewer Division CY 2026 - 2030

	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	920	7	750	}	800	}	000	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	000	
	Principal	or 2026	Principal In	<u>nterest</u>	Principal Int	UZS Interest	Principal Int	lnterest	Principal	oal Interest	TOTALS
Series 2009A Bonds	5,300	4,788	5,400	4,949	2,600	4,508	5,700	4,361	5,800	4,211	50,617
Series 2021A Bonds	34,000	27,200	36,540	25,746	38,000	23,425	40,600	21,701	42,105	19,278	308,595
Totals	39,300	31,988	41,940	30,695	43,600	27,933	46,300	26,062	47,905	23,489	359,212
						Average Aı Average Aı	Average Annual Principal & Interest - Sewer Average Annual Debt Service Coverage	pal & Intere Service Cov	sst - Sewer erage		\$ 71,842 \$ 14,368

			TABLE C	,			
0.15			V616 611555				
CUF			LYSIS - CURRE				
	Jessamin	e-South El	khorn Water	District - Se	wer Division		
	SUMMARY		No of Dillo	Callana Cald	Daviania		
	All Carran	Custonson	No. of Bills	Gallons Sold	Revenue		
	All Sewer	Customers	15,289		\$ 1,845,410 \$ 1,845,410		
			Loss Billin	g Adjustments			
			ress pillil	<u> </u>	\$ (13,547) \$ 1,831,863		
			Loss DSC		\$ (1,820,710)		
				•		0.6%	
			SF	AO Adjustment	\$ 11,153	0.0%	
Sewer Cust	omers						
Jewei Cust	<u>Officis</u>			FIRST	ALL OVER		
	USAGE	BILLS	GALLONS	2,000	2,000	TOTAL	
FIRST	2,000	2,962	3,430,900	3,430,900	-	3,430,900	
ALL OVER	2,000	11,646	94,547,856	23,292,000	71,255,856	94,547,856	
7122 0 7 211	_,000	14,608	97,978,756	26,722,900	71,255,856	97,978,756	
			0.70.07.00		1 =,===,===		
REVENUE	BY RATE INC	REMENT					
		BILLS	GALLONS	RATE	REVENUE		
FIRST	2,000	14,608	26,722,900	\$ 35.61	\$ 520,191		
ALL OVER	2,000		71,255,856	0.01768	1,259,804		
	TOTAL	14,608	97,978,756		\$ 1,779,994		
DRIP Custo	mers						
				FIRST	ALL OVER		
	USAGE	BILLS	GALLONS	2,000	2,000	TOTAL	
FIRST	2,000	56	63,042	63,042		63,042	
ALL OVER	2,000	625	3,578,339	1,250,000	2,328,339	3,578,339	
		681	3,641,381	1,313,042	2,328,339	3,641,381	
REVENUE	BY RATE INC	REMENT					
		BILLS	GALLONS	RATE	REVENUE		
FIRST	2,000	681	1,313,042	\$ 35.61	\$ 24,250		
ALL OVER	2,000		2,328,339	0.01768	41,165		
	TOTAL	681	3,641,381		\$ 65,415		