

EXHIBIT 4

Purchase Water Adjustment Factor Calculations

Lake Village Water Association 2023-00321

SUPPLIER	NEW RATE (per 1,000)	OLD RATE (per 1,000)
Harrodsburg	\$3.2100	\$3.0100
Danville	\$2.41000	\$2.4100

TWELVE MONTH TEST PERIOD:

September 2022 to August 2023

SUPPLIER	GALLONS PURCHASED DURING TEST PERIOD	
Harrodsburg	86,889,924	
Danville	137,288,218	12
TOTAL	224,178,142	

SUPPLIER	COST AT NEW RATE	COST AT OLD RATE		
Harrodsburg	\$ 266,684.79	\$ 249,992.07	\$16,692.72	
Danville	\$330,864.61	\$330,864.61	\$0.00	INCREASED
				<u>WATER COST</u>
TOTAL	\$597,549.40	\$580,856.68	=	\$16,692.72

TOTAL GALLONS SOLD FOR THE TEST PERIOD :

160,342,100

Increased Water Cost / (total gallons sold / 1,000) = Purchased Water Adjustment Factor

\$16,692.72 / 160,342,100 / 1000 = 0.104106906

ROUNDED 0.11

	2021 AR	2021 AR
Total Purchases	224,178,142	190,093
Total Sales	160,342,100	
% of plant use from 2021 AR	0.016392	0.016392
Plant Use	3,674,728	3,116
Total line loss (purchases-sales-plant use)	60,161,314	
Water loss % (Line loss / purchases)	0.268364	
Water loss above 15%	0.118364	
Purchased Water Expense Reduction (Cost * loss above 15%)		\$ 70,728.34
Total Water Loss Expense		\$ 160,360.75
	\$ 0.32	per 1,000 gallons purchased
	0.44	Per 1,000 gallons sold

Gallons purchsd less 448,800	Cost at Current Rate	Cost at Proposed Rate
6,404,084	17,893.76	19,092.39
5,487,081	15,331.55	16,358.54
8,147,612	22,765.39	24,290.34
8,992,089	25,124.95	26,807.97
5,218,235	14,580.36	15,557.04
7,724,215	21,582.37	23,028.07
6,174,052	17,251.03	18,406.60
6,224,908	17,393.13	18,558.22
6,650,461	18,582.17	19,826.91
6,764,336	18,900.35	20,166.40
6,882,139	19,229.51	20,517.61
6,835,112	19,098.11	20,377.41
	\$ 227,732.67	\$ 242,987.49

per 100 cubic feet	Gallons	per 1,000 gallons	Standard Monthly cost
13.12	1870	\$ 17.54	\$ 32.80
4.98	5610	6.66	37.35
4.32	22440	5.78	129.60
3.67	44880	4.91	220.20
3.13	187000	4.18	782.50
2.61	187000	3.49	652.50
2.09	448800	2.79	448.8

\$ 22,259.40 12 months cost of 1st 448,800 Gallons
 \$ 227,732.67 Current cost of Over 448800 Gallons
\$ 249,992.07 OLD COST from Harrodsburg

per 100 cubic feet	Gallons	per 1,000 gallons	Standard Monthly Cost
13.97	1870	18.68	34.93
5.30	5610	7.09	39.75
4.6	22440	6.15	138.00
3.91	44880	5.23	234.60
3.33	187000	4.45	832.50
2.78	187000	3.72	695.00
2.23	448800	2.98	448.8

\$ 1,974.78 Proposed Monthly Cost
 \$ 23,697.30 12 months cost below 448800 Gallons
 \$ 242,987.49 Proposed cost over 448800 Gallons
\$ 266,684.79 NEW COST from Harrodsburg

\$ 16,692.72 INCREASED COST

Water Purchased from Harrodsburg	Gallons purchd	Gallons purchd less 448,800	Cost at Current Rate	Cost at Proposed Rate
September	6,852,884	6,404,084	17,893.76	19,092.39
October	5,935,881	5,487,081	15,331.55	16,358.54
November	8,596,412	8,147,612	22,765.39	24,290.34
December	9,440,889	8,992,089	25,124.95	26,807.97
January	5,667,035	5,218,235	14,580.36	15,557.04
February	8,173,015	7,724,215	21,582.37	23,028.07
March	6,622,852	6,174,052	17,251.03	18,406.60
April	6,673,708	6,224,908	17,393.13	18,558.22
May	7,099,261	6,650,461	18,582.17	19,826.91
June	7,213,136	6,764,336	18,900.35	20,166.40
July	7,330,939	6,882,139	19,229.51	20,517.61
August	7,283,912	6,835,112	19,098.11	20,377.41
			227,732.67	242,987.49

Current Rates- Harrodsburg 1st	Cubic Feet	per 100 cubic feet	Gallons	per 1,000 gallons	Standard Monthly cost
	250	\$ 13.12	1870	\$ 17.54	1.87 \$ 32.80
	750	4.98	5610	6.66	5.61 \$ 37.35
	3000	4.32	22440	5.78	22.44 \$ 129.60
	6000	3.67	44880	4.91	44.88 \$ 220.20
	25000	3.13	187000	4.18	187 \$ 782.50
	25000	2.61	187000	3.49	187 \$ 652.50
	60000	2.09	448800	2.79	448.8 \$

Proposed Rates- Harrodsburg 1st	Cubic Feet	per 100 cubic feet	Gallons	per 1,000 gallons	Standard Monthly cost
	250	13.97	1870	18.68	1.87 \$ 34.93
	750	5.3	5610	7.09	5.61 \$ 39.75
	3000	4.6	22440	6.15	22.44 \$ 138.00
	6000	3.91	44880	5.23	44.88 \$ 234.60
	25000	3.33	187000	4.45	187 \$ 832.50
	25000	2.78	187000	3.72	187 \$ 695.00
	60000	2.23	448800	2.98	448.8 \$

\$	23,697.30	12 months cost below 448,800 G
\$	242,987.49	Proposed cost over 448,800 Gall
\$	<u>266,684.79</u>	NEW COST from Harrodsburg
\$	1,974.78	Proposed Monthly Cost
\$	16,692.72	INCREASED COST