

For: City of Morehead, Morehead Utility Plant Board

PSC KY NO. 1

13th Revised SHEET NO. 1

City of Morehead, Morehead Utility Plant Board
(NAME OF UTILITY)

CANCELLING PSC KY NO. 1

12th Revised SHEET NO. 1

RATES AND CHARGES

Monthly Rates

Rowan Water Incorporated

Monthly Capital Costs	\$ 0.00	(R)
Meter and Billing Charges	\$ 0.00	(R)
Per Thousand Gallons of Water Sold	\$ 2.284	(I)

Bath County Water District

Monthly Capital Costs	\$ 0.00	(R)
Meter and Billing Charges	\$ 0.00	(R)
Per Thousand Gallons of Water Sold	\$ 2.284	(I)

DATE OF ISSUE April 4, 2024
MONTH / DATE / YEAR

DATE EFFECTIVE July 1, 2024
MONTH / DATE / YEAR

ISSUED BY 
SIGNATURE OF OFFICER

TITLE Holly McGrath-Rosas, General Manager MUPD

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO.

IN CASE NO. Not Applicable DATED Not Applicable

CUSTOMER NOTICE TO BATH COUNTY WATER DISTRICT

City of Morehead Utility Plant Board ("Morehead UPB") is providing notice that it plans to file with the Public Service Commission, on or before April 4, 2024, to increase its wholesale water rate to Bath County Water District ("Bath County") effective for water service on and after July 1, 2024. The proposed rates are as follows:

MONTHLY RATES AND CHARGES				
	Previous	New	Difference	
Monthly Capital Costs	\$18,789.70	\$0.00	(\$18,789.70)	100.00%
Meter and Billing Charges				
\$10 per meter	\$10.00	\$0.00	(\$10.00)	100.00%
Per Thousand Gallons of Water Sold	\$1.626	\$2.284	\$0.658	40.5%

Bath County purchased 471,486 thousand gallons of water from Morehead UPB during the Test Year (FYE June 30, 2023). Its average monthly purchases were 39,291 thousand gallons at \$1.626 per thousand gallons plus. Under the current rates, Bath County's average monthly bill was \$82,686.87. Under the proposed rate effective July 1, 2024, Bath County's average monthly bill will be \$89,740.64, for an increase of \$7,053.77 per month or 8.53%.

Water flowing through the meters before the effective date will be charged at the current rate while water flowing through the meters on and after the effective date will be charged at the new rate.

This filing may be examined at the office of Morehead UPB located at 135 S Wilson Avenue, Morehead, Kentucky 40351. Please contact General Manager Holly McGrath-Rosas at (606) 748-5538 regarding any questions related to the proposed rate.

The filing may also be examined at the offices of the Public Service Commission located at 211 Sower Boulevard in Frankfort, Kentucky, Monday-Friday from 8:00 am - 4:30 pm or on the Commission website at <http://psc.ky.gov>.

Comments regarding this filing may be submitted by mail to the Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602; or through its website at <http://psc.ky.gov>.

The new rates are the rates proposed by Morehead UPB in its filing, but the Public Service Commission may order rates that differ from the proposed rates contained in this Customer Notice.

Intervention by Rowan Water or another person with a substantial interest may be requested by submitting a timely written request for intervention by mail to the Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602. The request for intervention must establish the grounds for the request including the status and interest of the party.

If the Public Service Commission does not receive a written request for intervention within thirty (30) days of the initial publication or mailing of the notice, the Commission may take final action on the proposed rate.

CUSTOMER NOTICE TO ROWAN WATER INCORPORATED

City of Morehead Utility Plant Board ("Morehead UPB") is providing notice that it plans to file with the Public Service Commission, on or before April 4, 2024, to increase its wholesale water rate to Rowan Water Incorporated ("Rowan Water") effective for water service on and after July 1, 2024. The proposed rates are as follows:

MONTHLY RATES AND CHARGES				
	Previous	New	Difference	
Monthly Capital Costs	\$24,629.55	\$0.00	(\$24,629.55)	100.00%
Meter and Billing Charges				
\$10 per meter	\$70.00	\$0.00	(\$70.00)	100.00%
Per Thousand Gallons of Water Sold	\$1.626	\$2.284	\$0.658	40.5%

Rowan Water purchased 676,061 thousand gallons of water from Morehead UPB during the Test Year (FYE June 30, 2023). Its average monthly purchases were 56,338 thousand gallons at \$1.626 per thousand gallons plus Monthly Capital Costs of \$24,629.55 and Meter and Billing Charges of \$70.00. Under the current rates, Rowan Water's average monthly bill was \$116,305.14. Under the proposed rate effective July 1, 2024, Rowan Water's average monthly bill will be \$128,675.99, for an increase of \$12,370.85 per month or 10.64%.

Water flowing through the meters before the effective date will be charged at the current rate while water flowing through the meters on and after the effective date will be charged at the new rate.

This filing may be examined at the office of Morehead UPB located at 135 S Wilson Avenue, Morehead, Kentucky 40351. Please contact General Manager Holly McGrath-Rosas at (606) 748-5538 regarding any questions related to the proposed rate.

The filing may also be examined at the offices of the Public Service Commission located at 211 Sower Boulevard in Frankfort, Kentucky, Monday-Friday from 8:00 am - 4:30 pm or on the Commission website at <http://psc.ky.gov>.

Comments regarding this filing may be submitted by mail to the Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602; or through its website at <http://psc.ky.gov>.

The new rates are the rates proposed by Morehead UPB in its filing, but the Public Service Commission may order rates that differ from the proposed rates contained in this Customer Notice.

Intervention by Rowan Water or another person with a substantial interest may be requested by submitting a timely written request for intervention by mail to the Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602. The request for intervention must establish the grounds for the request including the status and interest of the party.

If the Public Service Commission does not receive a written request for intervention within thirty (30) days of the initial publication or mailing of the notice, the Commission may take final action on the proposed rate.

***ANALYSIS AND RECOMMENDATIONS
FOR
WHOLESALE WATER RATE***

**Morehead Utility Plant Board
*Updated March 9, 2024***

Prepared by
Robert K. Miller



Kentucky Rural Water Association

1151 Old Porter Pike • Bowling Green, KY 42101 • 270.843.2291 • www.krwa.org

EXECUTIVE SUMMARY

Morehead Utility Plant Board sells water to Rowan Water, Inc. and Bath County Water District on a wholesale basis under an Interlocal Agreement signed in 2000. That agreement contains the terms and conditions under which water will be sold.

Morehead Utility Plant Board requested that Kentucky Rural Water Association perform a wholesale water rate study based upon current expenses as well as anticipated additional expenses associated with construction of a new water treatment plant. Following are the key assumptions made when developing the rate model:

- Audited revenues and expenses from the fiscal year ending June 30, 2023 would be used as the test year.
- Debt totaling \$52,052,602 will be issued, with \$44,998,000 at 0.50% with repayment over 30 years and \$7,054,602 at 2.75% interest over 20 years.
- Depreciation expense would be included in the revenue requirement, including the new water treatment plant, using depreciable lives allowed by Kentucky Public Service Commission.
- Capital Recovery Charges and Meter Charges would be eliminated, resulting in a Per Thousand Gallon Usage Charge only.
- Wholesale water rates associated with this rate study would be implemented in two phases:

Phase 1	(based on current expenses)	July 1, 2024
Phase 2	(based on new treatment plant)	To Be Determined

The wholesale rate study is now complete. Following are the steps taken to prepare the rate model:

Step	Activity	Reference
1. Trial Balance	Identify accounts from Trial Balance for water only activities and for water / sewer / stormwater / gas combined activities and allocate the water portion of those account balances.	
2. Summary of Operating Expenses by Category	Allocate water expenses to Water Production, Transmission & Distribution, Customer Accounts, and Administrative & General Expenses.	Table A
3. Allocation of Depreciation Expense	Allocate depreciation of water system assets to Water Production, Transmission & Distribution, Customer Accounts, and Administrative & General Expenses.	Table B.1 and B.2
4. Debt Service Schedule	Identify annual debt service and coverage for water system debt issues.	Table C.1 and C.2
5. Allocation of Debt Service	Allocate debt service to Water Treatment, Transmission & Distribution, and Storage Tanks.	Table D.1 and D.2
6. System Information	Identify length of mains by size for entire system and that portion of system jointly used by retail and wholesale	Table E

	systems and identify volume of water purchased, sold, and used.	
7. Wholesale Allocation Factors	<p>Compute the following allocation factors:</p> <p><u>Production Multiplier</u>: Factor to determine quantity that must be produced to service all sales.</p> <p><u>Joint Use Pipeline Ratio</u>: Ratio of Joint Use pipes to all pipes in the system.</p> <p><u>Joint Share of Line Loss</u>: Allocation of line loss to Joint Use mains.</p> <p><u>Joint Share Line Loss + Plant Use</u>: Total percentage allocation of nonrevenue water to Joint Use.</p> <p><u>Wholesale Production Multiplier</u>: Factor to determine quantity that must be produced to service wholesale sales.</p> <p><u>Water Production Factor</u>: Water produced for wholesale customers divided by total water produced.</p> <p><u>Pipeline Transmission Factor</u>: Portion of Joint Use pipes allocated to wholesale customers.</p> <p><u>Use Factor</u>: Allocation for tank expenses and sometimes other costs where water losses and transmission system issues do not apply.</p>	Table F
8. Wholesale Rate Computation	Compute wholesale rate by multiplying Operating Expenses, Depreciation Expense, and Debt Service & Coverage by specific Wholesale Allocation Factors.	Table G.1 and G.2

Based upon water production, sales, and financial information provided, the computed monthly wholesale rates are as follows:

	Current	Phase 1	Phase 2
Rate per Thousand Gallons	\$1.626	\$2.284	\$4.740
Capital Recovery RWI per Month	\$24,629.55		
Meter Charges RWI per Month	\$70.00		
Capital Recovery BCWD per Month	\$18,789.70		
Meter Charges BCWD per Month	\$10.00		
Percent Increase in Revenue Required		9.76%	107.51%

The increase in the Phase 1 rates is attributable to current rates below the existing cost of service. The increase in the Phase 2 rates is attributable to debt service and depreciation related to the new water treatment plant. The computations performed and the methodology used in the study are attached to this Executive Summary.

COMPUTATIONS AND METHODOLOGY

Morehead Utility Plant Board					
Adjusted Water Operating Expenses					
As of June 30, 2023 Audit					
		Water	Transmission	Customer	Administrative
	Amount	Production	& Distribution	Accounts	& General
6001 Water Department:Water Maintenance System:Salaries - Water Maint	341,780.93	-	341,780.93	-	-
6010 Water Department:Water Maintenance System:Equipment Repairs	16,665.22	-	16,665.22	-	-
6011 Water Department:Water Maintenance System:Equipment Fuel	28,872.43	-	28,872.43	-	-
6016 Water Department:Water Maintenance System:Shop Utilities	14,193.07	-	14,193.07	-	-
6017 Water Department:Water Maintenance System:Vehicle Expenses	38,200.27	-	38,200.27	-	-
6019 Water Department:Water Maintenance System:Equipment Expenses	2,093.88	-	2,093.88	-	-
6020 Water Department:Water Maintenance System:System Repair/Maintenance	128,378.27	-	128,378.27	-	-
6026 Water Department:Water Maintenance System:Janitor/Shop Supplies	6,886.00	-	6,886.00	-	-
6027 Water Department:Water Maintenance System:Office Supplies	1,031.81	-	1,031.81	-	-
6030 Water Department:Water Maintenance System:Computer Expense	10,076.69	-	10,076.69	-	-
6050 Water Department:Water Maintenance System:Easements	421.90	-	421.90	-	-
6070 Water Department:Water Maintenance System:Drug and Alcohol Testing	-	-	-	-	-
6075 Water Department:Water Maintenance System:Employee Training & Travel	11,620.92	-	11,620.92	-	-
6088 Water Department:Water Maintenance System:Employee Benefits - Maintenance	241,102.07	-	241,102.07	-	-
6092 Water Department:Water Maintenance System:Uniform Exp - Mtn	904.84	-	904.84	-	-
6000 Water Department:Water Treatment Plant:Salaries - WTP	566,595.88	566,595.88	-	-	-
6012 Water Department:Water Treatment Plant:Equipment Repairs	6,214.72	6,214.72	-	-	-
6013 Water Department:Water Treatment Plant:Equipment Fuel	9,832.41	9,832.41	-	-	-
6015 Water Department:Water Treatment Plant:Utilities-WTP	433,779.01	433,779.01	-	-	-
6018 Water Department:Water Treatment Plant:Vehicle Expenses	23,628.25	23,628.25	-	-	-
6021 Water Department:Water Treatment Plant:Repairs and Maintenance	120,827.37	120,827.37	-	-	-
6025 Water Department:Water Treatment Plant:Janitor/Shop Supplies	2,089.53	2,089.53	-	-	-
6031 Water Department:Water Treatment Plant:Computer Expense	4,214.51	4,214.51	-	-	-
6035 Water Department:Water Treatment Plant:Chemicals - WTP	382,843.31	382,843.31	-	-	-
6044 Water Department:Water Treatment Plant:Water Pumps & Tank Repair	3,261.32	3,261.32	-	-	-
6065 Water Department:Water Treatment Plant:Office Supplies	406.94	406.94	-	-	-
6085 Water Department:Water Treatment Plant:Employee Training & Travel	14,596.82	14,596.82	-	-	-
6086 Water Department:Water Treatment Plant:Water Lab Testing & Supplies	46,783.96	46,783.96	-	-	-
6087 Water Department:Water Treatment Plant:Dues & Subscriptions WTP	-	-	-	-	-
6093 Water Department:Water Treatment Plant:Uniform Exp - WTP	1,007.23	1,007.23	-	-	-
6099 Water Department:Water Treatment Plant:Employee Benefits- WTP	380,219.56	380,219.56	-	-	-
6150 Water Department:Water Treatment Plant:Drug/Alcohol Test WTP	-	-	-	-	-
	2,838,529.12	1,996,300.82	842,228.30	-	-
8000 Administrative Department:Salaries - Admin	286,233.35	-	-	143,116.67	143,116.67
8015 Administrative Department:Office Utilities	14,426.02	-	-	7,213.01	7,213.01
8018 Administrative Department:Vehicle Expenses	12,541.32	-	-	6,270.66	6,270.66
8020 Administrative Department:Repairs & Maintenance	3,338.81	-	-	1,669.41	1,669.41
8035 Administrative Department:Advertising & Printing	437.78	-	-	218.89	218.89
8040 Administrative Department:Professional Services	52,595.39	-	-	26,297.69	26,297.69
8050 Administrative Department:Easements and Right of Way	225.88	-	-	112.94	112.94
8052 Administrative Department:Janitorial Service	5,683.21	-	-	2,841.60	2,841.60
8055 Administrative Department:Employee Training & Travel	13,832.45	-	-	6,916.22	6,916.22
8055 Administrative Department:Pension Expense	-	-	-	-	-
8065 Administrative Department:General Insurance	80,357.49	-	-	40,178.74	40,178.74
8065 Administrative Department:Workman's Comp Ins	-	-	-	-	-
8070 Administrative Department:Office Supplies	7,734.92	-	-	3,867.46	3,867.46
8071 Administrative Department:Postage	20,855.66	-	-	10,427.83	10,427.83
8072 Administrative Department:Service Contracts	1,712.56	-	-	856.28	856.28
8073 Administrative Department:Dues & Subscriptions	526.58	-	-	263.29	263.29
8074 Administrative Department:Computer Programming	10,097.74	-	-	5,048.87	5,048.87
8080 Administrative Department:Payroll Taxes	2,003.05	-	-	1,001.53	1,001.53
8087 Administrative Department:Bad Debts	15,456.00	-	-	7,728.00	7,728.00
8088 Administrative Department:Safety Program Expenses	2,872.26	-	-	1,436.13	1,436.13
8090 Administrative Department:Miscellaneous	15,707.74	-	-	7,853.87	7,853.87
8091 Administrative Department:Ceremonies & Award	6,567.41	-	-	3,283.71	3,283.71
8092 Administrative Department:Uniform Expense	544.49	-	-	272.24	272.24
8099 Administrative Department:Employee Benefits	190,555.33	-	-	95,277.66	95,277.66
Total Administrative Expenses	744,305.44	-	-	372,152.72	372,152.72
Total Operating Expenses	3,582,834.56	1,996,300.82	842,228.30	372,152.72	372,152.72

Table A
ALLOCATION OF OPERATING EXPENSES
Morehead Utility Plant Board

Description	Account	Water	Water	Transmission	Customer	Administrative
		Amount	Production & Distribution	& Distribution	Accounts	& General
Chemicals	6035 Water Department:Water Treatment Plant:Chemicals - WTP	382,843	382,843	-	-	-
Chemicals Total		382,843	382,843	-	-	-
Contractual Services	6010 Water Department:Water Maintenance System:Equipment Repairs	16,665	-	16,665	-	-
Contractual Services	6012 Water Department:Water Treatment Plant:Equipment Repairs	6,215	6,215	-	-	-
Contractual Services	6020 Water Department:Water Maintenance System:System Repair/Maintenance	128,378	-	128,378	-	-
Contractual Services	6021 Water Department:Water Treatment Plant:Repairs and Maintenance	120,827	120,827	-	-	-
Contractual Services	6044 Water Department:Water Treatment Plant:Water Pumps & Tank Repair	3,261	3,261	-	-	-
Contractual Services	6050 Water Department:Water Maintenance System:Easements	422	-	422	-	-
Contractual Services	6085 Water Department:Water Treatment Plant:Employee Training & Travel	14,597	14,597	-	-	-
Contractual Services	6086 Water Department:Water Treatment Plant:Water Lab Testing & Supplies	46,784	46,784	-	-	-
Contractual Services	8020 Administrative Department:Repairs & Maintenance	3,339	-	-	1,669	1,669
Contractual Services	8035 Administrative Department:Advertising & Printing	438	-	-	219	219
Contractual Services	8040 Administrative Department:Professional Services	52,595	-	-	26,298	26,298
Contractual Services	8050 Administrative Department:Easements and Right of Way	226	-	-	113	113
Contractual Services	8052 Administrative Department:Janitorial Service	5,683	-	-	2,842	2,842
Contractual Services	8055 Administrative Department:Employee Training & Travel	13,832	-	-	6,916	6,916
Contractual Services	8072 Administrative Department:Service Contracts	1,713	-	-	856	856
Contractual Services	8074 Administrative Department:Computer Programming	10,098	-	-	5,049	5,049
Contractual Services Total		425,073	191,684	145,465	43,962	43,962
Employee Benefits & Taxes	6088 Water Department:Water Maintenance System:Employee Benefits - Maintenance	241,102	-	241,102	-	-
Employee Benefits & Taxes	6099 Water Department:Water Treatment Plant:Employee Benefits- WTP	380,220	380,220	-	-	-
Employee Benefits & Taxes	8055 Administrative Department:Pension Expense	-	-	-	-	-
Employee Benefits & Taxes	8080 Administrative Department:Payroll Taxes	2,003	-	-	1,002	1,002
Employee Benefits & Taxes	8099 Administrative Department:Employee Benefits	190,555	-	-	95,278	95,278
Employee Benefits & Taxes Total		813,880	380,220	241,102	96,279	96,279
General Expenses	6017 Water Department:Water Maintenance System:Vehicle Expenses	38,200	-	38,200	-	-
General Expenses	6018 Water Department:Water Treatment Plant:Vehicle Expenses	23,628	23,628	-	-	-
General Expenses	6019 Water Department:Water Maintenance System:Equipment Expenses	2,094	-	2,094	-	-
General Expenses	6030 Water Department:Water Maintenance System:Computer Expense	10,077	-	10,077	-	-
General Expenses	6031 Water Department:Water Treatment Plant:Computer Expense	4,215	4,215	-	-	-
General Expenses	6070 Water Department:Water Maintenance System:Drug and Alcohol Testing	-	-	-	-	-
General Expenses	6075 Water Department:Water Maintenance System:Employee Training & Travel	11,621	-	11,621	-	-
General Expenses	6087 Water Department:Water Treatment Plant:Dues & Subscriptions WTP	-	-	-	-	-
General Expenses	6093 Water Department:Water Treatment Plant:Uniform Exp - WTP	1,007	1,007	-	-	-
General Expenses	6150 Water Department:Water Treatment Plant:Drug/Alcohol Test WTP	-	-	-	-	-
General Expenses	8018 Administrative Department:Vehicle Expenses	12,541	-	-	6,271	6,271
General Expenses	8073 Administrative Department:Dues & Subscriptions	527	-	-	263	263
General Expenses	8087 Administrative Department:Bad Debts	15,456	-	-	7,728	7,728
General Expenses	8088 Administrative Department:Safety Program Expenses	2,872	-	-	1,436	1,436
General Expenses	8090 Administrative Department:Miscellaneous	15,708	-	-	7,854	7,854
General Expenses	8091 Administrative Department:Ceremonies & Award	6,567	-	-	3,284	3,284
General Expenses Total		144,513	28,850	61,992	26,836	26,836
Insurance	8065 Administrative Department:General Insurance	80,357	-	-	40,179	40,179
Insurance	8065 Administrative Department:Workman's Comp Ins	-	-	-	-	-
Insurance Total		80,357	-	-	40,179	40,179
Operating Supplies	6011 Water Department:Water Maintenance System:Equipment Fuel	28,872	-	28,872	-	-
Operating Supplies	6013 Water Department:Water Treatment Plant:Equipment Fuel	9,832	9,832	-	-	-
Operating Supplies	6025 Water Department:Water Treatment Plant:Janitor/Shop Supplies	2,090	2,090	-	-	-
Operating Supplies	6026 Water Department:Water Maintenance System:Janitor/Shop Supplies	6,886	-	6,886	-	-
Operating Supplies	6027 Water Department:Water Maintenance System:Office Supplies	1,032	-	1,032	-	-
Operating Supplies	6065 Water Department:Water Treatment Plant:Office Supplies	407	407	-	-	-
Operating Supplies	6092 Water Department:Water Maintenance System:Uniform Exp - Mtn	905	-	905	-	-
Operating Supplies	8070 Administrative Department:Office Supplies	7,735	-	-	3,867	3,867
Operating Supplies	8071 Administrative Department:Postage	20,856	-	-	10,428	10,428
Operating Supplies	8092 Administrative Department:Uniform Expense	544	-	-	272	272
Operating Supplies Total		79,159	12,329	37,695	14,568	14,568
Salaries & Wages	6000 Water Department:Water Treatment Plant:Salaries - WTP	566,596	566,596	-	-	-
Salaries & Wages	6001 Water Department:Water Maintenance System:Salaries - Water Maint	341,781	-	341,781	-	-
Salaries & Wages	8000 Administrative Department:Salaries - Admin	286,233	-	-	143,117	143,117
Salaries & Wages Total		1,194,610	566,596	341,781	143,117	143,117
Utilities	6015 Water Department:Water Treatment Plant:Utilities-WTP	433,779	433,779	-	-	-
Utilities	6016 Water Department:Water Maintenance System:Shop Utilities	14,193	-	14,193	-	-
Utilities	8015 Administrative Department:Office Utilities	14,426	-	-	7,213	7,213
Utilities Total		462,398	433,779	14,193	7,213	7,213
Grand Total		3,582,835	1,996,301	842,228	372,153	372,153

Table B.1
ALLOCATION OF DEPRECIATION EXPENSE (Existing Assets Only)
Morehead Utility Plant Board

Existing Assets	Totals	Water Treatment	Transmission & Distribution	Storage Tanks	General & Administration	Customer
Source of Supply Intakes	14,448	14,448				
Plant Structures and Improvements	428,212	428,212				
Water Treatment Equipment	37,806	37,806				
Distribution Reservoirs	128,797			128,797		
Tank Painting	-			-		
Transmission Mains	105,694		105,694			
Water Line Replacement	40,424		40,424			
Water Services	-					-
Meters	92,253					92,253
Fire Hydrants	566					566
Office Furniture & Equipment	21,759				10,879	10,879
Transportation Equipment	9,046				4,523	4,523
Tools & Shop Equipment	27,289				13,644	13,644
Total Existing Assets	906,292	480,466	146,117	128,797	29,046	121,866
New Regional Water Treatment Plant	-	-	-	-	-	-
Pro Forma Totals	906,292	480,466	146,117	128,797	29,046	121,866

Table B.2
ALLOCATION OF DEPRECIATION EXPENSE (Existing Assets and New Regional Water Treatment Plant)
Morehead Utility Plant Board

Existing Assets	Totals	Water Treatment	Transmission & Distribution	Storage Tanks	General & Administration	Customer
Source of Supply Intakes	14,448	14,448				
Plant Structures and Improvements	428,212	428,212				
Water Treatment Equipment	37,806	37,806				
Distribution Reservoirs	128,797			128,797		
Tank Painting	-			-		
Transmission Mains	105,694		105,694			
Water Line Replacement	40,424		40,424			
Water Services	-					-
Meters	92,253					92,253
Fire Hydrants	566					566
Office Furniture & Equipment	21,759				10,879	10,879
Transportation Equipment	9,046				4,523	4,523
Tools & Shop Equipment	27,289				13,644	13,644
Total Existing Assets	906,292	480,466	146,117	128,797	29,046	121,866
New Regional Water Treatment Plant	1,500,167	1,400,688	41,642	57,836	-	-
Pro Forma Totals	2,406,459	1,881,154	187,760	186,633	29,046	121,866

Table C.1
DEBT SERVICE SCHEDULE (Existing Assets Only)
Morehead Utility Plant Board
FY 2023/2024 - 2027/2028

	FY 2023/2024		FY 2024/2025		FY 2025/2026		FY 2026/2027		FY 2027/2028		Average Annual Debt Service	Average Annual Coverage	Average Annual Total	
	Principal	Interest & Fees	Principal	Interest & Fees	Principal	Interest & Fees	Principal	Interest & Fees	Principal	Interest & Fees				
WWTP expansion and upgrade	386,740	18,394	390,617	10,754	394,532	6,877	-	-	-	241,583	48,317	289,899		
Gravity and forcemain sewer extension	19,739	1,776	19,937	1,540	20,137	1,300	20,339	1,057	20,534	21,434	4,287	25,721		
Gravity and forcemain sewer extension	31,539	3,246	31,856	2,867	32,175	2,482	32,498	2,096	32,823	34,657	6,931	41,589		
WWTP expansion and upgrade	95,456	11,700	96,413	10,551	97,379	9,391	98,355	8,220	99,342	106,769	21,354	128,123		
Gravity and forcemain sewer extension	87,677	10,039	88,336	9,379	89,001	8,714	89,671	8,044	90,346	97,715	19,543	117,258		
Gravity and forcemain sewer extension	172,292	116,066	177,090	111,268	182,022	106,336	187,091	101,267	192,301	288,358	57,672	346,029		
Gravity and forcemain sewer extension	28,630	9,577	29,062	9,145	29,501	8,706	29,947	8,260	30,399	38,207	7,641	45,848		
New WTP, Raw Water Line, Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-		
Right to use water source (Cave Run Lake)	160,000	123,313	165,000	115,188	175,000	106,688	185,000	97,688	195,000	282,213	56,443	338,656		
WTP and WWTP expansion and system upgrade	-	115,368	50,403	64,965	49,103	66,265	47,778	67,590	46,426	115,368	23,074	138,442		
Fleet vehicles	174,975	34,222	113,652	23,606	89,917	19,298	67,709	15,982	40,284	117,974	23,595	141,569		
TOTALS	1,157,048	443,701	1,162,365	359,264	1,158,767	336,057	758,388	310,203	747,455	1,344,278	268,856	1,613,134		
											Water	Sewer	Storm	Gas
											-	289,899	-	-
											-	25,721	-	-
											-	41,589	-	-
											-	128,123	-	-
											-	117,258	-	-
											-	346,029	-	-
											-	45,848	-	-
											-	-	-	-
											246,181	92,475	-	-
											138,442	-	-	-
											42,798	40,798	28,987	28,987
											427,420	1,127,741	28,987	28,987

Table C.2
DEBT SERVICE SCHEDULE (Existing Assets and New Regional Water Treatment Plant)
 Morehead Utility Plant Board

FY 2025/2026 - 2027/2028

	FY 2025/2026		FY 2026/2027		FY 2027/2028		Average Annual Debt Service	Average Annual Coverage	Average Annual Total	Water	Sewer	Storm	Gas
	Principal	Interest & Fees	Principal	Interest & Fees	Principal	Interest & Fees							
WWTP expansion and upgrade	394,532	6,877	-	-	-	-	133,803	26,761	160,564	-	160,564	-	-
Gravity and forcemain sewer extension	20,137	1,300	20,339	1,057	20,534	812	21,393	4,279	25,672	-	25,672	-	-
Gravity and forcemain sewer extension	32,175	2,482	32,498	2,096	32,823	1,705	34,593	6,919	41,512	-	41,512	-	-
WWTP expansion and upgrade	97,379	9,391	98,355	8,220	99,342	7,037	106,575	21,315	127,890	-	127,890	-	-
Gravity and forcemain sewer extension	89,001	8,714	89,671	8,044	90,346	7,369	97,715	19,543	117,258	-	117,258	-	-
Gravity and forcemain sewer extension	182,022	106,336	187,091	101,267	192,301	96,056	288,358	57,672	346,029	-	346,029	-	-
Gravity and forcemain sewer extension	29,501	8,706	29,947	8,260	30,399	7,808	38,207	7,641	45,848	-	45,848	-	-
New WTP, Raw Water Line, Storage Tank	1,663,276	418,992	1,677,651	404,616	1,692,265	390,002	2,082,267	416,453	2,498,721	2,498,721	-	-	-
Right to use water source (Cave Run Lake)	175,000	106,688	185,000	97,688	195,000	88,188	282,521	56,504	339,026	246,449	92,576	-	-
WTP and WWTP expansion and system upgrade	49,103	66,265	47,778	67,590	46,426	68,942	115,368	23,074	138,442	138,442	-	-	-
Fleet vehicles	89,917	19,298	67,709	15,982	40,284	10,226	81,138	16,228	97,366	29,435	28,059	19,936	19,936
TOTALS	2,822,043	755,048	2,436,039	714,820	2,439,720	678,145	3,281,938	656,388	3,938,326	2,913,046	985,408	19,936	19,936

Table D.2

**ALLOCATION OF DEBT SERVICE (Existing Assets and New Regional Water Treatment Plant)
Morehead Utility Plant Board**

Issue	Use of Funds	Average Annual Debt Service & Coverage	Water Treatment	Transmission & Distribution	Storage Tanks
WWTP expansion and upgrade	WWTP expansion and upgrade	-			
Gravity and forcemain sewer extension	Gravity and forcemain sewer extension	-			
Gravity and forcemain sewer extension	Gravity and forcemain sewer extension	-			
WWTP expansion and upgrade	WWTP expansion and upgrade	-			
Gravity and forcemain sewer extension	Gravity and forcemain sewer extension	-			
Gravity and forcemain sewer extension	Gravity and forcemain sewer extension	-			
Gravity and forcemain sewer extension	Gravity and forcemain sewer extension	-			
New WTP, Raw Water Line, Storage Tank	New WTP, Raw Water Line, Storage Tank	2,498,721	2,248,849	124,936	124,936
Right to use water source (Cave Run Lake)	Right to use water source (Cave Run Lake)	246,449	246,449	-	-
WTP and WWTP expansion and system upgrade	WTP and WWTP expansion and system upgrade	138,442	138,442	-	-
Fleet vehicles	Fleet vehicles	29,435	8,830	17,661	2,943
Totals		\$ 2,913,046	\$ 2,642,570	\$ 142,597	\$ 127,880

Table E
SYSTEM INFORMATION
Morehead Utility Plant Board

Schedule of All Mains and Jointly Used Mains

<u>Main Size</u>	<u>Total System</u>			<u>Joint Use</u>	
	<u>Length (feet)</u>	<u>Miles of Mains</u>	<u>Inch - Miles</u>	<u>Miles of Mains</u>	<u>Inch - Miles</u>
24	15,180	2.88	69.00	2.88	69.00
16	75,642	14.33	229.22	14.33	229.22
12	59,309	11.23	134.79	11.23	134.79
10	24,359	4.61	46.13	4.61	46.13
8	45,821	8.68	69.43	8.68	69.43
6	173,038	32.77	196.63	-	-
4	22,352	4.23	16.93	-	-
3	30,899	5.85	17.56	-	-
2	100,208	18.98	37.96	-	-
1.5	1,095	0.21	0.31	-	-
1.25	776	0.15	0.18	-	-
1	12,018	2.28	2.28	-	-
0.75	350	0.07	0.05	-	-
Totals	561,048	106.26	820.48	41.73	548.57

Water Purchased, Sold and Used

	<u>Gallons</u> <u>x 1,000</u>	<u>Percent</u>
Water Produced	1,862,101.8	
Retail Sales	412,840.7	22.17%
Wholesale Sales	1,147,547.0	61.63%
Total Water Sold	1,560,387.7	
Water Used at WTP	146,024.2	7.84%
Distribution System Flushing	19,374.2	1.04%
Line Losses	136,315.7	7.32%

Table F
WHOLESALE ALLOCATION FACTORS
Morehead Utility Plant Board

				FACTOR
Line Loss Percentage				0.0732
Accounted For But Not Sold Percentage				0.0784
Line Loss + Plant Use				0.1516
Joint Use Inch-miles				548.57
Total Inch-Miles				820.48
Water Sold - Wholesale				1,147,547
Water Sold - Total				1,560,388
			1	
Production Multiplier	-----	----	=	1.1787
		1 - 0.1516		
<i>Factor to determine quantity that must be produced to service all sales. (For each gal sold, 1.1787 gals must be produced)</i>				
				548.57
Joint Use Pipeline Ratio		-----	=	0.6686
		820.48		
<i>Ratio of Joint Use pipes to all pipes in the system. (In-miles are used instead of miles to recognize additional first cost and maintenance for larger mains.)</i>				
Joint Share of Line Loss	0.0732	x	0.6686	=
				0.0489
<i>Allocation of line loss to Joint Use mains.</i>				
Joint Share Line Loss + Plant Use	0.0489	+	0.0784	=
				0.1274
<i>Total percentage allocation of non-revenue water to Joint Use.</i>				
			1	
Wholesale Production Multiplier	-----	----	=	1.1460
		1 - 0.1274		
<i>Factor to determine quantity that must be produced to service wholesale sales. For each gal sold to wholesale customers, 1.1460 gals must be produced.</i>				
	1.1460		1,147,547.0	
Water Production Factor	-----	x	-----	=
	1.1787		1,560,387.7	0.7150
<i>Water produced for wholesale customers divided by total water produced. (Percentage of all water produced that is for wholesale water sales.)</i>				
	1,147,547.0			
Pipeline Transmission Factor	-----	x	0.6686	=
	1,560,387.7			0.4917
<i>Portion of Joint Use pipes allocated to wholesale customers.</i>				
			1,147,547.0	
Use Factor			-----	=
			1,560,387.7	0.7354
<i>Allocation for tank expenses and sometimes other costs where water losses and transmission system issues don't apply.</i>				

Table G.1
WHOLESALE RATE COMPUTATION
Phase 1 (Existing Assets Only)
Morehead Utility Plant Board

	<u>Total</u>	<u>Allocation Factors</u>		<u>Wholesale</u>	<u>Retail</u>
		<u>Type</u>	<u>Factor</u>		
Salaries & Wages					
Water Production	\$ 566,596	WPF	0.7150	\$ 405,104	\$ 161,492
Trans./Distribution	341,781	PTF	0.4917	168,056	173,725
Employee Benefits + Taxes					
Water Production	\$ 380,220	WPF	0.7150	271,849	108,371
Trans./Distribution	241,102	PTF	0.4917	118,552	122,550
Contractual Services					
Water Production	\$ 191,684	WPF	0.7150	137,050	54,634
Trans./Distribution	145,465	PTF	0.4917	71,526	73,939
Utilities	433,779	WPF	0.7150	310,143	123,636
Chemicals	382,843	WPF	0.7150	273,725	109,118
Operating Supplies					
Water Production	\$ 12,329	WPF	0.7150	8,815	3,514
Trans./Distribution	37,695	PTF	0.4917	18,535	19,160
Insurance					
Water Production	\$ -	WPF	0.7150	-	-
Trans./Distribution	-	PTF	0.4917	-	-
General Expenses					
Admin & General	\$ 26,836	PTF	0.4917	13,195	13,640
Customer	26,836		-	-	26,836
Total Operating Expenses	2,787,166			1,796,551	990,615
Depreciation Expense					
Water Production	480,466	WPF	0.7150	343,523	136,943
Trans. / Distribution	146,117	PTF	0.4917	71,847	74,270
Storage Tanks	128,797	UF	0.7354	94,720	34,076
Admin & General	29,046	PTF	0.4917	14,282	14,764
Customer	121,866		-	-	121,866
Total Depreciation Expense	906,292			524,373	381,920
Debt Service & Coverage					
Water Production	397,461	WPF	0.7150	284,177	113,285
Trans. / Distribution	25,679	PTF	0.4917	12,626	13,052
Storage Tanks	4,280	UF	0.7354	3,147	1,132
Total Debt Service & Coverage	427,420			299,950	127,469
Total Revenue Required	4,120,878			2,620,874	1,500,004
Wholesale Gallons Sold (x 1,000)				1,147,547	
Computed Phase 1 Wholesale Rate per 1,000 Gallons				\$ 2.284	
Previous Revenue				\$ 2,387,902	
Difference in Revenue Required				\$ 232,971	
Percent Change in Revenue Required				9.76%	

Table G.2

WHOLESALE RATE COMPUTATION

Phase 2 Rate (Existing Assets and New Regional Water Treatment Plant)

Morehead Utility Plant Board

	<u>Total</u>	<u>Allocation Factors</u>		<u>Wholesale</u> <u>Allocation</u>	<u>Retail</u> <u>Allocation</u>
		<u>Type</u>	<u>Factor</u>		
Salaries & Wages					
Water Production	\$ 566,596	WPF	0.7150	\$ 405,104	\$ 161,492
Trans./Distribution	341,781	PTF	0.4917	168,056	173,725
Employee Benefits + Taxes					
Water Production	\$ 380,220	WPF	0.7150	271,849	108,371
Trans./Distribution	241,102	PTF	0.4917	118,552	122,550
Contractual Services					
Water Production	\$ 191,684	WPF	0.7150	137,050	54,634
Trans./Distribution	145,465	PTF	0.4917	71,526	73,939
Utilities	433,779	WPF	0.7150	310,143	123,636
Chemicals	382,843	WPF	0.7150	273,725	109,118
Operating Supplies					
Water Production	\$ 12,329	WPF	0.7150	8,815	3,514
Trans./Distribution	37,695	PTF	0.4917	18,535	19,160
Insurance					
Water Production	\$ -	WPF	0.7150	-	-
Trans./Distribution	-	PTF	0.4917	-	-
General Expenses					
Admin & General	\$ 26,836	PTF	0.4917	13,195	13,640
Customer	26,836	-	-	-	26,836
Total Operating Expenses	2,787,166			1,796,551	990,615
Depreciation Expense					
Water Production	1,881,154	WPF	0.7150	1,344,985	536,168
Trans. / Distribution	187,760	PTF	0.4917	92,323	95,437
Storage Tanks	186,633	UF	0.7354	137,254	49,379
Admin & General	29,046	PTF	0.4917	14,282	14,764
Customer	121,866	-	-	-	121,866
Total Depreciation Expense	2,406,459			1,588,845	817,614
Debt Service & Coverage					
Water Production	2,642,570	WPF	0.7150	1,889,382	753,188
Trans. / Distribution	142,597	PTF	0.4917	70,116	72,481
Storage Tanks	127,880	UF	0.7354	94,046	33,834
Total Debt Service & Coverage	2,913,046			2,053,544	859,503
Total Revenue Required	8,106,671			5,438,940	2,667,731
Wholesale Gallons Sold (x 1,000)				1,147,547	
Computed Phase 2 Wholesale Rate per 1,000 Gallons				\$ 4.740	
Previous Revenue				\$ 2,620,997	
Difference in Revenue Required				\$ 2,817,942	
Percent Change in Revenue Required				107.51%	