

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE FILING FOR BATH) CASE NO.
COUNTY WATER DISTRICT) 2012-00537

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of January 9, 2013, the attached report containing the findings and recommendations of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding.



Jeff Derogen
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATED FEB 15 2013

cc: Parties of Record

STAFF REPORT
ON
BATH COUNTY WATER DISTRICT
CASE NO. 2012-00537

Bath County Water District (“Bath County”), a water district organized pursuant to KRS Chapter 74, provides retail water service to approximately 3,688 customers residing in the Kentucky counties of Bath, Menifee, Montgomery, and Rowan¹ and provides wholesale water service to Sharpsburg Water District and the cities of Owingsville and Frenchburg.² On December 6, 2012, Bath County filed an application with the Commission requesting to increase all water service rates by 4.64 percent, except for the flat, monthly rate paid by the city of Owingsville.

The proposed rates would increase a monthly bill from \$30.25 to \$31.65, an increase of \$1.40, or 4.64 percent, for the use of 5,000 gallons of water through a 5/8-inch meter. In support of its request, Bath County provided financial exhibits with its application based on adjusted test-year operations ending December 31, 2011. These exhibits, which are presented in condensed form below, demonstrate that a revenue increase of \$77,460, or 4.64 percent, is justified.³

¹ *Annual Report of Bath County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2011* at 5 and 27.

² *Id.* at 30.

³ The fully disclosed exhibits are labeled in the Application as Adjusted Operations, Revenue Requirement Calculation, and Normalized Billing Analysis.

Pro Forma Operating Expenses	\$ 1,690,611
Plus: Average Annual Debt Principal and Interest Payments	<u>159,373</u>
Overall Revenue Requirement	1,849,984
Less: Other Operating Revenue and Non-Operating Revenue	<u>(104,465)</u>
Total Revenue Required from Water Sales	1,745,519
Less: Pro Forma Present Rate Water Sales	<u>(1,668,059)</u>
Revenue Increase	<u>\$ 77,460</u>
Percentage Increase	<u>4.64%</u>

Because the city of Owingsville's flat rate was not increased, the requested rates will not produce the entire revenue increase. They will produce only \$75,558⁴ in additional revenues. Based on the pro forma financial information provided in Bath County's application, this additional revenue will satisfy the requirements of Bath County's bondholders, the United States Department of Agriculture Rural Development ("RD").

RD requires its borrowers to assess rates for service that produce net revenues that are at least equal to 120 percent of the average annual principal and interest payments on all RD bonds. This is known as the Debt Service Coverage ("DSC") ratio. As shown below, the net revenues generated by the rates requested by Bath County produce a DSC ratio of 316 percent, which is well above the requirement.

⁴ Water Sales at Requested Rates, Billing Analysis Summary, Application at 21	\$1,743,616
Less: Water Sales at Present Rates, Billing Analysis Summary, Application at 16	<u>(1,668,059)</u>
Increase in Revenue at Requested Rates	<u>\$75,558</u>

Revenues at Present Rates	\$ 1,668,059
Increase in Revenues Requested	75,558
Other Operating and Nonoperating Revenue	<u>104,465</u>
Total Revenue at Proposed Rates	1,848,082
Less: Operating Expenses (Includes Operation and Maintenance, Depreciation, and Taxes Other Than Income)	(1,690,611)
Add Back: Depreciation Expense	<u>345,409⁵</u>
Net Revenues for DSC Calculation	502,880
Divide by: Average Bond Principal and Interest Payment	<u>159,373</u>
DSC Ratio	<u><u>316%</u></u>

To evaluate the reasonableness of the rates requested by Bath County, Commission Staff ("Staff") performed a limited financial review of Bath County's test-year operations. The scope of the review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable changes to test-year operations were identified and adjustments were made when deemed to have a material effect. Insignificant or immaterial discrepancies were not pursued and were not addressed, except when they may affect future reporting periods.

Staff's findings and recommendations are summarized in this report. Scott Lawless reviewed the calculation of revenue requirements. Sam Reid reviewed the billing analysis, reported revenues, and the allocation of the revenue increase to the rate design. This report is separated into the following sections:

⁵ The DSC ratio measures an entity's ability to pay its cash related operating expenses and to pay debt principal and interest. It is calculated by dividing net revenues by the average annual principal and interest payments. Net revenues are equal to total revenues less cash-related operating expenses. Depreciation is a noncash operating expense that is excluded from the determination of net revenues.

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Recommendation

Staff used two differing approaches to review the reasonableness of Bath County’s proposed rates and to determine a reasonable revenue requirement. Despite the differences in each approach, each produces a revenue requirement that is significantly higher than the level of revenue that Bath County’s proposed rates will produce.

Using the Cash Needs Approach, the methodology that Bath County used, Staff found that Bath County requires additional revenues of \$139,171, an 8.34 percent increase over adjusted test-year revenues. The rates set forth in Attachment A to this report will produce that level of revenue and will increase the monthly cost of 5,000 gallons of water purchased through a 5/8-inch meter from \$30.25 to \$32.78, an increase of \$2.53, or 8.36 percent.

Using the Debt Service Coverage (“DSC”) approach, which the Commission has historically used to calculate a water district’s revenue requirements, Staff found that, based upon adjusted test-year operations, Bath County requires an increase in revenues from water sales of \$171,045, or 10.25 percent. The rates set forth in Attachment B to this Report will produce these additional revenues and will increase the monthly cost of 5,000 gallons of water purchased through a 5/8-inch meter from \$30.25 to \$33.35, an increase of \$3.10, or 10.25 percent.

If after reviewing this report, Bath County wishes to adopt the rates shown in either Attachment A or Attachment B, it should notify the Commission when responding to this report. If Bath County requests to adopt either of these rates, Staff recommends they be approved by the Commission, but only after Bath County provides evidence to the Commission showing that notice has been provided to all customers of the amended rates. This notice must satisfy the requirements of 807 KAR 5:076, Section 5.

If Bath County chooses not to adopt the rates shown in either Attachment A or Attachment B, Staff recommends the Commission approve the rates requested in Bath County's Application. While these rates will not produce the overall revenue requirements calculated by Staff, they will produce net revenues that result in a DSC ratio of 275 percent, as calculated below, using Staff's adjusted pro forma operations. This ratio is well above the RD requirement.

Revenues at Present Rates	\$ 1,668,059
Increase in Revenues Requested	75,558
Other Operating and Nonoperating Revenue	<u>75,821</u>
 Total Revenue at Proposed Rates	 1,819,438
Less: Operating Expenses	(1,723,677)
Add Back: Depreciation Expense	<u>342,535</u>
 Net Revenues for DSC Calculation	 438,295
Divide by: Average Bond Principal and Interest Payments	<u>159,373</u>
 DSC Ratio	 <u><u>275%</u></u>

Calculation of Overall Revenue Requirement and Revenue Increase

The Commission historically applies the DSC Method to calculate a water district's overall revenue requirement. Bath County used the Cash Needs Method. For comparison purposes, Staff applied both methods. The calculations are shown below.

	Cash Needs Method	DSC Method
Pro Forma Operating Expenses	\$ 1,723,677	\$ 1,723,677
Plus: Average Annual Principal and Interest Payments	159,373	159,373
20 Percent of Principal and Interest Payments		<u>31,875</u>
Overall Revenue Requirement	1,883,051	1,914,925
Less: Other Operating Revenue	(52,910)	(52,910)
Interest Income	(8,073)	(8,073)
Nonutility Income	<u>(14,838)</u>	<u>(14,838)</u>
Revenue Required from Water Sales	1,807,230	1,839,104
Less: Pro Forma Present Rate Water Sales	<u>(1,668,059)</u>	<u>(1,668,059)</u>
Revenue Increase	<u>\$ 139,171</u>	<u>\$ 171,045</u>
Percentage Increase	<u>8.34%</u>	<u>10.25%</u>

The Cash Needs Method provides revenues sufficient to pay operating expenses, pay principal and interest on all debts, recover depreciation expense, and

meet the DSC provisions of Bath County's bonded debt obligations.⁶ Recovery of depreciation expense, a noncash item, is included in the Cash Needs Method to allow recovery of working capital that is necessary to provide internal funds to be used to

⁶ Bath County's bond ordinances require Bath County to charge rates for water service that will produce net annual revenues that are at least equal to 120 percent of the average annual principal and interest payments on the water district's bonded debt plus payments on any debts that are on par with its bonded debt. The calculations of the DSC ratios provided by the Cash Needs Method and the DSC Method are presented below.

	Cash Needs	
	Method	DSC Method
Total Revenue Requirement	\$ 1,883,051	\$ 1,914,925
Less: Operating Expenses	(1,723,677)	(1,723,677)
Add Back: Depreciation Expense	<u>342,535</u>	<u>342,535</u>
Net Revenues for DSC Calculation	501,908	533,782
Divide by: Average Bond Principal and Interest Payment	<u>159,373</u>	<u>159,373</u>
DSC Ratio	<u>315%</u>	<u>335%</u>

construct new assets and to renew and replace existing assets.⁷ It can also be used to pay increased operating expenses or to offset a decrease in revenues. The DSC Method includes all the components of the Cash Needs Method plus an additional amount for working capital. This additional working capital is set as equal to the DSC ratio required by a district's lenders.

All components included in the calculations and the DSC ratio are discussed in the following section of this report titled Pro Forma Operations except for the principal and interest payments. The principal and interest payments are set as equal to the three-year average annual payment to be made in 2012, 2013, and 2014 on Bath

⁷ The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds to be used for renewing and replacing assets. See *Public Serv. Comm'n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky. 1986). Bath County's bond ordinances require a very small portion of depreciation funds to be set aside in an account designated as "Depreciation Fund."

Bath County currently has outstanding bonds from 9 bond issues, all of which Rural Development holds, that require total monthly deposits of \$795, or \$9,540 annually, into a Depreciation Fund until the balance reaches \$219,400, or 1.5 percent of the balance of depreciable assets at the end of the test year. See Application at 29 (stating depreciable assets at \$14,956,359). Currently, the Depreciation Fund is fully funded and no deposits are required. Deposits must resume if money is expended from the fund. The bond resolutions state that these funds may to be used for "paying the cost of unusual or extraordinary maintenance, repairs, renewals and replacements not included in the annual budget of current expenses and/or of paying the costs of constructing future extensions, additions and improvements to the System which will either enhance its revenue-producing capacity or will provide a higher degree of service, and when necessary, for the purpose of making payments of principal and interest on the Bonds if the amount on deposit in the Sinking Fund is not sufficient to make such payments." Bond Resolution Authorizing Bath County Water District Waterworks Revenue Bonds, Series 2009, at 18. After a bond series is fully retired, the amount held on deposit for that bond can be transferred to the general funds and becomes working capital with no restrictions on its use.

Since Bath County's Depreciation Fund is fully funded and no deposits are required, all of the depreciation expense recovered through rates may be used for any purpose. If Bath County is required to resume deposits to the Depreciation Fund, this amount will decrease, but only by 2.8 percent (\$9,540 annual deposit / \$342,535 pro forma depreciation expense). All funds in the Depreciation Fund for a bond series that is fully retired become working capital that may be used for any purpose.

The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. See, e.g., Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

County's outstanding bonds. The DSC Coverage was set equal to 20 percent of the average payments. These calculations are shown below.

RD Bonds	Principal and Interest Payments				
	2012	2013	2014	Total	Average
Series 1977	\$ 7,800	\$ 7,500	\$ 7,200	\$ 22,500	\$ 7,500
Series 1982	6,700	6,500	6,300	19,500	6,500
Series 1988	21,800	22,275	21,725	65,800	21,933
Series 1991	6,043	6,025	6,100	18,168	6,056
Series 1994	15,434	15,186	15,428	46,048	15,349
Series 1998	11,023	10,968	11,006	32,997	10,999
Series 2004	27,008	27,213	26,906	81,127	27,042
Series 2006	54,059	53,992	53,904	161,955	53,985
Series 2009	10,104	10,009	9,914	30,026	10,009
Total	<u>\$ 159,970</u>	<u>\$ 159,667</u>	<u>\$ 158,482</u>	<u>\$ 478,119</u>	<u>\$ 159,373</u>
Times: 20 Percent					<u>20%</u>
DSC Coverage					<u>\$ 31,875</u>

Pro Forma Operating Statement

Bath County reported test-year operating revenues of \$1,675,705 and test-year operating expenses of \$1,664,233. It proposed adjustments to these amounts that it considered known and measurable.⁸ The Pro Forma Operating Statement that appears below reflects Staff's recommended adjustments to test-year operations.

⁸ App. at 13.

	Test Year	Adjustments	Ref.	Pro Forma
Operating Revenues				
Sales of Water	\$ 1,622,795	\$ 45,264	(A)	\$ 1,668,059
Other Operating Revenue	52,910			52,910
Total Operating Revenue	<u>1,675,705</u>	<u>45,264</u>		<u>1,720,969</u>
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	264,867	18,963	(B)	283,830
Salaries and Wages - Officers	20,510			20,510
Employee Pensions and Benefits	152,764	2,032	(C)	154,796
Purchased Water	656,954	38,553	(D)	695,507
Purchased Power	60,517	408	(E)	60,925
Chemicals	7,096			7,096
Materials and Supplies	26,569		(F)	26,569
Contractual Services	4,750			4,750
Water Testing	5,265	2,400	(G)	7,665
Transportation	24,858		(H)	24,858
Insurance	19,330			19,330
Regulatory Commission Expense	2,514			2,514
Bad Debt Expense	6,539			6,539
Miscellaneous Expense	44,084	(38)	(I)	44,046
Total Operation and Maintenance Expenses	1,296,617	62,319		1,358,936
Depreciation Expense	345,409	(2,874)	(J)	342,535
Taxes Other Than Income	22,207			22,207
Total Operating Expenses	<u>1,664,233</u>	<u>59,444</u>		<u>1,723,677</u>
Net Operating Income	11,472	(14,180)		(2,708)
Interest and Dividend Income	8,073			8,073
Nonutility Income	43,482	(28,644)	(K)	14,838
Income Available to Service Debt	<u>\$ 63,027</u>	<u>\$ (42,824)</u>		<u>\$ 20,203</u>

(A) Water Sales. Bath County reported \$1,622,795 for test-year Water Sales Revenue. It proposed to increase this amount by \$45,264⁹ to account for changes made to its water service rates in Case No. 2011-00514¹⁰ and to account for customer

⁹ Although this adjustment does not appear on Page 12 of the Application, it is accounted for on Page 15 of the Application.

¹⁰ Case No. 2011-00514, *Purchased Water Adjustment Filing of Bath County Water District* (Ky. PSC Jan. 18, 2012)

growth.¹¹ Bath County supported its adjustment with a billing analysis filed with its application.¹²

In the billing analysis, current water service rates were applied to test-year gallons sold after adjustments were made for customer growth. As a result, pro forma present rate revenues from water sales were calculated to be \$1,668,059. Staff reviewed Bath County’s billing analysis and found it appropriate. Staff agrees that test-year Water Sales Revenue should be increased by \$45,264.

(B) Salaries and Wages – Employees. Bath County reported \$264,867 for test-year Salaries and Wages - Employees. It proposed to increase this amount by \$7,696 to account for employee wage rates that became effective on January 1, 2012.

Staff determined that an \$18,963 increase is warranted based on wage rates that became effective on January 1, 2013. These rates were approved by Bath County’s Board of Commissioners on November 26, 2012. Staff’s calculation is shown below. In the calculation, Staff determined pro forma wages by applying wage rates to all regular

¹¹ Bath County added 40 new residential meters in 2012, estimating 5,000 gallons per month usage per meter, Bath County increased test-year gallons sold by 2,400,000 gallons, an increase of .67 percent, to account for these customers.

Additional Customers	40
Times: Monthly Usage per Customer	5,000
12 Months	<u>12</u>
Total Additional Gallons	2,400,000
Divide by: Test Year Gallons Sold	<u>355,934,000</u>
Percentage Increase	<u><u>0.6743%</u></u>

¹² App. at 16-25.

hours and overtime hours worked during the test year.¹³ This amount was increased by \$4,132 to account for the accrual of future compensated absences and decreased by \$15,834 to account for capitalized labor. The accrual and capitalization adjustments are explained following the calculation.

Employee	Hours Worked		Hourly Rate	Pro Forma
	Regular	Overtime		
1	2,166.0	20.0	\$ 23.21	\$ 50,969
2	2,164.0	9.0	20.76	45,205
3	2,160.0		16.88	36,461
4	2,160.0	0.5	12.21	26,383
5	2,190.0	39.5	18.18	40,891
6	2,180.5	43.5	15.78	35,438
7	2,180.0	35.0	13.60	30,362
8	2,167.5	41.0	13.38	<u>29,824</u>
Pro Forma Payroll				295,533
Plus: Pro Forma Accrual for Vacation and Sick Leave				<u>4,132</u>
Total Pro Forma				299,665
Less: Pro Forma Capitalized Labor				<u>(15,834)</u>
Pro Forma Expense				283,830
Less: Test Year				<u>(264,867)</u>
Increase				<u><u>\$ 18,963</u></u>

Bath County's employees are allowed to accrue up to 80 vacation hours and 480 sick hours. Bath County properly accrues a liability and expense for these hours in the reporting period in which they are earned. The test-year accrual was \$3,856, or 1.398

¹³ Overtime pay is calculated at one and one-half times the regular pay rate.

percent of total test-year wages.¹⁴ The test-year amount will increase as a result of the increase to wages. This increase should be accounted for in pro forma operations. Staff determined the pro forma accrual to be \$4,132 by applying the test-year accrual rate to pro forma wages.¹⁵

During the test year, Bath County properly capitalized wages incurred to construct capital assets. Capitalized wages represented 5.28 percent¹⁶ of all test-year

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Test-Year Accrual for Future Compensated Absences	\$	3,856
Divide by the Sum of Test-Year:		
Maintenance Wages	146,468	
Overtime Wages	4,520	
Office Wages	124,800	275,788
		<u>275,788</u>
Percent Accrued for Compensated Absences		<u>1.3980%</u>

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Total Pro Forma Wages	295,533
Times: Test Year Accrual Rate	<u>1.3980%</u>
Pro Forma Accrual	<u>\$ 4,132</u>

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Test-Year Capitalized Wages	\$ 14,776
Divide by: Test-Year Total Wages and Accrual for Future Compensated Absences	<u>279,643</u>
Percent Capitalized	<u>5.28%</u>

wages. Pro forma wages should be capitalized at the same rate. Accordingly, Staff capitalized \$15,834.¹⁷

(C) Employee Pensions and Benefits. Bath County increased test-year employee pensions and benefits by \$2,032 to account for the increase in retirement contributions and payroll taxes that will result from increased wages. Staff agrees that this adjustment fairly represents, in all material respects, the anticipated increase to these expenses and recommends the adjustment be accepted.

(D) Purchased Water. Bath County purchased wholesale water for resale from Mt. Sterling Water and Sewer System (“Mt. Sterling”), Morehead Utility Plant Board (“Morehead”), and the city of Frenchburg during the test year at a total cost of \$656,954. Bath County proposed to increase this amount by \$2,000 to account for a \$161.82 increase to the flat monthly capital charge paid to Mt. Sterling. This charge became effective on January 1, 2013.

Bath County did not propose an adjustment to account for the current volumetric rates charged by Mt. Sterling or Morehead. On August 1, 2012, Mt. Sterling increased its volumetric rate to \$2.41 per thousand gallons. Morehead increased its volumetric rate to \$1.088 per thousand gallons on January 1, 2013. Absent an adjustment to

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Pro Forma Payroll	\$ 295,533
Plus: Pro Forma Accrual for Vacation and Sick Leave	<u>4,132</u>
Total Pro Forma	299,665
Times: Capitalization Rate	<u>5.283963%</u>
Pro Forma Payroll Capitalized	<u>\$ 15,834</u>

account for the increase to wholesale water costs, pro forma expenses will be materially understated. Staff determined that an adjustment of \$33,895 is required. The calculation is shown below.

	Thousand Gallons	Rate Per Thousand	Volumetric Charge	Capital Charge	Meter Charge	Cost
Mt. Sterling	23,935	\$ 2.41	\$ 57,683			\$ 57,683
Morehead	372,810	1.088	405,617	\$222,676	\$120	<u>628,414</u>
Pro Forma Purchases from Mt. Sterling and Morehead						686,097
Less: Test-Year Purchases from Mt. Sterling and Morehead						<u>(652,202)</u>
Increase						<u>\$ 33,895</u>

Because test-year Water Sales Revenues were increased to account for customer growth, Purchased Water expense must also be increased to avoid a mismatch of revenues and expenses. Using the .6743 sales growth rate, Staff estimates the increase to purchased water expense to be \$4,658. This calculation is shown below.

Test-Year Expense	\$ 656,954
Plus: Adjustment for Current Wholesale Rates	<u>33,895</u>
Pro forma Water Costs for Test Year Gallons Purchased	690,849
Times: Percentage Increase Necessary to Meet Customer Growth	<u>0.6743%</u>
Increase for Customer Growth	<u>\$ 4,658</u>

Staff recommends an overall increase of \$38,553 to test-year expenses to account for the changes in wholesale water rates and customer growth.

Increase to Account for Current Wholesale Cost of Water	\$ 33,895
Increase to Account for Customer Growth	<u>4,658</u>
Total Increase	<u><u>\$ 38,553</u></u>

(E) Purchased Power. Like Purchased Water, test-year Purchased Power for Pumping must also be increased by the customer growth rate to properly match revenues and expenses. The calculation is shown below. While the \$408 adjustment is immaterial to the overall revenue requirement, it was made to be consistent with the customer growth adjustments to Water Sales Revenue and Purchased Water expense.

Test-Year Expense	\$ 60,517
Times: Growth Rate	<u>0.6743%</u>
Increase	<u><u>\$ 408</u></u>

(F) Materials and Supplies. On January 4, 2014, the Reduction of Lead in Drinking Water Act will become effective. This act requires that all pipes, fittings, and fixtures installed after the effective date be lead free if they will come into contact with drinking water.¹⁸ To comply with this requirement, Bath County recently began purchasing lead free materials and supplies to replenish depleting inventory, recognizing that some of these items may be installed after January 4, 2014. Bath County determined that the price of these materials is approximately 10 percent higher than the old items. Bath County increased test-year Materials and Supplies expense of \$26,569 by 10 percent, or \$2,650, to account for this increase.

Staff disagrees with Bath County's adjustment and recommends it be denied. The vast majority of the materials and supplies used during the test year that must now

¹⁸ The act defines lead free as: A) not containing more than 0.2 percent lead when used with respect to solder and flux; and B) not more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

be lead free were necessary to install new meter settings. Bath County properly reported the cost of these supplies on the balance sheet as plant in service. Their costs are not included in the Materials and Supplies expense account reported on the income statement. The increase to the test-year Materials and Supplies expense account that will result from the lead free rule will be minimal. No adjustment is necessary.

(G) Water Testing. Bath County reported \$5,265 for test-year water testing. It proposed to increase this amount by \$7,000 to account for additional testing that will be required by the Stage 2 Disinfectants and Disinfection Byproduct Rule ("S2 DBP Rule") and the Unregulated Contaminant Monitoring Rule 3 ("UCMR3").

The S2 DBP Rule requires additional testing for trihalomethanes and haloacetic acids. Bath County will begin this quarterly testing at four sample sites in October, 2013, at a total estimated cost of \$600. This estimate was based on information provided by Bath County's contracted laboratory, Appalachian States Analytical. The annual cost of \$2,400 is known and measurable and should be included in pro forma operations. Staff increased the test-year expense by this amount.

While Staff recognizes that the additional cost of testing will not begin until sometime after the conclusion of the current rate proceeding, no significant overearning will result. The monthly recovery for this testing is \$200. A six-month lag between the effective date of the rates approved in this case and the initial testing would result in potential overearnings of \$1,200, or .064 percent of Bath County's overall revenue requirement.

With regard to the UCMR3 testing, Bath County stated that this testing will begin in January, 2015. It requested recovery of \$4,600. It did not provide a contractor bid

supporting this amount. Absent any evidence supporting this cost, the adjustment is not known and measurable and should not be allowed. Furthermore, this testing will not occur until 2015. Its recovery at this time is not appropriate.

(H) Transportation. Bath County reported \$24,858 for transportation expenses. This amount included, but was not limited to, the cost of fuel and repairs. Bath County proposed to increase the test-year expense by \$5,000 to account for increased fuel prices. Staff recommends Bath County's adjustment be denied. Bath County did not provide any evidence comparing the average fuel prices paid during the test year to current prices. Absent this evidence, the adjustment is not known and measurable.

(I) Miscellaneous. Bath County reported a \$38 expense for the purchase of flowers. This item not necessary for the delivery of potable water and was, therefore, outside its statutory purpose. It has been removed for ratemaking purchases.

(J) Depreciation Expense. Bath County reported \$345,409 for test-year depreciation expense. The depreciation schedule showing this calculation is included in the Application.¹⁹ The depreciable lives used on the schedule were reviewed by the Commission's Division of Engineering. Its review and recommendations are summarized in a memorandum that is included herewith at Attachment C. By applying

¹⁹ App. at 26.

the recommended lives, Staff reduced test-year depreciation by \$2,874, as calculated below.²⁰

	Depreciable Basis	Life	Pro forma Expense	Less: Test Year	Test Adjustment
Other Plant and Miscellaneous Equipment	\$ 19,690	37.5	\$ 525	\$ (394)	\$ 131
Transportation Equipment	22,984	7.0	3,283	(4,597)	(1,314)
Tools and Shop Equipment	39,080	17.5	2,233	(3,925)	<u>(1,692)</u>
Decrease					<u>\$ (2,874)</u>

Staff recommends that Bath County use the new depreciable lives for accounting purposes in all future reporting periods. These lives better match the life expectancy of Bath County’s assets and will better match expenses to the revenues generated by the water service rates approved by the Commission in this proceeding. No adjustment to accumulated depreciation or retained earnings should be made to account for the retroactive effect of this change in accounting estimate.

(K) Nonutility Income. Bath County reported \$43,482 for Nonutility Income. Staff recommends this amount be decreased by \$28,644 to remove \$22,046 reported for tap fees and \$6,598 collected from the Federal Emergency Management Agency (“FEMA”).

Test-year tap fees were collected in return for the installation of new water connections. The Uniform Systems of Accounts (“USoA”) requires this collection to be

²⁰ Engineering’s recommendation to change the service life assigned to Water Treatment Plant Equipment from 5 years to 27.5 years has no effect on staff’s adjustment. This asset group was fully depreciated at the beginning of the test year. There is no depreciation expense on this asset group included in the test-year expense.

The Depreciation Schedule included in the Application states the depreciable basis for transportation equipment at \$154,856. The actual basis depreciated in the test year was \$22,984, the cost of a service truck. This amount was used in Staff’s calculation of pro forma depreciation. All other plant reported in this account group had been fully depreciated prior to the test year.

reported directly to account 215.2, Donated Capital. Staff removed these collections from the calculation of income to comply with the USoA.

The FEMA collection was for reimbursement of flood repairs performed in 2010. These collections should have been recognized in 2010 to properly offset the expense in the same reporting period. To remove the effects of this accounting error, Staff reduced test-year Nonutility Income by \$6,598.

Rates and Rate Design

Bath County proposes rates that will increase the revenue derived from each rate step of each rate schedule by approximately 4.64 percent. The one exception to this across-the-board strategy is the monthly debt service payment that Bath County assesses to the city of Owingsville ("Owingsville") for wholesale water service. Currently Bath County assesses Owingsville a monthly charge of \$4,733.91 and a \$2.07 per 1,000 gallon volumetric rate for all usage. The monthly charge is established by contract and is designed to recover Owingsville's portion of the capital costs of Bath County's treatment and distribution system. Bath County proposed no change to this monthly charge.

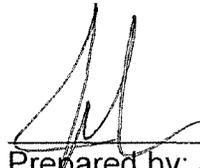
Staff recommends that the volumetric wholesale rate to Owingsville should be adjusted to recover the same approximate percentage increase from Owingsville as that recovered from Bath County's other customers. Bath County proposed, in its application, a wholesale volumetric rate of \$2.17 per 1,000 gallons to Owingsville. Staff finds that the establishment of a wholesale volumetric rate of \$2.20 per 1,000 gallons to Owingsville is more appropriate and that this will more equitably allocate the requested

increase by Bath County and will produce the level of revenues sufficient to meet Bath County's requested revenue requirement.

This proposed method fairly assigns the additional revenue to all customers in an unbiased manner. Absent a cost of service study or other evidence indicating that this method results in an inequitable or unfair distribution of the revenue increase, Staff recommends its use to establish the rates to produce Staff's recommended revenue requirement levels. As Bath County did not submit a cost-of-service study in this case and has not had a general rate adjustment proceeding in more than 20 years, Staff recommends that Bath County file a cost-of-service study or request staff assistance in preparing such a study for inclusion in its next application for a general rate increase.

Using the across-the-board method, Staff has prepared rates that will produce Staff's recommended revenue requirement levels. The rates set forth in Attachment A to this Report will produce total revenues from water sales of \$1,883,051, the level of revenue needed to meet the recommended revenue requirement using the cash needs method. The rates set forth in Attachment B to this Report will produce total revenues from water sales of \$1,914,925, the level of revenue needed to meet the recommended revenue requirement using the DSC method.

Signatures



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Manager, Water and Sewer
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Prepared by: Sam Reid
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ATTACHMENT A
STAFF REPORT, CASE NO. 2012-00537
STAFF'S RECOMMENDED RATES

Monthly Rates

5/8-Inch X 3/4-Inch Meter

First 2,000 Gallons	\$ 15.29 Minimum Bill
Next 3,000 Gallons	5.83 per 1,000 gallons
Next 5,000 Gallons	4.42 per 1,000 gallons
Next 10,000 Gallons	3.77 per 1,000 gallons
Next 30,000 Gallons	3.55 per 1,000 gallons
Over 50,000 Gallons	3.45 per 1,000 gallons

1-Inch Meter

First 10,000 Gallons	\$ 54.88 Minimum Bill
Next 10,000 Gallons	3.77 per 1,000 gallons
Next 30,000 Gallons	3.55 per 1,000 gallons
Over 50,000 Gallons	3.45 per 1,000 gallons

2-Inch Meter

First 50,000 Gallons	\$ 199.08 Minimum Bill
Over 50,000 Gallons	3.45 per 1,000 gallons

Bulk Sales

\$ 8.15 per 1,000 gallons

Wholesale

Sharpsburg Water District	\$ 3.15 per 1,000 gallons
City of Owingsville	\$ 2.30 per 1,000 gallons
Monthly Debt Service Payment	\$4,733.91 per month
City of Frenchburg	\$ 2.71 per 1,000 gallons

Leak Adjustment

\$ 2.68 per 1,000 gallons

ATTACHMENT B
STAFF REPORT, CASE NO. 2012-00537
STAFF'S RECOMMENDED RATES

Monthly Rates

5/8-Inch X 3/4-Inch Meter

First 2,000 Gallons	\$ 15.56 Minimum Bill
Next 3,000 Gallons	5.93 per 1,000 gallons
Next 5,000 Gallons	4.50 per 1,000 gallons
Next 10,000 Gallons	3.84 per 1,000 gallons
Next 30,000 Gallons	3.62 per 1,000 gallons
Over 50,000 Gallons	3.50 per 1,000 gallons

1-Inch Meter

First 10,000 Gallons	\$ 55.85 Minimum Bill
Next 10,000 Gallons	3.84 per 1,000 gallons
Next 30,000 Gallons	3.62 per 1,000 gallons
Over 50,000 Gallons	3.50 per 1,000 gallons

2-Inch Meter

First 50,000 Gallons	\$ 202.85 Minimum Bill
Over 50,000 Gallons	3.50 per 1,000 gallons

Bulk Sales

\$ 8.29 per 1,000 gallons

Wholesale

Sharpsburg Water District	\$ 3.21 per 1,000 gallons
City of Owingsville	\$ 2.35 per 1,000 gallons
Monthly Debt Service Payment	\$4,733.91 per month
City of Frenchburg	\$ 2.76 per 1,000 gallons

Leak Adjustment

\$ 2.73 per 1,000 gallons

ATTACHMENT C
 STAFF REPORT, CASE NO. 2012-00537
 BATH COUNTY WATER DISTRICT
 ENGINEERING DIVISION'S
 RECOMMENDED AVERAGE SERVICE LIVES

Historically, the Commission has relied on the National Association of Regulatory Utility Commissioners *Study of Depreciation Practices for Small Water Utilities* (“NARUC Study”), dated August 15, 1979, to evaluate the reasonableness of a utility’s depreciation practices. This study outlines expected service-life ranges for various asset groups designed, installed, and maintained in accordance with good water works practices. Typically, an adjustment is made when the Commission finds that a utility is proposing to use a service life that falls outside of this range, while service lives falling within these ranges are generally accepted.

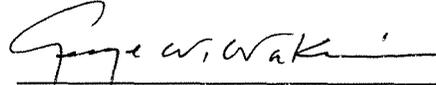
In the following table, Engineering staff has identified the account classifications for which the utility ’s current service lives are not consistent with the service lives contained in the NARUC Study. The table shows the utility’s current and Engineering staff’s recommendation for the estimated service lives based on a review of information contained in the record of this case.

Asset Classification	Current	Staff’s Recommendation	NARUC Study
Water Treatment Plant Equipment	5	27.5	20-35
Other Plant and Miscellaneous Equipment	50	37.5	35-40
Transportation Equipment	5	7	7
Tools And Shop Equipment	10	17.5	15-20

The utility appears to be utilizing service lives outside the range recommended by NARUC. Absent any specific and verifiable evidence supporting alternative service

lives, Engineering staff recommends using the service lives identified above which are within the range found reasonable in the NARUC Study.

Prepared January 25, 2013:



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