#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

# APPLICATION OF WOOD CREEK WATER)DISTRICT FOR RATE ADJUSTMENT)CASE NO. 2015-00428PURSUANT TO 807 KAR 5:076)

#### NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of February 2, 2016, the attached report containing the findings of Commission Staff regarding the Applicants' proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's February 2, 2016 Order, Wood Creek Water District is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report.

Garon D. Guemveel

Aaron D. Greenwell Acting Executive Director Public Service Commission P.O. Box 615 Frankfort, KY 40602

DATE APR 1 5 2016

cc: Parties of Record

#### STAFF REPORT

#### ON

# WOOD CREEK WATER DISTRICT

#### CASE NO. 2015-00428

Wood Creek Water District ("Wood Creek") is a water district organized pursuant to KRS Chapter 74 that operates a Water Division and a Sewer Division that are regulated by the Commission. The Water Division owns and operates a water treatment facility and distribution system that provides retail water service to approximately 5,231 customers that reside in Laurel County, Kentucky,<sup>1</sup> and wholesale water service to East Laurel Water District ("East Laurel"), West Laurel Water Association ("West Laurel"), and the city of Livingston. The Sewer Division owns and operates a sewer collection system that it uses to collect wastewater from approximately 1,235 customers.<sup>2</sup> The wastewater is transported to the city of London for processing.

In addition to its regulated operations, Wood Creek engages in nonregulated operations that include contracted operation and maintenance services provided to East Laurel and West Laurel (collectively, "East and West Laurel"). East and West Laurel provide potable water service to approximately 5,448 and 5,067 retail customers, respectively. East Laurel provides routine wholesale water service to the city of Manchester, while West Laurel provides routine wholesale water service to Cumberland

<sup>&</sup>lt;sup>1</sup> Annual Report of Wood Creek Water District (Water Division) to the Public Service Commission for the Calendar Year Ended December 31, 2014 ("Water Annual Report") at 12 and 53.

<sup>&</sup>lt;sup>2</sup> Annual Report of Wood Creek Water District (Water Division) to the Public Service Commission for the Calendar Year Ended December 31, 2014 ("Sewer Annual Report") at 25.

Falls Highway Water District. Pursuant to the service contracts, Wood Creek provides "all materials and labor as necessary to perform normal service and maintenance to the customers and water distribution system" of East and West Laurel. The contracts provide that Wood Creek bill East and West Laurel monthly for the actual cost of labor, materials, and equipment incurred to provide the contracted services.<sup>3</sup> The Water Division uses a work order system and accounts for the revenues and expenses for these contracted operations using account 415, Revenues from Merchandising, Jobbing, and Contract Work, and account 416, Costs and Expenses of Merchandising, Jobbing, and Contract Work, respectively.

In addition to the East and West Laurel service contracts, Wood Creek's nonregulated operations include the operation of a boat ramp and bait shop from a small building located on the shore of Wood Creek Lake Reservoir, Wood Creek's

<sup>&</sup>lt;sup>3</sup> Wood Creek provides the contracted services using the same employees, buildings, vehicles, equipment, and material inventory that it uses to perform its own operations. For billing purposes, Wood Creek uses a work order system to directly assign and bill East and West Laurel for their share of the cost of field operations, such as, meter reading, leak repairs, disconnections, etc. Direct assignment of customer account, administrative and general costs using the work order system is not practical. For example, Wood Creek employs five customer account specialists who bill, collect, and record customer account transactions on a monthly basis for all three entities, which is over 15,000 customers. Preparing a work order for each transaction is not practical. Instead, because these costs can be directly tied to the number of customers served by each entity. This method approximates the percentages of the number of customers served by each entity as shown below.

	Number of Customers	Percent
Utility	Served	_of Total
East Laurel	5,448	34.60%
West Laurel	5,067	32.18%
Wood Creek	5,231	33.22%
	15,746	100.00%

source of raw water. As with the contract services, Wood Creek accounts for the cost of operating the boat ramp and bait shop using a work order system. Wood Creek accounts for all revenues and expenses associated with the boat ramp and bait shop in the Water Division's general ledger using account 675-2, Miscellaneous Expense.

The Commission last authorized Wood Creek to adjust its water service rates in Case No. 2011-00209.<sup>4</sup> In that proceeding, Wood Creek filed an application requesting rates that would generate \$989,657 in additional annual water sales revenue, a 25.9 percent increase. After Commission Staff ("Staff") issued a report finding that Wood Creek had properly supported the amount of the requested revenue increase, the Commission issued an order authorizing the rates requested by Wood Creek.

The Commission last authorized Wood Creek to adjust its sewer service rates in Case No. 2013-00170.<sup>5</sup> In that proceeding, Wood Creek submitted financial exhibits with its application demonstrating that it could justify a revenue increase of 208 percent, but it requested rates that would generate only a 32.9 percent increase, stating that it wanted to lessen the rate shock to its customers.<sup>6</sup> After reviewing Wood Creek's sewer operations, Staff issued a report finding that Wood Creek could have justified rates that would generate a 131.87 percent increase to revenues.<sup>7</sup> As allowed by Commission Order,<sup>8</sup> in Wood Creek's August 2, 2013 response to Staff's report, Wood Creek

<sup>&</sup>lt;sup>4</sup> Application of Wood Creek Water District for Approval of a Proposed Increase in Rates for Water Service (Ky. PSC No. 18, 2011)

<sup>&</sup>lt;sup>5</sup> Alternative Rate Adjustment Filing of Wood Creek Water District (Ky. PSC Nov. 12, 2013)

<sup>&</sup>lt;sup>6</sup> See page 9 of 52 of application filed in Case No. 2013-00170 when downloaded from http://psc.ky.gov/PSC\_WebNet/ViewCaseFilings.aspx?case=2013-00170.

<sup>&</sup>lt;sup>7</sup> Case No. 2013-00170, Staff Report dated July 22, 2013, at 10.

<sup>&</sup>lt;sup>6</sup> Case No. 2013-00170 (Ky. PSC June 20, 2013) at 2.

requested that the Commission authorize rates that would generate more revenue than the rates it had originally requested, but not as much as the amount calculated by Staff. The revised requested rates would generate a 66.86 percent increase to revenues.<sup>9</sup> In its response, Wood Creek recognized that the revised rates would not generate the entire revenue increase calculated by Staff, but that these rates would "significantly relieve the existing unacceptable financial condition of the sewer division..." and that it intended "to phase rate adjustments over an appropriate time frame until the revenues equal the entire appropriate and allowable revenue requirement." The Commission authorized the revised rates to go into effect by Order dated November 12, 2013.

On December 28, 2015, Wood Creek tendered an application ("Application") with the Commission requesting to increase its current retail and wholesale water service rates pursuant to 807 KAR 5:076. Wood Creek did not request to adjust its sewer service rates. Wood Creek's Application was deemed filed on January 15, 2016, when all filing deficiencies were cured. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated February 2, 2016.

Wood Creek based the requested rates on a historic test period that coincides with the reporting period shown in its most recent Annual Report on file with the Commission at the time of its filing, the calendar year ending December 31, 2014, as required by 807 KAR 5:076. In the Application, Wood Creek stated that the requested

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Revenue at Revised Rate Request	\$ 632,491
Less: Revenue at Present Rates, Staff Report at 10	 (379,062)
Increase	\$ 253,429
Percentage Increase	 66.86%

-4-

rates would increase the monthly bill of a typical residential water customer<sup>10</sup> from \$33.50 to \$38.37, a \$4.87 increase, or 14.53 percent, and that the requested rates would generate \$701,615 in additional annual water sales revenues, a 14.54 percent increase. Wood Creek presented financial exhibits in its Application that support the need for the additional revenues. These exhibits are summarized below in condensed form.

Pro Forma Operating Expenses Plus: Average Annual Principal	\$	4,492,416
and Interest Payments		1,028,816
Additional Working Capital		162,424
Overall Revenue Requirement		5,683,656
Less: Other Operating Income		(154,147)
Interest Income		(1,601)
Revenue Required from Rates		5,527,908
Less: Revenue from Sales at Present Rates	<u> </u>	(4,826,293)
Required Revenue Increase Percent Increase	\$	701,615 14.54%

To determine the reasonableness of the water rates requested by Wood Creek, Staff performed a limited financial review of Wood Creek's test-year operations. During its review, Staff found that the operations and records of Wood Creek's Water and Sewer Divisions were interconnected enough that its review of the Water Division's operations could easily be expanded to include the review of the Sewer Division's operations. To assist Wood Creek in its endeavor "to phase rate adjustments over an appropriate time frame until the revenues equal the entire appropriate and allowable

<sup>&</sup>lt;sup>10</sup> A typical residential customer purchases 4,000 gallons of water per month through a 5/8-inch x 3/4-inch meter.

revenue requirement," Staff expanded its review to include an examination of the reasonableness of Wood Creek's current sewer rates. As allowed by the Commission's February 2, 2016 Procedural Order,<sup>11</sup> Wood Creek may request that the Commission allow it to adopt either the sewer service rates calculated by Staff or alternative rates that would generate up to, but less than, the amount of the sewer revenue increase calculated by Staff. Wood Creek is not required to adjust rates at this time.

The scope of Staff's review was limited to determining whether operations reported for the test year by the Water and Sewer Divisions were representative of normal operations. Known and measurable changes to test-year operations were identified and adjustments were made when their effects were deemed to be material. All insignificant and immaterial discrepancies were not pursued or addressed.

Staff's findings are summarized in this report. Jack Scott Lawless reviewed the calculation of Wood Creek's Overall Revenue Requirement. Sam Reid reviewed Wood Creek's reported revenues and rate design.

#### Summary of Findings

1. <u>Overall Revenue Requirement and Required Revenue Increase for Water</u> <u>and Sewer Divisions</u>. By applying the Debt Service Coverage ("DSC") method, as generally accepted by the Commission, Staff found that the Water Division's Overall Revenue Requirement is \$5,751,717 and that an \$815,882 revenue increase, or 17.07 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

<sup>&</sup>lt;sup>11</sup> Ordering paragraph 4 recognizes that Staff may find that Wood Creek's financial condition supports "the assessment of an additional rate or charge not proposed in Wood Creek's application."

By applying the operating ratio method, as generally accepted by the Commission, Staff found that the Sewer Division's Overall Revenue Requirement is \$1,084,145 and that a \$449,743 revenue increase, or 72.18 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. <u>Water Service Rates</u>. Wood Creek proposes to increase its current water service rates by approximately 14.54 percent evenly across the board. Wood Creek has not performed a cost-of-service study. The Commission has previously found that an across-the-board increase is an appropriate and equitable method of cost allocation in the absence of a cost-of-service study. Staff finds that an across-the-board increase is the appropriate means to allocate the increased revenue requirement. The rates set forth in Attachment A of this report are based upon the revenue requirement as calculated by Staff and will produce sufficient revenues from water sales to recover the \$5,595,969 determined by Staff, an approximate 17.07 percent increase. These rates will increase a typical residential customer's monthly water bill from \$33.50 to \$39.21, an increase of \$5.71, or 17.04 percent.

3. <u>Sewer Service Rates</u>. Staff finds that an across-the-board increase is the appropriate means to allocate the increased Sewer revenue requirement. The sewer rates set forth in Attachment B of this report are based upon the revenue requirement as calculated by Staff and will produce sufficient revenues from sewer service rates to recover the \$1,072,824 determined by Staff, an approximate 72.18 percent increase. These rates will increase a typical residential customer's sewer bill from \$35.42 to \$60.98, an increase of \$25.56, or 72.16 percent. Wood Creek may consider immediate implementation of these rates or phasing in smaller rate increases incrementally over a

-7-

three-year or five-year period until the final rates are equal to or less than the rates shown in Attachment B.

4. <u>Depreciation Practices</u>. In the 2014 Annual Report, the Water Division reported \$41,436,251<sup>12</sup> for the original cost of plant in service and \$903,468 for depreciation expense. The Sewer Division reported \$8,721,950<sup>13</sup> for the original cost of plant in service and \$388,194 for depreciation expense. The combined totals are \$50,158,201 for plant and \$1,291,662 for depreciation expense. In support of these amounts, Wood Creek attached to the Application its 2014 combined water and sewer plant ledger that was prepared by Wood Creek's independent financial auditor.

The ledger is separated into multiple subsidiary plant accounts where individual assets are grouped with other assets that are alike or similar. For example, the cost of all water main is recorded in one subsidiary account that is separate from other subsidiary accounts that are used to record the cost of water meters and sewer collection mains.

The plant ledger also includes subsidiary accounts that are used to record the cost of assets that are shared by Wood Creek's Water Division, Sewer Division and nonregulated operations. These shared assets include, but are not limited to, an office building, a warehouse, office furniture and equipment, and equipment necessary to carry out field operations.

The ledger totals for the cost of plant in service and depreciation expense for all subsidiary accounts are \$50,158,202 and \$1,291,662, respectively. While these totals

<sup>&</sup>lt;sup>12</sup> Water Annual Report at 31.

<sup>&</sup>lt;sup>13</sup> Sewer Annual Report at 18.

match and support the combined totals shown for these accounts in the Water and Sewer Division's Annual Reports, the subsidiary accounts are not grouped and totaled in the ledger for each division separately and are therefore not easily traced to each division's Annual Report. Wood Creek should require its auditor to revise the format of the plant ledger so that the cost of the assets reported in the Water Division's Annual Report are clearly grouped and totaled separately from the assets that are included in the Sewer Division's Annual Report.

Additionally, in Staff's report submitted in Case No. 2013-00170, George Wakim of the Commission's Division of Engineering, referring to the O&M Guide for the Support of Rural Water-Wastewater Systems by Commission on Rural Water, found that Wood Creek should make the following changes to the depreciable lives assigned to certain sewer assets.

Sewer Asset Class	Used by Wood Creek	Staff Approved	O&M Guide
Asset 544, Pumps	7	35	20-50
Asset 548, 56, 264 Service Lines	40	10	10
Asset 591, Services Asset 577, Electric Pumping	20	10	10
Equipment, Structures	20	35	20-50
Asset 592, Electric Pumping Equipment	20	7	7

Wood Creek agreed with Mr. Wakim's findings and the Commission ordered that Wood Creek use the revised depreciable lives to calculate depreciation accrued on sewer assets in future reporting periods for accounting and ratemaking purposes.<sup>14</sup> In

<sup>&</sup>lt;sup>14</sup> Case No. 2013-00170, Alternative Rate Adjustment Filing of Wood Creek Water District (Ky. PSC June 20, 2013) at 7.

this proceeding, Staff found that Wood Creek failed to revise these lives and that it had continued to use the same lives it was using prior to Case No. 2013-00070 to calculate test-year depreciation expense. Wood Creek should ensure that its financial auditor calculates depreciation on all assets using the lives authorized by the Commission in all future reporting periods.

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In this proceeding, the Staff of the Commission's Engineering Division ("Engineering Staff") reviewed the lives assigned to Wood Creek's water assets and shared assets and determined that adjustments to some of those lives are warranted. Its review and findings are summarized in this report at Attachment C. The revised lives should be used for accounting purposes in all future reporting periods. Staff finds that they better match the life expectancy of Wood Creek's assets than the lives currently used. No adjustment to accumulated depreciation or retained earnings should be made to account for the effect of this change in accounting estimate.

## Pro Forma Operating Statements

Pro Forma Operating Statements for the test year ended December 31, 2014, as determined by Staff, appear below for Wood Creek's Water and Sewer Divisions.

Staff Report Case No. 2015-00428

2

# Water Division

	Test Year	Adjustments	(Ref.)	Pro Forma
Operating Revenues				
Operating Revenues Sales of Water	\$4,826,293	¢ (48.000)	(	<b># 4 700 007</b>
Other Water Revenue	154,147	\$ (46,206)	(A-1)	\$4,780,087 154,147
Total Operating Revenues	4,980,440	(46,206)		4,934,234
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	1,448,934	78,800	(B-1)	1,527,734
Purchased Power for Pumping	385,525	388	(C)	385,913
Chemicals Materials and Organity	794,766			794,766
Materials and Supplies Contractual Services	577,591	6,432	(D)	584,023
Contractual Services	14,612	800	(E)	
Transportation Expenses	110.005	(4,400)	(F)	11,012
Insurance	110,685	26,230	(G)	136,915
	144,945	(5,547)	(H)	
		(24,811)	(1)	100.045
Bad Debt Expense	39,493	14,258	(J)	128,845
Miscellaneous Expense	00,400			39,493
Other	16,769			16,769
Boat Ramp and Bait Shop	33,634	(10,116)	(B-1)	10,703
		104	(C)	
		1,720	(D)	
		314	(Ġ)	
		319	ÌΗ)	
		989	(I)	
		24	(J)	
		671	(L)	
Commissioner Commercetter		(27,659)	(K)	-
Commissioner Compensation	7,560	(7,560)	(B-1)	
Total Operation and Maintenance Expenses	3,574,514	50,957		3,625,471
Depreclation Expense	903,468	(74,146)	(L)	829,322
Taxes Other Than Income - PSC Fee	10,434	(844)	(M)	9,590
Total Operating Expenses	4,488,416	(24,033)		4,464,383
Net Operating Income	492,024	(22,173)		469,851
Interest Income	1,601	(22, 173)		1,601
Revenues from Nonregulated Operations	1,001			1,001
East Laurel	775,120	(775,120)	(N)	_
West Laurel	764,769	(764,769)	(N)	_
Sewer Division	97,603	(97,603)	(O)	_
Expenses for Nonregulated Operations	, -	( · · · - · · · · · · · · · · · · · · ·	<b>v</b> = <b>y</b>	
East Laurel	(885,030)	885,030	(N)	
West Laurel	(871,156)	871,156	(N)	- ,
Sewer Division	(167,070)	167,070	(O)	
Income Available to Service Debt	\$_207,861	<u>\$ 263,5</u> 91		\$ 471,452

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## Sewer Division

	Test Year	Adjustments	(Ref.)	Pro Forma
Operating Revenues				
Sewer Service Revenues	\$ 635,440	\$ (12,359)	(A-2)	\$ 623,081
Miscellaneous Sewer Revenues	11,290	$\Psi$ (12,009)	(/-2)	φ 023,081 11,290
Total Operating Revenues	646,730	(12,359)		634,371
• · · -				
Operating Expenses				
Operation and Maintenance Expenses				
Furel and Purchased Power	25,066	956	(C)	26,022
Chemicals	30,728			30,728
Misc. Supp. and Exp Collection Sys.	1,077			1,077
Maintenance of Collection System - Wages	13,411	150,503	(B-2)	163,914
Maintenance of Pumping System				
Wages \$ 42,156				
Materials and Supplies29,800	71,956	15,813	(D)	87,769
Maintenance of Other Plant Facilities				
Wood Creek Wages 32,354				
Contracted Services500	32,854	4,400	(F)	37,254
Adminstrative and General Salaries	8,954		. ,	8,954
Outside Services Employed - City of London	243,110			243,110
		44,149	(G)	44,149
	•	5,228	(H)	5,228
		4,073	(I)	4,073
		3,393	(J)	3,393
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Total Operation and Maintenance Expenses	427,156	228,514		655,670
Depreciation Expense	388,194	(90,661)	(L)	297,533
Taxes Other Than Income - PSC Fee		844	(M)	844
<b>T</b> + 10				
Total Operating Expenses	815,350	138,697		954,047
Net Operating Income	(400.000)			<i></i>
Interest Income	(168,620)	(151,056)		(319,676)
	31			31
Net Operating Income after Interest	\$ (168,589)	\$ (151,056)		\$ (319,645)

(A-1) <u>Water Division Billing Analysis Adjustment</u>. Wood Creek provided a billing analysis with its Application that calculated water sales revenue of \$4,798,732 for all customers. Water sales revenue as reported in the 2014 Annual Report was adjusted downward by \$27,561 to this amount. During its review, Staff found that approximately

\$18,645 in additional downward billing adjustments for water sales were made during the test year that were not reflected in the billing analysis provided in the Application. With this additional adjustment, the test-year normalized revenue from water sales determined by Staff is \$4,780,087.

(A-2) <u>Sewer Division Billing Analysis Adjustment</u>. Wood Creek's 2014 annual report stated wastewater service revenues to be \$635,440. During its review, Staff found that approximately \$12,359 in downward billing adjustments for wastewater service were made during the test year. After recognizing this adjustment, the test-year normalized revenue for wastewater services determined by staff is \$623,081.

(B-1) <u>Water Division Wages and Benefits</u>. During the test year, Wood Creek employed 41 full-time employees and 6 part-time employees to carry out its daily regulated and nonregulated operations under the management and control of three commissioners. Payment of all employee and commissioner test-year wages, benefits and payroll taxes was managed and accounted for using the Water Division's accounting system. The Water Division reported \$1,817,618 for total test-year employee and commissioner wages. This amount was distributed to the Water Division's accounts as follows.

> Staff Report Case No. 2015-00428

-13-

Acct.			
No.	Account Title	_	Wages
333-4	Services	\$	3,981
601-1	Wages - Pumping Operations		22,542
601-3	Wages - Water Treatment		334,794
601-4	Wages - Water Treatment Maint.		1,484
601-5	Wages - T&D Operations		37,534
601-6	Wages - T&D Maintenance		276,375
601-7	Wages - Customer Account Expense		374,306
	Allocate 1/3 of total to 416-0		(124,769)
	Allocate 1/3 of total to 416-1		(124,769)
601-8	Wages - Administrative Expense		81,967
Total W	ater Expense Charged to Account No. 601		879,465
675-2	Miscellaneous Expense - Boat Ramp		
675-81	and Bait Shop Commissioners		31,488
075-01	Commissioners		7,560
Total W	ater Expense Charged to Account No. 675		39,048
416-0	Cost & Expense - West Laurel		
	Field Employees Directly Assigned		265,856
	Allocated Customer Accounts Expense		124,769
416-1	Cost & Expense - East Laurel		
	Field Employees Directly Assigned		277,617
440.0	Allocated Customer Accounts Expense		124,769
416-3	Cost & Expense - Sewer		102,113
Total Ex	pense Charged to Account No. 416		895,124
Total		\$	1,817,618

The distribution of test-year wages was performed by Wood Creek using employee direct time reporting when practical. Allocation methods were used when direct time reporting was not practical. The methods used to distribute test-year wages are discussed below for each of the following employee groups: 1) General Manager's ("GM") Office; 2) Water Treatment Plant 3) Field Maintenance and Operation; 4) Office; and 5) Commissioners.

1) GM's Office. The GM's Office includes the GM, Assistant GM, and Project Manager. Wood Creek allocated their regular wages evenly to accounts 601-8, 416-0, and 416-1 by distributing one-third of the total to each account. Their vacation and holiday wages were reported only to account 601-8. None of their wages were reported to the Sewer Division account 416-3 or to the Boat Ramp and Bait Shop account 675-2.

2) Water Treatment Plant Personnel. Wood Creek employed seven full-time certified water treatment plant operators and one full-time lab technician. Their wages were distributed to account 601-3.

3) Field Maintenance and Operation Personnel. Wood Creek employed 22 full-time and six part-time field staff. All full-time employees used daily work orders to document the amount of time that they dedicated to each of Wood Creek's regulated and nonregulated operations during the test year. This information was used to distribute their wages to accounts 333-4, 416-0, 416-1, 416-3, 601-1, 301-4, 601-5, 601-6, 601-7 and 601-8. None of their wages were distributed to the Boat Ramp and Bait Shop. All part-time employees were used to operate the Boat Ramp and Bait Shop. Their wages were charged entirely to account 675-2.

4) Office Personnel. Wood Creek employed eight full-time office staff members during the test year. This staff included the Chief Financial Officer ("CFO"), assistant CFO, and customer account specialists. Their wages were allocated evenly to accounts 601-7, 416-0, and 416-1, with one-third of their wages distributed to each

> Staff Report Case No. 2015-00428

-15-

account. None of their wages were allocated to the Sewer Division account 416-3 or to the Boat Ramp and Bait Shop account 675-2.

5) Commissioners. Each of Wood Creek's three commissioners received a test-year salary in the amount of \$2,520. All commissioner wages were reported to account 675-81.

In addition to the wages listed above, Wood Creek also incurred the cost of testyear employee benefits and payroll taxes ("wage overheads") listed below.

Health Insurance Other Insurance Retirement Contributions	\$ 669,143 18,582 325,136
Total Pensions and Benefits	\$ 1,012,861
FICA Taxes State and Federal Unemployment Taxes	\$ 139,858 10,633
Total Payroll Taxes	\$ 150,491

Wood Creek distributed the employee wage overheads to the same accounts to which it distributed employee wages based on the percentage of employee wages, excluding Commissioner wages, distributed to each account. The table below details Wood Creek's accounting for test-year wages and wage overheads for employees and Commissioners.

			Allocation of Benefits and Taxes			
			Percent		FICA and	
Acct.			of Employee	Pension and	Unemployment	Total Charged
No.	Account Title	Wages	Wage Total	Insurance	Taxes	to Account
333-4	Services	\$3,981	0.22%	\$ 2,205	\$ 328	\$ 6,514
601-1	Wages - Pumping Operations	22,542	1.23%	12,485	1,855	36,883
601-3	Wages - Water Treatment	334,794	18.31%	186,252	27,673	548,719
601-4	Wages - Water Treatment Maint.	1,484	0.08%	822	122	2,429
601-5	Wages - T&D Operations	37,534	2.05%	21,203	3,150	61,887
601-6	Wages - T&D Maintenance	276,375	15.11%	158,466	23,545	458,386
601-7	Wages - Customer Account Expense	374,306	20.47%	209,796	31,172	615,274
	Allocate 1/3 of total to 416-0				01,112	(205,091)
	Allocate 1/3 of total to 416-1					(205,091)
601-8	Wages - Administrative Expense	81,967	4,48%	46,642	6,930	135,539
	•				0,000	
Total W	/ater Expense Charged to Account No. 601	1,129,002				1,448,934
675-2	Miscellaneous Expense - Boat Ramp					
	and Bait Shop	31,488	1.72%	17,439	2,591	51,518
675-81	Commissioners	7,560		• •	_,	7,560
Total W	ater Expense Charged to Account No. 675	39,048				59,078
416-0	Cost & Expense - West Laurel					
410-0	Field Employees Directly Assigned	005 050	4.6.5.40			
	Allocated Customer Accounts Expense	265,856	14.54%	147,241	21,877	434,974
416-1	Cost & Expense - East Laurel					205,091
410-1	Field Employees Directly Assigned	077 047	15 100			
	Allocated Customer Accounts Expense	277,617	15.18%	153,754	22,845	454,216
416-3	Cost & Expense - Sewer	100 110	5 500/			205,091
410-0	Cost & Expense - Sewel	102,113	5.58%	56,554	8,403	167,070
Total E	xpense Charged to Account No. 416	645,586				1,466,442
Total		<u>\$ 1,817,618</u>		\$ 1,012,861	\$ 150,491	\$ 2,980,969

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During its review, Staff found that adjustments were warranted to the test-year amounts to account for:

1) wage rate increases awarded to employees during and subsequent to the test-year;

2) replacement of five full-time employees whose average hourly wage rate
 was \$17.26 with five new full-time employees whose average hourly wage rate is
 \$10.60;

3) the addition of one part-time office employee;

4) reclassification of water meter reading costs from accounts 601.7 and account 416-1 to account 416-3;<sup>15</sup>

5) reclassification of office personnel costs that are attributed to sewer operations from accounts 601-7 and 416-1 to account 416-3;

6) allocation of the cost of the Commissioners and the GM's office to each wage account based on the wages that had been distributed to each account for all employees who were controlled, supervised, and managed by the Commissioners and General Manager's office; and

7) distribution of the current cost of wage overheads that total 1,257,453,<sup>16</sup> to the appropriate wage accounts.

The table below demonstrates the results of Staff's adjustments to the Water Division's test-year wages and wage overheads. Staff's distribution of pro forma wages and wage overheads to each account for each employee is detailed in Attachment D.

<sup>&</sup>lt;sup>15</sup> During the test year, Wood Creek provided sewer service to approximately 1,235 customers. It also provided water service to 1,158 of these customers. The remaining 75 sewer customers were provided water service by East Laurel. Each customer's monthly sewer bill was determined using water meter readings. As a result, it is necessary and appropriate to report a portion of the water meter reading costs to the Sewer Division based on the number of sewer customers served by Wood Creek and East Laurel when compared to the total number of combined water and sewer customers served by each of these entities.

Health Insurance, \$66,350.50 Current Premium x 12 Months	\$ 796,206
Other Insurance, Test-Year Amount	18,581
Retirement Contributions, Pro Forma Wages x 17.06 Percent	296,102
FICA Taxes, Pro Forma Wages x 7.65 Percent	135,931
Unemployment Taxes, Test-Year Amount	 10,633
Total	\$ 1,257,453

Acct. No.	Account Title	Test Year	Pro Forma	Increase/ (Decrease)
333-4	Services	<u> </u>	\$ 7,894	\$ 1,380
601-1 601-3 601-4 601-5 601-6 601-7 601-8	Wages - Pumping Operations Wages - Water Treatment Wages - Water Treatment Maint. Wages - T&D Operations Wages - T&D Maintenance Wages - Customer Account Expense Wages - Administrative Expense	36,883 548,719 2,429 61,887 458,386 205,092 135,539	44,002 602,506 2,965 79,043 506,693 291,143 1,382	7,119 53,787 536 17,156 48,307 86,051 (134,157)
Total W	ater Expense Charged to Account No. 601	1,448,934	1,527,734	78,800
675-2 675-81	Miscellaneous Expense - Boat Ramp and Bait Shop Commissioners	51,518	41,402	(10,116) (7,560)
Total W	ater Expense Charged to Account No. 675	59,078	41,402	(17,676)
416-0	Cost & Expense - West Laurel	640,065	598,648	(41,417)
416-1	Cost & Expense - East Laurel	659,307	617,035	(42,272)
416-3	Cost & Expense - Sewer	167,070	249,180	82,110
Total E	xpense Charged to Account No. 416	1,466,442	1,464,863	(1,579)
Total		\$ 2,980,969	\$3,041,893	\$ 60,924

(B-2) <u>Sewer Division Wages and Benefits</u>. During the test year, Wood Creek's Water Division reported \$102,113 to account 416-3, Cost and Expense Sewer, for the wages of field maintenance and operation employees that were directly charged to sewer operations using the work order system. Without explanation, Wood Creek's Sewer Division recognized only \$97,603 of this amount on its income statement using the following accounts.

Acct. No.	Account Title	al Charged Account	Percent of Total
354-9 363-9	Services Electric Pumping Equipment	\$ 70 657	
Total C	apitalized	 727	0.74%
712-9 713-9 715-9 920-9	Maint. Collection System Maint. Pumping System Maint. Other Salaries - Adm. & General	 13,411 42,156 32,355 8,954	
Total E	xpensed	 96,876	99.26%
Total		\$ 97,603	100%

There were no test-year wages either assigned or allocated to the Sewer Division for office employees, the GM's Office, or the Commissioners. Further, there were no wage overheads assigned or allocated to the Sewer Division for any employees. As noted in Ref. Item B-1, Staff determined that \$249,223 of Wood Creek's pro forma wages and wage overheads should be charged to the Sewer Division. Of this amount, Staff determined that \$247,379 (\$249,223, total pro forma, x .9926, test-year expense percentage) should be expensed in the Sewer Division's pro forma operations. Accordingly, Staff increased the Sewer Division's test-year expenses by \$150,503 (\$247,379, pro forma expense - \$96,876, test-year expense). Staff recorded the entire adjustment to account 712, Maintenance of Collection System, instead of distributing it to all of the expense accounts used by the Sewer Division to record test-year wages expense.

(C) <u>Office Electric</u>. During the test year, Wood Creek reported \$13,329 for electrical service provided to its office building. For reporting purposes, Wood Creek

-20-

shared this expense evenly with its Water Division and East and West Laurel by allocating one-third of the cost to each entity. A portion of this cost should have also been allocated to the Sewer Division and to the Boat Ramp and Bait Shop, since their operations were administered and managed by the employees housed in the office building. Staff allocated the test-year expense to Wood Creek's regulated and nonregulated operations based on the percentage of the office employees' pro forma wages distributed to each entity by Staff. The office employees include the customer account specialists, the CFO, the GM, and their support staff. Staff's allocations, and the resulting adjustments to Wood Creek's test-year operations, are shown below.

#### Allocation of Office Electric

	Office Wages	Percent of Wages	Allocation of Test- Year Offic Electric	-		ustment
Water Division Sewer Division Boat Ramp and Bait Shop East Laurel West Laurel	\$178,458 35,285 3,846 137,278 137,450	36.25% 7.17% 0.78% 27.88% 27.92%	\$ 4,832 956 104 3,716 3,72	5 4 5 (4,443	)	388 956 104 (727) (722)
Total	492,317	100.00%	<u>\$ 13,329</u>	9 \$ (13,329	\$	

(D) <u>Office Materials and Supplies</u>. During the test year, Wood Creek reported \$220,539 for materials and supplies expense that were used at its office building. For reporting purposes, Wood Creek shared this expense evenly with its Water Division and East and West Laurel by allocating one-third of the cost to each entity. A portion of this cost should have also been allocated to the Sewer Division and to the Boat Ramp and Bait Shop, since their operations were administered and managed by the employees

housed in the office building using these materials and supplies. Staff reallocated the test-year expense to Wood Creek's regulated and nonregulated operations based on the percentage of the office employee's pro form wages distributed to each entity by Staff. The office employees include the customer account specialists, the CFO, the GM, and their support staff. Staff's allocations, and the resulting adjustments to Wood Creek's test-year operations, are shown below.

#### Allocation of Office Materials and Supplies

	Office Wages	Percent of Wages	Allocation of Test- Year Office Supplies	Less: Test Year	Adjustment
Water Division Sewer Division Boat Ramp and Bait Shop East Laurel West Laurel	\$178,458 35,285 3,846 137,278 137,450	36.25% 7.17% 0.78% 27.88% 27.92%	\$ 79,945 15,813 1,720 61,486 61,574	\$ (73,513) (73,513) (73,513)	\$ 6,432 15,813 1,720 (12,027) (11,939)
Total	492,317	100.00%	\$ 220,539	\$(220,539)	<u>\$ -</u>

(E) <u>Rate Case Expense</u>. Wood Creek paid Kenvirons, Inc. ("Kenvirons") \$4,000 to prepare the rate application filed in this matter. Wood Creek proposed to increase its Water Division's test-year expenses by \$4,000 to fully recover this expense on an annual basis.

Staff finds that rate recovery of rate case expense is appropriate and should be allowable, but Staff disagrees with the adjustment proposed by Wood Creek. The rate case expense paid to Kenvirons is a nonrecurring expense that should be amortized for rate recovery over the anticipated five-year life of the rates<sup>17</sup> that will be authorized by the Commission in this proceeding. Accordingly, Staff increased the Water Division's test-year expenses by \$800 (\$4,000 / 5 years), not the \$4,000 requested by Wood Creek.

(F) <u>Contractual Services - Accounting</u>. Cloyd & Associates performed the 2014 financial audits of Wood Creek, East Laurel and West Laurel. East and West Laurel each paid an audit fee of \$7,800. Wood Creek's fee was \$12,200, which it reported as an expense to the Water Division. No amount was charged to the Sewer Division.

During Staff's review, Wood Creek's CFO, Dewayne Lewis, stated that the amount of work performed by the auditor for Wood Creek's Water Division and East and West Laurel was nearly identical. He stated that the amount of Wood Creek's audit fee that exceeded those of East and West Laurel, \$4,400, is attributed to the audit work performed for Wood Creek's Sewer Division. To properly report the Sewer Division's portion of the test-year audit fee, Staff decreased the Water Division's expenses by \$4,400 and increased the Sewer Division's expenses by \$4,400.

(G) <u>Transportation Expenses</u>. During the test year, Wood Creek incurred transportation expenses for field maintenance, meter reading, and the GM's Office in the amounts of \$238,631, \$63,218, and \$15,794, respectively. It allocated these amounts evenly to its Water Division and to East and West Laurel as shown below.

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<sup>&</sup>lt;sup>17</sup> Generally, the anticipated life of a utility's service rates is based on the frequency of the utility's previous rate case filings. Since Wood Creek's current water rates were authorized nearly five years ago on November 18, 2011, in Case No. 2011-00209, Staff anticipates that the life of the rates authorized in this proceeding will be approximately five years.

	 Total	Water Division	 East Laurel	 West Laurel
Field Maintenance Meter Reading GM's Office	\$ 238,631 63,218 15,794	\$ 79,544 21,073 5,265	\$ 79,544 21,073 5,265	\$ 79,544 21,073 5,265
Total	\$ 317,643	\$ 105,881	\$ 105,881	\$ 105,881

Wood Creek did not charge test-year transportation costs to either the Sewer Division or the Boat Ramp and Bait Shop. Because a portion of the transportation expenses reported for field maintenance, meter reading, and the GM's office can be attributed to sewer operations, and a portion of the GM's office transportation expense can be attributed to the boat ramp and bait shop, Staff made adjustments to Wood Creek's test-year operations to reallocate these expenses. Individual and cumulative adjustments for these expenses are calculated and discussed below.

Field Maintenance. Travel expenses reported for field maintenance represent the cost of travel necessary for field employees to operate and maintenance the water distribution systems of the Wood Creek and East and West Laurel, as well as Wood Creek's sewer collection system. Based on the information gathered by Staff during its review, Staff determined that the percentage of wages distributed to each system is the most appropriate method to allocate these travel costs for ratemaking purposes in this proceeding. Staff's allocations are shown below.

-24-

	Pro forma Wages	Percent	Allocation of Field Maint. Expense	Less: Test Year	Adjustment
Water Division Sewer Division East Laurel West Laurel	\$ 278,540 102,882 132,942 138,070	42.69% 15.77% 20.38% 21.16%	\$ 101,877 37,630 48,624 50,500	\$ (79,544) (79,544) (79,544)	\$22,334 37,630 (30,919) (29,044)
Total	\$ 652,434	100.00%	\$ 238,631	\$(238,631)	<u>\$ -</u>

Meter Reading. Travel expenses reported for meter reading represent the cost of travel necessary for Wood Creek's employees to read the water meters of Wood Creek and East and West Laurel. The meter readings are used to prepare the monthly bills for the water customers of those entities, as well as the sewer customers of Wood Creek. From the information gathered by Staff during its review, Staff determined that the allocation of these costs for ratemaking purposes should be based on the percentage of meter reading employee wages charged to each water and sewer system by Staff as shown below.

	o forma /ages	Percent	Me	ocation of ter Read xpense	L.	ess: Test Year	Adj	ustment
Water Division Sewer Division East Laurel West Laurel	\$ 23,676 5,543 21,375 16,466	35.31% 8.27% 31.87% 24.55%	\$	22,320 5,225 20,150 15,523	\$	(21,073) (21,073) (21,073)	\$_	1,247 5,225 (922) (5,550)
Total	\$ 67,060	100.00%	_\$	63,218	\$	(63,218)	_\$	-

GM's Office. Travel expenses of the GM's Office represent the cost of travel necessary for the employees of the GM's Office to carry out their management and oversight of Wood Creek's regulated and nonregulated operations. From the

-25-

information gathered by Staff during its review, Staff determined that the allocation of these costs for ratemaking purposes should be based on the percentage of wages that were distributed to each entity as shown below.

	F	ro forma Wages	Percent	GN	ocation of I's Office xpense	Le	ess: Test Year	Ad	ustment
Water Division Sewer Division Boat Ramp and Bait East Laurel West Laurel	\$	96,837 15,827 3,846 38,978 37,761	50.11% 8.19% 1.99% 20.17% 19.54%	\$	7,915 1,294 314 3,186 3,086	\$	(5,265) (5,265) (5,265)	\$	2,650 1,294 314 (2,079) (2,179)
Total	\$	193,249	100.00%	\$	15,794	\$	(15,794)	\$	- ;

Staff's adjustments to reallocate test-year transportation costs are summarized below.

	Field Maintenance		Meter Reading		General Manager's Office		Total Adjustment	
Water Division Sewer Division Boat Ramp and Bait Shop	\$	22,334 37,630	\$	1,247 5,225	\$	2,650 1,294 314	\$	26,230 44,149 314
East Laurel West Laurel		(30,919) (29,044)		(922) (5,550)		(2,079) (2,179)		(33,921) (36,772)

(H) <u>Insurance-General Liability</u>. Wood Creek incurred \$46,225 for test-year general liability insurance expense that was reported entirely by the Water Division. Since this insurance policy benefited the Water Division, Sewer Division, and the Boat Ramp and Bait Shop, its test-year premium should be shared by these entities. As shown in the table below, Staff determined that \$5,228 of the test-year amount should be allocated to the Sewer Division and \$319 to the Boat Ramp and Bait Shop based on

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the percentage of each entity's pro forma present rate revenues when compared to the total revenues of all three entities benefiting from the insurance.<sup>18</sup> Accordingly, Staff decreased the Water Division's test-year insurance expense by \$5,547 and increased the Sewer Division's and Boat Ramp's test-year expenses by \$5,228 and \$319, respectively.

	Te	est Year		Water Division	Sewer Division	at Ramp and ait Shop
Pro forma Present Rate Service Revenue Plus: Other Operating Revenue Interest Income Rents	\$5	,441,830 165,437 1,632 -	\$4	,780,087 154,147 1,601 -	\$ 623,081 11,290 31	\$ 38,662
Total Percentage	5	,608,899 100%	4	,935,835 88.00%	 634,402 11.31%	 38,662 0.69%
Allocated General Liablity Insurance Less: Test Year	\$	46,225	\$	40,678 (46,225)	\$ 5,228	\$ 319 -
Adjustment			\$	(5,547)	\$ 5,228	\$ 319

(I) <u>Workers Compensation Insurance</u>. Wood Creek incurred \$49,734 for testyear Workers Compensation Insurance expense. The entire amount was reported as an operating expense of the Water Division. Since this insurance coverage benefitted all employees, Staff allocated its costs to Wood Creek's regulated and nonregulated operations based on the percentage of pro forma employee wages that Staff directly

<sup>&</sup>lt;sup>18</sup> Allocation of the cost of general liability insurance expense based on an entity's share of total revenue was accepted by the Commission in Case No. 2013-00350, *Alternative Rate Adjustment Filing of Garrison-Quincy-Ky-O-Heights Water District* ("Garrison-Quincy"). In that proceeding, recognizing that general liability insurance premiums can generally be dependent on the level of an entity's annual revenues, Staff allocated general liability insurance between Garrison-Quincy's water and sewer divisions based on their percentage of total pro forma present rate revenues (*See,* Staff's January 17, 2014 Report at 21). The Commission accepted Staff's allocation method in its February 19, 2014 Order.

assigned and allocated to each entity. The adjustments to test-year expenses that are necessary to account for Staff's allocations are calculated and shown below.

	P	ro Forma					
	E	mployee	Percent	Percent			
		Wages	_of Total	Allocation	Year	Adj	ustment
Water Division	\$	890,433	50.11%	\$24,923	\$(49,734)	\$ (	24,811)
Sewer Division		145,525	8.19%	4,073	-		4,073
Boat Ramp and Bait Shop		35,334	1.99%	989	-		989
East Laurel		358,401	20.17%	10,031	-		10,031
West Laurel		347,186	19.54%	9,718			9,718
	\$1	,776,879	100.00%	\$49,734	\$(49,734)	\$	-

(J) <u>Vehicle Insurance</u>. Wood Creek incurred test-year vehicle insurance expense in the amount of \$24,411, which was reported as a Water Division expense. Staff finds that vehicle insurance is a transportation cost that should be allocated to Wood Creek's regulated and nonregulated operations based on the percentage of all other transportation costs allocated to each operation. Staff's allocation of test-year vehicle insurance and the adjustments necessary to account for this allocation are shown below.

		Allocated Tr	avel Expense					
	Field Maint.	Meter Reading	General Manager's Office	Total	Percent	Allocated Vehicle Insurance	Less: Test Year	Adjustment
Water Division Sewer Division Boat Ramp and Bait East Laurel West Laurel	\$ 101,877 37,630 Shop 48,624 50,500	\$ 22,320 5,225 20,150 	\$ 7,915 1,294 314 3,186 3,086	\$132,111 44,149 314 71,960 69,109	41.59% 13.90% 0.10% 22.65% 21.76%	\$ 10,153 3,393 24 5,530 5,311	\$ (24,411)	\$ (14,258) 3,393 24 5,530 5,311
Total	\$ 238,631	\$ 63,218	<u>\$ 15,794</u>	\$317,643	100.00%	<u>\$ 2</u> 4,411	<u>\$ (24,411)</u>	<u>\$</u>

(K) <u>Boat Ramp and Bait Shop</u>. Wood Creek reported the Boat Ramp and Bait Shop's test-year revenues and expenses, in the amounts of \$38,662 and \$72,295,

-28-

respectively, using Water Division account 675.2, Miscellaneous Expense, which resulted in a net expense, or net loss, in the amount of \$33,634. As discussed throughout this report, Staff made several adjustments to the Boat Ramp and Bait Shop's test-year operations that decrease the test-year net loss to \$27,659. Because the Boat Ramp and Bait Shop's operations are not essential to the provision of Wood Creek's regulated water or sewer services, it is not appropriate or proper to place the financial burden of the adjusted test-year loss on Wood Creek's customers by allowing it to be recovered through water or sewer rates. Accordingly, Staff removed the loss from the Water Division's pro forma operations. If the Boat Ramp and Bait Shop had generated a net profit, Staff would have shared the profit between Wood Creek's water and sewer customers, recognizing that Wood Creek has no stockholders to benefit from such profit through the receipt of dividend payments from Wood Creek.

(L) <u>Depreciation</u>. Wood Creek's Water Division and Sewer Division reported test-year depreciation expense in the amounts of \$903,468 and \$388,194, respectively. The amount reported by the Water Division included depreciation accrued on: 1) assets used only by the Water Division; 2) assets used only by the boat ramp and bait shop; and 3) assets shared by Wood Creek's regulated and nonregulated operations ("Shared Assets"). The shared assets included, but were not limited to, the office building, office equipment, computer software, warehouse, transportation equipment, tools, shop, and garage equipment, power operated equipment, and communication equipment. The Sewer Division's test-year depreciation expense included depreciation that accrued on assets that were used only by the Sewer Division.

-29-

Wood Creek calculated test-year depreciation using the whole-life, straight-line method, pursuant to which an asset's depreciable basis is divided by its estimated useful life. In this proceeding, Engineering Staff reviewed the lives assigned to assets used only by the Water Division and to Shared Assets. A summary of their review is found in this report at Attachment C.

As previously discussed, Engineering Staff found in Case No. 2013-00170 that changes should be made to some of the depreciable lives Wood Creek had assigned to its Sewer Division's assets. After Wood Creek accepted Staff's findings, the Commission Ordered that the changes be made. In this proceeding Staff found that Wood Creek had not made those changes and had calculated test-year sewer depreciation using lives other than those that had been authorized by the Commission. A comparison of the lives used by Wood Creek and those authorized are shown below.

Sewer Asset Class	Used by Wood Creek	PSC Authorized
Asset 544, Pumps	7	35
Asset 548, 56, 264 Service		
Lines	40	10
Asset 591, Services	20	10
Asset 577, Electric Pumping Equipment, Structures Asset 592, Electric Pumping	20	35
Equipment	20	7

In this proceeding, Staff decreased test-year depreciation reported by the Water Division and Sewer Division by \$74,146 and \$90,661, respectively, and it increased the nonregulated expenses reported for the Boat Dock and Bait Shop and East and West Laurel by \$671, \$13,943 and \$18,409, respectively, to account for: 1) changes found appropriate by Engineering Staff in this proceeding to the lives assigned to assets used only by the Water Division and Shared Assets;

2) changes to the depreciable lives assigned to assets used only by the Sewer Division as ordered by the Commission in Case No. 2013-00170;

 allocation of pro forma depreciation accrued on Shared Assets to the Water Division, Sewer Division and nonregulated operations;

4) allocation of a portion of depreciation accrued on water meters from the Water Division to the Sewer Division;<sup>19</sup>

4) removal of test-year depreciation accrued on assets that had become fully depreciated during the test year; and

5) annualizing depreciation on assets that were placed into service during the test year for which only partial year depreciation was reported during the test year.

The detailed calculations and explanations of Staff's adjustments to test-year depreciation are provided in Attachment E of this report.

(M) <u>PSC Fee</u>. Wood Creek's test-year PSC fee totaled \$10,434. The entire amount was reported as an expense by the Water Division, even though \$844 of the fee was assessed on revenues reported for the Sewer Division. To properly separate and account for the PSC fee between the water and sewer divisions in pro forma operations, Staff removed \$844 from the Water Division's expenses and increased the expenses of the Sewer Division by \$844.

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<sup>&</sup>lt;sup>19</sup> As discussed in footnote 15, because the Sewer Division's customer's monthly bill is determined using water meter readings, it is appropriate to allocate a portion of the water meter reading costs to the Sewer Division. Depreciation accrued on water meters is a cost of meter reading that should be allocated.

(N) <u>Contracted Services Provided to East and West Laurel</u>. Copies of the operation and maintenance contracts are included with this report as Attachment F. Although the contracts require that East and West Laurel pay Wood Creek for the actual cost of materials and labor used in the performance of the contracts, East and West Laurel do not pay based on the actual cost. For example, during the test year, Wood Creek reported a net loss from the contracted services in the amount of \$216,297 as detailed below.

Revenue	
East Laurel	\$ 775,120
West Laurel	764,769
Expenses East Laurel West Laurel	885,030 871,156
Net Income/(Loss)	\$(216,297)

The majority of the net loss is attributed to the difference between: 1) the amount of revenues billed by Wood Creek to East and West Laurel for the use of field employees and field equipment, and 2) the amount of the actual expenses reported by Wood Creek for those items. During its review, Mr. Lewis explained that, pursuant to the contracts, Wood Creek bills East and West Laurel on a monthly basis for field services, and the monthly bills are based on estimated costs, not actual costs. The estimated costs are determined by multiplying actual employee and equipment hours reported on contract work orders by an average hourly employee wage rate and

-32-

equipment cost rate, respectively.<sup>20</sup> Mr. Lewis continued by stating that Wood Creek does not update the hourly rates on a routine basis, as it should. The rates used during the test year became effective on July 1, 2008, and were developed from costs for the 12 months ended June 30, 2008. As a result, test-year revenues were based on 2008 costs, which were significantly less than actual expenses for 2014. This contributed greatly to the test-year net loss.

Mr. Lewis stated that the average cost billing is necessary because the actual costs are not readily available on a monthly basis due to limitations within Wood Creek's accounting system. He stated that the actual field costs are not known until the end of Wood Creek's 12-month accounting cycle when its books and records are closed. He stated that using the average cost method has not generally resulted in such a large discrepancy between contracted revenues and expenses as occurred during the test year. He stated that Wood Creek did not request that East and West Laurel pay Wood Creek the amount of the test-year under billing, but that Wood Creek updated the field employee and equipment cost rates using actual costs for the calendar year ended 2014, recognizing the significance of the under billing. The new rates became effective on January 1, 2015.

At Staff's request, Wood Creek determined that test-year contracted revenues would have increased by \$309,007 if the revised rates had been charged during the test year. After accounting for this increase to revenues, and Staff's adjustments as presented throughout this report that affect the costs of Wood Creek's contracted

<sup>&</sup>lt;sup>20</sup> The employee rate includes the average cost of field employee wages, wage overheads, workers compensation insurance, and uniform costs. The equipment rate includes the cost of fuel, maintenance, insurance, and depreciation.

operations, Wood Creek's contracted services in pro forma operations results in a net income of \$209,179 as calculated below.

	Test Year	Adjustments	<u>(Ref.)</u>	Pro Forma
Revenue East Laurel West Laurel	\$ 775,120 764,769	\$ 157,033 151,974		\$ 932,153 916,743
Total Revenue	1,539,889	309,007		1,848,896
Expenses East Laurel West Laurel	885,030	<ul> <li>\$ (42,272) (727) (12,027) (33,921) 10,031 5,530 13,943 (41,417) (722) (11,939) (36,772) 9,718 5,311 18,795</li> </ul>	(B-1) (C) (D) (G) (J) (J) (L) (B-1) (C) (D) (G) (I) (J) (L)	\$ 825,588
Total Expenses	1,756,186	(116,469)		1,639,717
Net Income/(Loss)	\$(216,297)	\$ 425,476		\$ 209,179

In its Application, Wood Creek acknowledged that the field employee and equipment rates were increased; however, it did not propose to increase the test-year contracted revenue account. Instead, Wood Creek proposed to remove the contracted revenues and expenses from the Water Division's income available to service debt, arguing that "since the Wood Creek Water District's cost for the operation of West Laurel Water Association and East Laurel Water District is a simple reimbursement of

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those costs, which have no impact on the Wood Creek Water District general and wholesale rates, this facet of the Wood Creek Water District operation [should] be treated separately."<sup>21</sup>

Staff agrees that the loss should be removed from test-year operations. Pursuant to the contracts, Wood Creek is required to provide all services necessary to operate and maintain East and West Laurel's distribution systems, and East and West Laurel are required to reimburse Wood Creek for the "actual cost" of those services. To ensure that the provisions of the contracts are properly followed in all future reporting periods, Wood Creek should bill East and West Laurel at the end of each accounting cycle for all actual costs that exceed the amount of revenues Wood Creek collected from East and West Laurel during the accounting cycle. Conversely, Wood Creek should refund to East and West Laurel any revenues that it collects in excess of the actual costs. Proper enforcement of the contracts will ensure that Wood Creek will never recognize an income or loss from the contracted operations in future reporting periods. Accordingly, Staff made adjustments to remove the test-year contracted service loss from Wood Creek's operations.

Throughout this report, Staff identified and made many adjustments to allocate expenses between Wood Creek's regulated and nonregulated contract operations. When Wood Creek is accounting for these costs in future reporting periods, it may use the allocation methods developed by Staff in this report, or it may use other more refined methods using information available to Wood Creek that was not considered by

<sup>&</sup>lt;sup>21</sup> Application, ARF Form 1 – Attachment SR.

Staff. If Wood Creek desires, it may request Staff's assistance in developing allocation methods.

(O) <u>Sewer Division</u>. Wood Creek's Water Division reported a net loss in the amount of \$69,467<sup>22</sup> for the test-year operation of the Sewer Division. Without explanation, Wood Creek proposed to remove this loss from the Water Division's income available to service debt.

Staff agrees that the loss should be removed from the Water Division's income and has removed the loss from the Water Division's pro forma operations. The amount of the loss represents the field employee wage and wage overheads that were paid by the Water Division on behalf of the Sewer Division for which the Sewer Division did not provide reimbursement. The loss is a subsidy, or payable, that should not have been reported as a loss on the Water Division's Income Statement. It should have been reported on the Water and Sewer Division's Balance Sheets using a combination of the accounts provided in the Uniform Systems of Accounts ("USoA") that are prescribed by the Commission for each division as shown in the table below.

	Water USoA	Sewer USoA
Asset Accounts	145, Accounts Receivable from Asso. Companies 146, Notes Receivable from Asso. Companies	145, Notes Receivable from Asso. Companies 146, Accounts Receivable from Asso. Companies
Liability Accounts	223, Advances from Asso. Companies 233, Accounts Payable to Asso. Companies 234, Notes Payable to Asso. Companies	223, Advances from Asso. Companies 233, Notes Payable to Asso. Companies 234, Accounts Payable to Asso. Companies
22		

 Receipts from Sewer Division
 \$ 97,603

 Less: Field Employee Wages and Wage
 0verheads Assigned to Sewer Division
 (167,070)

 Net Loss
 \$ (69,467)

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Accounting for the subsidy in future reporting periods using the proper accounts will allow Wood Creek to easily monitor the accumulation of the amount of the subsidy from year to year. Wood Creek's current accounting method does not allow it to easily monitor the subsidy. The subsidies that were reported as losses in prior periods have accumulated in the Water Division's retained earnings account, are comingled with the division's other earnings, and are not readily determinable.

Wood Creek should use the USoA accounts above in all future reporting periods to properly record all costs that are paid by the Water Division and are either directly assignable or allocable to the Sewer Division. Many of these costs have been identified and allocated by Staff in this report. They include, but may not be limited to, wages and wage overheads of office, administrative, and field employees, office electric, office materials and supplies, audit fees, transportation costs, general liability insurance, worker's compensation insurance, vehicle insurance, depreciation on shared assets, and PSC Fee.

When Wood Creek is accounting for these costs in future periods, it may use the allocation methods developed by Staff in this report, or it may use other more refined methods using information available to Wood Creek that was not considered by Staff. If Wood Creek desires, it may request Staff's assistance in developing allocation methods.

### <u>Water Division's Overall Revenue Requirement</u> and Required Revenue Increase

The Commission has historically applied a DSC method to calculate the Overall Revenue Requirement of a water district or a water association which has outstanding long-term indebtedness. This method generally accepted by the Commission allows for

-37-

recovery of: 1) cash related pro forma operating expenses; 2) recovery of depreciation expense, a non-cash item, to provide working capital;<sup>23</sup> 3) the average annual principal and interest payments on all long-term debts, and 4) working capital that is in addition to depreciation expense.

Recognizing that its Water Division has outstanding long-term debts, Wood Creek applied the Commission's DSC method to calculate its Water Division's revenue requirement. Staff agrees that using the DSC method for the Water Division is consistent with the general practice of the Commission and has applied this method to calculate the Water Division's Overall Revenue Requirement. A comparison of Wood Creek's and Staff's calculation of the Water Division's Overall Revenue Requirement and Required Revenue Increase using the Commission's DSC method is shown below.

<sup>&</sup>lt;sup>23</sup> 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 for renewing and replacing assets. See Public Serv. Comm'n of Kentucky v. Dewitt Water Dist., 720 S.W.2d 725, 728 (Ky.1986). Although a water district's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district's general funds or that depreciation funds be used only for asset renewal and replacement. 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, 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).

	Wood		
	Creek	Staff	(Ref.)
Pro Forma Operating Expenses Plus: Average Annual Principal	\$4,492,416	\$ 4,435,867	
and Interest Payments	1,028,816	1,096,542	(1)
Additional Working Capital	162,424	219,308	(2)
Overall Revenue Requirement Less: Other Operating Revenue Interest Income	5,683,656 (154,147)	5,751,717 (154,147)	
	(1,601)	(1,601)	
Revenue Required from Rates Less: Pro Forma Present Rate Water Sales	5,527,908 (4,826,293)	5,595,969 (4,780,087)	
Required Revenue Increase Percent Increase	\$ 701,615 14.54%	\$ 815,882 17.07%	

(1) <u>Average Annual Principal and Interest Payments</u>. At the end of the test year, Wood Creek had the following outstanding bonds payable to the United States Department of Agriculture Rural Development ("RD"); the Kentucky Rural Water Finance Corporation ("KRWFC"); and the Bank of New York ("BNY").<sup>24</sup>

<sup>&</sup>lt;sup>24</sup> The BNY Bonds are incorrectly labeled as "KRWFC 1998" bonds on pages 66 and 74 of Wood Creek's Application when they are downloaded from: <u>http://psc.ky.gov/PSC\_WebNet/ViewCaseFilings.aspx?case=2015-00428</u>.

Payable To	Series	Original Amount	Outstanding Balance at End of Test Year
RD	91-04	\$ 61,000	, ,
	91-09	114,000	-,
	91-12	1,711,000	0 1,411,000
	91-13	7,250,000	0 6,628,000
	91-16	725,000	0 661,000
KRWFC	2003A	299,000	0 162,000
	2003B	1,345,400	) 379,900
	2004B	1,318,000	940,000
	2005B	3,594,000	2,805,000
	2007A	2,086,000	0 1,777,000
BNY	1998	665,000	) 320,000

The proceeds from each bond issuance were used to either construct water system improvements or to refinance long-term debt instruments that had been assumed to construct water system assets. All long-term debts were properly reported by Wood Creek as a debt of the Water Division.

Subsequent to the test year, in Case No. 2014-00440,<sup>25</sup> Wood Creek sought and received the Commission's authority to borrow up to \$1,633,500<sup>26</sup> from KRWFC in order to refinance RD Bond Series 91-04, 91-09, and 91-12. In its January 5, 2015 Order, the Commission authorized the refinancing, finding that it would produce estimated gross

<sup>&</sup>lt;sup>25</sup> Case No. 2014-00440, Application of Wood Creek Water District to Issue Securities in the Approximate Principal Amount of \$1,485,000 for the Purpose of Refunding Certain Outstanding Revenue Bonds of the District Pursuant to the Provisions of KRS 278.300 and 807 KAR 5:001 (Ky. PSC January 5, 2015).

<sup>&</sup>lt;sup>26</sup> In its Order, the Commission identified the RD bonds as Waterworks Revenue Bonds Series 1980, 1992, and 1998, respectively. The Commission authorized Wood Creek to borrow up to \$1,633,500. This amount included \$1,485,000 for the estimated amount of bond proceeds necessary to complete the refinancing, plus an adjustment of up to 10 percent of the estimated amount, or \$148,500.

savings and net present value savings in the amounts of \$160,871 and \$109,841, respectively.<sup>27</sup> Recognizing that the estimated savings were based on interest rates that fluctuate with bond market conditions that may change before the refinancing transaction was complete, the Commission ordered that the transaction be consummated only if the actual interest rates would result in gross savings and present value savings. To ensure savings were realized, the Commission ordered that Wood Creek file amortization schedules and work papers showing the actual savings if they were different from the estimated savings.

The KRWFC refinancing transaction was completed on February 19, 2015 ("KRWFC Series 2015"). On March 31, 2015, Wood Creek submitted amortization schedules and work papers to the Commission showing the actual gross savings and present value savings that would result from the refinancing.<sup>28</sup> These work papers demonstrated that the proceeds from KRWFC Series 2015 totaled \$2,780,000, exceeding the authorized amount by \$1,146,500. While there was no narrative explanation for the use of the excess funds in the March 31, 2015 filing, the schedules and work papers demonstrated that the excess funds were borrowed to refinance KRWFC Bond Series 2003A, 2003C, and 2004A. The schedules and work papers demonstrated that the gross savings and present value savings that will result from the refinancing of all six bond series would be \$470,743 and \$326,209, respectively.

When reviewing Wood Creek's March 31, 2015 filing in Case No. 2014-00440 to confirm that the refinancing would generate savings, Staff failed to notice that the

<sup>&</sup>lt;sup>27</sup> Id. at 2.

<sup>&</sup>lt;sup>28</sup> Wood Creek's March 31, 2015 filing can be found in the "post case file" for Case No. 2014-00440 that can be found at <u>http://psc.ky.gov/PSC\_WebNet/ViewCaseFilings.aspx?case=2014-00440</u>.

proceeds from the KRWFC Series 2015 Bonds exceeded the amount authorized by the Commission. Staff became aware of the excess borrowing during its review conducted in this proceeding. Staff's review included discussions with W. Randall Jones of Rubin & Hays, Attorneys at Law, who represented KRWFC and filed Case No. 2014-00440 on behalf of Wood Creek.

After Staff's discussion with Mr. Jones, he and Wood Creek submitted a joint filing into the record of Case No. 2014-00440 on February 8, 2016. In the filing, Wood Creek stated that subsequent to the filing of the application in Case No. 2014-00440, KRWFC notified Wood Creek that additional savings would be realized by rolling the "reamortization" of the KRWFC bonds into the RD bond refinancing that had been approved by the Commission. Wood Creek stated that the decision to "reamortize" the KRWFC bonds was made after the Commission entered its January 5, 2015 Order authorizing the RD bond refinancing. It continued by stating that it realizes that adherence to KRS 278.300 is in the best interest of regulated utilities and that its failure to request an amendment to the Commission's Order was unintentional. Mr. Jones, while recognizing that the "reamortization" of the KRWFC bonds required the Commission's authorization pursuant to KRS 278.300, noted that the reamortization of the KRWFC Bonds accounted for \$142,847 of the \$326,209 in total present value savings generated by the refinancing and therefore benefited Wood Creek's customers.

After accounting for the refinancing that resulted from Case No. 2014-00440 and for the principal retirements made subsequent to the test year on all debts, Wood Creek's schedule of outstanding long-term indebtedness at the time of Staff's review appears as shown below.

-42-

Payable To	Series	Original Amount	Outstanding Balance at Time of Staff's Review
RD	91-13	\$7,250,000	\$   6,414,000
	91-16	725,000	639,500
KRWFC	2005B	3,594,000	2,577,000
	2007A	2,086,000	1,673,000
	2015B	2,780,000	2,590,000
BNY	1998	665,000	250,000

In the Application, Wood Creek requested to recover \$1,028,816 annually to pay the principal and interest payments on the debts listed above. The requested amount is equal to the three-year average debt payments that are due in the years 2015, 2016, and 2017.

As discussed in Ref. Item (E), Staff anticipates that the water service rates authorized by the Commission in this proceeding will have a five-year life. Staff finds that the annual debt service payments that are to be recovered through the rates authorized in this proceeding should coincide with that life. Accordingly, Staff included the five-year average principal and interest payments that will become due for all debts on and after January 1, 2016. This five-year period better matches Wood Creek's debt payments with the period of time that the rates authorized in this proceeding are anticipated to remain in effect than the three-year period requested by Wood Creek. As shown below, Staff calculated the five-year average to be \$1,096,542.

-43-

	RI	D		KRWFC			
Year	<u> </u>	91-16	2005B	2007A	2015B	BNY	Total
2016	\$394,469	\$38,647	\$235,140	\$128,775	\$268,437	\$48,357	\$1,113,825
2017	394,700	38,679	236,109	126,548	249,331	46,625	1,091,992
2018	394,713	38,690	235,854	126,280	250,338	49,750	1,095,625
2019	394,507	38,680	234,414	125,931	251,231	47,750	1,092,513
2020	395,082	38,649	233,720	123,541	252,013	45,750	1,088,755
	ear Total						5,482,710
Divide	by: Five Yea	rs					5
Five-Y	ear Average						\$1,096,542

The amount of the five-year average debt payment calculated by Staff beginning with 2016 is \$67,726 more than the three-year average calculated by Wood Creek beginning with 2015. The majority of this difference is because Wood Creek's calculation includes only partial-year interest in the amount of \$36,056 that was paid in 2015 on the KRWFC Series 2015B Bonds. Staff's calculation does not include a partial payment.

If Wood Creek had not executed the unauthorized refinancing of the KRWFC 2003A, 2003C, and 2004A bonds, its five-year average debt service requirement would have been \$18,745 more. The calculation of this amount is shown below.

ı.

					K	RWFC				
	R	D	Add	ed to Calcula	tion		1	Adjusted		
Year	91-13	91-16	2003A	2003C	2004A	2005B	2007A	2015B	BNY	Total
2016	\$394,469	\$38,647	\$ 23,109	\$ 65,313	\$87,223	\$235,140	\$ 128,775	\$112,900	\$48,357	\$1,133,933
2017	394,700	38,679	23,383	44,692	87,167	236,109	126,548	112,056	46.625	1,109,959
2018	394,713	38,690	23,603	43,901	88,991	235,854	126,280	109,712	49,750	1,111,494
2019	394,507	38,680	24,735	44,005	88,658	234,414	125,931	107,288	47,750	1,105,968
2020	395,082	38,649	25,752	44,094	90,165	233,720	123,541	102,709	45,750	1,099,462
Divide	by. Five Ye	ars								5
Divide	by: Five Ye	ars								5
			nauthorized F							1,112,163
L655.	rive-rear A	verage inclu	uding Unautho	brized Refina	incing					(1,096,542)
Differe										15,621
Times	120 Percer	nt Gross-Up	for Addition	al Working C	apital Relat	ted to Debt F	ayments as E	xplained Belo	w	120%
Total /	Annual Savin	gs from Una	authorized Re	efinancing En	nbedded in	Overall Reve	enue Requirem	ent		\$ 18,745
							1			

(2) <u>Additional Working Capital</u>. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by a district's lenders that are above its average annual

debt payments. In this case, Staff calculated the amount to be \$219,308 for Wood Creek.<sup>29</sup>

Average Annual Principal and Interest Payments	\$1,096,542
Times: DSC Ratio	120%
Total Net Revenues Required	1,315,850
Less: Average Annual Principal and Interest Payments	(1,096,542)
Additional Working Capital	\$ 219,308

### Sewer Division's Overall Revenue Requirement and Required Revenue Increase

Because construction of Wood Creek's sewer system assets was fully funded by contributions in aid of construction, Wood Creek currently has no long-term debts outstanding that should be assigned to the Sewer Division and recovered through sewer

<sup>&</sup>lt;sup>29</sup> The RD bond resolutions require Wood Creek to assess rates for water service that produce net revenues that are equal to at least 120 percent of the average annual RD bond principal and interest payments as well as all principal and interest payments on any debts that are on par with the RD bonds. The DSC ratio measures an entity's ability to pay its cash related operating expenses and to pay debt principal and interest. RD calculates the ratio by dividing net revenues by the entity's average annual debt principal and interest payments. Net revenues are equal to total revenues less cash related expenses. Depreciation expense, a noncash operating expense, is excluded from the determination of net revenues. As shown below, the required DSC ratio is met with or without including the additional working capital in Wood Creek's overall revenue requirement.

	w	ith Additional		Without Additional
		orking Capital		rking Capital
Overall Revenue Requirement Less: Operation and Maintenance Expense Taxes Other Than Income	\$	5,751,717 (3,596,955) (9,590)	\$	5,532,409 (3,596,955) (9,590)
Net Revenues Divide by: Average Annual Debt Payments		2,145,172 1,096,542		1,925,864 1,096,542
DSC Ratio		196%	<u> </u>	176%

rates. When a water district, water association, or operating division thereof has no long-term debts, the Commission has historically applied an operating ratio method to calculate the utility's Overall Revenue Requirement and Required Revenue Increase.<sup>30</sup> As shown below, by applying the Commission's operating ratio method to the Sewer Division's pro forma operations, Staff determined that the Sewer Division's Overall Revenue Requirement is \$1,084,145 and that a revenue increase in the amount of \$449,743, or 72.18 percent, is required to generate the Overall Revenue Requirement.

Pro Forma Operating Expenses Divide by: Operating Ratio	\$ 954,047 <u>88%</u>
Overall Revenue Requirement Less: Miscellaneous Sewer Revenues Interest Income	 1,084,145 (11,290) (31)
Revenue Required from Sewer Sewer Rates Less: Pro Forma Present Rate Revenues	 1,072,824 (623,081)
Required Revenue Increase Percent Increase	\$ <u>449,743</u> 72.18%

<sup>&</sup>lt;sup>30</sup> The operating ratio is equal to the margin between the operating revenues and operating expenses authorized by the Commission. The margin is allowed to provide working capital above the amount provided through recovery of depreciation expense. The Commission has traditionally set the margin equal to 12 percent of operating revenues with adjustments made for certain "below-the-line" accounts. When no "below-the-line" accounts are included, the formula appears as shown below.

Operating Revenues	100%
Less: Operating Expenses	88%_

Net Operating Income \_\_\_\_\_12%

Signatures

Prepared by: Jack Scott Lawless, CPA Water and Sewer Revenue Requirements Branch Division of Financial Analysis

Prepared by: Sam Reid Water and Sewer Rate Design Branch Division of Financial Analysis

## ATTACHMENT A

## Water Division Staff Calculated Monthly Water Rates

5/8- <u>x 3/</u> 4-	Inch Meter			
First	2,000	gallons	\$ 24.22	Minimum bill
Next	1,500	gallons	7.70	per 1,000 gallons
Next	1,500	gallons	6.87	per 1,000 gallons
Next	2,500	gallons	5.78	per 1,000 gallons
All Over	7,500	gallons	4.57	per 1,000 gallons
<u>1-Inch Me</u>	ter			
First	5,000	gallons	\$ 46.08	Minimum bill
Next	2,500	gallons	5.78	per 1,000 gallons
All Over	7,500	gallons	4.57	per 1,000 gallon
<u>1 ½-Inch  </u>	<u>Meter</u>			
First	10,000	gallons	\$ 71.95	Minimum bill
All Over	10,000	gallons	4.57	per 1,000 gallons
2-Inch Me	eter			
First	20,000	gallons	\$ 117.65	Minimum bill
All Over	20,000	gallons	4.57	per 1,000 gallons
3-Inch Me	eter			
First	30,000	gallons	\$ 163.35	Minimum bill
All Over	30,000	gallons	4.57	per 1,000 gallons
6-Inch Me	eter			
First	100,000	gallons	\$ 483.25	Minimum Bill
All Over	100,000	gallons	4.57	per 1,000 gallon
Wholesale	e User Rates	;		
	el Water Dist		\$ 3.42	per 1,000 gallons
West Lau	rel Water As	sociation	\$ 3.42	per 1,000 gallons
City Of Liv	vingston		\$ 3.42	per 1,000 gallons
-	-			=

## ATTACHMENT B

## Sewer Division Staff Calculated Monthly Sewer Rates

5/8- x 3/4-	- Inch <u>Meter</u>			
First	2,000	gallons	\$ 35.63	Minimum bill
Next	1,500	gallons	12.91	per 1,000 gallons
Next	1,500	gallons	11.97	per 1,000 gallons
Next	2,500	gallons	10.73	per 1,000 gallons
All Over	7,500	gallons	9.35	per 1,000 gallons
<u>1-Inch Me</u>			<b>* -------------</b>	<b>M</b> (1) (1) (1) (1)
First	5,000	gallons	\$ 72.95	Minimum bill
Next	2,500	gallons	10.73	per 1,000 gallons
All Over	7,500	gallons	9.35	per 1,000 gallons
2-Inch Me	ator			
First	20,000	gallons	\$ 216.65	Minimum bill
All Over	20,000	gallons	9.35	per 1,000 gallons
	,	34		per 1,000 Juneire
<u>3-Inch Me</u>	eter			
First	30,000	gallons	\$ 310.15	Minimum bill
All Over	30,000	gallons	9.35	per 1,000 gallons
<u>6-Inch Me</u>				
First	100,000	gallons	\$ 964.65	Minimum Bill
All Over	100,000	gallons	9.35	per 1,000 gallons

## Attachment C

Engineering Staff's Review of Depreciable Lives

#### WOOD CREEK WATER DISTRICT CASE NO. 2015-00428

#### ENGINEERING DIVISION'S ANALYSIS OF ASSET SERVICE LIVES FOR WATER SYSTEMS

Historically, the Commission has relied on the *Depreciation Practices for Small Water Utilities* by National Association of Regulatory Utility Commissioners, Washington, DC, August 15, 1979, page 11, 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 utility practices. Typically, an adjustment is made when the Commission finds that a utility is proposing to use a service life that falls outside of the range, while service lives falling within these ranges are generally accepted.

Certain asset service lives proposed in this case were found to be outside the Commission's established guidelines or as otherwise previously adopted by the Commission.

	NARUC		Recommended
			Staff Report
Type of Accet			Service
Type of Asset	Life		Life/Lives
			35
Structures and Improvements	35-40	50	40
-		50	40
Structures and Improvements	35-40	30	35
Pumping Equipment	20	7	20
		20	35
	35-40	50	40
	20-35	50	35
Transmission and Distribution Mains	50-75	20	50
		10	30
Services	30-50	20	30
Meters	35-45		35
Hydrants	40-60		40
			35
Structures and Improvements	35-40		40
Office Furniture and Equipment			20
Transportation Equipment	7	4	7
		25	20
		10	15
Tools, Shop & Garage Equipment	15-20	7	15
	Hydrants Structures and Improvements Office Furniture and Equipment	Average Service LifeType of AssetLifeStructures and Improvements35-40Structures and Improvements35-40Pumping Equipment20Structures and Improvements35-40Water Treatment Equipment20-35Transmission and Distribution Mains50-75Services30-50Meters35-45Hydrants40-60Structures and Improvements35-40	Average ServiceSubmitted ServiceType of AssetLifeLife/LivesStructures and Improvements35-4050Structures and Improvements35-4030Pumping Equipment207Structures and Improvements35-4050Structures and Improvements35-4050Water Treatment Equipment20-3550Transmission and Distribution Mains50-7520Services30-5020Meters35-4520Hydrants40-6020Structures and Improvements35-4050Distribution Mains50-7520Transmission and Distribution Mains50-7520Meters35-4520Hydrants40-6020Structures and Improvements35-4050Office Furniture and Equipment20-2510Transportation Equipment74102510Transportation Equipment74

NOTE: Some Types of Asset had more than one service life submitted. In these cases, service life/lives that were within the NARUC range should remain unchanged.

The Recommended Staff Report Service Life/Lives should be used for the purpose of the Commission Staff Report unless specific and verifiable evidence supports using alternative service lives.

Prepared February 12, 2016

Mark Rasche, P.E. Manager, Water and Sewer Branch

## Attachment D Distribution of Wages and Wage Overheads

Job Title	333-40	416-0	416-1 Non-Meter Reading	416-1 Meter Reading	416-3 Non-Meter Reading	416-3 Meter Reading	601-1	601-3	601-4	601-5	601-6	601-7 Non-Meter Reading	601-7 Meter Reading	601-8	675-2	675-81
Office and Field Employees																
Office Percentage of Employee's Total Wages FICA Tax Retirement Insurance Unemployment Tax		\$ 10,352 33 33% 792 1,766 6,790 74			\$ 2,021 6.51% 155 345 1,325 14							\$ 8,476 27.29% 648 1,446 5.559 60				
Office Percentage of Employee's Total Wages FICA Tax Retirement Insurance Unemployment Tax		7,067 33.33% 541 1,206 6,790 74	6,968 32.87% 533 1,189 6,695 73		1,379 6.51% 106 235 1,325 14							5,786 27.29% 443 987 5,559 60				
Office Percentage of Employee's Total Wages FKCA Tax Retirement Insurance Unemployment Tax		6,277 33.33% 480 1,071 6,790 74	6,190 32,87% 474 1,056 6,695 73		1,225 6.51% 94 209 1,325 14							5,140 27,29% 393 877 5,559 60				
Office Percentage of Employee's Total Wages FICA Tax Retirement Insurance Unemployment Tax		9,498 33.33% 727 1,620 6,790 74	9,365 32.87% 716 1,598 6,695 73		1,854 6.51% 142 316 1,325 14							7,776 27.29% 595 1,327 5,559 60				
Percentage of Employee's Total Wages Office FKCA Tax Retirement Insurance Unemployment Tax		16,006 33,33% 1,224 2,731 6,790 74	15,783 32.87% 1,207 2,693 6,695 73		3,124 6.51% 239 533 1,325 14							13,105 27.29% 1,003 2,236 5,559 60				
Office Percentage of Employee's Total Wages FKCA Tax Retirement Insurance Unemployment Tax		22,467 33.33% 1,719 3,833 6,790 74	22,154 32.87% 1,695 3,779 8,695 73		4,385 6.51% 335 748 1,325 14							18,395 27.29% 1,407 3,138 5,559 60				
Office Percentage of Employee's Total Wages FKA Tax Retirement Insurance Unemployment Tax		14,331 33,33% 1,096 2,445 6,790 74	14,131 32.87% 1,081 2,411 6,695 73		2,797 6,51% 214 477 1,325 14							11,734 27.29% 898 2,002 5,559 60				
Office Percentage of Employee's Total Wages FICA Tax Retirement Insurance Unemployment Tax		10,825 33 33% 828 1,847 6,790 74	10,674 32.87% 817 1,821 6,695 73		2,113 6.51% 162 360 1,325 14							8,863 27.29% 678 1,512 5,559 60				

Job Title	333-40	416-0	416-1 Non-Meter Reading	416-1 Motor Reading	416-3 Non-Meter Reading	416-3 Meter Reading	601-1	601-3	601-4	601-5	601-6	601-7 Non-Meter Reading	601-7 Meter Reading	601-8	675-2	675-81
Plant Operator																
Parcentage of Employee's Total Wages								40,486 100.00%								
FICA Tax								3,097								
Retirement Insurance								6.907								
Unemployment Tax								20,370								
-								222								
WTP Operator			309					61,964								
Percentage of Employee's Total Wages FICA Tax			0.50% 24					99.50%								
Retirement			24 53					4,733								
Insurance			101					10,554 20,268								
Unemployment Tax			1					220								
WTP Operator																
Percentage of Employee's Total Wages								26,876 100.00%								
FICA Tax								2,056								
Retirement Insurance								4,585								
Unemployment Tax								20,370 222								
WTP Operator								55,794								
Percentage of Employee's Total Wages FICA Tax								100.00%								
Retirement								4,268 9,519								
insurance								20,370								
Unemployment Tax								222								
WTP Operator								35.826		547						
Percentage of Employee's Total Wages								98.50%		1.50%						
FICA Tax Retirement								2,741		42						
Insurance								6,112		93						
Unemployment Tax								20,063 218		306 3						
WTP Operator																
Percentage of Employee's Total Wages								47,713 100.00%								
FICA Tex								3,650								
Retirement Insurance								8,140								
Unemployment Tax								20,370								
								222								
WTP Operator Percentage of Employee's Total Wages								23,500								
FICA Tax								100.00%								
Retirement								1,798 4,009								
Insurance								20,370								
Unemployment Tax								222								
Lab Tech		13,109	13,109					19,341								
Percentage of Employee's Total Wages		28.77%	28.77%					42.45%								
FICA Tax Retirement		1,003 2,236	1,003					1,480								
Insurance		2,236 5,861	2,236 5,861					3,300								
Unemployment Tax		64	64					8,648 94								
Foreman - Maintenance		18,928	18,288													
Percentage of Employee's Total Wages		29.02%	28.04%		200 0.31%						27,812 42.64%					
FICA Tax		1,448	1,399		15						42.64%					
Retirement Insurance		3,229	3,120		34						4,745					
Unemployment Tax		5,911 64	5,711 62		62 1						8,685					
			02		1						94					

Job Title	333-40	<b>416-0</b>	416-1 Non-Meter Reading	416-1 Meter Reading	416-3 Non-Meter Reading	416-3 Meter Reading	601-1	601-3	601-4	601-5	601-6	601-7 Non-Meter Reading	601-7 Meter Reading	601-8	675-2	675-81
Foreman - Maintenance		13,467	13,256		11,136											
Percentage of Employee's Total Wages		23.41%	23.05%		19.36%						19,661					
FICA Tax		1,030	1,014		852						34.18%					
Retirement		2,297	2,261		1,900						1,504					
Insurance		4,769	4,694		3,944						3,354					
Unemployment Tax		52	-,054		43						6,963 76					
		~	51		-3						/6					
Maintenance		10,129	10, 106								15,727					
Percentage of Employee's Total Wages		28.17%	28.10%								43.73%					
FICA Tax		775	773								1,203					
Retirement		1,728	1,724								2,683					
Insurance		5,739	5.724								8,908					
Unemployment Tax		62	62								8,508 97					
											57					
Maintenance		8,113	7,805								14.000					
Percentage of Employee's Total Wages		27.12%	26.09%								46.79%					
FICA Tax		621	597								1.071					
Retirement		1,384	1,332								2,388					
Insurance		6,524	5,314								9,532					
Unemployment Tax		60	58								104					
Mala																
Maintenance	79	2,685	4,249		26,014				138		10,110	315				
Percentage of Employee's Total Wages FICA Tax	0.18%	6.16%	9.75%		59.68%				0.32%		23.19%	0.72%				
Retirement	6	205	325		1,990				11		773	24				
Insurance	13	458	725		4,438				23		1,725	54				
	37	1,255	1,985		12,157				64		4,725	147				
Unemployment Tax		14	22		132				1		51	2				
Maintenance		0.410	0.074													
Percentage of Employee's Total Wages		2,410 4.40%	2,971		33,103			297	605	264	15,110					
FICA Tax		184	5.43%		60.45%			0.54%	1.11%	0.48%	27.59%					
Retirement		411	227 507		2,532			23	46	20	1,156					
Insurance		896	1,105		5,647 12,314			51	103	45	2,578					
Unemployment Tax		10	1, 105		12,314			111	225	96	5,620					
, , ,		10	16		134			1	2	1	61					
Maintenance	1,442	8,294	8,627		2,641				36	307	22.646	144				
Percentage of Employee's Total Wages	3.27%	18.79%	19.55%		5.98%				0.08%	0.69%	22,040 51.31%	0.33%				
FICA Tax	110	634	660		202				3	23	1,732	0.33%				
Retirement	246	1,415	1,472		451				6	52	3.863	25				
Insurance	666	3,828	3,982		1,219				17	141	10,451	67				
Unemployment Tax	7	42	43		13				.,	2	114	1				
												•				
Maintenance	459	14,297	11,518		7,497					451	23,018					
Percentage of Employee's Total Wages	0.80%	24.98%	20.12%		13.10%					0.79%	40.21%					
FICA Tex	35	1,094	681		574					34	1,761					
Retirement	78	2,439	1,965		1,279					77	3,927					
Insurance	163	5,088	4,099		2,668					160	8,191					
Unemployment Tax	2	55	45		29					2	69					
Maintenance		10.040	44.070													
Percentage of Employee's Total Wages		12,316 21.52%	11,078		2,633					2,218	28,987					
FICA Tax		21.02% 942	19.36%		4.60%					3.87%	50.65%					
Retirement		2.101	647 1,690		201					170	2,218					
Insurance		4,383	1,690 3,943		449 937					378	4,945					
Unemployment Tax		•,363 48	3,943		937 10					789	10,317					
·····			40		10					9	112					
Maintenance	116	10.462	10,246		1,114						16 04 4					
Percentage of Employee's Total Wages	0.30%	27.00%	26.44%		2.87%						16,811					
FICA Tax	9	800	784		85						43.38% 1,286					
Retirement	20	1,765	1,748		190						1,286					
Insurance	61	5,500	5,386		685						2,000 8,637					
Unemployment Tax	1	60	59		6						6,637 96					
					-											

Job Title	333-40	416-0	416-1 Non-Meter Reading	416-1 Meter Reading	416-3 Non-Meter Reading	416-3 Meter Reading	601-1	601-3	601-4	601-5	601-6	601-7 Non-Meter Reading	601-7 Meter Reading	601-8	675-2	675-81
Maintenance Percentage of Employee's Total Wages FICA Tax Retirement Insurance Unemployment Tax	787 1.37% 60 134 279 3	11,778 20.47% 901 2,009 4.171 45	10,836 18 84% 829 1,849 3.837 42		5,796 10.08% 443 989 2,052 22					476 0.83% 36 81 169 2	27,852 48.42% 2,131 4.752 9.862 107					
Maintenance Percentage of Employee's Total Wages FICA Tax Retirement Insurance Unemployment Tax	217 0.37% 17 37 75 1	15,881 26.78% 1,215 2,709 5,456 59	15,414 26,99% 1,179 2,630 5,295 58		739 1.25% 57 126 254 3			65 0.11% 5 11 22 0		12,674 21.37% 970 2,162 4,354 47	13.501 22.77% 1,033 2,303 4,638 50	630 1.06% 48 108 217 2		174 0.29% 13 30 60 1		
Maintonance Percentage of Employee's Total Wages FKA Tax Retirement Insurance Unemployment Tax	659 2.25% 50 112 457 5	6,665 22.71% 510 1,137 4,625 50	6,802 23.18% 520 1,160 4,721 51		714 2.43% 55 122 496 5				37 0.12% 3 6 25 0		14,474 49.31% 1,107 2,469 10,045 109					
Maintenance Percentage of Employee's Total Wages FKA Tax Retirement Insurance Unemployment Tax	294 1.34% 22 50 273 3	2,646 12.07% 202 451 2,458 27	1,746 7 96% 134 298 1,622 18		11,295 51.51% 854 1,927 10,492 114				37 0.17% 3 6 34	49 0.22% 4 8 46	5,764 26.28% 441 983 5,354 58			98 0.45% 7 17 91 1		
Foreman - Meter Readers Percentage of Employee's Total Wages FICA Tax Retirement Insurance Unemployment Tax		15,264 29.07% 1,168 2,604 5,921 64	15,299 29.14% 1,170 2,610 5,935 65			3,714 7.07% 284 634 1,441 16					248 0.47% 19 42 96 1	1,204 2.29% 92 205 467 5	16,779 31.95% 1,284 2,863 6,509 71			
Meter Reader Percentage of Employee's Total Wages FICA Tax Rotirement Insurance Unemployment Tax		1,674 5.85% 128 286 1,191 13	10,845 37.88% 830 1,850 7,717 84	10,060 35.14% 770 1,716 7,158 78	350 1.22% 27 60 249 3	142 0.50% 11 24 101 1			208 0.73% 16 35 148 2	123 0.43% 9 21 88 1	344 1.20% 26 59 245 3	4,803 16.78% 367 619 3,417 37		78 0.27% 6 13 65 1		
Meter Reader Percentage of Employee's Total Wages FICA Tax Retirement Insurance Unemployment Tax		1,776 6.65% 136 303 1,354 15	504 1.89% 39 86 384 4		72 0.27% 6 12 55 1	1,527 5.71% 117 260 1,164 13			192 0.72% 15 33 148 2	9,828 36.78% 762 1,677 7,493 81	612 2.29% 47 104 467 5	5,214 19.51% 399 890 3,975 43	6,897 25.81% 528 1,177 5,258 57	96 0.36% 7 16 73 1		
Meter Reader Percentage of Employee's Total Wagas FICA Tax Retirement Insurance Unemployment Tax		5,362 11.29% 410 915 2,300 26	21,676 45.64% 1,658 3,698 9,297 101	11,315 23.83% 866 1,930 4,853 53	1,195 2.52% 91 204 513 6	160 0.34% 12 27 69 1				395 0. <b>83%</b> 30 67 169 2	1,738 3.66% 133 297 745 8	5,649 11.89% 432 984 2,423 26				

Job Title	333-40	416-0	416-1 Non-Meter Reading	416-1 Meter Reading	416-3 Non-Meter Reading	416-3 Meter Reading	601-1	601-3	601-4	601-5	601-6	601-7 Non-Meter Reading	601-7 Meter Reading	601-8	675-2	675-81
Meter Reader Percentage of Employee's Total Wages FICA Tax		26,883 80 93% 2,067	138 0.42% 11		138 0.42% 11				245 0.74% 19		184 0.55% 14	5,538 16.67% 424		92 0.28% 7		
Retirement		4,586	24		24				42		31	945		16		
Insurance Unemployment Tax		16,485 179	85 1		85				151		113	3,396		56		
		179	1		1				2		1	37		1		
Meter Reader		2,291	88							12,197	474	16,158		88		
Percentage of Employee's Total Wages FICA Tax		7.32%	0.28%							38.97%	1.52%	51. <b>63%</b>		0.28%		
Retirement		175 391	7 15							933	36	1,236		7		
insurance		1,491	57							2,081 7,939	81 309	2,757 10,517		15 67		
Unemployment Tax		16	1							7,839 86	309	114		1		
Medica Matter Tester/Other Materia																
Marina/Meter Tester/Other Maintenance Percentage of Employee's Total Wages		4,777 11.60%	4,758 11.56%				22,644				8,700	291			•	
FICA Tax		365	364				55.00% 1,732				21.13% 666	0.71%				
Retirement		815	812				3,863				1,484	22 50				
Insurance		2,364	2,354				11,203				4,305	144				
Unemployment Tax		26	26				122				47	2				
Martna															7,816	
Percentage of Employee's Total Wages															100.00%	
FICA Tax															598	
Unemployment Tax															222	
Medna															8,432	
Percentage of Employee's Total Wages															8,432 100.00%	
FICA Tax															645	
Unemployment Tax															222	
Marina															8,600	
Percentage of Employee's Total Wages															100.00%	
FICA Tax															658	
Unemployment Tax															222	
Marina															1,992	
Percentage of Employee's Total Wages															100.00%	
FICA Tax															152	
Unemployment Tax															222	
Marina															2,752	
Percentage of Employee's Total Wages															100.00%	
FICA Tax															211	
Unemployment Tax															222	
Marina															1,896	
Percentage of Employee's Total Wages															100.00%	
FICA Tax															145	
Unemployment Tax															222	
Total Pro Forma Field and Office Wages	7,087	534,178	512,395	38,799	213,383	9,718	39,564	541,401	2,686	71,285	453,635	218,676	41,422	1,177	35,226	<u> </u>

Job Titlo	333-40	416-0	416-1 Non-Meter Reading	416-1 Meter Reading	416-3 Non-Meter Reading	416-3 Meter Reeding	601-1	601-3	601-4	601-5	601-6	601-7 Non-Meter Reading	601-7 Meter Reading	601-8	675-2	675-81
Percentage of Total Field and Office Wages (Excludes Wage Overheads)	0.26%	19.54%	18. <b>82%</b>	1.35%	7.84%	0.35%	1.43%	19. <b>69%</b>	0.09%	2.50%	16.93%	7.68%	1.49%	0.04%	1.99%	0.00%
General Manager's Office											10.00%	1.00 /	1.40 %	0.0410	1.33 %	0.00 #
General Manager	208	15, <b>654</b>	15,078	1,082	6,281	280	1,146	15,775	72	2,003	13,563	6,153	1,1 <del>94</del>	20	1,594	
Percentage of Employee's Total Wages	0.26%	19.54%	18.82%	1.35%	7.84%	0.35%	1.43%	19.69%	0.09%	2,50%	16.93%	7.68%	1,194	32 0.04%	1,594	
FICA Tax	16	1,198	1,153	83	480	21	88	1,207	6	153	1,038	471	91	2	122	
Retirement	36	2.671	2.572	185	1.072	48	195	2,691	12	342	2,314	1,050	204	5	272	
Insurance	53	3,980	3,834	275	1,597	71	291	4,011	18	509	3,449	1,564	304	8	405	
Unemployment Tax	1	43	42	3	17	t	3	44	0	6	38	17	з	0	4	
Assistant General Manager	167	12,581	12,117	869	5,048	225	921	12,677	58	1.610	10,900	4.945	959	26	1,281	
Percentage of Employee's Total Wages	0.26%	19.54%	18.82%	1.35%	7.84%	0.35%	1 43%	19.69%	0.09%	2.50%	16.93%	7.68%	1.49%	0.04%	1.99%	
FICA Tax	13	962	927	66	386	17	70	970	4	123	834	378	73	2	98	
Retirement	29	2,146	2,067	148	861	38	157	2,163	10	275	1,860	844	164	4	219	
Insurance	53	3,980	3,834	275	1,597	71	291	4,011	18	509	3,449	1,664	304	8	405	
Unemployment Tex	1	43	42	3	17	1	3	44	0	6	38	17	3	0	4	
Project Manager	127	9,526	9,175	658	3,822	171	697	9,599	44	1,219	8,253	3,744	726	19	970	
Percentage of Employee's Total Wages	0.26%	19.54%	18.82%	1.35%	7.84%	0.35%	1.43%	19.69%	0.09%	2.50%	16,93%	7.68%	1.49%	0.04%	1.99%	
FICA Tax	10	729	702	50	292	13	53	734	3	93	631	286	56	0.04%	74	
Retirement	22	1,625	1,565	112	652	29	119	1,639	7	208	1,408	639	124	3	165	
insurance	53	3,980	3,834	275	1,597	71	291	4,011	18	509	3,449	1,564	304	8	405	
Unemployment Tax	1	43	42	3	17	1	3	44	0	6	38	17	3	0	4	
Total for General Manager's Office	787	59,162	56,982	4,087	23,737	1,060	4,330	59,616	272	7,569	51,260	23,253	4,511	121	6,025	<u> </u>
Board of Commissioners														_		
Commissioner	7	492	474	34	198	9	26	40.6								
Commissioner	7	492	474	34	198	9	36 36	496 496	2	63 63	427 427	194	38	1	50	
Commissioner	7	492	474	34	198	9	36	496	2	63	427 427	194 194	38 38	1	50 50	
Total for Board of Commissioners	20	1,477	1,423	102	593	26	108	1,489	7	189	1,280	581	113	3	150	
Part-Time Employees														<u>u</u>		
Office - Part Time		2.867	2,827		500											
Percentage of Employee's Total Wages		2,007	2,827		560 6.51%							2,347				
FICA Tax		219	216		43							27.29% 180				
Retirement			2.0		~							180				
Insurance																
Unemployment Tax		74	73		14							60				
Maintenance - Part Time		528	104		36						408			64		
Percentage of Employee's Total Wages		46.32%	9.12%		3.16%						35.79%			5.61%		
FICA Tax		40	8		3						31			5		
Retirement														-		
Insurance																
Unemployment Tax		103	20		7						79			12		
Total Pro Forma Wages and Overheads	7, <b>8</b> 94 \$	598,648	574,047 \$	42,988	<b>3 238,376 \$</b>	10,804 \$	44,002 \$	602,506 \$	2,965 \$	79,043 \$	506,693	<b>\$</b> 245,097	46,046 \$	1,382 \$	41,402 \$	
Total For All Accounts						-										

Total For All Accounts

\$ 3,041,894

#### Attachment E

				Ν	Ionregulated	ł	
	Regula	ated		t Ramp and	East	West	
	 Water	Sewer	Bai	t Shop	Laurel	Laurel	(Ref.)
Assets Not Shared	\$ 802,253	\$283,351	\$	564			(1)
Shared Assets Water Meters	 32,139 (5,070)	9,112 5,070		107	\$13,943	\$18,795	(2) (3)
Pro Forma Less: Test-Year	829,322 (903,468)	297,533 (388,194)		671 -	13,943	18,795	
Adjustment	\$ (74,146)	\$ (90,661)	\$	671	\$13,943	\$18,795	

Staff's adjustments to the test-year depreciation expense that Wood Creek reported for its regulated and nonregulated operations are shown and explained below.

(1) Pro Forma Depreciation on Assets that are Not Shared. The calculation of pro forma depreciation expense on assets that are dedicated to either the Water Division, Sewer Division, or Boat Dock and Bait Shop are shown in the tables below. Note that these tables do not include all of the unshared assets listed on the plant ledger provided in the Application. The tables include only the assets upon which test-year depreciation was accrued. Assets that did not accrue test-year depreciation, such as land and assets that were fully depreciated prior to the beginning of the test year, are not shown. Also note that there are many assets shown in the tables that appear inside the areas that are shaded in gray. Staff made no adjustments to these assets. Their pro forma depreciation is the same as their test-year depreciation. Adjustments were made only to the assets that are outside the shaded areas.

#### Water Division Unshared Assets

V	Vood Creek's Plant Ledger		NARUC	Prop	osed	by Staff
Item No.	Asset Title	 Cost	Acct. No.	Life		preciation
4	Plant Furnace	\$ 1,172	321	40	\$	29
474	Cabinets at Plant	8,900	331	40		223
475	3 Ton HP/Duct PTS/Lab	4,480	331	40		112
90	Computer - Plant	2,976	397	-		-
92	Computer & Printer - Lab	1,873	397	-		_
	Structures & Improvemen	795,118	311	35		22,718
	Plant Gate & Sign	4,662	331	35		133
	Sign at Plant	4,662	331	35		133
473	Gate at Plant	1,392	331	35		40

M	Vood Creek's Plant Ledger			NARUC	Prop	osed by Staff
Item No.	Asset Title	_	Cost	Acct. No.	Life	Depreciation
	2					
402		\$	234,229	331	40	\$ 5,856
403	Structures and Improvem		559,813	331	40	13,995
404	Structures and Improvem		735,684	331	40	18,392
405	Structures and Improvem		1,870,601	331	40	46,765
406	Roof-Plant		16,000	331	40	400
407	Roof-Chemical Building		6,575	331	40	164
408	Storage Building		1,700	331	40	43
410	Fence		448	331	40	11
497	New Water Plant		6,145,882	331	40	153,647
500	Structure & Improvement		179,869	331	40	4,497
264			795,118	390	35	22,718
245	Collecting & Impounding		30,880	312	50	618
246	Supply Mains		4,484	343	50	90
481	Pulse Feeder Pump		12,982	332	35	371
511	Pumping Equipment		5,196	324-7	20	260
247	Electric Pumping Equipme		9,100	321	40	228
248	Electric Pumping Equipme		86,906	321	40	2,173
249	Electric Pumping Equipme		132	321	40	3
250	Electric Pumping Equipme		310,976	321	40	7,774
251	Electric Pumping Equipme		80	321	40	2
252	Electric Pumping Equipme		4,822	321	40	121
253	Electric Pumping Equipme		21,807	321	40	545
254	Electric Pumping Equipme		47,340	321	40	1,184
255	Elec Pump Equip Vaughn		210,000	321	40	5,250
451	Electric Pumping Equipme		12,099	321	40	302
510	Pumping Equipment		119,530	324-7	20	5,977
413	Water Treatment Equipme		906		50	18
423	Pressure Recorder		326		-	-
424	Recorders		649	394	20	32
425	Chlorine Machine		2,285	332	25	91
426	Air Compressor		1,495	394	20	75
427	Chemical Pump		1,001	328	25	40
428	Water Treament Equipme		656	332	35	19
429	Recorder		573	394	20	29
430	Water Treament Equipme		12,445	332	35	356
431	Chemical Feed Addition - SE		191,041	332	35	5,458
432	Water Treament Equipme		2,461	332	35	70
433	Water Treament Equipme		22,500	332	35	643
498	New Water Plant	1	6,189,620	331	40	154,741
502	Water Treament Equipme		31,442	332	35	898

# Water Division Unshared Assets

Attachment E Case No. 2015-00428

	ood Creek's Plant Ledger			NARUC	Pro	oposed by Staff
Item No.	Asset Title	_	Cost	Acct. No.	Life	Depreciation
265	Dist Reservoirs & Standpipes	\$	89,960	342	50	\$ 1,799
266	Distb. Reservoirs & Stand		309,159	342	50	6,183
267	Distb. Reservoirs & Stand		37,509	342	50	750
268	Distb. Reservoirs & Stand		8,317	342	50	166
269	Distb. Reservoirs & Stand		217,958	342	50	4,359
270	Dist Reservoirs & Standpipes		850	342	50	17
271	Dist Reservoirs & Standpipes		775,776	342	50	15,516
	Fence at Plant		6,495	342	50	130
273	Tank		7,540	N/A	50	151
274	Water Tank		21,851	342	50	437
275	Reservoirs and Standpipes		308	342	50	6
276	Vaughn Ridge Tank		577,509	342	50	11,550
277-503	Transmission and Dist Mains		10,735,815	343	50	214,716
512	Trans & Dist Mains		68,497	343	50	1,370
569-579	Trans & Dist Mains		49,299	343	50	986
598-607	Transm & Distrib Mains		92,920	343	60	1,549
339	Services		36,691	345	-	-
340	Services		42,574	345	30	1,419
341	Services		59,841	345	30	1,995
342	Services		46,053	345	30	1,535
343	Services		36,553	345	30	1,218
344	Services		44,506	345	30	1,484
345	Services		44,834	345	30	1,494
346	Services		38,330	345	30	1,278
347	Services		68,512	345	30	2,284
348	Services		73,177	345	30	2,439
349	Services		58,561	345	30	1,952
350	Services		60,974	345	30	2,032
351	Services		75,866	345	30	2,529
453	Services		84,232	345	50	1,685
483	Services		60,436	345	30	2,015
504	Services		60,144	345	30	2,015
	Services		20,178	345	30	673
	Services		47,620	345	30	1,587
	Services		48,858	345	30	
and a second	Services		11,821	345	40	1,629
	Services		23,999	345	40	296 600
	Meters		1,565	345	40 20	000
	Meters		14,968	346	35	428

# Water Division Unshared Assets

	Nood Creek's Plant Ledger		NARUC	Pr	oposed by Staff
Item No.	Asset Title	 Cost	Acct. No.	Life	Depreciation
375	Meters	\$ 14,924	346	35	\$ 426
376	Meters	34,122	346	35	975
377	Meters	50,283	346	35	1,437
378	Meters	66,762	346	35	1,907
379	Meters	143,868	346	35	4,111
380	Meters	53,048	346	35	1,516
381	Meters	36,138	346	35	1,033
382	Meters	120,746	346	35	3,450
383	Meters	33,969	346	35	971
455	Meters	76,012	346	35	2,172
484	Meters	21,073	346	35	602
505	Meters	31,888	346	35	911
514	Meters	64,793	346	35	1,851
571	Meters	24,643	346	35	704
581	Meters	75,317	346	35	2,152
609	Meter & Meter Installations	113,875	347	45	2,531
600		35,912	346	45	798
396	Hydrants	5,941	348	40	149
397		7,174	348	40	179
398	Hydrants	2,151	348	40	54
399	Hydrants	4,054	348	40	101
400	Hydrants	7,935	348	40	198
401	Hydrants	25,967	348	40	649
454	Hydrants	8,792	348	40	220
485	Hydrants	6,350	348	40	159
506	Hydrants	6,532	348	40	163
515	Hydrants	10,979	348	40	274
582	Hydrants	8,869	348	40	
610	Hydrants	10,192	348	40	222
256	Temporary Dams	21,732	348	50	255
584	Telemetry	2,980	397	10	435
618	Communication Equipment	18,500	397	10	298
		10,000	091	10	1,850

# Water Division Unshared Assets

Pro Forma Depreciation on Assets Used Only by the Water Division

802,253

\$

Item No.	Wood Creek's Plant Ledger Asset Title	Cost	Acct. No.	Life	Depreciation
			Acct. NO.		Depreciation
519	Structure & Improvement	\$ 7,290	390	20	\$ 365
521	Structure & Improvement	8,375	390	20	419
578		20,220	390	20	1,011
589		1,143	390	20	57
520		1,401,954	000	40	35,049
522	Collection Sewers	120,364		40	3,009
523	Collection Sewers	8,626		40	210
524	Collection Sewers	762,695		40	19,06
525	Collection Sewers	28,218		40	70
526	Collection Sewers	119,022		40	2,97
527	Collection Sewers	3,624		40	2,37
528		1,079,888		40	26,99
529		18,182		40	45
574	Collections Force Main	772,400		40	19,310
590		2,772		40	19,310
602		11,061		40	
542		35,948	324-7	40	27
543	• • • • • • • • • • • • • • • • • • •	38,849	324-7	7	EEE
544	Pumps	994,788	324-7		5,55
545	Pumps	96,812	324-7	35 7	28,42
577	Electric Pumping Equipment	285,175			13,830
592	Electric Pumping Equipment	117,263	324-7	35	8,148
617	Electric Pumping Equipment	93,744	324-7	7	16,75
548	56,264 Service Lines	140,660	324-7	20	4,68
552	Services		345	10	14,06
553	Services	11,325	345	10	1,13
554	Services	41,600	345	10	4,160
555	Services	29,329	345	10	2,933
556	Services	32,002	345	10	3,200
557	Services	130,690	345	10	13,069
558	Services	146,685	345	10	14,669
575	Services	89,191	345	10	8,919
591	Services	100,804	345	10	10,080
603	Services	130,538	345	10	13,054
616	Services	49,702	345	35	1,420
562	Receiving Wells/Pump Pit	86,857	345	35	2,482
563	Receiving Wells/Pump Pit	75,000	321	40	1,875
564	Receiving Wells/Pump Pit	4,259	321	40	106
565	Receiving Wells/Pump Pit	3,409	321	40	85
566	Receiving Wells	24,549	321	40	614
576	Receiving Well & Pumps	20,982	321	40	525
604	Rec Wells & Pumps	15,920	321	40	398
605	Electric Pump	4,680	321	30	156
000	Licetric Fullip	58,930	324-7	20	2,947

# Sewer Division Unshared Assets

Pro Forma Depreciation on Assets Used Only by the Sewer Division

\$ 283,351

Attachment E Case No. 2015-00428

#### Boat Dock and Bait Shop Unshared Assets

Detail of the assets used only by the Boat Ramp and Bait Shop are listed below. Because these assets are used for non-regulated operations, Staff did not review the reasonableness of their depreciable lives. Test-year depreciation on these assets, in the amount of \$564, was reported by the Water Division along with the depreciation of other water assets in account 408. Staff removed the Boat Ramp and Bait Shop depreciation from account 408 and added it to account 675.2 with the other expenses of the Boat Ramp and Bait Shop.

Wo	od Creek's Plan	t Leo	dger	C	Current	
Item No.	Asset Title		Cost	Life	Depr	reciation
6	Lake-Building	\$	2,318	50	\$	46
244	Boat Dock		10,362	20		518
Total		\$	12,680		\$	564

(2) <u>Calculation and Allocation of Depreciation of Shared Assets</u>. During the test year, Wood Creek owned many assets that were shared by its regulated and nonregulated operations. For the purposes of this report, Staff classified each shared asset as either an office asset or field asset. Office assets include Wood Creek's office building and all furniture and equipment housed therein. Field assets include a warehouse, power equipment, transportation equipment and tools, shop, and garage equipment. All test-year depreciation on shared assets was reported by the Water Division. Wood Creek did not allocate depreciation to the Sewer Division or nonregulated operations.

In pro forma operations, Staff first calculated depreciation on the shared assets using the lives found appropriate by Engineering Staff. It then allocated the depreciation to the Water Division, Sewer Division and nonregulated operations using appropriate allocation factors. Staff's calculation of pro forma depreciation on shared assets is shown in the tables below. Note that Staff made no adjustments to the assets shown in the tables that are inside the areas shaded in gray. Their pro forma depreciation is the same as their test-year depreciation. Adjustments were made only to the assets that are outside the shaded areas. Staff's allocation of pro forma depreciation follows the tables that show the calculations.

	Wood Creek's Plant Ledger			NARL	JC	Prop	osed by Staff
Item No.	Asset Title		Cost	Acct. N	No.	Life	Depreciation
1	Storage Building	\$	1,769	3	390	40	\$ 44
2	New Office	•	172,919		390	40	4,323
5	Bathroom Fixtures		165		390	40	4
7	Fence		3,843		390	40	96
8	Structures & Improvemen		33,843		390	35	967
9	Structures & Improvement		6,855		390	35	196
439	Blacktop Office Parking L		13,428		390	35	384
440			1,594		390	35	46
441	Metal Carport		1,620		90	35	46
443	Building		29,042		31	40	726
476	Shelving		1,400		31	40	35
501	Structure & Improvement		17,230	3	90	35	492
568	Structures & Improvements		1,107		90	35	32
91	Printer/Reload System		2,078	3	97	-	-
93	Computer System, Modem		2,065	3	97	-	-
94	(10) 17 LCD Monitors, Serve		15,935	3	97	-	-
95	Computer, Monitor, Wirel		4,402	3	97	10	440
96	Computer		3,782	3	97	10	378
435	Computer Desk & Cabinets		2,100	3	91	20	105
436	Desk & Cabinet		2,809	3	91	20	140
	Traverse Software		2,385		37	10	239
486	Chairs		5,308	3	91	20	265
487	Office Copier		3,039	3	91	20	152
507	United Systems		29,851	3	91	20	1,493
	Office Furniture		5,313	3	91	20	266
	Office Furniture and Equipment		1,683	3	91	20	84
583			12,093	3	91	20	605
597			11,725	3	91	20	586
611	Office Equipment		30,807	3	91	20	1,540

## Calculation of Depreciation on Shared Office Assets

Pro Forma Depreciation on Office Assets

\$ 13,684

Attachment E Case No. 2015-00428

Item No.	Wood Creek's Plant Ledge Asset Title	-	Cost	NARUC			by Staff
11011110.			COSI	Acct. No.	Life	Depr	eciation
438	Fence at Warehouse	\$	8,735	390	35	\$	250
477	Warehouse Heat Pump		2,000	331	40		50
478	Roof-Storage Building		2,800	331	40		70
479	Road to Sludg Dump		7,036	331	35		201
480	Top Soil Bin		23,280	390	40		582
530	JD 4501 Dozer		89,500	396	10		8,950
531	KOMATSU PC78MR-6		72,000	396	10		7,200
490	Dump Truck		56,880	392	10		5,688
222	Mole Hammerhead		4,140	394	15		276
585	GMG G7 Tanker		7,000	392	7		1,000
586	2012 Ford F-150		17,363	392	7		2,480
587	2012 Ford F-150		17,363	392	7		2,480
593	2013 Ford F-150 4WD		25,711	392	7		3,673
594	2013 Ford F-150 4WD		25,711	392	7		3,673
612	2014 Ford 150 4WD		21,402	392	7		3,057
613	Ford F-150 2WD		17,967	392	7		2,567
614	Ford F-150 2WD		17,967	392	7		2,567
615	2014 Ford F-150 4WD		26,402	392	7		3,772
170	Cummins Diesel 40-KN Mob		10,000	002	-		
171	HoleHog		4,437		-		-
172	Mitsubishi FX 503041 Forklift		19,260		_		-
173	John Deere 310 Backhoe		22,680		-		
174			1,275	394	15		85
446	J x 70 Case IH Tractor		19,900	394	15		1,327
447	Stihl TS-400 With Blades		1,156	394	15		77
491	Two Cash Registers		968	391	20		48
	Forklift		21,800	394	15		1,453
493	John Deere Backhoe		79,000	394	15		5,267
595	John Deer Mower		5,288	394	15		353
596	Tiller		1,500	394	15		100
444	Asphalt Cutter		2,500	394	15		167
445	Handheld Meter Readers		5,180	394	15		345
494	Warehouse Alarm		4,557	394	15		304
496	Overbilt Trailer		25,457	394	15		1,697
508	Misc. Equipment		1,665	394	15		111
219	Miscellaneous		1,000	394	-		-
220	New Hammerhead		3,740	394	15		249
223	Gator 7 x 18' Trailer		4,395	394	15		293

# Calculation of Depreciation on Shared Field Assets

Pro Forma Depreciation on Field Assets

Attachment E Case No. 2015-00428

### Allocation of Depreciation of Shared Assets

Because office assets are used by the GM's Office, CFO, assistant CFO, and customer account representatives to carry out the daily operations of Wood Creek's regulated and nonregulated operations, Staff allocated pro forma office depreciation to each of Wood Creek's regulated and nonregulated operations based on the percentage of the pro forma wages of these employees that Staff assigned or allocated to each of those operations. Staff's allocation of office depreciation is shown below.

	0	lages for ffice and General Nanager			
	II	nployees	Percent	A	location
Water Division Sewer Division Boat Ramp and Bait Shop East Laurel West Laurel	\$	178,458 35,285 3,846 137,278 137,450	36.25% 7.17% 0.78% 27.88% 27.92%	\$	4,960 981 107 3,816 3,820
Total	\$	492,317	100.00%	\$	13,684

Staff allocated field asset depreciation based on the percentage of pro forma wages of the 21 field employees that Staff charged to Wood Creek's regulated and nonregulated operations, recognizing that field assets were used by these employees to operate and maintain the water distribution systems of Wood Creek and East and West Laurel as well as Wood Creek's sewer collection system. Staff's allocation of field asset depreciation is shown below. Note that no depreciation was allocated to the Boat Ramp and Bait Shop since none of the 21 field employees charged time to its test-year operations.

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	ages for Field nployees	Percent	_ A!	location
Wood Creek Water Division Wood Creek Sewer Division Boat Ramp and Bait Shop East Laurel West Laurel	\$ 368,396 110,216 - 137,278 202,970	44.99% 13.46% 0.00% 16.76% 24.79%	\$	27,179 8,131 - 10,128 14,974
Total	\$ 818,860	100.00%	\$	60,412

The table below summarizes Staff's allocation of pro forma depreciation of shared assets to Wood Creek's regulated and nonregulated operations.

		of Depred ared Asse		on
	 Office	 Field		Total
Wood Creek Water Division Wood Creek Sewer Division Boat Ramp and Bait Shop East Laurel West Laurel	\$ 4,960 981 107 3,816 3,820	\$ 27,179 8,131 - 10,128 14,974	\$	32,139 9,112 107 13,943 18,795
Total	\$ 13,684	\$ 60,412	_\$	74,096

(3) <u>Allocation of Depreciation on Water Meters to the Sewer Division</u>. During the test year, the Sewer Division provided sewer service to 1,158<sup>31</sup> of the Water Division's 5,231 water customers. The monthly sewer bills of the 1,158 combination water and sewer customers were determined using water meter readings. Pro forma depreciation expense calculated by Staff for the Water Division includes \$27,973 for depreciation of water meters. Because the Sewer Division benefited from the water meters, it is appropriate to allocate a portion of the water meter depreciation to the Sewer Division. As shown below, Staff allocated \$5,070 to the Sewer Division based on the percentage of Wood Creek's 1,158 combination water and sewer customers when compared to the total number of its water and sewer customers.

<sup>&</sup>lt;sup>31</sup> As previously noted, Wood Creek provided sewer service to approximately 1,235 customers during the test year. It provided water service 1,158 of those customers. East Laurel provided water service to the remaining 77 sewer customers.

Allocation of Depreciation on Water Meters					
	Number of				
Division	Customers	Percent	Allocation		
Water	5,231	81.88%	\$22,903		
Sewer	1,158	18.12%	5,070		
Total	6,389	100.00%	\$27,973		

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## Attachment F

Service Contracts between Wood Creek and East and West Laurel

#### **CONTRACT**

October 5, 2007

This contract and agreement made and entered into at London, Kentucky by and between Wood Creek Water District and East Laurel Water District. That for consideration of the mutual covenants and agreements herein contained, the parties hereby contract as follows:

(1) Wood Creek Water District will furnish all materials and labor as necessary to perform normal service and maintenance to the customers and water distribution system of East Laurel Water District, including meter installations, service, maintenance, removals and repairs, and normal water line maintenance and repairs.

(2) East Laurel Water District will pay to Wood Creek Water District the actual cost of materials and labor used in the performance of this agreement.

(3) Payments will be made on a monthly basis by East Laurel Water District and pursuant to monthly billings by Wood Creek Water District.

(4) The term of this contract shall be one (1) year from the date hereof, and thereafter until terminated by either of the parties upon thirty (30) days written notice.

EAST LAUREL WATER DISTRICT

By: CHAIRMAN

WOOD CREEK WATER DISTRICT By: <u>Chairman</u>

Attest: TREASURER

#### CONTRACT

October 8, 2007

This contract and agreement made and entered into at London, Kentucky by and between Wood Creek Water District and West Laurel Water Association. That for consideration of the mutual covenants and agreements herein contained, the parties hereby contract as follows:

(1) Wood Creek Water District will furnish all materials and labor as necessary to perform normal service and maintenance to the customers and water distribution system of West Laurel Water Association, including meter installations, service, maintenance, removals and repairs, and normal water line maintenance and repairs.

(2) West Laurel Water Association will pay to Wood Creek Water District the actual cost of materials and labor used in the performance of this agreement.

(3) Payments will be made on a monthly basis by West Laurel Water Association and pursuant to monthly billings by Wood Creek Water District.

(4) The term of this contract shall be one (1) year from the date hereof, and thereafter until terminated by either of the parties upon thirty (30) days written notice.

WEST LAUREL WATER ASSOCIATION

By: PRESIDENT

Attes

WOOD CREEK WATER DISTRICT

By: CHAIRMAN

Attest:

\*Wood Creek Water District 1670 Hal Rogers Parkway P. O. Box 726 London, KY 40743

\*Dewayne Lewis Wood Creek Water District P. O. Box 726 London, KY 40743

\*Mr. Kenneth Taylor Kenvirons, Inc. 452 Versailles Road Frankfort, KENTUCKY 40602