

**BOONSBORO KEEDYSVILLE WATER ADVISORY BOARD**  
**Wednesday December 7, 2016 6:30 PM**  
**Keedysville Town Hall**

**AGENDA**

*Rules of procedure:* Members of the Water Advisory Board, alternates and town staff or others involved with the operation of the joint water system are welcome to sit at the table during our meetings provided there is sufficient room. Discussion is open but with priority given to members of the Board. The Chair reserves the right to limit discussion to Board members at his/her discretion in accordance with the Board's Bylaws. Voting is restricted to the 5 members of the Board or alternates serving in the place of a Board member.

- I. Approval of minutes from August 17, 2016 meeting
- II. True-up of FY16 cost allocation to Keedysville (Austin)
- III. FY17 cost projections for Keedysville (Austin)
- IV. True-up revision proposals (Austin)
- V. Boonsboro's 5-year CIP projections (Megan)
- VI. Update on water capacity review by consultant (Megan)
- VII. New business
- VIII. Public comment

***NEXT SCHEDULED MEETING:*** February 15, 2017 6:30 PM at Boonsboro Town Hall  
(Regular meetings are 3<sup>rd</sup> Wednesday of February, May, August and November)

Standard Agenda Schedule:

**February**

- Review of current year CIP projects
- Review of proposed CIP projects for coming year

**May**

- Review of current year CIP projects
- Review of proposed CIP projects for coming year

**August**

- Update of current year CIP projects

**November**

- True-up of prior year costs
- Projected costs for current year
- Review of current year CIP projects (included in projected costs for current year)
- Review of proposed CIP projects for coming fiscal year

Other items to add:

- Reports from Towns on state water allocations, expected water use increases, recharge area

**BOONSBORO KEEDYSVILLE WATER ADVISORY BOARD**  
**MEETING MINUTES**  
**Wednesday, August 17, 2016**

**Voting members present:** Austin Abraham, Chairperson; Terry Davis (B); Paul Loeber (B); Eric Kitchen (B-alternate); Ken Lord (K-alternate); Matt Hull (K-alternate);

**Members absent:** Barry Levey (K); Gina Ellis (K-alternate); Rob Hutzell (B-alternate); Bobby Mose (B-alternate)

**Others present:** Megan Clark (B), Boonsboro Town Manager; Pete Shumaker (B), Utilities Superintendent; Ray Hoffman (B), Cindy Harris (B), Recording Secretary

The meeting convened at 6:37 PM at Boonsboro Town Hall.

- I. **Approval of minutes from May 18, 2016 meeting.** Motion by Member Hull, second by Member Davis to approve the minutes with no corrections. Motion carried unanimously.
  
- II. **Review of FY16 and FY17 capital projects (Megan).** Boonsboro Town Manager Clark reviewed the FY2016 WF CIP Budget Update. She pointed out the Capital Outlay total is \$68,455 over budget due to several items. The Town purchased 150 new meters, placed a deposit on the new CUSI billing software, and the correlator purchase was over budget. However, FY16 User Fees (used to fund capital improvements) received so far have exceeded the Town expenses.

Under the FY17 Capital Outlay Projects, the Town is moving forward with replacing six water plant filters this Fall, two in Keedysville and four in Boonsboro. As stated at the May meeting, Boonsboro/Keedysville is the first customer to use rehabilitated water filters at a cost of \$8,000 per filter. Although more than budgeted, it is a substantial savings versus \$20,000 per filter if purchased new, and are guaranteed to last 20 years. The Ford F-350 truck and Handheld meter reader are over budget although \$8k was saved by purchasing earlier in the year. Last, the Bobcat may not be purchased this year as it may not fit into the budget as planned. Chairman Abraham pointed out that actual expenses will be used for the True-Up in November.

- III. **Water Capacity Update (Megan).** Boonsboro is undergoing a lot of development and has begun the permit renewal process. Clark met with consultant ALWI in June to assist with the MDE permit application. ALWI was impressed with the efforts being made to mitigate water loss. The consultant will draft a permit package for MDE and meet with

Boonsboro to review what is needed. Each water source, except for Warrenfeltz and Crestview, has its own permit. Crestview is currently not operational but Clark will discuss options to bring it online. Chairperson Abraham proposed having Keedysville involved in the review meeting, which was met with much agreement from both towns. Town Manager Clark will contact Keedysville when that time comes. Clark noted the town is in search of an additional water source to use as backup. The permitting process is expected to take approximately 18 months.

- IV. **Continued discussion of new water agreement (Austin).** Chairperson Abraham stated he is still working on this and has met with Town Manager Clark to review, and may have something to present at the February 2017 meeting. The group discussed several ongoing concerns to be addressed in the new agreement's verbiage including capacity, allocation, steps to foster communication during supply shortages, disagreements between the towns, etc. Superintendent Shumaker noted the amount of water currently being pumped is not making any impact on the spring levels. Chairperson Abraham will talk with his contacts at Hagerstown whether there is a "trigger" for reaching a certain allocation and what MDE does when reaching this threshold. This information could help craft our verbiage in addressing each Town's allocation should water supplies become limited in the future.
- V. **New business.** Member Davis provided an update on the correlator. Town Engineer Brian Hopkins, Public Works Superintendent Greg Huntsberry and himself have all been trained on the equipment. Boonsboro will perform a leak detection of Keedysville lines possibly in November to look for leaks. The correlator has already proven accurate by finding a leak in the Kinsey Heights development. This, in addition to the ongoing meter replacements is helping to track where the water is going and help to reduce water losses. Superintendent Shumaker said he was concerned with the appearance of weeds around the plant at Mt. Hebron Road should MDE visit the site. Member and Mayor Lord will address this with Shumaker directly. Member Davis announced he had resigned his position as BMUC Chair and no replacement had been designed yet.
- VI. **Public Comment.** There was no comment from the public.

Chairperson Abraham declared the meeting adjourned at 8:16 PM. The next meeting date is scheduled for Wednesday, December 7, 2016 at 6:30 PM at Keedysville Town Hall.

Submitted by: Cindy Harris, Recording Secretary

**BOONSBORO KEEDYSVILLE WATER ADVISORY BOARD**

**PROPOSED COST-SHARING TRUE-UP FOR FY16 AND PROJECTIONS FOR FY17**

*Prepared by: Austin Abraham, Chair*

**TABLE OF CONTENTS**

*Summary Documents:*

Summarized FY16 True-up and FY17 Projections .....1  
True-Up Narrative .....2  
True-Up and Projections Chart .....3

*Detail Support Documents:*

Boonsboro Water Fund Statement of Revenue  
and Expenditures FY16 .....4  
Boonsboro Water Fund Budget FY17 .....5-6  
Boonsboro Water Fund Capital .....7  
Water Usage Report FY16 .....8  
Daily Operations Labor for Tank and Booster Station FY16 .....9  
Daily Operations Labor for Tank and Booster Station FY17 .....10  
Boonsboro Billing and Customer Accounting for  
Keedysville Accounts FY17 .....11  
Annual Recap FY11 – FY16 .....12

**Summarized True-Up and Projection Calculations**  
**FY15 FY16 FY17**

Ln	Description	FY15 Actual	FY16 Budget	FY16 Actual	FY17 Budget
1	Applicable B operating expenses to be shared (65%)	\$277,196	\$331,119	\$363,657	\$394,505
2	Shared capital	14,737	50,500	55,266	82,478
3	Total to be allocated to K based on water pumped	291,933	381,619	418,923	476,983
4	K % of total water pumped	14.1%	15.0%	14.5%	15.0%
5	Sub-total	41,163	57,243	60,744	71,547
6	Direct billing expenses	2,886	5,653	5,653	5,465
7	Daily tank/booster station labor @1/2 hr. per day	5,434	5,733	5,911	5,903
8	1-time utility adjustment	-3,043			
9	Total due from K to B for year	\$46,440	\$68,629	\$72,308	\$82,915
10	Paid by K for 4 quarters			(68,628)	
11	True-up amount (Balance due to B)			\$3,680	

Prepared: November 28, 2016 (Austin)

**Boonsboro Keedysville Water Service**  
**Narrative of the Cost-Sharing True-up for FY16 and Projections for FY17**

**Proposed True-up of Keedysville Cost for FY16**

Keedysville's (K) estimated cost for FY16 was based on projections of Boonsboro's (B) allocable operating expenses of \$509,414, capital of \$50,500, labor for daily operations of the tank and booster station of \$5,733, and K using 15% of the water pumped into the towns. Actual numbers were allocable expenses of \$559,473, capital of \$55,266, tank and booster station operations labor of \$5,911, and K's use of 14.3% of the water.

While allocable operating expenses and capital were higher than budgeted, this was partially offset by a lower percentage of water used. The operating expenses exceeded budget primarily due to an increase in the percentage of general fund labor allocated to water beginning in April 2016 from 25% to 33% and to higher than expected maintenance and repair costs.

The total amount due from K to B for the year is \$72,308. As K has paid \$68,628 for FY16 in projected payments, the net true-up is a final payment from K to B of \$3,680 (accounts for all rounding).

**Proposed Estimated Payments for Keedysville for FY17**

The proposed estimated payments for FY17 include allocable operating expenses of \$606,932, an operating contingency of \$20,000, capital of \$82,478, annual billing and administrative costs of \$5,465, tank and booster station operations labor of \$5,903, and K's % of water at 15%. Capital includes \$49,200 for water plant filters, \$5,000 to replace the casing in well #8, \$16,378 for a truck replacement, \$6,900 for meter reading equipment, and \$5,000 for weir wall stabilization.

The projected annual payment from K to B is \$82,915 (\$20,729 per quarter). This is \$11,435 higher than the FY16 actual expense due primarily to higher wage and benefit costs including the increase in general fund employee cost allocation from 25% to 33% for the entire year.

*Prepared by: Austin Abraham November 28, 2016*

Line # from rate formula	Description	FY14/15			FY15/16			FY16/17		
		Budget	Actual	Difference	Budget	Actual	Difference	Budget	Actual	Difference
1	Boonsboro Operating Expenses	\$671,181	\$670,735		\$781,286	\$679,404		\$852,225		
2	Less Annual loan fee to MDE(1)							0		
3	Adjustment #1 - Heat costs	(1,500)	(1,489)		(1,500)	(316)		(1,500)		
4	Adjustment #2 - Property insurance	(4,000)	(5,177)		(4,000)	(6,580)		(4,000)		
5	Adjustment #3 - Less Budgeted Contingency	(10,756)	NA		(55,436)	NA		(23,160)		
6	Adjustment #3A - Add back contingency	30,000	NA		-	NA		20,000		
7	Adjustment #4 - Reimb'd engineering fees	-	-		-	-		-		
8	Adjustment #5 - Capital Expense	(251,500)	(229,293)		(105,250)	(100,275)		(125,700)		
9	Adjustment #5A - Debt-service-interest	(59,625)	NA		(94,300)	NA		(99,565)		
10	Adjustment #6 - direct pay by K to B									
11	Customer billing	(2,886)	(2,886)		(5,653)	(5,653)		(5,465)		
12	Repairs by B for K	-	-		-	(1,196)		-		
13	Daily operations labor for tank + booster station	(5,407)	(5,434)		(5,733)	(5,911)		(5,903)		
14	Total applicable operating expenses	\$365,507	\$426,456	\$60,949	\$509,414	\$559,473	\$50,059	\$606,932	\$0	\$0
15	Less 35% for the estimated cost of maintenance and repair to B. distribution system	(127,927)	(149,260)		(178,295)	(195,815)		(212,426)		
16	Plus cash cost of any capital improvement serving both Towns	51,500	14,737		50,500	55,266		82,478		
17	Plus debt-service on any financed improvements serving both towns	0	-		-	-		-		
18	Total	\$289,080	\$291,934	\$2,854	\$381,619	\$418,923	\$37,304	\$476,984	\$0	\$0
19	Keedysville % of total water pumped	16.0%	14.1%		15.0%	14.5%		15.0%		
20	Keedysville annual cost water service	\$46,253	\$41,163	-\$5,090	\$57,243	\$60,744	\$3,501	\$71,548	\$0	\$0
21	K portion of customer billing expense	2,886	2,886		5,653	5,653		5,465		
22	Daily operations labor for tank + booster station	5,407	5,434		5,733	5,911		5,903		
22a	Less B portion of utilities for booster station Jan-May		(3,043)							
23	<b>Keedysville total annual expense</b>	<b>\$54,546</b>	<b>\$46,440</b>	<b>-\$8,106</b>	<b>\$68,629</b>	<b>\$72,308</b>	<b>\$3,679</b>	<b>\$82,915</b>	<b>\$0</b>	<b>\$0</b>

Line #	Description	Budget	Actual	Difference
24	Payments:			
25	Estimated quarterly cost	13,636	17,157	20,729
26	First quarter billed		17,157	
27	Second quarter billed		17,157	
28	Third quarter billed		17,157	
29	Fourth quarter billed		68,628	
30	True-up due to B/(due from B)		<u>\$3,680</u>	<u>\$0</u>

NOTES:

Prepared by: Austin Abraham November 28, 2016





**MAYOR AND COUNCIL OF BOONSBORO**  
**Statement of Revenues and Expenditures - Budget and Actual - Water Utility Fund**  
**(Budgetary Basis)**  
**Year Ended June 30, 2016 (Unaudited)**

	Budgeted Amounts		Actual	Variance with Final Budget Positive (Negative)
	Original	Final		
<b>OPERATING REVENUES</b>				
Charges for services	\$ 545,040	\$ 545,040	\$ 508,742	\$ (36,298)
Charges for debt services	20,000	20,000	22,629	2,629
Charges for administration	54,546	54,546	60,524	5,978
Connection fees and user fees	150,000	150,000	237,050	87,050
Other income	11,300	11,300	13,024	1,724
<b>Total Operating Revenues</b>	<b>780,886</b>	<b>780,886</b>	<b>841,969</b>	<b>61,083</b>
<b>OPERATING EXPENSES</b>				
Maintenance and repairs	135,000	135,000	146,520	(11,520)
Chemicals	12,000	12,000	13,784	(1,784)
Electricity	50,000	50,000	58,151	(8,151)
Heating	1,500	1,500	316	1,184
Telephone	5,500	5,500	6,021	(521)
Advertising	500	500	334	166
Salaries	190,000	190,000	209,704	(19,704)
Insurance	15,000	15,000	17,623	(2,623)
Health/life insurance expense	36,000	36,000	46,958	(10,958)
Audit	5,000	5,000	6,200	(1,200)
Legal fees	500	500	-	500
Supplies	8,500	8,500	13,165	(4,665)
Miscellaneous	100	100	3,342	(3,242)
Uniforms	1,500	1,500	3,283	(1,783)
Professional memberships and certifications	2,000	2,000	3,090	(1,090)
Meeting expense	1,200	1,200	1,250	(50)
Payroll taxes	9,500	9,500	14,848	(5,348)
Pension expense	9,000	9,000	10,156	(1,156)
Testing	1,000	1,000	738	262
Truck expense	10,000	10,000	6,193	3,807
Equipment expense	10,000	10,000	9,130	870
Connections - water meters	20,000	20,000	6,073	13,927
Contingency fund	55,436	55,436	-	55,436
Postage	2,500	2,500	2,250	250
Capital outlay	105,250	105,250	100,275	4,975
<b>Total Operating Expenses</b>	<b>686,986</b>	<b>686,986</b>	<b>679,404</b>	<b>7,582</b>
<b>Operating Income</b>	<b>93,900</b>	<b>93,900</b>	<b>162,565</b>	<b>68,665</b>
<b>OTHER REVENUES AND (EXPENSES)</b>				
Interest expense	(24,000)	(24,000)	(30,117)	(6,117)
Debt service (principal)	(70,300)	(70,300)	(53,090)	17,210
Interest income	400	400	1,620	1,220
<b>Total other revenues and (expenses)</b>	<b>(93,900)</b>	<b>(93,900)</b>	<b>(81,587)</b>	<b>12,313</b>
<b>NET INCOME</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 80,978</b>	<b>\$ 80,978</b>

Note: Budgetary basis reflects loan proceeds as other revenue, principal payments on debt and capital equipment purchases as expenses, and does not reflect depreciation and amortization expense.

EXHIBIT A



TOWN OF BOONSBORO, MARYLAND  
WATER FUND  
FISCAL YEAR 2017 BUDGET

Proposed Water Rates July 1, 2016	IR	OR	IC	OC
Water Fixed Fee	\$12	\$35	\$17	\$33
1-18000 gallons	\$5.40/1000 gal	\$8.00/1000gal	\$5.40/1000gal	\$8.00/1000gal
18001 + gallons	\$6.60/1000gal	\$10.00/1000gal	\$6.60/1000gal	\$10.00/1000gal

	FY14	FY15	FY16	FY17
<b>Revenues</b>				
Water Charges-Boonsboro	365,000	465,810	545,040	601,896
Keedysville Admn. Charges	45,196	45,196	54,546	68,629
Debt Service-Alt 40 Waterline	0	18,475	20,000	20,000
Connection Fees	0	0	20,000	20,000
User Fees	65,000	130,000	130,000	130,000
Interest Income	400	400	400	400
Other Income	100	100	100	100
Hydrants - Boonsboro	11,200	11,200	11,200	11,200
<b>Total Revenues</b>	<b>486,896</b>	<b>671,181</b>	<b>\$781,286</b>	<b>\$852,225</b>
<b>Expenses</b>				
<b>Operations &amp; Maintenance</b>				
Salaries	107,000	131,000	180,000	235,000
Salaries-Overtime	5,000	5,000	5,000	0
Salaries-SP Overtime	0	4,000	5,000	0
Insurance - Property	4,000	4,000	4,000	4,000
Payroll Taxes	8,000	8,000	9,500	11,000
Audit Fees	6,000	6,500	5,000	6,000
Legal Fees	500	500	500	500
Advertising	0	500	500	500
Testing	1,000	1,000	1,000	1,000
Major Repair Expense	20,000	180,000	100,000	120,000
Maintenance & Repair	25,000	25,000	35,000	35,000
Uniforms	1,000	1,000	1,500	2,500
Cell Phones	1,000	1,000	2,000	2,500
Electricity	50,000	50,000	50,000	47,000
Heating	1,500	1,500	1,500	1,500
Health Insurance Expense	34,000	34,000	36,000	40,000
Workers' Comp Ins Expense	10,000	10,000	11,000	11,000
Vehicle Expense	3,000	3,000	4,000	4,000

EXHIBIT A

	FY14	FY15	FY16	FY17
Vehicle Gas	5,000	5,000	6,000	6,000
Meeting Expense	1,200	1,200	1,200	1,200
Training/Certification	1,000	1,000	2,000	2,000
Miscellaneous	100	100	100	100
Equipment Expense	2,500	2,500	10,000	10,000
Pension Expense	8,000	8,000	9,000	15,000
Chemicals	10,000	12,000	12,000	12,000
Maintenance Supplies	2,500	5,000	5,000	5,500
Office Supplies	3,500	3,500	3,500	4,000
Postage	1,500	1,500	2,500	3,000
Telephone	3,500	3,500	3,500	3,500
Contingency Fund	28,965	10,756	55,436	23,160
Connections - Water Meters	0	0	20,000	20,000
Loan Interest (SHA & Maple Ave)	28,965	32,000	20,000	8,900
Loan Interest Alt40 Waterline	0	2,610	4,000	4,000
MDE Alt40 Waterline Loan	0	19,300	19,300	19,300
Debt Service (SHA, Maple & CDA)	0	0	51,000	67,365
Capital Outlay	43,800	91,500	105,250	125,700
MDE Filtration Debt Serv. Loan	5,715	5,715	0	
<b>Total Expenses</b>	<b>427,215</b>	<b>671,181</b>	<b>\$781,286</b>	<b>\$852,225</b>

DEBT SERVICE/LOAN INTEREST SUMMARY		
	PRINCIPAL	INTEREST
SHA Main Street	28834	3991
Maple Avenue Waterline	16000	4300
CDA Infrastructure	22531	609
<b>TOTAL DEBT SERVICE/LOAN INTEREST</b>	<b>67365</b>	<b>8900</b>

Capital Outlay Projects	
Water Plant Filters (6 total)	\$32,000
Replace Casing In Well #8	\$10,000
Replace 2004 Ford F350	\$13,500
Bobcat	\$6,700
New Handheld Meter Reader	\$6,500
Water Modeling	\$30,000
Weir Wall Stabilization	\$5,000
Meter Replacement	\$22,000
<b>TOTAL PROPOSED FOR FY17</b>	<b>\$125,700</b>
<i>Estimate \$130,000 based on 20 tap fees @\$6500ea</i>	

**Boonsboro Water Fund Capital Expense  
FY16 and FY17**

<b>FY16 Capital In Audited Financial Statement</b>			
<b>Description</b>	<b>Amount</b>	<b>Shared</b>	<b>Notes</b>
Homesteader Water Trailer	\$4,413	\$4,413	
Ferguson Leak Finder	\$22,996	\$0	K paid its portion during FY16 by side agreement
Turbidity Meter Well #8	\$3,742	\$3,742	
Regal Gas Chlorinator Model 216	\$2,870	\$0	Previously capitalized in FY14; in service FY16
Windows Reservoir Building	\$4,399	\$4,399	
2016 Ford F-250	\$16,963	\$16,963	
2016 Ford F-150	\$10,875	\$10,875	
John Deere 210SK Backhoe Loader	\$16,500		
Turbidity Meter Keedysville Plant	\$14,874	\$14,874	
<b>TOTAL</b>	<b>\$97,631</b>	<b>\$55,266</b>	

<b>FY17 Capital Outlay in Adopted Budget</b>			<b>12/1/16 shared projections</b>	
<b>Description</b>	<b>Amount</b>	<b>Shared</b>		<b>Notes</b>
Water Plant Filters (6 total)	\$32,000	YES	49,200	
Replace Casing in Well #8	\$10,000	YES	5,000	Completed October 2016
Replace 2004 Ford F350	\$13,500	YES	16,378	
Bobcat	\$6,700	no	N/A	WILL NOT BE PURCHASING
New Handheld Meter Reader	\$6,500	YES	6,900	Reader and Wand - ordered Oct 2016
Water Modeling	\$30,000	no	N/A	
Weir Wall Stabilization	\$5,000	YES	5,000	
Meter Replacement (275)	\$22,000	no	N/A	WILL NOT BE CAPITALIZED
	<b>\$125,700</b>		<b>\$82,478</b>	

Prepared: November 21, 2016 Megan and Austin

**Boonsboro/Keedysville Regional Water System  
FY 2015/2016 Quarterly Usage Report**

Fiscal YR	Finished Water Pumped From Source			Monthly Usage Received Per Town			Qtrly Gallons Billed to Customers			
	Kdysvle	Well #8	Warrentfeltz & Park Well	Boonsboro	Keedysville	%	Boonsboro	Keedysville	Lost	
2015/2016										
42,566	6,179,000	2,427,000	1,380,000	11,861,100	2,181,900	0.845				
42,597	6,126,000	2,427,000	1,500,000	11,273,000	2,728,000	0.805				
42,628	5,838,000	2,430,000	1,060,000	10,935,500	1,788,500	0.859				
<b>1st Qtr</b>	18,143,000	7,284,000	3,940,000	34,069,600	6,698,400	<b>0.836</b>	22,887,720	4,829,035	32.8%	27.9%
					40,768,000		27,716,755		-11,181,880	-1,869,365
Oct 15	5,896,000	2,356,000	2,080,000	14,838,000	13,057,500	0.880				
Nov 15	5,741,000	1,211,000	780,000	12,233,000	10,560,100	0.863				
Dec 15	5,820,000	1,183,000	1,230,000	12,036,000	10,287,000	0.855				
<b>2nd Qtr</b>	17,457,000	4,750,000	4,090,000	39,107,000	5,202,400	<b>0.867</b>	19,426,959	4,394,140	42.7%	15.0%
					39,107,000		23,821,099		-14,477,641	-808,260
Jan 16	5,747,000	2,355,000	0	12,822,000	11,015,600	0.859				
Feb 16	5,271,000	2,138,000	0	11,999,000	10,342,000	0.862				
Mar 16	5,530,000	2,598,000	0	12,660,000	10,905,300	0.861				
<b>3rd Qtr</b>	16,548,000	7,091,000	0	37,481,000	5,218,100	<b>0.861</b>	18,794,196	4,435,983	41.7%	15.0%
					37,481,000		23,230,179		-13,468,704	-782,117
Apr 16	5,457,000	2,495,000	1,210,000	13,426,000	11,633,600	0.866				
May 16	5,485,000	2,538,000	570,000	12,731,000	10,758,800	0.845				
Jun 16	5,630,000	2,596,000	1,350,000	14,022,000	12,058,000	0.860				
<b>4th Qtr</b>	16,572,000	7,629,000	3,130,000	40,179,000	34,450,400	<b>0.857</b>	21,380,687	5,019,015	37.9%	12.4%
					0		26,399,702		-13,069,713	-709,585
<b>Total 15/16</b>	66,720,000	26,754,000	11,160,000	157,535,000	134,687,500	0.855	82,489,562	18,678,173	38.8%	18.2%

Adjustments for meter calibrations outside of +/- 2%:

Last test result:										
Adjustment %										
Adj K gals	0									
Adj B gals	0	0	0	0	0	0.000	0	#DIV/0!	0	#DIV/0!

## Cost of Daily Operations Labor at Keedysville Tank and Booster Station FY16

*By agreement between the Towns Keedysville is charged for 1/2 hour per day of water operator time for routine inspection and daily operations of the water tank and booster station in Keedysville.*

Regular Time		Shumaker	DeGrange	Austin	Pereschuk	
Hourly rate		\$25.75	\$15.98	\$18.53	\$18.53	
Salary for fiscal year		\$53,563	\$33,248	\$38,548	\$38,548	
FICA + Medicare @7.65%	0.0765	4,098	2,543	2,949	2,949	
Health Ins (Annual Amt)		8,589	14,136	0	10,045	
Life Ins (Annual Amt)		178	146	178	167	
STD Ins (Annual Amt)		393	244	283	269	
Unemployment @.021 x \$8500						
Pension	0.07	3,749	2,327	2,698	2,698	
<b>Total wage and benefit</b>		<b>\$70,570</b>	<b>\$52,645</b>	<b>\$44,656</b>	<b>\$54,676</b>	<b>\$222,547</b>
Regular work hours/week		40	40	40	40	
Weeks employed		52	52	52	50	
Annual hours paid		2,080	2,080	2,080	2,000	
Less:						
Personal leave		-240	-160	-160	-120	
<b>Total on job hours</b>		<b>1,840</b>	<b>1,920</b>	<b>1,920</b>	<b>1,880</b>	<b>7,560</b>
Billing hourly rate		\$38.35	\$27.42	\$23.26	\$29.08	
Average rate for all 4						<b>\$29.44</b>

Overtime Rate Saturday x1.5		\$38.63	\$23.97	\$27.80	\$27.80	
FICA + Medicare @7.65%	0.0765	2.95	1.83	2.13	2.13	
Pension 7% of all wages	0.07	2.70	1.68	1.95	1.95	
Total direct cost per hour		\$44.28	\$27.48	\$31.87	\$31.87	
Average of 4 employees						<b>\$33.87</b>

Overtime Rate Sunday x2.0		\$51.50	\$31.96	\$37.06	\$37.06	
FICA + Medicare @7.65%	0.0765	3.94	2.44	2.84	2.84	
Pension 7% of all wages	0.07	3.61	2.24	2.59	2.59	
Total direct cost per hour		\$59.04	\$36.64	\$42.49	\$42.49	
Average of 4 employees						<b>\$45.17</b>

Day of the week
Monday - Friday
Saturday
Sunday
<b>TOTAL</b>

Days in Yr	Hrs per Day	Rate per Hr	Total
262	0.5	\$29.44	\$3,856.31
52	0.5	\$33.87	\$880.74
52	0.5	\$45.17	\$1,174.33
366			<b>\$5,911.38</b>

Prepared: November 21, 2016 Megan and Austin  
Prepared by: Megan and Austin

## Cost of Daily Operations Labor at Keedysville Tank and Booster Station FY17

*By agreement between the Towns Keedysville is charged for 1/2 hour per day of water operator time for routine inspection and daily operations of the water tank and booster station in Keedysville.*

Regular Time		Shumaker	DeGrange	Austin	Mose	
Hourly rate		\$26.52	\$16.46	\$19.09	\$18.53	
Salary		\$55,120	\$34,246	\$39,705	\$38,548	
FICA + Medicare @7.65%	0.0765	4,217	2,620	3,037	2,949	
Health Ins (Annual Amt)		8,243	13,641	0	6,553	
Life Ins (Annual Amt)		178	147	178	178	
STD Ins (Annual Amt)		393	244	283	283	
Unemployment @.021 x \$8500						
Pension	0.07	3,858	2,397	2,779	2,698	
<b>Total wage and benefit</b>		<b>\$72,009</b>	<b>\$53,295</b>	<b>\$45,983</b>	<b>\$51,209</b>	<b>\$222,497</b>
Regular work hours/week		40	40	40	40	
Weeks employed		52	52	52	52	
Annual hours paid		2,080	2,080	2,080	2,080	
LESS: Personal Leave		-240	-160	-160	-120	
<b>Total on job hours</b>		<b>1,840</b>	<b>1,920</b>	<b>1,920</b>	<b>1,960</b>	<b>7,640</b>
Billing hourly rate		\$39.14	\$27.76	\$23.95	\$26.13	
<b>Average rate for all 4</b>						<b>\$29.12</b>

Overtime Rate Saturday x1.5		\$39.78	\$24.69	\$28.64	\$27.80	
FICA + Medicare @7.65%	0.0765	3.04	1.89	2.19	2.13	
Pension 7% of all wages	0.07	2.78	1.73	2.00	1.95	
		\$45.61	\$28.31	\$32.83	\$31.87	
<b>Average of 4 employees</b>						<b>\$34.65</b>

Overtime Rate Sunday x2.0		\$53.04	\$32.92	\$38.18	\$37.06	
FICA + Medicare @7.65%	0.0765	4.06	2.52	2.92	2.84	
Pension 7% of all wages	0.07	3.71	2.30	2.67	2.59	
		\$60.81	\$37.74	\$43.77	\$42.49	
<b>Average of 4 employees</b>						<b>\$46.20</b>

Day of the week	Days in Yr	Hrs per Day	Rate per Hr	Total
Monday - Friday	261	0.5	\$29.12	\$3,800.50
Saturday	52	0.5	\$34.65	\$900.98
Sunday	52	0.5	\$46.20	\$1,201.30
<b>TOTAL</b>	<b>365</b>			<b>\$5,902.78</b>

Prepared: November 21, 2016 Megan and Austin

**Boonsboro Billing and Customer Accounting for Keedysville Accounts  
FY17**

Water/sewer clerk	Rate	Amount
Annual wages	16.47	\$34,258
FICA	0.0765	2,621
Health		12,516
Life		178
STD		283
Unemployment (first \$8,500)	0.021	179
Pension	0.07	2,398
Total wage and benefits		\$52,432
Work hours		2080
40*52		-120
LESS: Personal Leave		1960
Total on job hours		
Billing rate per hour		\$26.75

Admin breakdown - water and sewer - 8 hour day:			Keedysville	
Description	%	Hours	%	hrs/day
Payment Posting	30%	2.4	10%	0.240
Window/Phone	40%	3.2	5%	0.160
Work Orders	15%	1.2	7%	0.084
Admin/Reports	15%	1.2	3%	0.036
Note: above includes billing			hours/day	0.520
			work days (260-11 holidays)	249
			hours/year	129
			Billing rate/hr from above	26.75
				\$3,464

No. Boonsboro Accounts	1395	78.2%
No. Keedysville Accounts	390	21.8%

	Quan	Cost	Sub-Tot	Total
<b>Postage:</b>				
4 Bills per account	1,560	0.467	729	
Late Notices	352	0.467	164	
Disconnection Reminder	180	0.467	84	
Disconnection Notice	32	0	0	\$977
<b>Billing and Reminder Supplies:</b>				
Billing sheets	2,124	0.09	193	
BKRWB envelopes	2,092	0.15	316	
Return envelopes	2,092	0.15	316	824
<b>Computer/Printer Supplies:</b>				
Supplies, paper & ink			200	200
<b>Billing and Customer Accounting:</b>				
Run sets of bills, separate, sort, stuff, includes inserts,				
Enter new customers, posting, send reminders,				
follow-up on delinquent bills, disconnection/reconnection				
of water services, make deposits, maintain monthly				
bank statements, prepare quarterly reports and annual				
administrative fees report (from charts at right)				3,464
<b>TOTAL BILLING + CUSTOMER ACCOUNT COST</b>				<b>\$5,465</b>

Prepared: November 21, 2016 Megan and Austin



Keedysville Annual Recap FY11 - FY17

	Total Gallons Pumped	% Pumped to K	K Annual Cost	\$/1,000 Gal Pumped	Gallons Metered to K Customers	\$/1,000 Gal. Metered to K Customers	Total Shared Capital (K portion Incl.)	Billing Fees (Incl.)
FY11	31,025,000	18.6%	\$39,264	\$1.27			\$0	\$2,564
FY12	26,296,000	15.8%	\$40,908	\$1.56	19,519,970	\$2.10	\$20,257	\$2,616
FY13	23,012,000	14.5%	\$38,102	\$1.66	19,687,738	\$1.94	\$13,553	\$2,808
FY14	23,473,000	14.8%	\$47,993	\$2.04	18,819,588	\$2.55	\$71,327	\$2,628
FY15	23,379,000	14.1%	\$46,440	\$1.99	19,227,111	\$2.42	\$14,737	\$2,886
FY16	22,847,500	14.5%	\$72,308	\$3.16	18,678,173	\$3.87	\$55,266	\$5,653
FY17 projected	22,500,000	15.0%	\$82,915	\$3.69	19,000,000	\$4.36	\$82,478	\$5,465

Prepared: November 28, 2016 (Austin)

WATER FUND 5-YEAR CIP

<u>FISCAL</u>	<u>WATER FUND CIP PROJECTS</u>	<u>ESTIMATED COST</u>
FY14	Upgrade Keedysville Spring House	\$10,000
FY14	Water Audit	\$15,000
FY14	Maple Ave W/L Replacement	\$85,000
FY15	Leak Detection Survey	\$7,500
FY15	Septum Sleeves for Keedysville	\$14,000
FY15	Automatic Flusher @ Mill Point	\$1,000
FY15	Replace Meters with R900 Radio Read Meters (100)	\$20,000
FY16	Boonsboro Water Plant Turbidity Meters (6)	\$15,000
FY16	Clean Clear Wells/Reservoir/Water Tower	\$7,000
FY16	Replace Meters with R900 Radio Read Meters (100)	\$20,000
FY17	Filters for Water Plants (6 total @ \$5,000 each)	\$30,000
FY17	Replace Casing in Well #8	\$10,000
FY17	Replace K Chlorine Analyzer	\$3,500
FY17	Keedysville Turbidity Meters (4)	\$13,000
FY17	Shafer Park Well Rehab	\$50,000
FY17	Replace Meters with R900 Radio Read Meters (100)	\$20,000
FY17	Water Modeling	\$20,000
	<b>TOTAL FY17</b>	<b>\$133,500</b>
FY18	Rebuild High Service Pump at Boonsboro Water Plant (3)	\$22,500
FY18	Clean Clear Wells/Reservoir/Water Tower	\$8,000
FY18	VFD Drives and Pump Controls	\$25,000
FY18	Replace Meters with R900 Radio Read Meters (100)	\$20,000
FY18	Replace Raw, Finished/Combo & Warrenfeltz Meter & Display	\$12,000
	<b>TOTAL FY18</b>	<b>\$87,500</b>
FY19	Reservoir Metering	\$5,000
FY19	Replace Meters with R900 Radio Read Meters (100)	\$20,000
FY19	Waterline Replacement/Rehabilitation	\$100,000
FY19	Utility Truck Replacement	\$15,000
	<b>TOTAL FY19</b>	<b>\$140,000</b>
FY20	Generator @ Keedysville Plant	\$60,000
FY20	Replace Meters with R900 Radio Read Meters (100)	\$20,000
FY20	Replace Septum Sleeves in Boonsboro and Keedysville (6)	\$48,000
	<b>TOTAL FY20</b>	<b>\$128,000</b>
FY21	Shafer Park Well Bore and Casing	\$75,000
FY21	Crestview Well Rehabilitation	\$50,000
	<b>TOTAL FY21</b>	<b>\$125,000</b>
FY22	Waterline Replacement/Rehabilitation	\$1,000,000
	Chestnut Waterline Replacement (8")	\$150,000
	Enclosed Trailer for Waterleak Equipment	\$2,500
	Knode Circle Waterline	\$150,000

	<u>WATER CIP</u>	<u>ESTIMATED COST</u>	<u>Project Status</u>	<u>Cost</u>
FY15	Upgrade Keedysville Spring House	\$10,000	Completed FY15	\$16,881.00
FY15	Water Audit	\$15,000	Postponed	
FY15	Maple Ave W/L Replacement	\$85,000	Completed FY15	\$230,000.00
FY15	Leak Detection Survey	\$7,500	Spring 2015	\$7,222.00
FY15	Septum Sleeves for Keedysville	\$14,000	Completed	\$11,745.00
FY15	Automatic Flusher @ Mill Point	\$1,000	Completed	\$2,860.00
FY15	Replace Meters with R900 Radio Read Meters (100)	\$20,000	Replaced 126 Meters	\$28,500.00
FY15	Clean Clear Wells/Reservoir/Water Tower		Completed	\$5,000.00
FY15	Hydrofracking Shafer Park Well & Pump Replacement		Completed	\$12,676.00
	<b>TOTAL FY15 CIP Projected</b>	<b>\$130,000</b>		<b>\$314,884.00</b>
FY16	Keedysville Water Plant Turbidity Meters (6)	\$15,000	Completed	\$14,873.00
FY16	Replace Meters with R900 Radio Read Meters (100)	\$20,000	Replaced 295 Res. Meters, Lids	\$89,843.00
FY16	Utility Trucks (2)	\$40,000	Completed	\$27,837.00
FY16	Backhoe	\$17,500	Completed	\$16,500.00
FY16	Enclosed Water Trailer	\$2,500	Completed	\$4,413.00
FY16	Correlator	\$9,000	Completed	\$31,100.00
FY16	Shafer Park Well Rehab		Not Budgeted/Repair	\$12,824.00
FY16	Park Well Pump Controller		Not Budgeted/Repair	\$2,265.00
	<b>TOTAL FY16</b>	<b>\$130,000</b>		<b>\$199,655.00</b>

	<u>EST. ACTUAL</u>
FY2017 Approved Capital Outlay Projects	
Water Plant Filters (6 total)	\$48,000
Replace Casing in Well #8	\$4,200
Replace 2004 Ford F350	\$16,260
Bobcat	\$0
New Handheld Meter Reader	\$8,500
Water Modelling	
Weir Wall Stabilization	
Meter Replacement	
<b>TOTAL PROPOSED FOR FY17</b>	<b>\$133,960</b>