

AQUA PENNSYLVANIA, INC.TABLE OF CONTENTS TO EXHIBIT 1-A WATER

	Schedule	Witness
<b>A Summary</b>		
Pro Forma Statement Of Income For The Twelve Months Ending March 31, 2018, March 31, 2019 And March 31, 2020 Under Present And Proposed Rates	A-1	William C. Packer
Number Of Customers Served And Whose Bills Will Be Changed	A-2	William C. Packer
Calculation Of Revenue Deficiency And Rate Of Return At Current And Proposed Rates March 31, 2020	A-3	William C. Packer
Statement Of Utility's Calculation Of Rate Of Return - Earned In The Year Ended March 31, 2018 And Anticipated Under Present And Proposed Rates For The Test Years Ended March 31, 2019 And March 31, 2020	A-4	William C. Packer
Calculation Of Gross Revenue Conversion Factor	A-5	William C. Packer
<b>B Operating Revenues</b>		
Statement Of Operating Revenue For The Twelve Months Ending March 31, 2018, March 31, 2019 And March 31, 2020 Under Present And Proposed Rates	B-1	Renee T. Marquis & Paul Herbert
Summary Of Adjustments To Operating Revenues	B-2	Renee T. Marquis
Operating Revenues - Change In Customers	B-3	Renee T. Marquis
Operating Revenues - Declining Residential Usage	B-4	Renee T. Marquis
Operating Revenues - Annualization Of Acquisition - Sun Valley	B-5	Renee T. Marquis
Operating Revenues - DSIC Annualization (Excluding Superior Water Company)	B-6	Renee T. Marquis
Operating Revenues - Superior DSIC Annualization	B-7	Renee T. Marquis
Operating Revenues - Miscellaneous Revenue Adjustments	B-8	Renee T. Marquis
<b>C Operating Expenses</b>		
Notes To Statement Of Income Operating Expenses Expense Detail Accounts	C-1	William C. Packer
Operating Expenses Summary Of Expense Accounts	C-2	William C. Packer
Summary Of Adjustments To Operating Expenses	C-3	William C. Packer
Operating Expenses - General Price Level Adjustment	C-4.1	Erin M. Feeney
Operating Expenses - Inflation Factor Calculation	C-4.1.i	Erin M. Feeney
Operating Expenses - Uncollectible Accounts	C-4.2	Erin M. Feeney
Operating Expenses - Derivation Of Uncollectible Accounts Based On Three Years Of History	C-4.2.i	Erin M. Feeney
Operating Expenses - Additional Cost Of Serving Customers	C-4.3	Renee T. Marquis
Operating Expenses - Rate Case Expense	C-4.4	William C. Packer
Operating Expenses - Payroll	C-4.5	William C. Packer
Operating Expenses - Insurance Expense	C-4.6	Erin M. Feeney
Operating Expenses - Management Service & Sundry	C-4.7	William C. Packer
Operating Expenses - Customer Service & Sundry	C-4.8	William C. Packer
Operating Expenses - Miscellaneous Expense Adjustments	C-4.9	William C. Packer
Operating Expenses - Specific Expenses Not Subject To Inflation	C-4.10	Erin M. Feeney
Operating Expenses - Amortization Of New Positive Acquisition Adjustments	C-5.1	Renee T. Marquis

## AQUA PENNSYLVANIA, INC.

TABLE OF CONTENTS TO EXHIBIT 1-A WATER

	Schedule	Witness
Operating Expenses - Amortization Of New Negative Acquisition Adjustments	C-5.2	Renee T. Marquis
Operating Expenses - Purchased Power Expense	C-6.1	Erin M. Feeney
Operating Expenses - Purchased Power - Electric	C-6.1.i	Erin M. Feeney
Operating Expenses - Purchased Power - Gas	C-6.1.ii	Erin M. Feeney
Operating Expenses - Chemicals	C-6.2	Erin M. Feeney
Operating Expenses - Purchased Water Expense	C-7.1	Erin M. Feeney
Operating Expenses - Purchased Water - Detail By Supplier	C-7.1.i	Erin M. Feeney
Operating Expenses - Water Production Adjustment	C-7.2	Erin M. Feeney
Operating Expenses - Employee Group Insurance	C-8.1	William C. Packer
Operating Expenses - Pension	C-8.2	William C. Packer
Operating Expenses - Post Retirement Benefits	C-8.3	William C. Packer
Operating Expenses - Remove Intracompany Benefits	C-8.4	William C. Packer
Operating Expenses - Legal Expense	C-9.1	William C. Packer
Operating Expenses - Eliminate NAWC Lobbying Expense	C-9.2	Erin M. Feeney
Operating Expenses - Annualization Of Sun Valley	C-10.1	William C. Packer
<b>D Other Expenses</b>		
Statement Of Depreciation	D-1	Renee T. Marquis & John J. Spanos
Summary Of Adjustments To Taxes Other Than Income	D-2	William C. Packer
Taxes Other Than Income - General Assessment Fees By The Pennsylvania Public Utility Commission	D-2.1	Erin M. Feeney
Taxes Other Than Income - General Assessment Fees By The Consumer Advocate And Small Business Advocate	D-2.2	Erin M. Feeney
Taxes Other Than Income - Public Utility Realty Tax	D-2.3	William C. Packer
Taxes Other Than Income - Pennsylvania Property Tax	D-2.4	William C. Packer
Taxes Other Than Income - Payroll Taxes	D-2.5	William C. Packer
<b>E Interest Expense</b>		
Interest On Long-Term Debt	E-1	William C. Packer
Amortization Of Debt Issuance & Premium/Discount On Debt	E-2	William C. Packer
Other Interest Charges	E-3	William C. Packer
Interest During Construction	E-4	William C. Packer
<b>F Income Taxes</b>		
Summary Of Adjustments To Income Taxes	F-1	William J. Jerdon
Computation Of Federal And State Income Taxes Under Present And Proposed Rates	F-2	William J. Jerdon

AQUA PENNSYLVANIA, INC.

TABLE OF CONTENTS TO EXHIBIT 1-A WATER

	Schedule	Witness
<b>G Rate Base</b>		
Rate Base As Of March 31, 2018, March 31, 2019 And March 31, 2020 Under Present And Proposed Rates	G-1	William C. Packer
Rate Base - Utility Plant In Service & Accumulated Depreciation	G-2	Renee T. Marquis & John J. Spanos
Rate Base - Utility Plant Acquisition Adjustments	G-3	Renee T. Marquis
Rate Base - Materials And Supplies	G-4	William C. Packer
Rate Base - Cash Working Capital Summary	G-5	William C. Packer
Rate Base - Cash Working Capital - Calculation Of Lag Days In Receipt Of Revenue	G-5.1	William C. Packer
Rate Base - Cash Working Capital - Calculation Of Lag Days In Payment Of Expenses	G-5.2	William C. Packer
Rate Base - Cash Working Capital - Calculation Of Lag Days In Payment Of Taxes	G-5.3	William C. Packer
Rate Base - Cash Working Capital - Calculation Of Lag Days In Payment Of Interest	G-5.4	William C. Packer
Rate Base - Contributions In Aid Of Construction (CIAC)	G-6	Renee T. Marquis & John J. Spanos
Rate Base - Customer Advances For Construction (CAC)	G-7	Renee T. Marquis & John J. Spanos
Rate Base - Deferred Income Taxes	G-8	William J. Jerdon

AQUA PENNSYLVANIA, INC.

1-A WATER AND 1-B WASTEWATER REVENUE REQUIREMENT - SUMMARY

	Total Company	Water Operations	Wastewater Operations
Present Rate Revenue	\$ 444,811,948	\$ 431,368,643	\$ 13,443,305
Additional Revenue Requirement	71,768,833	58,298,846	13,469,988
Act 11 Allocation (1)	-	8,073,988	(8,073,988)
Proposed Revenues	<u>\$ 516,580,781</u>	<u>\$ 497,741,476</u>	<u>\$ 18,839,305</u>
Rate Increase/(Decrease) - \$	\$ 71,768,833	\$ 66,372,833	\$ 5,396,000
Rate Increase/(Decrease) - %	16.13%	15.39%	40.14%

**Notes:**

- (1) The allocation between wastewater operations and water operations is achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

AQUA PENNSYLVANIA, INC.

PRO FORMA STATEMENT OF INCOME FOR THE TWELVE MONTHS ENDING MARCH 31, 2018,  
MARCH 31, 2019 AND MARCH 31, 2020 UNDER PRESENT AND PROPOSED RATES

LINE NO.	PRESENT RATES				PRESENT RATES				PRESENT RATES		PROPOSED
	PER BOOKS	ADJUSTMENT	3/31/18 AMOUNT	ADJUSTMENT	3/31/19 AMOUNT	ADJUSTMENT	3/31/20 AMOUNT	ADJUSTMENT	RATES	RATES	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(10)	
1	Operating Revenues	\$ 406,667,607	\$ (162,394)	\$ 406,505,212	\$ 23,226,812	\$ 429,732,024	\$ 1,636,619	\$ 431,368,643	\$ 58,298,846	\$ 489,667,488	
2	Operating Expenses	118,503,920	961,808	119,465,728	2,165,367	121,631,095	3,971,342	125,602,437	297,676	125,900,113	
3	Depreciation	81,051,282	3,910,486	84,961,768	9,632,994	94,594,762	6,173,184	100,767,946	-	100,767,946	
4	Taxes, other than income :										
5	PUC assessment	1,732,490	(9,778)	1,722,712	98,432	1,821,144	6,936	1,828,080	247,062	2,075,142	
6	OCA & SBA assessments	318,087	5,939	324,025	18,514	342,539	1,305	343,844	46,470	390,314	
7	Public Utility Realty tax	4,148,545	51,455	4,200,000	-	4,200,000	-	4,200,000	-	4,200,000	
8	State Capital Stock tax	-	-	-	-	-	-	-	-	-	
9	Local property taxes & misc.	917,726	-	917,726	-	917,726	-	917,726	-	917,726	
10	Federal & State payroll tax	2,447,311	182,844	2,630,156	131,323	2,761,478	59,875	2,821,353	-	2,821,353	
11	Total Taxes, other than income	9,564,159	230,460	9,794,619	248,269	10,042,888	68,115	10,111,003	293,532	10,404,535	
12	Utility Operating Income Before Tax	197,548,245	(5,265,148)	192,283,098	11,180,182	203,463,279	(8,576,023)	194,887,256	57,707,637	252,594,894	
13	Income Taxes:										
14	Federal Tax-Current	(13,121,786)	8,886,609	(4,235,177)	(216,750)	(4,451,927)	4,334,727	(117,200)	10,907,955	10,790,755	
15	Pa. CNI Tax-Current	1,580,468	(5,337,032)	(3,756,565)	39,223	(3,717,342)	2,660,640	(1,056,702)	5,764,993	4,708,291	
16	Federal Tax-Deferred	(678,989)	(7,195,055)	(7,874,044)	(314,828)	(8,188,873)	(3,090,067)	(11,278,940)	-	(11,278,940)	
17	Pa. CNI Tax-Deferred	(10,462,760)	5,915,374	(4,547,386)	-	(4,547,386)	(528,560)	(5,075,947)	-	(5,075,947)	
18	ITC-Current	-	-	-	-	-	-	-	-	-	
19	ITC-Amortized	(252,864)	(549)	(253,413)	-	(253,413)	-	(253,413)	-	(253,413)	
20	Total Income Taxes	(22,935,931)	2,269,346	(20,666,585)	(492,356)	(21,158,941)	3,376,740	(17,782,201)	16,672,948	(1,109,253)	
21	Total Operating Revenue Deductions	186,183,430	7,372,099	193,555,529	11,554,274	205,109,804	13,589,381	218,699,185	17,264,157	235,963,342	
22	Utility Operating Income	220,484,177	(7,534,494)	212,949,683	11,672,538	224,622,221	(11,952,763)	212,669,458	41,034,689	253,704,147	
23	Income Deductions:										
24	Interest on Long-Term debt	55,336,607	798,046	56,134,652	7,367,578	63,502,230	4,706,678	68,208,908	-	68,208,908	
25	Amort. Of debt discount & expense	834,379	(834,379)	-	-	-	-	-	-	-	
26	Other interest charges	(8,184)	8,184	-	-	-	-	-	-	-	
27	Interest during Construction	(10,107,463)	10,107,463	-	-	-	-	-	-	-	
28	Total Income Deductions	46,055,339	10,079,313	56,134,652	7,367,578	63,502,230	4,706,678	68,208,908	-	68,208,908	
29	Net Income	\$ 174,428,837	\$ (17,613,807)	\$ 156,815,031	\$ 4,304,960	\$ 161,119,991	\$ (16,659,441)	\$ 144,460,550	\$ 41,034,689	\$ 185,495,239	
30	Preferred Dividend										
31	Net Income-Common	\$ 174,428,837	\$ (17,613,807)	\$ 156,815,031	\$ 4,304,960	\$ 161,119,991	\$ (16,659,441)	\$ 144,460,550	\$ 41,034,689	\$ 185,495,239	

AQUA PENNSYLVANIA, INC.  
 NUMBER OF CUSTOMERS SERVED  
 AND WHOSE BILLS WILL BE CHANGED

LINE NO.	CUSTOMER CLASS	SERVED AT 3/31/2017	SERVED AT 3/31/2018	TO BE SERVED AT 3/31/2019	TO BE SERVED AT 3/31/2020	INCREASED BILLS	DECREASED BILLS	UNCHANGED BILLS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Metered:							
2	Residential	391,514	394,192	395,423	396,654	396,654	-	-
3	Commercial	22,264	22,460	22,598	22,737	22,733	4	-
4	Industrial	781	779	776	773	773	-	-
5	Public	1,254	1,256	1,256	1,256	1,256	-	-
6	Bulk Water	-	-	-	-	-	-	-
7	Private Fire Protection	5,197	5,301	5,403	5,504	5,504	-	-
8	Sales to Water Utilities	17	16	16	16	16	-	-
9	Total Metered Customers	421,027	424,004	425,472	426,940	426,936	4	-
10	Other:							
11	Unmetered	903	943	943	943	943	-	-
12	Availability Charge	2,801	2,769	-	-	-	2,769	-
13	Public Fire Protection	263	263	263	263	263	-	-
14	Private Fire Protection	766	779	779	779	779	-	-
15	Total Customers	425,760	428,758	427,457	428,925	428,921	2,773	-

AQUA PENNSYLVANIA, INC.  
 CALCULATION OF REVENUE DEFICIENCY AND RATE OF RETURN  
 AT CURRENT AND PROPOSED RATES MARCH 31, 2020

LINE NO.	DESCRIPTION	REFERENCE		
1	Pro Forma Rate Base	Schedule G-1	\$	3,265,241,568
2	Recommended Rate of Return	Schedule E-1	X	7.77%
3	Operating Income, Pro Forma Proposed Rates		= \$	253,704,147
4	Operating Income, Pro Forma Present Rates	Schedule A-1	\$	212,669,458
5	Operating Income Deficit		= \$	41,034,689
6	Gross Revenue Conversion Factor	Schedule A-5	X	1.4207
7	Revenue Deficit		= \$	58,298,846

AQUA PENNSYLVANIA, INC.

STATEMENT OF UTILITY'S CALCULATION OF RATE OF RETURN  
 EARNED IN THE YEAR ENDED MARCH 31, 2018 AND  
 ANTICIPATED UNDER PRESENT AND PROPOSED RATES  
 FOR THE TEST YEARS ENDED MARCH 31, 2019 AND MARCH 31, 2020

LINE NO.		NET UTILITY OPERATING INCOME	VALUATION AT ORIGINAL COST	RATE OF RETURN
1	Present Rates March 31, 2018	\$ 212,949,683	\$ 2,757,953,888	7.72%
2	Present Rates March 31, 2019	\$ 224,622,221	\$ 3,058,231,387	7.34%
3	Present Rates March 31, 2020	\$ 212,669,458	\$ 3,265,241,568	6.51%
4	Proposed Rates March 31, 2020	\$ 253,704,147	\$ 3,265,241,568	7.77%



AQUA PENNSYLVANIA, INC.

CALCULATION OF GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	RATE
1	Dollar (Taxable income)	\$ 1.0000
2	Less:	
3	Gross Receipts Tax	0.000% N/A
4	PUC Assessments	0.503% Schedule D-2.1 & Schedule D-2.2
5	Bad Debt	0.511% Schedule C-4.2.i
6	Subtotal (Taxable income)	\$ 0.9899
7	State Tax Rate	9.990%
8	State Tax \$\$ =====>	\$ 0.0989
9	State Factor	\$ 0.8910
10	Federal Tax Rate	21.00%
11	Fed Tax \$\$ =====>	\$ 0.1871
12	Combined Income Tax Factor on Gross Revenues	28.60%
13	Net Operating Income Factor	70.39%
14	Gross Revenue Conversion Factor	1.42072

AQUA PENNSYLVANIA, INC.

STATEMENT OF OPERATING REVENUE FOR THE TWELVE MONTHS ENDING MARCH 31, 2018,  
 MARCH 31, 2019 AND MARCH 31, 2020 UNDER PRESENT AND PROPOSED RATES

LINE NO.	CUSTOMER CLASS (1)	REVENUE FOR 12 MOS. ENDED 3/31/18		PRESENT RATES 3/31/18		PRESENT RATES 3/31/19		PRESENT RATES 3/31/20		REVENUE RATE INCREASE		PROPOSED RATES
		AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT	%	\$	AMOUNT
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1	Metered Sales:											
2	Residential	\$ 263,070,641	\$ -	\$ 263,070,641	\$ 15,081,745	\$ 278,152,386	\$ 661,977	\$ 278,814,363	14.3%	\$ 39,961,178	\$ 318,775,541	
3	Commercial	94,801,557	-	94,801,557	6,049,581	100,851,138	795,181	101,646,319	13.3%	13,532,482	115,178,801	
4	Industrial	17,532,784	-	17,532,784	730,167	18,262,950	(58,763)	18,204,187	12.9%	2,355,521	20,559,709	
5	Public	8,250,766	-	8,250,766	394,078	8,644,844	-	8,644,844	12.6%	1,092,095	9,736,939	
6	Bulk Water	-	-	-	-	-	-	-	0.0%	-	-	
7	Private Fire Protection	10,960,901	-	10,960,901	888,289	11,849,190	238,224	12,087,414	8.4%	1,016,806	13,104,220	
8	Sales to Water Utilities	2,523,293	-	2,523,293	627	2,523,920	-	2,523,920	6.4%	161,087	2,685,007	
9	Total Metered Sales	397,139,941	-	397,139,941	23,144,488	420,284,429	1,636,619	421,921,047	13.8%	58,119,169	480,040,216	
10	Other:											
11	Unmetered	11,065	-	11,065	11,592	22,657	-	22,657	14.1%	3,194	25,851	
12	Availability Charge	84,406	(84,406)	-	-	-	-	-	0.0%	-	-	
13	Public Fire Protection	6,044,692	(80,898)	5,963,794	-	5,963,794	-	5,963,794	4.3%	254,740	6,218,534	
14	Private Fire Protection	2,230,697	-	2,230,697	70,732	2,301,429	-	2,301,429	-3.4%	(78,258)	2,223,171	
15	Total Sales to General Customers	405,510,800	(165,303)	405,345,496	23,226,812	428,572,308	1,636,619	430,208,927	13.6%	58,298,846	488,507,772	
16	Other Water Revenue:											
17	Forfeited Discounts	-	-	-	-	-	-	-	0.0%	-	-	
18	Miscellaneous Service Revenue	1,156,807	2,909	1,159,716	-	1,159,716	-	1,159,716	0.0%	-	1,159,716	
19	Sub-Total	1,156,807	2,909	1,159,716	-	1,159,716	-	1,159,716	0.0%	-	1,159,716	
20	Total Operating Revenue	\$ 406,667,607	\$ (162,394)	\$ 406,505,212	\$ 23,226,812	\$ 429,732,024	\$ 1,636,619	\$ 431,368,643	13.5%	\$ 58,298,846	\$ 489,667,488	

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES		PRESENT RATES		PRESENT RATES	
			ADJUSTMENT	3/31/18 AMOUNT	ADJUSTMENT	3/31/19 AMOUNT	ADJUSTMENT	3/31/20 AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Per Books			\$ 406,667,607				
2	Present Rates at 3/31/18					\$ 406,505,212		
3	Present Rates at 3/31/19							\$ 429,732,024
4	Change In Customers	Schedule B-3	-		2,025,954		2,025,954	
5	Declining Residential Usage	Schedule B-4	-		(389,335)		(389,335)	
6	Annualization Of Acquisition - Sun Valley	Schedule B-5	-		11,100		-	
7	DSIC Annualization (Excluding Superior Water Company)	Schedule B-6	-		21,558,000		-	
8	Superior DSIC Annualization	Schedule B-7	-		21,094		-	
9	Miscellaneous Revenue Adjustments	Schedule B-8	(162,394)		-		-	
10	Pro Forma Adjustment			<u>(162,394)</u>		<u>23,226,812</u>		<u>1,636,619</u>
11	Pro Forma Present Rates at March 31, 2018			<u>\$ 406,505,212</u>				
12	Pro Forma Present Rates at March 31, 2019					<u>\$ 429,732,024</u>		
13	Pro Forma Present Rates at March 31, 2020							<u>\$ 431,368,643</u>

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING REVENUES  
 CHANGE IN CUSTOMERS

The following adjustment reflects the change in revenues due to the average change in number of customers during the three years ending March 31, 2020. Projections were based on a three year historical growth average exclusive of acquisitions.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Metered Sales:		
2	Residential	\$ 1,051,312	\$ 1,051,312
3	Commercial	795,181	795,181
4	Industrial	(58,763)	(58,763)
5	Public		
6	Bulk Water		
7	Private Fire Protection	238,224	238,224
8	Sales to Water Utilities		
9	Total Metered Sales	<u>2,025,954</u>	<u>2,025,954</u>
10	Other:		
11	Unmetered		
12	Availability Charge		
13	Public Fire Protection		
14	Private Fire Protection		
15	Total Sales to General Customers	<u>2,025,954</u>	<u>2,025,954</u>
16	Other Water Revenue:		
17	Forfeited Discounts		
18	Miscellaneous Service Revenue		
19	Sub-Total	<u>-</u>	<u>-</u>
20	Total Operating Revenue	<u>\$ 2,025,954</u>	<u>\$ 2,025,954</u>

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING REVENUES  
 DECLINING RESIDENTIAL USAGE

The following adjustment is being made to address the declining trend in residential usage that has been experienced for many years and is expected to continue to occur.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Metered Sales:		
2	Residential	\$ (389,335)	\$ (389,335)
3	Commercial		
4	Industrial		
5	Public		
6	Bulk Water		
7	Private Fire Protection		
8	Sales to Water Utilities		
9	Total Metered Sales	<u>(389,335)</u>	<u>(389,335)</u>
10	Other:		
11	Unmetered		
12	Availability Charge		
13	Public Fire Protection		
14	Private Fire Protection		
15	Total Sales to General Customers	<u>(389,335)</u>	<u>(389,335)</u>
16	Other Water Revenue:		
17	Forfeited Discounts		
18	Miscellaneous Service Revenue		
19	Sub-Total	<u>-</u>	<u>-</u>
20	Total Operating Revenue	<u>\$ (389,335)</u>	<u>\$ (389,335)</u>

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

ANNUALIZATION OF ACQUISITION - SUN VALLEY

The following adjustment is to annualize the additional revenue from the Sun Valley Acquisition to give effect of a full twelve months of service.

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 AMOUNT	ANNUALIZED PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2019 ADJUSTMENT
1	Metered Sales:			
2	Residential		\$ -	
3	Commercial		-	
4	Industrial		-	
5	Public		-	
6	Bulk Water		-	
7	Private Fire Protection		-	
8	Sales to Water Utilities		-	
9	Total Metered Sales	-	-	-
10	Other:			
11	Unmetered	2,220	13,320	11,100
12	Availability Charge		-	
13	Public Fire Protection		-	
14	Private Fire Protection		-	
15	Total Sales to General Customers	2,220	13,320	11,100
16	Other Water Revenue:			
17	Forfeited Discounts		-	
18	Miscellaneous Service Revenue		-	
19	Sub-Total	-	-	-
20	Total Operating Revenue	\$ 2,220	\$ 13,320	\$ 11,100

## AQUA PENNSYLVANIA, INC.

## NOTES TO STATEMENT OF INCOME

## OPERATING REVENUES

## DSIC ANNUALIZATION (EXCLUDING SUPERIOR WATER COMPANY)

This revenue adjustment is being made to reflect the annualization of the Distribution System Improvement Charge revenues for March 31, 2019 based on the Company's pro forma level at March 31, 2018 and the 7.50% rate that became effective on April 1, 2018.

LINE NO.	DESCRIPTION	PER BOOKS	ANNUALIZED	PRESENT RATES
		3/31/2018 DSIC REVENUE	3/31/2019 DSIC REVENUE	3/31/2019 ADJUSTMENT
1	Metered Sales:			
2	Residential	\$ 4,619,895	\$ 19,020,044	\$ 14,400,150
3	Commercial	1,685,482	6,939,105	5,253,623
4	Industrial	253,106	1,042,036	788,930
5	Public	126,403	520,399	393,996
6	Bulk Water	-	-	-
7	Private Fire Protection	208,556	858,621	650,065
8	Sales to Water Utilities	201	828	627
9	Total Metered Sales	6,893,642	28,381,033	21,487,391
10	Other:			
11	Unmetered	158	650	492
12	Availability Charge	-	-	-
13	Public Fire Protection	-	-	-
14	Private Fire Protection	22,495	92,611	70,117
15	Total Sales to General Customers	6,916,295	28,474,295	21,558,000
16	Other Water Revenue:			
17	Forfeited Discounts	-	-	-
18	Miscellaneous Service Revenue	-	-	-
19	Sub-Total	-	-	-
20	Total Operating Revenue	\$ 6,916,295	\$ 28,474,295	\$ 21,558,000

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING REVENUES  
 SUPERIOR DSIC ANNUALIZATION

This revenue adjustment is being made to reflect the annualization of the Distribution System Improvement Charge revenues for March 31, 2019 based on the Company's pro forma level at March 31, 2018 and the 2.42% rate that became effective on June 1, 2018.

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 DSIC REVENUE	ANNUALIZED PRESENT RATES 3/31/2019 DSIC REVENUE	PRESENT RATES 3/31/2019 ADJUSTMENT
1	Metered Sales:			
2	Residential	\$ 46,718	\$ 66,337	\$ 19,618
3	Commercial	1,852	2,629	778
4	Industrial	-	-	-
5	Public	195	277	82
6	Bulk Water	-	-	-
7	Private Fire Protection	-	-	-
8	Sales to Water Utilities	-	-	-
9	Total Metered Sales	<u>48,765</u>	<u>69,243</u>	<u>20,478</u>
10	Other:			
11	Unmetered	-	-	-
12	Availability Charge	-	-	-
13	Public Fire Protection	-	-	-
14	Private Fire Protection	1,466	2,081	615
15	Total Sales to General Customers	<u>50,231</u>	<u>71,324</u>	<u>21,094</u>
16	Other Water Revenue:			
17	Forfeited Discounts	-	-	-
18	Miscellaneous Service Revenue	-	-	-
19	Sub-Total	<u>-</u>	<u>-</u>	<u>-</u>
20	Total Operating Revenue	<u>\$ 50,231</u>	<u>\$ 71,324</u>	<u>\$ 21,094</u>



AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

MISCELLANEOUS REVENUE ADJUSTMENTS

The following adjustments reflect miscellaneous additions or deductions from pro forma revenues.

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 AMOUNT	3/31/2018 ADJUSTMENT	PRESENT RATES 3/31/2018 AMOUNT
1	Metered Sales:			
2	Residential		\$ -	\$ -
3	Commercial		-	-
4	Industrial		-	-
5	Public		-	-
6	Bulk Water		-	-
7	Private Fire Protection		-	-
8	Sales to Water Utilities		-	-
9	Total Metered Sales	-	-	-
10	Other:			
11	Unmetered		-	-
12	Availability Charge	(a) 84,406	(84,406)	-
13	Public Fire Protection	(b) 80,898	(80,898)	-
14	Private Fire Protection		-	-
15	Total Sales to General Customers	165,303	(165,303)	-
16	Other Water Revenue:			
17	Forfeited Discounts		-	-
18	Miscellaneous Service Revenue	(c) (2,909)	2,909	-
19	Sub-Total	(2,909)	2,909	-
20	Total Operating Revenue	\$ 162,394	\$ (162,394)	\$ -

- (a) Eliminate Availability Charge
- (b) Eliminate Unbilled Public Fire
- (c) Eliminate STAS Refunds

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/18	PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
	(1)	(2)	(3)	(4)	(5)	(6)
1		--Source of Supply--				
2		-Operations-				
3	6011	Labor	211,843	211,843	221,936	227,762
4	6101	Purchased Water	5,168,610	5,168,610	4,539,857	4,811,051
5	6151	Purchased Power	8,731,801	8,796,969	8,787,527	8,556,154
6	6161	Purchased Power	164,552	165,780	165,602	261,702
7	6201	Supplies	49,531	49,531	50,559	51,646
8	6311	OS Engineer	160	160	163	167
9	6361	OS Other	210,099	210,099	214,459	219,070
10	6411	Leases	526,247	526,247	526,247	526,247
11	6681	Other	1,500	1,500	1,531	1,564
12	6751	Other	674	674	688	703
13		-Maintenance-				
14	6012	Labor	609,362	609,362	638,396	655,153
15	6202	Supplies	28,443	28,443	29,033	29,657
16	6362	OS Other	222,087	222,087	226,696	231,570
17	6502	Transportation	1,102	1,102	1,124	1,149
18	6752	Other	60	60	61	63
19						
20		Total Source of Supply Expense	\$ 15,926,072	\$ 15,992,468	\$ 15,403,879	\$ 15,573,657
21						

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/18	PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
	(1)	(2)	(3)	(4)	(5)	(6)
22		--Treatment--				
23		-Operations-				
24	6013	Labor	9,103,602	9,103,602	9,537,346	9,787,702
25	6153	Purchased Power	205,826	207,362	232,315	217,793
26	6163	Purchased Power	28,915	29,131	29,099	28,333
27	6183	Chemicals	4,891,606	4,891,606	5,109,377	5,369,526
28	6203	Supplies	456,160	456,160	465,625	475,636
29	6313	OS Engineer	14,346	14,346	14,644	14,959
30	6353	OS Lab Testing	339,449	339,449	346,493	353,943
31	6363	OS Other	695,303	695,303	709,731	724,990
32	6423	Leases	4,168	4,168	4,168	4,168
33	6753	Other	24,724	24,724	25,237	25,780
34		-Maintenance-				
35	6014	Labor	203,747	203,747	213,454	219,058
36	6204	Supplies	82,087	82,087	83,790	85,592
37	6354	OS Lab Testing	509	509	520	531
38	6364	OS Other	3,017,376	3,017,376	3,079,986	3,146,206
39	6754	Other	27,577	27,577	28,150	28,755
40						
41		Total Treatment Expense	\$ 19,095,396	\$ 19,097,148	\$ 19,879,935	\$ 20,482,969
42						
43		--Transmission and Distribution--				
44		-Operations-				
45	6015	Labor	6,241,602	6,241,602	6,538,985	6,710,633
46	65052	Labor	639,671	639,671	670,148	687,739
47	6155	Purchased Power	1,267,698	1,277,159	1,275,788	1,242,197

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/18	PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
	(1)	(2)	(3)	(4)	(5)	(6)
48	6165	Purchased Power	1,425	1,435	1,434	1,396
49	6205	Supplies	889,594	889,594	908,053	927,576
50	6315	OS Engineer	1,480	1,480	1,510	1,543
51	6365	OS Other	528,352	528,352	539,316	550,911
52	6415	Leases	21,090	21,090	21,090	21,090
53	6505	Transportation	1,015,226	1,015,226	1,036,292	1,058,572
54	6755	Other	2,635	2,635	2,690	2,748
55		-Maintenance-				
56	6016	Labor	2,167,600	2,167,600	2,270,875	2,330,486
57	6206	Supplies	449,159	449,159	458,480	468,337
58	6366	OS Other	4,896,912	4,846,912	5,351,486	5,466,543
59	6756	Other	6,465	6,465	6,600	6,742
60						
61		Total Transmission and Distribution Expense	\$ 18,128,909	\$ 18,088,381	\$ 19,082,746	\$ 19,476,513
62						
63		--Customer Accounting--				
64	6017	Labor	451,071	451,071	472,562	484,967
65	6167	Purchased Power	10,680	10,760	10,748	10,465
66	6207	Supplies	440	440	449	459
67	6367	OS Other	8,538,659	8,538,659	9,265,311	9,556,283
68	6757	Other	50	50	51	52
69	6707	Bad Debt	1,796,146	2,069,709	2,188,306	2,196,663
70						
71		Total Customer Accounting Expense	\$ 10,797,046	\$ 11,070,689	\$ 11,937,428	\$ 12,248,889
72						

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/18	PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
	(1)	(2)	(3)	(4)	(5)	(6)
73		--Administrative and General--				
74	6018	Labor	9,257,100	9,218,043	9,658,289	9,912,009
75	6038	Labor	2,449,781	2,449,781	2,566,501	2,633,872
76	6048	Employee Benefits	20,853,060	21,685,620	19,298,546	19,919,646
77	6158	Purchased Power	371,718	374,492	374,090	364,240
78	6168	Purchased Power	131,978	132,963	136,780	133,368
79	6208	Supplies	73,555	73,555	79,042	80,741
80	6318	OS Engineer	211,304	211,304	215,688	220,326
81	6328	OS Accounting	684,637	684,637	698,843	713,868
82	6338	OS Legal	351,164	397,744	397,744	397,744
83	6348	Management Fees	495	495	505	516
84	6349	Management Fees	21,854,828	21,854,828	23,499,247	24,149,349
85	6368	OS Other	1,874,437	1,551,554	1,587,349	1,621,477
86	6418	Leases	26,843	26,843	26,843	26,843
87	6428	Leases	75,937	75,937	75,937	75,937
88	6508	Transportation	68,318	68,318	69,735	71,235
89	6568	Insurance	246,061	246,061	291,751	306,936
90	6578	Insurance	2,183,167	2,183,167	2,496,008	2,624,066
91	6588	Insurance	1,672,545	1,672,545	1,857,962	1,952,157
92	6598	Insurance	1,074,351	1,074,351	1,076,070	1,128,114
93	6608	Other	193,578	193,578	197,595	201,843
94	6758	Other	2,613,966	2,573,292	2,629,568	2,686,104
95	67621	Labor	(1,809,884)	(1,809,884)	(1,847,439)	(1,887,159)
96	67622	Employee Benefits	(8,058,003)	(8,058,003)	(8,225,207)	(8,402,049)
97	67624	Other	(1,778,646)	(1,598,387)	(1,766,889)	(1,856,281)
98	6668	Amortization of Rate Case	-	-	-	630,420

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/18	PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
	(1)	(2)	(3)	(4)	(5)	(6)
99	4060	Amortization of UPAA	14,197	14,197	14,197	198,491
100	4048	Employee Benefits	(79,991)	(79,991)	(81,650)	(83,406)
101						
102		Total Admin & General Expense	<u>\$ 54,556,497</u>	<u>\$ 55,217,041</u>	<u>\$ 55,327,107</u>	<u>\$ 57,820,408</u>
103						
104		Total Operating Expenses	<u>\$ 118,503,920</u>	<u>\$ 119,465,728</u>	<u>\$ 121,631,095</u>	<u>\$ 125,602,437</u>

## AQUA PENNSYLVANIA, INC.

## NOTES TO STATEMENT OF INCOME

## OPERATING EXPENSES

## SUMMARY OF EXPENSE ACCOUNTS

LINE NO.	PER	ADJUSTMENTS	PRESENT	ADJUSTMENTS	PRESENT	ADJUSTMENTS	PRESENT
	BOOKS		RATES		RATES		RATES
	3/31/18	3/31/18	3/31/18	3/31/19	3/31/19	3/31/20	3/31/20
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1 Labor	\$ 29,525,495	\$ (39,057)	\$ 29,486,438	\$ 1,454,616	\$ 30,941,054	\$ 821,169	\$ 31,762,223
2 Employee Benefits	12,715,066	832,560	13,547,626	(2,555,937)	10,991,689	442,503	11,434,192
3 Purchased Water	5,168,610	-	5,168,610	(628,754)	4,539,857	271,195	4,811,051
4 Purchased Wastewater	-	-	-	-	-	-	-
5 Sludge	-	-	-	-	-	-	-
6 Purchased Power	10,914,591	81,459	10,996,051	17,333	11,013,384	(197,735)	10,815,648
7 Chemicals	4,891,606	-	4,891,606	217,771	5,109,377	260,149	5,369,526
8 Supplies	2,028,970	-	2,028,970	46,061	2,075,031	44,613	2,119,644
9 OS Engineer	227,290	-	227,290	4,716	232,006	4,988	236,994
10 OS Accounting	684,637	-	684,637	14,206	698,843	15,025	713,868
11 OS Legal	351,164	46,580	397,744	-	397,744	-	397,744
12 OS Lab Testing	339,958	-	339,958	7,054	347,013	7,461	354,473
13 OS Other	19,983,226	(372,883)	19,610,344	1,363,989	20,974,333	542,717	21,517,049
14 Management Fees	21,855,323	-	21,855,323	1,644,429	23,499,753	650,112	24,149,865
15 Leases	654,286	-	654,286	-	654,286	-	654,286
16 Transportation	1,084,645	-	1,084,645	22,506	1,107,152	23,804	1,130,955
17 Insurance	5,176,124	-	5,176,124	545,667	5,721,791	289,483	6,011,274
18 Other	1,092,585	139,585	1,232,170	(106,888)	1,125,282	(27,211)	1,098,071
19 Bad Debt	1,796,146	273,564	2,069,709	118,597	2,188,306	8,357	2,196,663
20 Amortization of Rate Case	-	-	-	-	-	630,420	630,420
21 Amortization of UPAA	14,197	-	14,197	0	14,197	184,294	198,491
22 Amortization of Tank Painting	-	-	-	-	-	-	-
23 Amortization Other	-	-	-	-	-	-	-
24 Total Operating Expenses	\$ 118,503,920		\$ 119,465,728		\$ 121,631,095		\$ 125,602,437
25 Pro Forma Adjustments		\$ 961,808		\$ 2,165,367		\$ 3,971,342	
26 Uncollectibles @ Proposed Rates							\$ 297,676
27 Proposed Rates @ 3/31/20							\$ 125,900,113

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING EXPENSES

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES		PRESENT RATES		PRESENT RATES	
			ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Per Books			\$ 118,503,920				
2	Present Rates at 3/31/18					\$ 119,465,728		
3	Present Rates at 3/31/19							\$ 121,631,095
4	General Price Level Adjustment	Schedule C-4.1	-		700,612		750,786	
5	Uncollectible Accounts	Schedule C-4.2	273,564		118,597		8,357	
6	Additional Cost Of Serving Customers	Schedule C-4.3	-		-		216,381	
7	Rate Case Expense	Schedule C-4.4	-		-		630,420	
8	Payroll	Schedule C-4.5	-		1,474,766		842,480	
9	Insurance Expense	Schedule C-4.6	180,259		377,165		200,091	
10	Management Service & Sundry	Schedule C-4.7	-		1,402,155		393,871	
11	Customer Service & Sundry	Schedule C-4.8	-		622,163		159,211	
12	Miscellaneous Expense Adjustments	Schedule C-4.9	(419,688)		404,000		-	
13	Specific Expenses Not Subject To Inflation	Schedule C-4.10	-		-		-	
14	Amortization Of New Positive Acquisition Adjustments	Schedule C-5.1	-		-		184,294	
15	Amortization Of New Negative Acquisition Adjustments	Schedule C-5.2	-		0		-	
16	Purchased Power Expense	Schedule C-6.1	81,459		(11,803)		(289,212)	
17	Chemicals	Schedule C-6.2	-		206,087		214,770	
18	Purchased Water Expense	Schedule C-7.1	-		(628,754)		226,424	
19	Water Production Adjustment	Schedule C-7.2	-		36,859		(14,383)	
20	Employee Group Insurance	Schedule C-8.1	390,861		604,890		486,630	
21	Pension	Schedule C-8.2	277,244		(3,058,560)		-	
22	Post Retirement Benefits	Schedule C-8.3	164,454		(97,211)		(38,779)	
23	Legal Expense	Schedule C-9.1	46,580		-		-	
24	Eliminate NAWC Lobbying Expense	Schedule C-9.2	(32,926)		-		-	
25	Annualization Of Sun Valley	Schedule C-10.1	-		14,400		-	
26	Pro Forma Adjustments			\$ 961,808		\$ 2,165,367		\$ 3,971,342
27	Pro Forma Present Rates at March 31, 2018			\$ 119,465,728				
28	Pro Forma Present Rates at March 31, 2019					\$ 121,631,095		
29	Pro Forma Present Rates at March 31, 2020							\$ 125,602,437



AQUA PENNSYLVANIA, INC.  
NOTES TO STATEMENT OF INCOME  
OPERATING EXPENSES  
GENERAL PRICE LEVEL ADJUSTMENT

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Total Operations and Maintenance Expenses:		
2	Present Rates 3/31/2018	\$ 119,465,728	
3	Present Rates 3/31/2019		\$ 121,631,095
4	Less amounts specifically adjusted in this filing or not otherwise subject to inflation:		
5	Labor	30,457,513	31,932,279
6	Employee Benefits	13,791,327	11,240,446
7	Purchased Water	5,168,610	4,539,857
8	Purchased Power	10,996,051	10,984,248
9	Chemicals	4,891,606	5,097,693
10	Supplies	-	-
11	OS Engineer	-	-
12	OS Accounting	-	-
13	OS Legal	397,744	397,744
14	OS Lab Testing	-	-
15	OS Other	3,503,091	4,125,255
16	Management Fees	10,179,428	11,581,582
17	Leases	654,286	654,286
18	Transportation	-	-
19	Insurance	5,176,124	5,721,791
20	Other	(1,598,387)	(1,766,889)
21	Bad Debt	2,069,709	2,188,306
22	Amortization of Rate Case	-	-
23	Amortization of UPAA	14,197	14,197
24	Amortization of Tank Painting	-	-
25	Amortization Other	-	-
26	Total Operating Expenses Adjusted/Unadjusted for Separately	<u>\$ 85,701,298</u>	<u>\$ 86,710,795</u>
27	Total Operating Expenses Subject to Effects of Inflation	<u>\$ 33,764,429</u>	<u>\$ 34,920,300</u>
28	Inflation Factor - Schedule C-4.1.i	<u>2.075%</u>	<u>2.150%</u>
29	Estimated Effect of Inflation at Annual Rate Pro Forma Adjustment	<u>\$ 700,612</u>	<u>\$ 750,786</u>

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 INFLATION FACTOR CALCULATION

LINE NO.	GDP Chained Price Index (% Change From Same Quarter Prior Year)		
1	Second Quarter	2018	2.100% (a)
2	Third Quarter	2018	2.100% (a)
3	Fourth Quarter	2018	2.000% (a)
4	First Quarter	2019	2.100% (a)
5	Annual Average for the Period Ending 3/31/2019		2.075%
6	Second Quarter	2019	2.100% (a)
7	Third Quarter	2019	2.100% (a)
8	Fourth Quarter	2019	2.200% (a)
9	First Quarter	2020	2.200% (b)
10	Annual Average for the Period Ending 3/31/2020		2.150%

Source:  
 (a) Blue Chip Economic Indicators Volume 43, No. 1, January 10, 2018, Page 5, Forecasted Future Periods  
 (b) First Quarter of 2020 not available in Blue Chip Report. Used Prior Quarter, Q4-2019.

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 UNCOLLECTIBLE ACCOUNTS

For the three years ended March 31, 2018, the Company experienced an average uncollectible accounts factor of 0.51060% with regard to sales to general customers.

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Sales to General Customers Excluding Forfeited Discounts and Misc Revenue	\$ 405,510,800	\$ 405,345,496	\$ 428,572,308	\$ 430,208,927
2	Annualized Uncollectible Account based on Experience Factor @ 0.51060%		2,069,709	2,188,306	2,196,663 ‡
3	Less: Amount Charged to Operating Expense				
4	During the Twelve Months Ended 3/31/2018		1,796,146		
5	Less: Present Rates 3/31/2018			2,069,709	
6	Less: Present Rates 3/31/2019				2,188,306
7	Increase/(Decrease)		<u>\$ 273,564</u>	<u>\$ 118,597</u>	<u>\$ 8,357</u>
8	Pro Forma Adjustment:				
9	6707		\$ 273,564	\$ 118,597	\$ 8,357

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
NOTES TO STATEMENT OF INCOME  
OPERATING EXPENSES  
DERIVATION OF UNCOLLECTIBLE ACCOUNTS  
BASED ON THREE YEARS OF HISTORY

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2016 AMOUNT	PRESENT RATES 3/31/2017 AMOUNT	PRESENT RATES 3/31/2018 AMOUNT	THREE YEAR AVERAGE
1	Net Write-Offs	\$ 2,104,832	\$ 2,280,696	\$ 1,796,146	\$ 2,060,558
2	Sales to General Customers	\$ 401,634,121	\$ 403,514,616	\$ 405,510,800	\$ 403,553,179
3	Factor	0.0052407	0.0056521	0.0044293	0.0051060

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 ADDITIONAL COST OF SERVING CUSTOMERS

The Company computes the additional cost of providing service to customers connected during the three years ending March 31, 2020, exclusive of acquisitions.

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES 3/31/2020 AMOUNT
1	Estimated Additional Revenue from New Customers		
2	connected during the three years ended March 31, 2020	Schedule B-3	\$ 4,051,907
3	Operating Ratio		5.34%
4	Cost of Providing Service to New Customers		\$ 216,381
5	The operating ratio specifically related to the adjusted cost of serving new customers		
6	was computed as follows:		
7	Purchased Power Expense		\$ 10,695,036
8	Chemical Expense		5,312,463
9	Bill Processing & Postage Expense		2,262,275
10	Purchased Water Expense		<u>4,766,281</u>
11	Total		<u>\$ 23,036,055</u>
12	Total Water Sales at Present Rates	Schedule B-1	<u>\$ 431,368,643</u>
13	Operating Ratio		5.34%
14	Pro Forma Adjustment:		
15	6161		\$ 100,460
16	6183		\$ 49,901
17	6367		\$ 21,250
18	6101		<u>\$ 44,770</u>
19	Total		\$ 216,381

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 RATE CASE EXPENSE

The following adjustment reflects the estimated cost of this rate case as summarized below. The total cost is being allocated based on the ratio of water customers served to total water and wastewater customers. The Company proposes to normalize this cost over a thirty-six month period, which is consistent with the rate treatment in previous cases.

LINE NO.	DESCRIPTION				
1	Engineering, Cost Allocation and Depreciation	\$	190,000		
2	Legal		1,200,000		
3	Other Consultants		100,000		
4	Rate of Return		90,000		
5	Notices and Postage		330,000		
6	Miscellaneous		65,000		
7	Total	\$	1,975,000		
8	Allocation of Total Rate Case Expense		Total	Annual Amortization	
9	Water	95.76%	\$ 1,891,260	\$ 630,420	
10	Wastewater	4.24%	\$ 83,740	\$ 27,913	
11	Normalization Period		36 Months		
12			PRESENT RATES	PRESENT RATES	
13			3/31/2019	3/31/2020	
14			AMOUNT	AMOUNT	
15	Annual Expense on a 36 Month Normalized Basis	\$	-	\$ 630,420	‡
16	Less: Amount Charged to Operating Expense				
17	During the Twelve Months Ended 3/31/2018		-		
18	Less: Present Rates 3/31/2019			-	
19	Increase/(Decrease)	\$	-	\$ 630,420	
20	Pro Forma Adjustment:				
21	6668			\$ 630,420	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 PAYROLL

The following amounts summarize the Company's estimated annualized payroll expense. This results from the calculation of employee compensation levels scheduled to be in effect by March 31, 2019 and March 31, 2020.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	
1	<b>Non-Union Payroll</b>				
2	Gross Payroll	\$ 17,553,249	\$ 18,686,410	\$ 19,238,752	
3	Capital Payroll	5,297,450	5,639,430	5,806,123	
4	Non-Operating Payroll	240,544	256,073	263,642	
5	Expense Payroll	12,015,255	12,790,908	13,168,988	‡
6	Non-Union Expense Payroll Increase/(Decrease)		\$ 775,653	\$ 378,080	
7	<b>Union Payroll</b>				
8	Gross Payroll	\$ 27,836,526	\$ 28,891,759	\$ 29,592,720	
9	Capital Payroll	9,133,343	9,479,572	9,709,562	
10	Non-Operating Payroll	260,925	270,816	277,386	
11	Expense Payroll	18,442,258	19,141,371	19,605,772	‡
12	Union Expense Payroll Increase/(Decrease)		\$ 699,114	\$ 464,400	
13	Total Expense Payroll Increase/(Decrease)		<u>\$ 1,474,766</u>	<u>\$ 842,480</u>	
14	Pro Forma Adjustment:				
15	6011		\$ 9,970	\$ 5,696	
16	6012		\$ 28,679	\$ 16,383	
17	6013		\$ 428,451	\$ 244,759	
18	6014		\$ 9,589	\$ 5,478	
19	6015		\$ 293,754	\$ 167,811	
20	6016		\$ 102,016	\$ 58,278	
21	6017		\$ 21,229	\$ 12,127	
22	6018		\$ 435,676	\$ 248,886	
23	6038		\$ 115,296	\$ 65,865	
24	65052		\$ 30,105	\$ 17,198	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 INSURANCE EXPENSE

The Company's self insured policies for General Liability, Workers Compensation, Vehicle, and Other are evaluated annually by a third party insurance broker, using multiple year claims history. The Company has based its expense claim on the actual and projected premiums for the twelve months ending March 31, 2019 and March 31, 2020.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	
1	General Liability	\$ 2,183,167	\$ 2,496,008	\$ 2,622,288	
2	Workers Compensation	1,672,545	1,857,962	1,951,962	
3	Vehicle	246,061	291,751	306,512	
4	Other (Exec Risk, Property, Surety Bond)	1,074,351	1,076,070	1,130,512	
5		<u>5,176,124</u>	<u>5,721,791</u>	<u>6,011,274</u>	‡
6	Capitalized portion not charged to operating expense	30.88% (1,598,387)	(1,766,889)	(1,856,281)	‡
7	Subtotal Insurance	<u>\$ 3,577,737</u>	<u>\$ 3,954,902</u>	<u>\$ 4,154,992</u>	
8	Less: Amount Charged to Operating Expense				
9	During the Twelve Months Ended 3/31/2018	3,397,478			
10	Less: Present Rates 3/31/2018		3,577,737		
11	Less: Present Rates 3/31/2019			3,954,902	
12	Increase/(Decrease)	<u>\$ 180,259</u>	<u>\$ 377,165</u>	<u>\$ 200,091</u>	
13	Pro Forma Adjustment:				
14	6578	\$ -	\$ 312,841	\$ 126,281	
15	6588	\$ -	\$ 185,417	\$ 94,000	
16	6568	\$ -	\$ 45,690	\$ 14,761	
17	6598	\$ -	\$ 1,719	\$ 54,442	
18	67624	\$ 180,259	\$ (168,502)	\$ (89,392)	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)



AQUA PENNSYLVANIA, INC.  
NOTES TO STATEMENT OF INCOME  
OPERATING EXPENSES  
MANAGEMENT SERVICE & SUNDRY

The following amounts summarize the estimated additional annualized payroll expense and the company portion of employee benefit related insurance premiums of the Aqua Services, Inc. employees whose time was charged to Aqua Pennsylvania during the test year.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	
1	Management Fees Labor & Benefits	\$ 10,179,428	\$ 10,179,428	\$ 11,581,582	‡
2	Payroll Increase		1,158,758	315,632	‡
3	Employee Benefit Insurance Increase		243,396	78,240	‡
4	Management Fees All Other	11,675,896	11,675,896	11,675,896	
5	Total Expense Claim	<u>\$ 21,855,323</u>	<u>\$ 23,257,478</u>	<u>\$ 23,651,349</u>	
6	Less: Amount Charged to Operating Expense				
7	During the Twelve Months Ended 3/31/2018	21,855,323			
8	Less: Present Rates 3/31/2018		21,855,323		
9	Less: Present Rates 3/31/2019			23,257,478	
10	Increase/(Decrease)	<u>\$ -</u>	<u>\$ 1,402,155</u>	<u>\$ 393,871</u>	
11	Pro Forma Adjustment:				
12	6349	\$ -	\$ 1,402,155	\$ 393,871	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 CUSTOMER SERVICE & SUNDRY

The following amounts summarize the estimated additional annualized payroll expense and the company portion of employee benefit related insurance premiums of the Aqua Customer Operations employees whose time was charged to Aqua Pennsylvania during the test year.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	
1	Customer Operations Labor & Benefits	\$ 3,503,091	\$ 3,503,091	\$ 4,125,255	‡
2	Payroll Increase		479,218	101,415	‡
3	Employee Benefit Insurance Increase		142,946	57,796	‡
4	Customer Operations All Other	1,615,099	1,615,099	1,615,099	
5	Total Expense Claim	<u>\$ 5,118,190</u>	<u>\$ 5,740,353</u>	<u>\$ 5,899,565</u>	
6	Less: Amount Charged to Operating Expense				
7	During the Twelve Months Ended 3/31/2018	5,118,190			
8	Less: Present Rates 3/31/2018		5,118,190		
9	Less: Present Rates 3/31/2019			5,740,353	
10	Increase/(Decrease)	<u>\$ -</u>	<u>\$ 622,163</u>	<u>\$ 159,211</u>	
11	Pro Forma Adjustment:				
12	6367	\$ -	\$ 622,163	\$ 159,211	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 MISCELLANEOUS EXPENSE ADJUSTMENTS

The following adjustments reflect miscellaneous additions or deductions from pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	<b>Additions:</b>			
2	DEP Adjustment		\$ 404,000	
3	<b>Deductions:</b>			
4	Fines	\$ (7,748)		
5	Non Operating Expenses	\$ (372,883)		
6	Removed Position	\$ (39,057)		
7	Increase/(Decrease)	<u>\$ (419,688)</u>	<u>\$ 404,000</u>	<u>\$ -</u>
8	Pro Forma Adjustment:			
9	6366	\$ (50,000)	\$ 404,000	
10	6368	\$ (322,883)		
11	6758	\$ (7,748)		
12	6018	\$ (39,057)		

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 SPECIFIC EXPENSES NOT SUBJECT TO INFLATION

The following amounts reflect specific expenses that are not separately adjusted for and are not subject to growth from inflation. These amounts are eliminated from the eligible Operating Expenses subject to inflation on Schedule C-4.1.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Leases	\$ 654,286	\$ 654,286	\$ 654,286 ‡
2	Total Specific Expenses Not Subject to Inflation	<u>\$ 654,286</u>	<u>\$ 654,286</u>	<u>\$ 654,286</u>

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

## AQUA PENNSYLVANIA, INC.

## NOTES TO STATEMENT OF INCOME

## OPERATING EXPENSES

## AMORTIZATION OF NEW POSITIVE ACQUISITION ADJUSTMENTS

The Company is proposing to amortize certain positive acquisition adjustments involving acquisitions that were closed after the last AP rate case was filed. Listed below is the first year amortization of the acquisition adjustments. A twenty year amortization period was selected similar to the treatment of prior acquisition adjustments approved by the Commission.

LINE NO.	DESCRIPTION	ORIGINAL ACQUISITION ADJUSTMENT	DATE OF OWNERSHIP	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Sand Springs	\$ 4,140	11/1/2011	\$ -	\$ -	\$ 207
2	Mifflin Twp Water	\$ 394,100	4/2/2012	\$ -	\$ -	\$ 19,705
3	Beech Mountain	\$ 157,299	5/4/2012	\$ -	\$ -	\$ 7,865
4	Treasure Lake	\$ 3,024,801	3/1/2013	\$ -	\$ -	\$ 151,240
5	Concord Park	\$ 52,202	3/30/2013	\$ -	\$ -	\$ 2,610
6	Mt Jewett Water	\$ 49,459	5/6/2015	\$ -	\$ -	\$ 2,473
7	Sun Valley Water	\$ 3,883	1/30/2018	\$ -	\$ -	\$ 194
8		<u>\$ 3,685,883</u>		<u>\$ -</u>	<u>\$ -</u>	<u>\$ 184,294</u>
9	Amortization Period	20 Years				
10	Annual Amortization	\$ 184,294				
11	Less: Amount Charged to Operating Expense					
12	During the Twelve Months Ended 3/31/2018			-		
13	Less: Present Rates 3/31/2018				-	
14	Less: Present Rates 3/31/2019					-
15	Increase/(Decrease)			<u>\$ -</u>	<u>\$ -</u>	<u>\$ 184,294</u>
16	Pro Forma Adjustment:					
17	4060			\$ -	\$ -	\$ 184,294

AQUA PENNSYLVANIA, INC.  
NOTES TO STATEMENT OF INCOME  
OPERATING EXPENSES

AMORTIZATION OF NEW NEGATIVE ACQUISITION ADJUSTMENTS

The Company is proposing to amortize certain negative acquisition adjustments involving acquisitions that were closed after the last AP rate case was filed. Listed below is the amortization of the acquisition adjustments. A twenty year amortization period was selected similar to the treatment of prior acquisition adjustments approved by the Commission.

LINE NO.	DESCRIPTION	ORIGINAL ACQUISITION ADJUSTMENT	DATE OF OWNERSHIP	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Yalick Farms Water	\$ (993,958)	12/21/2012	\$ (49,698)	\$ (49,698)	\$ (49,698)
2	Bristol Township Water	\$ (224,935)	8/1/2013	\$ (11,247)	\$ (11,247)	\$ (11,247)
3	Bunker Hill Water	\$ (17,254)	8/12/2015	\$ (863)	\$ (863)	\$ (863)
4	Robin Hood Lake Water	\$ (87,234)	10/15/2015	\$ (4,362)	\$ (4,362)	\$ (4,362)
5	East Cameron Township Water	\$ (69,859)	12/20/2016	\$ (3,493)	\$ (3,493)	\$ (3,493)
6		\$ (1,393,239)		\$ (69,662)	\$ (69,662)	\$ (69,662)
7	Amortization Period	20 Years				
8	Annual Amortization	\$ (69,662)				
9	Less: Amount Charged to Operating Expense					
10	During the Twelve Months Ended 3/31/2018			\$ (69,662)		
11	Less: Present Rates 3/31/2018				\$ (69,662)	
12	Less: Present Rates 3/31/2019					\$ (69,662)
13	Increase/(Decrease)			\$ -	\$ 0	\$ -
14	Pro Forma Adjustment:					
15	4060			\$ -	\$ 0	\$ -

AQUA PENNSYLVANIA, INC.  
NOTES TO STATEMENT OF INCOME  
OPERATING EXPENSES  
PURCHASED POWER EXPENSE

This adjustment summarizes the Company's purchased power expense claim as detailed on Schedule C-6.1.i & Schedule C-6.1.ii.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	
1	Claimed Purchased Power Expense - Electric	\$ 10,677,654	\$ 10,645,612	\$ 10,356,399	
2	Claimed Purchased Power Expense - Gas	318,397	338,637	338,637	
3		<u>\$ 10,996,051</u>	<u>\$ 10,984,248</u>	<u>\$ 10,695,036</u>	‡
4	Less: Amount Charged to Operating Expense				
5	During the Twelve Months Ended 3/31/2018	10,914,591			
6	Less: Present Rates 3/31/2018		10,996,051		
7	Less: Present Rates 3/31/2019			10,984,248	
8	Increase/(Decrease)	<u>\$ 81,459</u>	<u>\$ (11,803)</u>	<u>\$ (289,212)</u>	
9	Pro Forma Adjustment:				
10	6151	\$ 65,168	\$ (9,442)	\$ (231,373)	
11	6153	\$ 1,536	\$ (223)	\$ (5,454)	
12	6155	\$ 9,461	\$ (1,371)	\$ (33,591)	
13	6158	\$ 2,774	\$ (402)	\$ (9,850)	
14	6161	\$ 1,228	\$ (178)	\$ (4,360)	
15	6163	\$ 216	\$ (31)	\$ (766)	
16	6165	\$ 11	\$ (2)	\$ (38)	
17	6167	\$ 80	\$ (12)	\$ (283)	
18	6168	\$ 985	\$ (143)	\$ (3,497)	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 PURCHASED POWER - ELECTRIC

LINE NO.	UTILITY	LOCATION	PRESENT RATES		PRESENT RATES		FULLY PROJECTED		PRESENT RATES	
			HISTORIC KW HOURS	3/31/2018 AMOUNT	FUTURE KW HOURS	3/31/2019 AMOUNT	FUTURE KW HOURS	3/31/2020 AMOUNT		
1	PECO	Southeastern Pennsylvania	110,612,874	\$ 8,645,146	110,613,090	\$ 8,508,499	110,613,090	\$ 8,297,577		
2	PP&L	Southeastern Pennsylvania	242,523	\$ 23,329	242,523	\$ 23,738	242,523	\$ 22,520		
3	MetEd	Southeastern Pennsylvania	1,719,933	\$ 181,805	1,733,449	\$ 179,188	1,733,449	\$ 177,333		
4	PP&L	Roaring Creek	5,428,869	\$ 455,649	5,428,869	\$ 464,802	5,428,869	\$ 437,549		
5	MetEd	Roaring Creek	201,664	\$ 20,462	201,664	\$ 19,991	201,664	\$ 19,776		
6	Adams Co-op	Roaring Creek	58,176	\$ 6,488	58,176	\$ 6,618	58,176	\$ 6,618		
7	PenElec	Susquehanna	649,143	\$ 68,498	649,143	\$ 68,794	649,143	\$ 67,541		
8	TriCounty REC	Susquehanna	2,887	\$ 584	2,887	\$ 596	2,887	\$ 596		
9	PenElec	Shenango	1,661,829	\$ 166,028	1,687,789	\$ 169,391	1,687,789	\$ 166,134		
10	Penn Power	Shenango	9,210,550	\$ 684,830	9,213,700	\$ 640,212	9,213,700	\$ 628,511		
11	United Electric Co-op	Shenango	161,136	\$ 17,652	161,136	\$ 18,005	161,136	\$ 18,005		
12	West Penn Power	Shenango	115,280	\$ 11,199	187,002	\$ 18,167	187,002	\$ 18,167		
13	PP&L	White Haven	5,976,777	\$ 565,487	6,024,586	\$ 580,168	6,024,586	\$ 549,924		
14	UGI	White Haven	605,383	\$ 66,476	652,143	\$ 73,043	652,143	\$ 73,043		
15	Claverack	White Haven	42,081	\$ 4,774	42,081	\$ 4,869	42,081	\$ 4,869		
16	PenElec	White Haven	152,898	\$ 16,586	152,898	\$ 16,656	152,898	\$ 16,361		
17	MetEd	White Haven	136,664	\$ 14,274	139,012	\$ 14,195	139,012	\$ 14,046		
18										
19	PJM Demand Response (CPower)	Southeastern Pennsylvania		\$ (13,715)		\$ (32,371)		\$ (33,221)		
20	PA ACT 129 PECO Peak Response (CPower)	Southeastern Pennsylvania		\$ (31,339)		\$ (15,669)		\$ (15,669)		
21	Constellation Energy Peak Response Rebate	Southeastern Pennsylvania		\$ (226,559)		\$ (113,280)		\$ (113,280)		
22										
23	Solar Generated Power	Pickering	2,053,848		1,848,463		1,971,694			
24	Solar Generated Power	Ingrams	1,222,382		1,100,144		1,173,487			
25				\$ 10,677,654		\$ 10,645,612		\$ 10,356,399		



AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 PURCHASED POWER - GAS

LINE NO.	UTILITY	LOCATION	HISTORIC THERMS	PRESENT RATES 3/31/2018 AMOUNT	FUTURE THERMS	PRESENT RATES 3/31/2019 AMOUNT	FULLY PROJECTED FUTURE THERMS	PRESENT RATES 3/31/2020 AMOUNT
1	PECO	Southeastern Pennsylvania	210,179	\$ 157,510	210,179	\$ 173,261	210,179	\$ 173,261
2	UGI UTILITIES , INC	Southeastern Pennsylvania	3,101	\$ 3,672	3,101	\$ 4,039	3,101	\$ 4,039
3	CENTRAL PENN GAS	Roaring Creek	7,094	\$ 6,338	7,094	\$ 6,972	7,094	\$ 6,972
4	COLUMBIA GAS OF Pa	Shenango	3,869	\$ 3,727	3,869	\$ 4,100	3,869	\$ 4,100
5	NATIONAL FUEL	Shenango	49,302	\$ 25,231	49,302	\$ 27,754	49,302	\$ 27,754
6	UGI UTILITIES , INC	White Haven	4,854	\$ 5,919	4,854	\$ 6,511	4,854	\$ 6,511
7	Direct Purchases - Fuel Oil, Propane and Generator Diesel			\$ 116,000		\$ 116,000		\$ 116,000
8				<u>\$ 318,397</u>		<u>\$ 338,637</u>		<u>\$ 338,637</u>

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 CHEMICALS

The company utilizes various chemicals in the water treatment process. The chemical expense claim is based on the total production gallons for the twelve months ended March 31, 2018 multiplied by the chemical treatment cost per million gallons. The cost per million gallons for the historic test year was increased by an average year over year growth rate to arrive at the treatment cost per million gallons for the future and fully projected future test years.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Claimed Chemical Treatment Cost Per Million Gallons	\$ 116.86	\$ 121.79	\$ 126.92
2	Claimed Production Sendout	41,858 MG		
3	Claimed Chemical Expense	\$ 4,891,606	\$ 5,097,693	\$ 5,312,463 ‡
4	Less: Amount Charged to Operating Expense During the Twelve Months Ended 3/31/2018	4,891,606		
5	Less: Present Rates 3/31/2018		4,891,606	
6	Less: Present Rates 3/31/2019			5,097,693
7	Increase/(Decrease)	<u>\$ -</u>	<u>\$ 206,087</u>	<u>\$ 214,770</u>
8	Pro Forma Adjustment:			
9	6183	\$ -	\$ 206,087	\$ 214,770

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 PURCHASED WATER EXPENSE

The Company summarized the actual gallons and expenses from each of its purchased water vendors and projected the Future Test Year and Fully Projected Future Test Year expense claim using historical test year gallons, adjusted to reflect the termination of purchases from Bucks County for the Bensalem Account and new rates that are scheduled to be in effect during the future test years.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Claimed Purchased Water Expense	\$ 4,539,857	\$ 4,766,281 ‡
2	Less: Amount Charged to Operating Expense		
3	During the Twelve Months Ended 3/31/2018	5,168,610	
4	Less: Present Rates 3/31/2019		4,539,857
5	Increase/(Decrease)	<u>\$ (628,754)</u>	<u>\$ 226,424</u>
6	Pro Forma Adjustment:		
7	6101	\$ (628,754)	\$ 226,424

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 PURCHASED WATER - DETAIL BY SUPPLIER

LINE NO.	Supplier	Account Name	PRESENT RATES 3/31/2016		PRESENT RATES 3/31/2017		PRESENT RATES 3/31/2018		PRESENT RATES 3/31/2019		PRESENT RATES 3/31/2020	
			GALLONS	AMOUNT \$	GALLONS	AMOUNT \$	GALLONS	AMOUNT \$	GALLONS	AMOUNT \$	GALLONS	AMOUNT \$
1	Bucks County Water Authority and Sewer	Bensalem & Southampton	1,285,845,000	\$ 7,287,208	1,287,043,000	\$ 7,678,841	133,546,000	\$ 830,403	-	\$ -	-	\$ -
2	Philadelphia Water Department	Tinicum and Cheltenham	551,800,000	\$ 3,573,971	532,400,000	\$ 3,348,204	507,300,000	\$ 3,253,142	519,700,000	\$ 3,432,060	519,700,000	\$ 3,609,750
3	Chester Water Authority	Ridley	141,807,000	\$ 414,942	141,081,000	\$ 412,859	142,945,000	\$ 418,208	143,192,000	\$ 422,581	143,192,000	\$ 460,809
4	Chester Water Authority	Cheyney Rd	53,136,000	\$ 190,300	51,192,000	\$ 183,838	50,927,000	\$ 183,145	51,402,000	\$ 187,601	51,402,000	\$ 203,257
5	Aqua Ohio	Shenango	23,730,000	\$ 163,311	23,399,000	\$ 169,001	28,302,300	\$ 211,020	29,764,669	\$ 229,243	25,492,043	\$ 204,668
6	Chester Water Authority	Birney Highway	36,833,000	\$ 121,191	38,157,000	\$ 126,422	38,648,000	\$ 128,064	38,759,000	\$ 131,574	38,759,000	\$ 144,731
7	Downingtown Municipal Authority	Rock Raymond	84,494,000	\$ 81,959	93,215,000	\$ 90,794	89,174,000	\$ 89,448	84,704,000	\$ 86,066	84,704,000	\$ 87,787
8	Chester Water Authority	Pocopson	-	\$ 4,391	-	\$ 4,391	-	\$ 4,391	-	\$ 4,391	-	\$ 4,830
9	Philadelphia Water Department	Miquon	991,848	\$ 9,527	1,478,796	\$ 12,408	1,313,488	\$ 11,350	1,457,852	\$ 11,918	1,344,156	\$ 12,526
10	Chester Water Authority	Eddystone	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
11	Phoenixville Water	Schuylkill	1,120,000	\$ 2,240	1,205,000	\$ 2,410	1,129,000	\$ 2,258	1,062,000	\$ 2,124	1,062,000	\$ 2,124
12	Philadelphia Water Department	Knights Rd	-	\$ 1,610	-	\$ 1,555	-	\$ 1,166	-	\$ -	-	\$ -
13	Can Do Inc - Water Division	Sand Springs	1,073,000	\$ 14,105	6,560,000	\$ 31,863	7,418,000	\$ 31,432	7,107,708	\$ 30,300	8,453,375	\$ 33,799
14	Shamokin Dam Borough		-	\$ 2,000	-	\$ 2,000	-	\$ 2,000	-	\$ 2,000	-	\$ 2,000
15												
16	Total		2,180,829,848	\$ 11,866,756	2,175,730,796	\$ 12,064,585	1,000,702,788	\$ 5,166,026	877,149,229	\$ 4,539,857	874,108,574	\$ 4,766,281

AQUA PENNSYLVANIA, INC.  
NOTES TO STATEMENT OF INCOME  
OPERATING EXPENSES  
WATER PRODUCTION ADJUSTMENT

As a result of eliminating a portion of the Company's purchased water source from Bucks County Water and Sewer Authority - Bensalem, the Company is claiming the production costs associated with producing its own water in the future and fully projected future test years. Additionally, as a result of declining residential consumption, the company is claiming a reduction to the costs associated with the resulting decreased production in the future and fully projected future test years.

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	The production cost specifically related to the adjusted cost of the change in production			
2	was computed as follows:			
3	Purchased Power Expense	Schedule C-6.1	\$ 10,984,248	\$ 10,695,036
4	Chemical Expense	Schedule C-6.2	\$ 5,097,693	\$ 5,312,463
5			<u>\$ 16,081,941</u>	<u>\$ 16,007,499</u>
6	Estimated Production Gallons (Thousands)		41,858,000	41,858,000
7	Production Cost per 1,000 Gallons		\$ 0.38	\$ 0.38
8	Increased Gallons treated from elimination of purchased gallons from Bucks	Schedule C-7.1.i	133,546	
9	Decreased Gallons treated from declining residential usage	Schedule B-4	(37,610)	(37,610)
10	Estimated Change in Production Gallons (Thousands)		<u>95,936</u>	<u>(37,610)</u>
11	Total Production Cost Increase / (Decrease)		\$ 36,859	\$ (14,383)
12	Pro Forma Adjustment:			
13	6153		\$ 25,175	\$ (9,610)
14	6183		\$ 11,684	\$ (4,773)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 EMPLOYEE GROUP INSURANCE

The Company offers group insurance coverage to all full time employees. The following amounts summarize the Company's estimated annualized group insurance expense, less the employee co-pay, and adjusted for the portion not charged to operations. This results from the calculation of group insurance levels projected to be in effect by March 31, 2019 and March 31, 2020.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	
1	Medical/Prescription/Vision	\$ 6,387,565	\$ 7,189,714	\$ 7,878,102	
2	Life/ADD/LTD	425,407	481,085	481,085	
3	Dental	493,801	511,106	526,754	
4		<u>7,306,774</u>	<u>8,181,905</u>	<u>8,885,941</u>	
5	Capitalized portion not charged to operating expense	30.88% (2,256,332)	(2,526,572)	(2,743,979)	
6	Sub-Total	<u>\$ 5,050,442</u>	<u>\$ 5,655,333</u>	<u>\$ 6,141,963</u>	‡
7	Less: Amount Charged to Operating Expense				
8	During the Twelve Months Ended 3/31/2018	4,659,581			
9	Less: Present Rates 3/31/2018		5,050,442		
10	Less: Present Rates 3/31/2019			5,655,333	
11	Increase/(Decrease)	<u>\$ 390,861</u>	<u>\$ 604,890</u>	<u>\$ 486,630</u>	
12	Pro Forma Adjustment:				
13	6048	\$ 390,861	\$ 604,890	\$ 486,630	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 PENSION

The Company's pension expense claim is based on its analysis of ERISA minimum and IRS maximum deductible pension contribution data provided by its outside actuary, Towers Watson.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	<u>ERISA Minimum Pension Contribution</u>			
2	Based on Willis Towers Watson			
3	2017 Actuarial Report	\$ 6,683,097		
4	2018 Forecast		\$ 6,683,097	
5	2019 Forecast			\$ 6,683,097
6	<u>IRS Maximum Deductible Pension Contribution</u>			
7	Based on Willis Towers Watson			
8	2017 Actuarial Report	\$ 161,118,642		
9	2018 Forecast		\$ 161,118,642	
10	2019 Forecast			\$ 161,118,642
11	<u>Resulting Mid-Point Contribution - Mid-point between the</u>			
12	<u>above minimum and maximum contributions (the Company's</u>			
13	<u>past practice for selecting a contribution level)</u>	\$ 83,900,870	\$ 83,900,870	\$ 83,900,870
14	<u>Company's Claim</u>			
15	Aqua Pennsylvania's claim based on range of actuarial results	\$ 10,525,000	\$ 6,100,000	\$ 6,100,000
16	Less: Capitalized Portion	30.88% (3,250,120)	(1,883,680)	(1,883,680)
17		\$ 7,274,880	\$ 4,216,320	\$ 4,216,320 ‡
18	Less: Amount Charged to Operating Expense			
19	During the Twelve Months Ended 3/31/2018	6,997,636		
20	Less: Present Rates 3/31/2018		7,274,880	
21	Less: Present Rates 3/31/2019			4,216,320
22	Increase/(Decrease)	<u>\$ 277,244</u>	<u>\$ (3,058,560)</u>	<u>\$ -</u>
23	Pro Forma Adjustment:			
24	6048	\$ 277,244	\$ (3,058,560)	\$ -

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 POST RETIREMENT BENEFITS

The following adjustment is based on the results of the most recent valuation of post-retirement benefits (SFAS 106) which was performed for AP by Towers Watson. Included in the claim is the amortization of the funding deficit that conforms to the Commission's 1997 Order at Docket No. R-00973952.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	<u>SFAS 106</u>			
2	Annual Expense for Aqua PA Employees	\$ 2,120,956	\$ 1,980,315	\$ 1,980,315
3	Funding Deficit (3/31/20 - 3/31/22) - 3 Year Amortization	\$ (168,312)		(56,104)
4	Less: Capitalized Portion	30.88% (654,951)	(611,521)	(594,196)
5		\$ 1,466,005	\$ 1,368,794	\$ 1,330,015 ‡
6	Less: Amount Charged to Operating Expense			
7	During the Twelve Months Ended 3/31/2018	1,301,551		
8	Less: Present Rates 3/31/2018		1,466,005	
9	Less: Present Rates 3/31/2019			1,368,794
10	Increase/(Decrease)	<u>\$ 164,454</u>	<u>\$ (97,211)</u>	<u>\$ (38,779)</u>
11	Pro Forma Adjustment:			
12	6048	\$ 164,454	\$ (97,211)	\$ (38,779)

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)



AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 REMOVE INTRACOMPANY BENEFITS

The Company charges a portion of employee benefits and other related overheads to Aqua Pennsylvania Wastewater through an intracompany transaction which is allocated based on approximately 60% of wastewater payroll expense. Refer to Exhibit 1-B Wastewater, Schedule C-8.1 for the corresponding entry.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Wastewater Intracompany Benefits	\$ (883,392)	\$ (935,825)	\$ (962,026) ‡
2	Less: Amount Charged to Operating Expense			
3	During the Twelve Months Ended 3/31/2018	(888,188)		
4	Less: Present Rates 3/31/2018		(883,392)	
5	Less: Present Rates 3/31/2019			(935,825)
6	Increase/(Decrease)	<u>\$ 4,796</u>	<u>\$ (52,433)</u>	<u>\$ (26,201)</u>
7	Pro Forma Adjustment:			
8	6048	\$ 4,796	\$ (52,433)	\$ (26,201)

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 LEGAL EXPENSE

The Company incurs cost for general legal services during the normal course of business to protect and defend the Company's interests in a variety of legal matters. This adjustment normalizes the Company's legal expense claim experienced in the historic test year to levels that are expected to be realized during the first year rates are in effect and more in line with prior experience.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Legal Expense Claim (3 Year Average)	\$ 397,744	\$ 397,744	\$ 397,744
2	Less: Amount Charged to Operating Expense			
3	During the Twelve Months Ended 3/31/2018	351,164		
4	Less: Present Rates 3/31/2018		397,744	
5	Less: Present Rates 3/31/2019			397,744
6	Increase/(Decrease)	<u>\$ 46,580</u>	<u>\$ -</u>	<u>\$ -</u>
7	Pro Forma Adjustment:			
8	6338	\$ 46,580	\$ -	\$ -

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 ELIMINATE NAWC LOBBYING EXPENSE

This adjustment removes the lobbying expense portion, approximately 13%, of the National Association of Water Companies annual dues for the historic test year.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT
1	Claimed Lobbying Expense	\$ -
2	Less: Amount Charged to Operating Expense	
3	During the Twelve Months Ended 3/31/2018	32,926
4	Increase/(Decrease)	<u>\$ (32,926)</u>
5	Pro Forma Adjustment:	
6	6758	\$ (32,926)

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 ANNUALIZATION OF SUN VALLEY

The following adjustment is to annualize the additional expenses from the Sun Valley Acquisition to give effect of a full twelve months of service.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Annualization of Sun Valley Expenses	\$ 14,400	\$ 14,400
2	Less: Amount Charged to Operating Expense		
3	During the Twelve Months Ended 3/31/2018	-	
4	Less: Present Rates 3/31/2019		14,400
5	Increase/(Decrease)	<u>\$ 14,400</u>	<u>\$ -</u>
6	Pro Forma Adjustment:		
7	6168	3,960	-
8	6208	3,960	-
9	6368	3,600	-
10	6758	2,880	-

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 STATEMENT OF DEPRECIATION

LINE NO.	DESCRIPTION	PRESENT RATES	PRESENT RATES	PRESENT RATES
		3/31/18 AMOUNT	3/31/19 AMOUNT	3/31/20 AMOUNT
	(1)	(2)	(3)	(4)
1	(a) Annualized Depreciation Expense	\$ 84,961,768	\$ 94,594,762	\$ 100,767,946
2	Less: Amount Charged to Depreciation Expense			
3	During the Twelve Months Ended 3/31/2018	81,051,282		
4	Less: Present Rates 3/31/2018		84,961,768	
5	Less: Present Rates 3/31/2019			94,594,762
6	Increase/(Decrease)	<u>\$ 3,910,486</u>	<u>\$ 9,632,994</u>	<u>\$ 6,173,184</u>
7	Pro Forma Adjustment:			
8		\$ 3,910,486	\$ 9,632,994	\$ 6,173,184

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO TAXES OTHER THAN INCOME

LINE NO.	DESCRIPTION	PRESENT RATES		PRESENT RATES		PRESENT RATES		PROPOSED RATES	
		ADJUSTMENT	3/31/18 AMOUNT	ADJUSTMENT	3/31/19 AMOUNT	ADJUSTMENT	3/31/20 AMOUNT	ADJUSTMENT	AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Per Books		\$ 9,564,159						
2	Present Rates at 3/31/18				\$ 9,794,619				
3	Present Rates at 3/31/19						\$ 10,042,888		
4	Present Rates at 3/31/20								\$ 10,111,003
	General Assessment Fees By The Pennsylvania Public Utility								
5	Commission	(9,778)		98,432		6,936		247,062	
	General Assessment Fees By The Consumer Advocate And Small								
6	Business Advocate	5,939		18,514		1,305		46,470	
7	Public Utility Realty Tax	51,455		-		-		-	
8	Pennsylvania Property Tax	-		-		-		-	
9	Payroll Taxes	182,844		131,323		59,875			
10	Pro Forma Adjustment		\$ 230,460		\$ 248,269		\$ 68,115		\$ 293,532
11	Pro Forma Present Rates at March 31, 2018		<u>\$ 9,794,619</u>						
12	Pro Forma Present Rates at March 31, 2019				<u>\$ 10,042,888</u>				
13	Pro Forma Present Rates at March 31, 2020						<u>\$ 10,111,003</u>		
14	Pro Forma Proposed Rates at March 31, 2020								<u>\$ 10,404,535</u>

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 TAXES OTHER THAN INCOME

GENERAL ASSESSMENT FEES BY THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	PROPOSED RATES AMOUNT
1	Gross Utility Water Revenues	\$ 406,505,212	\$ 429,732,024	\$ 431,368,643	\$ 489,667,488
2	Estimated General Assessment Fee:				
3	Public Utility Commission Fee At 0.004237859666	1,722,712	1,821,144	1,828,080	2,075,142
4	Total General Assessment Fees	\$ 1,722,712	\$ 1,821,144	\$ 1,828,080	\$ 2,075,142
5	Less: Amount Charged to Taxes Other Than Income				
6	During the Twelve Months Ended 3/31/2018	1,732,490			
7	Less: Present Rates 3/31/2018		1,722,712		
8	Less: Present Rates 3/31/2019			1,821,144	
9	Less: Present Rates 3/31/2020				1,828,080
10	Increase/(Decrease)	\$ (9,778)	\$ 98,432	\$ 6,936	\$ 247,062
11	Pro Forma Adjustment:				
12	4081	\$ (9,778)	\$ 98,432	\$ 6,936	\$ 247,062

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 TAXES OTHER THAN INCOME

GENERAL ASSESSMENT FEES BY THE CONSUMER ADVOCATE AND SMALL BUSINESS ADVOCATE

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	PROPOSED RATES AMOUNT
1	Gross Utility Water Revenues	\$ 406,505,212	\$ 429,732,024	\$ 431,368,643	\$ 489,667,488
2	Estimated General Assessment Fee:				
3	Consumer Advocate Fee At 0.000672671080	273,444	289,068	290,169	329,385
4	Small Business Advocate Fee At 0.000124428392	50,581	53,471	53,675	60,929
5	Total General Assessment Fees	\$ 324,025	\$ 342,539	\$ 343,844	\$ 390,314
6	Less: Amount Charged to Taxes Other Than Income				
7	During the Twelve Months Ended 3/31/2018	318,087			
8	Less: Present Rates 3/31/2018		324,025		
9	Less: Present Rates 3/31/2019			342,539	
10	Less: Present Rates 3/31/2020				343,844
11	Increase/(Decrease)	<u>\$ 5,939</u>	<u>\$ 18,514</u>	<u>\$ 1,305</u>	<u>\$ 46,470</u>
12	Pro Forma Adjustment:				
13	4081	\$ 5,939	\$ 18,514	\$ 1,305	\$ 46,470



AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 TAXES OTHER THAN INCOME  
 PUBLIC UTILITY REALTY TAX

PURTA for the future test year and fully projected future test year are based on the year 2018 tax liability.  
 This is the latest statement that the Company has received from the Commonwealth of Pennsylvania.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	2018 PURTA Liability	\$ 4,200,000	\$ 4,200,000	\$ 4,200,000
2	Less: Amount Charged to Taxes Other Than Income			
3	During the Twelve Months Ended 3/31/2018	4,148,545		
4	Less: Present Rates 3/31/2018		4,200,000	
5	Less: Present Rates 3/31/2019			4,200,000
6	Increase/(Decrease)	<u>\$ 51,455</u>	<u>\$ -</u>	<u>\$ -</u>
7	Pro Forma Adjustment:			
8	4082	\$ 51,455	\$ -	\$ -

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 TAXES OTHER THAN INCOME  
 PENNSYLVANIA PROPERTY TAX

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Claimed Property Tax Expense	\$ 917,726	\$ 917,726	\$ 917,726
2	Less: Amount Charged to Taxes Other Than Income			
3	During the Twelve Months Ended 3/31/2018	917,726		
4	Less: Present Rates 3/31/2018		917,726	
5	Less: Present Rates 3/31/2019			917,726
6	Increase/(Decrease)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
7	Pro Forma Adjustment:			
8	4081	\$ -	\$ -	\$ -

AQUA PENNSYLVANIA, INC.  
NOTES TO STATEMENT OF INCOME  
TAXES OTHER THAN INCOME  
PAYROLL TAXES

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim made at March 31, 2019 and March 31, 2020.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	FICA OASDI		\$ 2,996,097	\$ 3,063,681
2	FICA Medicare		717,066	736,006
3	FICA Total	3,520,490	3,713,163	3,799,687
4	FUTA	25,896	25,646	25,656
5	SUTA	258,816	256,385	256,476
6	Annualized Payroll Taxes	3,805,202	3,995,195	4,081,819
7	Capitalized portion not charged to operating expense	30.88% (1,175,046)	(1,233,716)	(1,260,466)
8	Sub-Total	\$ 2,630,156	\$ 2,761,478	\$ 2,821,353
9	Less: Amount Charged to Taxes Other Than Income			
10	During the Twelve Months Ended 3/31/2018	2,447,311		
11	Less: Present Rates 3/31/2018		2,630,156	
12	Less: Present Rates 3/31/2019			2,761,478
13	Increase/(Decrease)	<u>\$ 182,844</u>	<u>\$ 131,323</u>	<u>\$ 59,875</u>
14	Pro Forma Adjustment:			
15	40812	\$ 182,844	\$ 131,323	\$ 59,875

AQUA PENNSYLVANIA, INC.  
INTEREST ON LONG-TERM DEBT

For the purposes of calculating long-term debt interest expense, the Company is using the pro-forma capital structure and cost rates as noted below:

LINE NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1		PRESENT RATES @ 3/31/18			PRESENT RATES @ 3/31/19			PRESENT RATES @ 3/31/20		
2	Capital Structure	\$	%	Cost Rate	\$	%	Cost Rate	\$	%	Cost Rate
3	Long-term Debt	\$ 1,333,382,818	46.05%	4.42%	\$ 1,484,107,392	46.87%	4.43%	\$ 1,608,093,832	47.15%	4.43%
4	Common Equity	\$ 1,562,180,646	53.95%	10.75%	\$ 1,682,180,646	53.13%	10.75%	\$ 1,802,180,646	52.85%	10.75%
5		<u>\$ 2,895,563,464</u>	<u>100.00%</u>	<u>7.84%</u>	<u>\$ 3,166,288,037</u>	<u>100.00%</u>	<u>7.79%</u>	<u>\$ 3,410,274,478</u>	<u>100.00%</u>	<u>7.77%</u>

		PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
6				
7	Calculation of Interest:			
8	Original Cost Rate Base	Schedule G-1 Col 3, Row 16 \$ 2,757,953,888	Schedule G-1 Col 4, Row 16 \$ 3,058,231,387	Schedule G-1 Col 5, Row 16 \$ 3,265,241,568
9	Applicable Percentage	<u>46.05%</u>	<u>46.87%</u>	<u>47.15%</u>
10	Applicable Portion of Rate Base	\$ 1,270,014,757	\$ 1,433,458,913	\$ 1,539,704,461
11	Cost Rate	4.42%	4.43%	4.43%
12	Pro-Forma Long-term Interest Expense	<u>\$ 56,134,652</u>	<u>\$ 63,502,230</u>	<u>\$ 68,208,908</u>
13	Less: Interest on Long Term Debt Per Books 3/31/18	55,336,607		
14	Less: Interest on Long Term Debt Present Rates at 3/31/18		56,134,652	
15	Less: Interest on Long Term Debt Present Rates at 3/31/19			<u>63,502,230</u>
16	Long Term Debt Pro Forma Adjustment	<u>\$ 798,046</u>	<u>\$ 7,367,578</u>	<u>\$ 4,706,678</u>

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

AMORTIZATION OF DEBT ISSUANCE & PREMIUM/DISCOUNT ON DEBT

Since the debt discount and expense is considered in calculating the cost rate of debt used to calculate interest on long-term debt, it should be eliminated.

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Amortization of Debt Discount and Expense Per Books	\$ 834,379	\$ -	\$ -
2	Eliminate Amortization of Debt Discount and Expense	<u>(834,379)</u>	<u>-</u>	<u>-</u>
3	Sub-Total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
4	Pro Forma Adjustment:			
5	4276	\$ (834,379)	\$ -	\$ -

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 OTHER INTEREST CHARGES

Other Interest Charges for the year ending March 31, 2018 were principally for funds borrowed through bank loans to finance the Company's capital expenditures. The bank loans outstanding are anticipated to be refinanced with long-term debt prior to the end of the future test year. Therefore, the interest on bank loans is eliminated.

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Other Interest Charges Per Books	\$ (8,184)	\$ -	\$ -
2	Eliminate Other Interest Charges	8,184	-	-
3	Sub-Total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
4	Pro Forma Adjustment:			
5	4190	\$ 8,184	\$ -	\$ -

AQUA PENNSYLVANIA, INC.  
 NOTES TO STATEMENT OF INCOME  
 INTEREST DURING CONTRUCTION

The Company eliminates interest during construction to allow for full recovery of the Company's interest expense claim (weighted cost of debt times rate base).

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Interest During Construction Per Books	\$ (10,107,463)	\$ -	\$ -
2	Eliminate Interest During Construction	10,107,463	-	-
3	Sub-Total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
4	Pro Forma Adjustment:			
5	4200	\$ 10,107,463	\$ -	\$ -

AQUA PENNSYLVANIA, INC.

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO INCOME TAXES

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES	PRESENT RATES	PRESENT RATES	PROPOSED RATES
			3/31/18 AMOUNT	3/31/19 AMOUNT	3/31/20 AMOUNT	3/31/20 AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)
1	Federal Income Tax - Current	Schedule F-2	\$ (4,235,177)	\$ (4,451,927)	\$ (117,200)	\$ 10,790,755
2	Less: Per Book	Schedule A-1	(13,121,786)			
3	Less: Present Rates at 3/31/18			(4,235,177)		
4	Less: Present Rates at 3/31/19				(4,451,927)	
5	Less: Present Rates at 3/31/20					(117,200)
6	Pro Forma Adjustment		<u>\$ 8,886,609</u>	<u>\$ (216,750)</u>	<u>\$ 4,334,727</u>	<u>\$ 10,907,955</u>
7	State Income Tax - Current	Schedule F-2	\$ (3,756,565)	\$ (3,717,342)	\$ (1,056,702)	\$ 4,708,291
8	Less: Per Book	Schedule A-1	1,580,468			
9	Less: Present Rates at 3/31/18			(3,756,565)		
10	Less: Present Rates at 3/31/19				(3,717,342)	
11	Less: Present Rates at 3/31/20					(1,056,702)
12	Pro Forma Adjustment		<u>\$ (5,337,032)</u>	<u>\$ 39,223</u>	<u>\$ 2,660,640</u>	<u>\$ 5,764,993</u>
13	Federal Income Tax - Deferred	Schedule F-2	\$ (7,874,044)	\$ (8,188,873)	\$ (11,278,940)	\$ (11,278,940)
14	Less: Per Book	Schedule A-1	(678,989)			
15	Less: Present Rates at 3/31/18			(7,874,044)		
16	Less: Present Rates at 3/31/19				(8,188,873)	
17	Less: Present Rates at 3/31/20					(11,278,940)
18	Pro Forma Adjustment		<u>\$ (7,195,055)</u>	<u>\$ (314,828)</u>	<u>\$ (3,090,067)</u>	<u>\$ -</u>
19	State Income Tax - Deferred	Schedule F-2	\$ (4,547,386)	\$ (4,547,386)	\$ (5,075,947)	\$ (5,075,947)
20	Less: Per Book	Schedule A-1	(10,462,760)			
21	Less: Present Rates at 3/31/18			(4,547,386)		
22	Less: Present Rates at 3/31/19				(4,547,386)	
23	Less: Present Rates at 3/31/20					(5,075,947)
24	Pro Forma Adjustment		<u>\$ 5,915,374</u>	<u>\$ -</u>	<u>\$ (528,560)</u>	<u>\$ -</u>
25	Income Tax Credit Amortization	Schedule F-2	\$ (253,413)	\$ (253,413)	\$ (253,413)	\$ (253,413)
26	Less: Per Book	Schedule A-1	(252,864)			
27	Less: Present Rates at 3/31/18			(253,413)		
28	Less: Present Rates at 3/31/19				(253,413)	
29	Less: Present Rates at 3/31/20					(253,413)
30	Pro Forma Adjustment		<u>\$ (549)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>



AQUA PENNSYLVANIA, INC.  
COMPUTATION OF FEDERAL AND STATE INCOME TAXES  
UNDER PRESENT AND PROPOSED RATES

LINE NO.	REFERENCE	PRESENT RATES 3/31/18		PRESENT RATES 3/31/19		PRESENT RATES 3/31/20		PROPOSED RATES 3/31/20		
		FEDERAL (3)	STATE (4)	FEDERAL (5)	STATE (6)	FEDERAL (7)	STATE (8)	FEDERAL (9)	STATE (10)	
1	Utility Operating Income Before Tax	Schedule A-1	\$ 192,283,098	\$ 192,283,098	\$ 203,463,279	\$ 203,463,279	\$ 194,887,256	\$ 194,887,256	\$ 252,594,894	\$ 252,594,894
2	Interest Expense	Schedule A-1	(56,134,652)	(56,134,652)	(63,502,230)	(63,502,230)	(68,208,908)	(68,208,908)	(68,208,908)	(68,208,908)
3	State Income Tax	[11]	3,756,565		3,717,342		1,056,702		(4,708,291)	
4	Tax Repair Deduction		(185,114,428)	(185,114,428)	(193,980,114)	(193,980,114)	(154,514,546)	(154,514,546)	(154,514,546)	(154,514,546)
5	Book Depreciation	Schedule A-1	84,961,768	84,961,768	94,594,762	94,594,762	100,767,946	100,767,946	100,767,946	100,767,946
6	Tax Depreciation		(59,919,858)	(73,599,036)	(65,492,691)	(77,786,328)	(74,546,547)	(83,509,343)	(74,546,547)	(83,509,343)
7	Taxable Income	Sum of Lines [1] : [6]	\$ (20,167,508)	\$ (37,603,251)	\$ (21,199,652)	\$ (37,210,631)	\$ (558,096)	\$ (10,577,594)	\$ 51,384,548	\$ 47,130,043
8	Income Tax Rate		21.00%	9.99%	21.00%	9.99%	21.00%	9.99%	21.00%	9.99%
9	Pro Forma Income Tax : Current	[7] * [8]	(4,235,177)	(3,756,565)	(4,451,927)	(3,717,342)	(117,200)	(1,056,702)	10,790,755	4,708,291
10	Other									
11	Total - Current Income Tax	[9] + [10]	\$ (4,235,177)	\$ (3,756,565)	\$ (4,451,927)	\$ (3,717,342)	\$ (117,200)	\$ (1,056,702)	\$ 10,790,755	\$ 4,708,291
12	Deferred Income Tax:									
13	Catch Up Adjustment		\$ (32,598,426)	\$ (45,519,383)	\$ (32,598,426)	\$ (45,519,383)	\$ (36,387,476)	\$ (50,810,278)	\$ (36,387,476)	\$ (50,810,278)
14	Income Tax Rate		21.00%	9.99%	21.00%	9.99%	21.00%	9.99%	21.00%	9.99%
15	Deferred Income Tax - Repair Adjustment	[13] * [14]	(6,845,669)	(4,547,386)	(6,845,669)	(4,547,386)	(7,641,370)	(5,075,947)	(7,641,370)	(5,075,947)
16	Normalized Book Depreciation		(58,503,559)		(67,188,688)		(70,715,234)		(70,715,234)	
17	Normalized Tax Depreciation		53,881,050		61,066,995		70,176,308		70,176,308	
18	Income Tax Rate		21.00%	9.99%	21.00%	9.99%	21.00%	9.99%	21.00%	9.99%
19	Deferred Income Tax - Tax/Book Depreciation	([16] + [17]) * [18]	(970,727)	-	(1,285,555)	-	(113,174)	-	(113,174)	-
20	Flowback of TRA-86		(57,648)		(57,648)		(57,648)		(57,648)	
21	Flowback of TCJA 2017 (ARAM) - Protected		-		-		(3,710,939)		(3,710,939)	
22	Flowback of TCJA 2017 - 10 Years		-		-		244,192		244,192	
23	Total Flow Through		(57,648)	-	(57,648)	-	(3,524,395)	-	(3,524,395)	-
24	Total - Deferred Income Tax	[15] + [19] + [23]	\$ (7,874,044)	\$ (4,547,386)	\$ (8,188,873)	\$ (4,547,386)	\$ (11,278,940)	\$ (5,075,947)	\$ (11,278,940)	\$ (5,075,947)
25	Amortization of Income Tax Credit		(253,413)		(253,413)		(253,413)		(253,413)	
26	Total - Income Tax	[11] + [24] + [25]	\$ (12,362,634)	\$ (8,303,951)	\$ (12,894,213)	\$ (8,264,728)	\$ (11,649,553)	\$ (6,132,648)	\$ (741,598)	\$ (367,655)

## AQUA PENNSYLVANIA, INC.

RATE BASE AS OF MARCH 31, 2018,

MARCH 31, 2019 AND MARCH 31, 2020 UNDER PRESENT AND PROPOSED RATES

LINE NO.	REFERENCE	ORIGINAL COST 3/31/18	ORIGINAL COST 3/31/19	ORIGINAL COST 3/31/20
(1)	(2)	(3)	(4)	(5)
1	Utility Plant in Service	\$ 4,104,653,138	\$ 4,477,016,813	\$ 4,764,121,238
2	Utility Plant Acquisition Adjustment	6,102,423	5,847,315	5,407,913
3		<u>4,110,755,561</u>	<u>4,482,864,128</u>	<u>4,769,529,151</u>
4	Less: Accumulated Depreciation	(833,098,330)	(906,865,499)	(991,611,560)
5	Net Plant in Service	<u>3,277,657,231</u>	<u>3,575,998,629</u>	<u>3,777,917,591</u>
6	Additions:			
7	Materials & Supplies	7,572,676	6,954,190	6,954,190
8	Cash Working Capital	2,287,000	2,287,000	2,287,000
9		<u>9,859,676</u>	<u>9,241,190</u>	<u>9,241,190</u>
10	Deductions:			
11	Contributions in Aid of Construction	(128,600,479)	(127,389,095)	(125,935,446)
12	Customer Advances for Construction	(51,474,677)	(51,474,677)	(51,474,677)
13	Deferred Income Taxes	(349,487,863)	(348,144,660)	(344,507,090)
14	Investment Tax Credit	-	-	-
15		<u>(529,563,019)</u>	<u>(527,008,432)</u>	<u>(521,917,213)</u>
16	Total Rate Base	<u>\$ 2,757,953,888</u>	<u>\$ 3,058,231,387</u>	<u>\$ 3,265,241,568</u>

AQUA PENNSYLVANIA, INC.

NOTES TO RATE BASE ELEMENTS

UTILITY PLANT IN SERVICE & ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Utility Plant in Service	\$ 4,104,653,138	\$ 4,104,653,138	\$ 4,477,016,813
2	Plus: Additions		385,602,988	297,822,865
3	Less: Retirements		(13,239,313)	(10,718,441)
4	Utility Plant in Service	<u>\$ 4,104,653,138</u>	<u>\$ 4,477,016,813</u>	<u>\$ 4,764,121,238</u>
5	Accumulated Depreciation	<u>\$ (833,098,330)</u>	<u>\$ (906,865,499)</u>	<u>\$ (991,611,560)</u>

AQUA PENNSYLVANIA, INC.

NOTES TO RATE BASE ELEMENTS

UTILITY PLANT ACQUISITION ADJUSTMENTS

The following adjustment reflects the recognition of the positive Utility Plant Acquisition Adjustments (UPAA) associated with the acquisition of various water utility assets pursuant to the terms of the Commission-approved settlement of the Company's rate cases at Docket Nos. R-00038805, R-00051030, R-00072711, and R-2009-2132019. In addition, the Company is requesting recognition of the positive UPAA associated with its acquisitions of the water assets for Sand Springs, Mifflin Township, Beech Mountain, Treasure Lake, Concord Park, Mt. Jewett and Sun Valley.

LINE NO.	DESCRIPTION	DOCKET NO.	ORIGINAL ACQUISITION		AMORTIZATION PERIOD		PRESENT RATES		PRESENT RATES		PRESENT RATES	
			ADJUSTMENT	DATE CLOSED	20 YEARS	3/31/2018 BALANCE	FTY AMORTIZATIONS	3/31/2019 BALANCE	FPFTY AMORTIZATIONS	3/31/2020 BALANCE		
1	N.U.I.	R-00038805	\$ 1,221,535	6/26/2002	8/04 - 7/24	\$ 386,820	\$ 61,077	\$ 325,743	\$ 61,077	\$ 264,666		
2	White Rock	R-00038805	227,554	11/22/2002	8/04 - 7/24	72,059	11,378	60,681	11,378	49,303		
3	Marienville	R-00051030	467,205	3/30/2004	7/06 - 6/26	192,722	23,360	169,362	23,360	146,001		
4	Meribah	R-00051030	13,387	3/31/2004	7/06 - 6/26	5,522	669	4,853	669	4,183		
5	Hex Acres	R-00051030	85,923	4/30/2004	7/06 - 6/26	35,443	4,296	31,147	4,296	26,851		
6	Tambur	R-00051030	36,314	4/30/2004	7/06 - 6/26	14,980	1,816	13,164	1,816	11,348		
7	Barret Water	R-00051030	34,881	4/30/2004	7/06 - 6/26	14,389	1,744	12,645	1,744	10,901		
8	Oneida	R-00051030	76,172	6/24/2004	7/06 - 6/26	31,421	3,809	27,613	3,809	23,804		
9	Christian Springs	R-00051030	6,055	8/19/2004	7/06 - 6/26	2,498	303	2,195	303	1,892		
10	Stanton	R-00051030	41,903	2/25/2005	7/06 - 6/26	17,285	2,095	15,190	2,095	13,095		
11	Meadowcrest	R-00051030	101,156	8/18/2005	7/06 - 6/26	41,727	5,058	36,669	5,058	31,611		
12	Garbush	R-00072711	65,216	10/19/2005	8/08 - 7/28	33,967	3,261	30,706	3,261	27,445		
13	C S Water	R-00072711	887,125	1/20/2006	8/08 - 7/28	458,348	44,356	413,991	44,356	369,635		
14	Country Club Gardens	R-00072711	60,900	11/28/2006	8/08 - 7/28	31,465	3,045	28,420	3,045	25,375		
15	Lakeside Acres	R-00072711	108,602	12/19/2007	8/08 - 7/28	56,111	5,430	50,681	5,430	45,251		
16	Honesdale	R-2009-2132019	1,521,927	9/30/2008	7/10 - 6/30	932,180	76,096	856,084	76,096	779,988		
17	Washington Park (1)	R-2009-2132019	(11,493)	3/31/2009	7/10 - 6/30	(7,039)	(575)	(6,465)	(575)	(5,890)		
18	Sleepy Hollow (1)	R-2009-2132019	(99,921)	3/31/2009	7/10 - 6/30	(61,201)	(4,996)	(56,205)	(4,996)	(51,209)		
19	Clarendon	R-2009-2132019	201,107	4/30/2009	7/10 - 6/30	123,178	10,055	113,122	10,055	103,067		
20	Kratzerville	R-2009-2132019	56,599	5/29/2009	7/10 - 6/30	34,667	2,830	31,837	2,830	29,007		
21	Sand Springs	Seeking Approval	4,140	10/31/2011	4/19 - 3/39	4,140	-	4,140	207	3,933		
22	Mifflin Twp Water	Seeking Approval	394,100	4/1/2012	4/19 - 3/39	394,100	-	394,100	19,705	374,395		
23	Beech Mountain	Seeking Approval	157,299	5/3/2012	4/19 - 3/39	157,299	-	157,299	7,865	149,434		
24	Treasure Lake	Seeking Approval	3,024,801	2/28/2013	4/19 - 3/39	3,024,801	-	3,024,801	151,240	2,873,561		
25	Concord Park	Seeking Approval	52,202	3/29/2013	4/19 - 3/39	52,202	-	52,202	2,610	49,592		
26	Mt Jewett Water	Seeking Approval	49,459	5/5/2015	4/19 - 3/39	49,459	-	49,459	2,473	46,986		
27	Sun Valley Water	Seeking Approval	3,883	1/29/2018	4/19 - 3/39	3,883	-	3,883	194	3,689		
28	Effect to Rate Base Element		<u>\$ 8,788,032</u>			<u>\$ 6,102,423</u>	<u>\$ 255,108</u>	<u>\$ 5,847,315</u>	<u>\$ 439,402</u>	<u>\$ 5,407,913</u>		

(1) Washington Park and Sleepy Hollow are exceptions to the treatment of negative acquisition adjustments as provided for in Section 1327 of the Public Utility Code because it was stipulated in the order approving their acquisition (Docket No. A-230550F2000) that rate base for rate making purposes would be limited to purchase price. To accomplish that requirement, the negative acquisition adjustment had to be included as a deduction to rate base.

AQUA PENNSYLVANIA, INC.

NOTES TO RATE BASE ELEMENTS

MATERIALS AND SUPPLIES

The Company's claim for materials and supplies at March 31, 2019 and March 31, 2020 is calculated on the basis of the average monthly balances in the materials and supplies account during the period March 2017 to March 2018.

LINE NO.	MONTH	YEAR	BALANCE
1	March	2017	\$ 6,126,091
2	April	2017	6,402,785
3	May	2017	6,351,327
4	June	2017	6,712,850
5	July	2017	6,541,158
6	August	2017	6,817,283
7	September	2017	7,640,385
8	October	2017	7,483,650
9	November	2017	7,161,183
10	December	2017	6,853,179
11	January	2018	7,201,828
12	February	2018	7,540,077
13	March	2018	7,572,676
14	Total		<u>\$ 90,404,471</u>
15	13 Month Average		\$ 6,954,190
16	Allowance for Materials & Supplies		
17	At 3/31/2019 and 3/31/2020		<u><u>\$ 6,954,190</u></u>

AQUA PENNSYLVANIA, INC.  
 NOTES TO RATE BASE ELEMENTS  
 CASH WORKING CAPITAL SUMMARY

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Cash Working Capital - Expenses	Schedule G-5.2	\$ 4,836,000	\$ 4,836,000	\$ 4,836,000
2	Cash Working Capital - Taxes	Schedule G-5.3	6,010,000	6,010,000	6,010,000
3	Cash Working Capital - Interest	Schedule G-5.4	(8,559,000)	(8,559,000)	(8,559,000)
4	Total Cash Working Capital Requirement		\$ 2,287,000	\$ 2,287,000	\$ 2,287,000

## AQUA PENNSYLVANIA, INC.

## NOTES TO RATE BASE ELEMENTS

## CASH WORKING CAPITAL

## CALCULATION OF LAG DAYS IN RECEIPT OF REVENUE

The time between rendering of a bill and receipt of payment is determined by dividing the average accounts receivable balances for the test year by the average daily billing as follows:

LINE NO.	MONTH (1)	YEAR (2)	BALANCE (3)
1	March	2017	\$ 28,095,956
2	April	2017	29,646,234
3	May	2017	26,788,865
4	June	2017	30,644,595
5	July	2017	31,948,576
6	August	2017	26,502,119
7	September	2017	34,207,856
8	October	2017	31,221,791
9	November	2017	30,543,773
10	December	2017	30,822,329
11	January	2018	28,797,366
12	February	2018	31,368,272
13	March	2018	28,901,214
14	Total		\$ 389,488,945
15	Average Accounts Receivable Balance		\$ 29,960,688
16	Gross Utility Water Revenues recorded		
17	During the Twelve Months Ended 3/31/2018		\$ 406,667,607
16	Average Daily Billing		\$ 1,114,158
18	Lag in Receipt of Payment		26.9
19	Average Use Period (a)		15.2
20	Bill Issue Period		2.0
21	Lag Days in Receipt of Revenue		<u>44.1</u>

## Reference:

(a) One-half of monthly billing period.

AQUA PENNSYLVANIA, INC.

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN PAYMENT OF EXPENSES

LINE NO.	ITEM (1)	AMOUNT (2)	LAG DAYS (3)	Ref. # (4)	DOLLAR DAYS (5)
1	Hourly Labor	\$ 19,605,772	7.5	(a)	\$ 147,043,287
2	Non-Union Labor	13,168,988	11.0	(b)	144,858,863
3	Management Fee	24,149,865	16.0	(d)	386,397,839
4	Electric Power	10,815,648	23.4	(c)	252,705,085
5	Water Purchased	4,811,051	30.9	(c)	148,590,502
6	Employee Group Insurance	6,141,963	16.0	(d)	98,271,400
7	Liability Insurance	6,011,274	(12.3)	(c)	(73,944,973)
8	SFI Postage	1,446,181	(8.0)	(c)	(11,513,112)
9	Pension	4,216,320	302.5	(c)	1,275,633,330
10	SFAS106	1,330,015	364.3	(e)	484,568,710
11	All Other Expenses (g)	30,879,788	25.4	(f)	784,861,274
12	Total	<u>\$ 122,576,863</u>			<u>\$ 3,637,472,205</u>
13	Average Lag Days in Payment of Expenses		<u>29.7</u>	Col 5, Row 12 / Col 2, Row 12	
14	Average Lag Days in Receipt of Revenues		<u>44.1</u>	Schedule G-5.1	
15	Average Lag Days between Payment of Expenses				
16	and Receipt of Revenue		<u>14.4</u>	[14] - [13]	
17	WORKING CAPITAL REQUIREMENT				
18	Pro-forma Annual Expense Per Day		\$ 335,827	Col 2, Row 12 / 365	
19	Cash Working Capital Required		\$ 4,835,909	[16] * [18]	
20	USE		<u>\$ 4,836,000</u>	* Rounded to nearest thousandth	

Reference:

- (a) Weekly payroll paid on Thursday for preceding weeks work.
- (b) Bi-weekly payroll paid on Thursday for the preceding two weeks work.
- (c) Calculated based on test year actual experience.
- (d) Based on normal payment schedule & Intercompany settlement (1st of each month)
- (e) Payment made last week of calendar year
- (f) Assumes service rendered on 15th of the month, paid 10th of the following month. (Same procedure as prior rate cases.)
- (g) Less annual uncollectible accounts expense and other non-cash items



AQUA PENNSYLVANIA, INC.

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN PAYMENT OF TAXES

LINE NO.	ITEM	AMOUNT	LAG DAYS	Ref. #	DOLLAR DAYS
	(1)	(2)	(3)	(4)	(5)
1	PA PUC - General Assessments	\$ 1,828,080	(288.0)	(a)	\$ (526,486,974)
2	OCA & SBA - General Assessments	343,844	(288.0)	(a)	(99,026,991)
3	Public Utility Realty Tax	4,200,000	(230.3)	(a)	(967,260,000)
4	Local, County, School, & Municipal Tax	917,726	(173.6)	(a)	(159,291,902)
5	FICA Taxes - Hourly	1,478,874	8.5		12,570,432
6	FICA Taxes - Executive & Exempt	2,320,813	12.0		27,849,752
7	Federal Unemployment Tax	25,656	75.0		1,924,234
8	PA Unemployment Tax	256,476	75.0		19,235,687
9	PA State Income Tax	(1,056,702)	45.0	(a)	(47,551,573)
10	Federal Income Tax	(117,200)	45.0	(a)	(5,274,006)
11	Total	<u>\$ 10,197,567</u>			<u>\$ (1,743,311,342)</u>
12	Average Lag Days in Payment of Taxes		<u>(171.0)</u>	Col 5, Row 11 / Col 2, Row 11	
13	Average Lag Days in Receipt of Revenues		<u>44.1</u>	Schedule G-5.1	
14	Average Lag Days between Payment of Taxes				
15	and Receipt of Revenue		<u>215.1</u>	[13] - [12]	
16	<b>WORKING CAPITAL REQUIREMENT</b>				
17	Pro-forma Annual Tax Expense Per Day		\$ 27,939	Col 2, Row 11 / 365	
18	Cash Working Capital Required		\$ 6,009,580	[15] * [17]	
19	USE		<u>\$ 6,010,000</u>	* Rounded to nearest thousandth	

Reference:

(a) The lag days are based on current tax regulation.

AQUA PENNSYLVANIA, INC.

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN PAYMENT OF INTEREST

LINE NO.	ITEM (1)	AMOUNT (2)	LAG DAYS (3)	Ref. # (4)	DOLLAR DAYS (5)
1	Long Term Debt- Interest	\$ 67,004,198	91.3	(a)	\$ 6,114,133,033
2	PennVest-Interest	1,204,710	15.2	(b)	18,321,631
3	Total	<u>\$ 68,208,908</u>			<u>\$ 6,132,454,665</u>
4	Average Lag Days in Payment of Interest		<u>89.9</u>	Col 5, Row 3 / Col 2, Row 3	
5	Average Lag Days in Receipt of Revenues		<u>44.1</u>	Schedule G-5.1	
6	Average Lag Days between Payment of Interest				
7	and Receipt of Revenue		<u>(45.8)</u>	[5] - [4]	
8	<b>WORKING CAPITAL REQUIREMENT</b>				
9	Pro-forma Annual Interest Expense Per Day		\$ 186,874		
10	Cash Working Capital Required		\$ (8,558,816)		
11	USE		<u>\$ (8,559,000)</u>	* Rounded to nearest thousandth	

Reference:  
 (a) Paid Semi-Annually  
 (b) Paid Monthly

AQUA PENNSYLVANIA, INC.

NOTES TO RATE BASE ELEMENTS

CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC)

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Contributions In Aid Of Construction	\$ 128,600,479	\$ 128,600,479	\$ 127,389,095
2	Plus: Contributions		1,215,553	967,500
3	Less: CIAC Amortization		(2,426,937)	(2,421,149)
4	Contributions In Aid Of Construction	<u>\$ (128,600,479)</u>	<u>\$ (127,389,095)</u>	<u>\$ (125,935,446)</u>

AQUA PENNSYLVANIA, INC.

NOTES TO RATE BASE ELEMENTS

CUSTOMER ADVANCES FOR CONSTRUCTION (CAC)

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Customer Advances for Construction	\$ 51,474,677	\$ 51,474,677	\$ 51,474,677
2	Customer Advances for Construction	<u>\$ (51,474,677)</u>	<u>\$ (51,474,677)</u>	<u>\$ (51,474,677)</u>

AQUA PENNSYLVANIA, INC.  
 NOTES TO RATE BASE ELEMENTS  
 DEFERRED INCOME TAXES

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Deferred Income Taxes		\$ 349,487,863	\$ 349,487,863	\$ 348,144,660
2	Change in Deferred Tax	Schedule F-2		(1,343,203)	(3,637,570)
3	Deferred Income Taxes		<u>\$ (349,487,863)</u>	<u>\$ (348,144,660)</u>	<u>\$ (344,507,090)</u>

AQUA PENNSYLVANIA WASTEWATER, INC.TABLE OF CONTENTS TO EXHIBIT 1-B WASTEWATER

	Schedule	Witness
<b>A Summary</b>		
Pro Forma Statement Of Income For The Twelve Months Ending March 31, 2018, March 31, 2019 And March 31, 2020 Under Present And Proposed Rates	A-1	William C. Packer
Number Of Customers Served And Whose Bills Will Be Changed	A-2	William C. Packer
Calculation Of Revenue Deficiency And Rate Of Return At Current And Proposed Rates March 31, 2020	A-3	William C. Packer
Statement Of Utility's Calculation Of Rate Of Return - Earned In The Year Ended March 31, 2018 And Anticipated Under Present And Proposed Rates For The Test Years Ended March 31, 2019 And March 31, 2020	A-4	William C. Packer
Calculation Of Gross Revenue Conversion Factor	A-5	William C. Packer
<b>B Operating Revenues</b>		
Statement Of Operating Revenue For The Twelve Months Ending March 31, 2018, March 31, 2019 And March 31, 2020 Under Present And Proposed Rates	B-1	Renee T. Marquis & Paul Herbert
Summary Of Adjustments To Operating Revenues	B-2	Renee T. Marquis
Operating Revenues - DSIC Annualization	B-3	Renee T. Marquis
Operating Revenues - Annualization Of Acquisition - Tobyhanna	B-4	Renee T. Marquis
Operating Revenues - Annualization Of Acquisition - Avon Grove	B-5	Renee T. Marquis
Operating Revenues - Eliminate North Heidelberg Revenue	B-6	Renee T. Marquis
Operating Revenues - Miscellaneous Revenue Adjustments	B-7	Renee T. Marquis
<b>C Operating Expenses</b>		
Notes To Statement Of Income Operating Expenses Expense Detail Accounts	C-1	William C. Packer
Operating Expenses Summary Of Expense Accounts	C-2	William C. Packer
Summary Of Adjustments To Operating Expenses	C-3	William C. Packer
Operating Expenses - General Price Level Adjustment	C-4.1	Erin M. Feeney
Operating Expenses - Inflation Factor Calculation	C-4.1.i	Erin M. Feeney
Operating Expenses - Uncollectible Accounts	C-4.2	Erin M. Feeney
Operating Expenses - Derivation Of Uncollectible Accounts Based On Three Years Of History	C-4.2.i	Erin M. Feeney
Operating Expenses - Page Held For Future Use	C-4.3	
Operating Expenses - Rate Case Expense	C-4.4	William C. Packer
Operating Expenses - Payroll	C-4.5	William C. Packer
Operating Expenses - Insurance Expense	C-4.6	Erin M. Feeney
Operating Expenses - Management Service & Sundry	C-4.7	William C. Packer
Operating Expenses - Customer Service & Sundry	C-4.8	William C. Packer
Operating Expenses - Miscellaneous Expense Adjustments	C-4.9	William C. Packer
Operating Expenses - Specific Expenses Not Subject To Inflation	C-4.10	Erin M. Feeney
Operating Expenses - Amortization Of New Positive Acquisition Adjustments	C-5.1	Renee T. Marquis
Operating Expenses - Amortization Of New Negative Acquisition Adjustments	C-5.2	Renee T. Marquis

## AQUA PENNSYLVANIA WASTEWATER, INC.

TABLE OF CONTENTS TO EXHIBIT 1-B WASTEWATER

	Schedule	Witness
Operating Expenses - Purchased Power Expense	C-6.1	Erin M. Feeney
Operating Expenses - Purchased Power - Electric	C-6.1.i	Erin M. Feeney
Operating Expenses - Purchased Power - Gas	C-6.1.ii	Erin M. Feeney
Operating Expenses - Chemicals	C-6.2	Erin M. Feeney
Operating Expenses - Purchased Wastewater Treatment Expense	C-7.1	Erin M. Feeney
Operating Expenses - Employee Benefits	C-8.1	William C. Packer
Operating Expenses - Eliminate North Heidelberg Expenses	C-9.1	William C. Packer
Operating Expenses - Annualization Of Avon Grove	C-10.1	William C. Packer
Operating Expenses - Annualization Of Tobyhanna	C-10.2	William C. Packer
<b>D Other Expenses</b>		
Statement Of Depreciation	D-1	Renee T. Marquis & John J. Spanos
Summary Of Adjustments To Taxes Other Than Income	D-2	William C. Packer
Taxes Other Than Income - General Assessment Fees By The Pennsylvania Public Utility Commission	D-2.1	Erin M. Feeney
Taxes Other Than Income - General Assessment Fees By The Consumer Advocate And Small Business Advocate	D-2.2	Erin M. Feeney
Taxes Other Than Income - Public Utility Realty Tax	D-2.3	William C. Packer
Taxes Other Than Income - Pennsylvania Property Tax	D-2.4	William C. Packer
<b>E Interest Expense</b>		
Interest On Long-Term Debt	E-1	William C. Packer
Amortization Of Debt Issuance & Premium/Discount On Debt	E-2	William C. Packer
Other Interest Charges	E-3	William C. Packer
Interest During Construction	E-4	William C. Packer
<b>F Income Taxes</b>		
Summary Of Adjustments To Income Taxes	F-1	William J. Jerdon
Computation Of Federal And State Income Taxes Under Present And Proposed Rates	F-2	William J. Jerdon
<b>G Rate Base</b>		
Rate Base As Of March 31, 2018, March 31, 2019 And March 31, 2020 Under Present And Proposed Rates	G-1	William C. Packer
Rate Base - Utility Plant In Service & Accumulated Depreciation	G-2	Renee T. Marquis & John J. Spanos
Rate Base - Utility Plant Acquisition Adjustments	G-3	Renee T. Marquis
Rate Base - Materials And Supplies	G-4	William C. Packer
Rate Base - Cash Working Capital Summary	G-5	William C. Packer
Rate Base - Cash Working Capital - Calculation Of Lag Days In Receipt Of Revenue	G-5.1	William C. Packer
Rate Base - Cash Working Capital - Calculation Of Lag Days In Payment Of Expenses	G-5.2	William C. Packer
Rate Base - Cash Working Capital - Calculation Of Lag Days In Payment Of Taxes	G-5.3	William C. Packer
Rate Base - Cash Working Capital - Calculation Of Lag Days In Payment Of Interest	G-5.4	William C. Packer

AQUA PENNSYLVANIA WASTEWATER, INC.

TABLE OF CONTENTS TO EXHIBIT 1-B WASTEWATER

	Schedule	Witness
Rate Base - Contributions In Aid Of Construction (CIAC)	G-6	Renee T. Marquis & John J. Spanos
Rate Base - Customer Advances For Construction (CAC)	G-7	Renee T. Marquis & John J. Spanos
Rate Base - Deferred Income Taxes	G-8	William J. Jerdon



AQUA PENNSYLVANIA WASTEWATER, INC.

PRO FORMA STATEMENT OF INCOME FOR THE TWELVE MONTHS ENDING MARCH 31, 2018,  
 MARCH 31, 2019 AND MARCH 31, 2020 UNDER PRESENT AND PROPOSED RATES

LINE NO.	PRESENT RATES				PRESENT RATES				PRESENT RATES		PROPOSED RATES
	PER BOOKS	ADJUSTMENT	3/31/18 AMOUNT	ADJUSTMENT	3/31/19 AMOUNT	ADJUSTMENT	3/31/20 AMOUNT	ADJUSTMENT	AMOUNT	AMOUNT	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(10)	
1 Operating Revenues	\$ 13,481,903	\$ (237,788)	\$ 13,244,115	\$ 199,190	\$ 13,443,305	\$ -	\$ 13,443,305	\$ 13,469,988	\$ 26,913,292	\$ 26,913,292	
2 Operating Expenses	7,598,126	87,076	7,685,202	395,838	8,081,039	328,570	8,409,609	157,668	8,567,278	8,567,278	
3 Depreciation	3,114,235	(96,761)	3,017,474	1,404,767	4,422,241	926,917	5,349,158	-	5,349,158	5,349,158	
4 Taxes, other than income :											
5 PUC assessment	49,113	7,014	56,127	844	56,971	-	56,971	57,084	114,055	114,055	
6 OCA & SBA assessments	9,016	1,540	10,557	159	10,716	-	10,716	10,737	21,453	21,453	
7 Public Utility Realty tax	-	-	-	-	-	-	-	-	-	-	
8 State Capital Stock tax	-	-	-	-	-	-	-	-	-	-	
9 Local property taxes & misc.	152,852	-	152,852	-	152,852	-	152,852	-	152,852	152,852	
10 Federal & State payroll tax	-	-	-	-	-	-	-	-	-	-	
11 Total Taxes, other than income	210,981	8,554	219,535	1,003	220,538	-	220,538	67,821	288,359	288,359	
12 Utility Operating Income Before Tax	2,558,561	(236,657)	2,321,904	(1,602,418)	719,486	(1,255,487)	(536,001)	13,244,499	12,708,498	12,708,498	
13 Income Taxes:											
14 Federal Tax-Current	(338,676)	372,107	33,432	(1,460,402)	(1,426,971)	160,466	(1,266,504)	2,503,488	1,236,984	1,236,984	
15 Pa. CNI Tax-Current	104,614	(184,566)	(79,951)	(771,841)	(851,792)	84,808	(766,984)	1,323,125	556,141	556,141	
16 Federal Tax-Deferred	45,865	(213,964)	(168,099)	(86,976)	(255,075)	31,066	(224,009)	-	(224,009)	(224,009)	
17 Pa. CNI Tax-Deferred	(501,135)	467,001	(34,134)	-	(34,134)	(3,967)	(38,101)	-	(38,101)	(38,101)	
18 ITC-Current	-	-	-	-	-	-	-	-	-	-	
19 ITC-Amortized	-	-	-	-	-	-	-	-	-	-	
20 Total Income Taxes	(689,331)	440,579	(248,752)	(2,319,220)	(2,567,972)	272,373	(2,295,598)	3,826,614	1,531,015	1,531,015	
21 Total Operating Revenue Deductions	10,234,011	439,447	10,673,459	(517,612)	10,155,847	1,527,860	11,683,707	4,052,103	15,735,810	15,735,810	
22 Utility Operating Income	3,247,892	(677,236)	2,570,656	716,802	3,287,458	(1,527,860)	1,759,598	9,417,885	11,177,483	11,177,483	
23 Income Deductions:											
24 Interest on Long-Term debt	24,780	1,698,136	1,722,916	768,650	2,491,565	513,525	3,005,090	-	3,005,090	3,005,090	
25 Amort. Of debt discount & expense	-	-	-	-	-	-	-	-	-	-	
26 Other interest charges	-	-	-	-	-	-	-	-	-	-	
27 Interest during Construction	(713,663)	713,663	-	-	-	-	-	-	-	-	
28 Total Income Deductions	(688,883)	2,411,799	1,722,916	768,650	2,491,565	513,525	3,005,090	-	3,005,090	3,005,090	
29 Net Income	\$ 3,936,775	\$ (3,089,035)	\$ 847,740	\$ (51,848)	\$ 795,893	\$ (2,041,385)	\$ (1,245,493)	\$ 9,417,885	\$ 8,172,392	\$ 8,172,392	
30 Preferred Dividend											
31 Net Income-Common	\$ 3,936,775	\$ (3,089,035)	\$ 847,740	\$ (51,848)	\$ 795,893	\$ (2,041,385)	\$ (1,245,493)	\$ 9,417,885	\$ 8,172,392	\$ 8,172,392	

AQUA PENNSYLVANIA WASTEWATER, INC.

NUMBER OF CUSTOMERS SERVED  
 AND WHOSE BILLS WILL BE CHANGED

LINE NO.	CUSTOMER CLASS	SERVED AT 3/31/2017	SERVED AT 3/31/2018	TO BE SERVED AT 3/31/2019	TO BE SERVED AT 3/31/2020	INCREASED BILLS	DECREASED BILLS	UNCHANGED BILLS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Residential	16,062	17,051	17,051	17,051	16,981	-	70
2	Commercial	1,324	1,469	1,469	1,469	1,427	42	-
3	Industrial	1	1	1	1	1	-	-
4	Public	38	40	40	40	40	-	-
5	Miscellaneous	-	-	-	-	-	-	-
6	Availability Charge	469	446	-	-	-	446	-
7	Total Customers	17,894	19,007	18,561	18,561	18,449	488	70

AQUA PENNSYLVANIA WASTEWATER, INC.  
 CALCULATION OF REVENUE DEFICIENCY AND RATE OF RETURN  
 AT CURRENT AND PROPOSED RATES MARCH 31, 2020

LINE NO.	DESCRIPTION	REFERENCE		
1	Pro Forma Rate Base	Schedule G-1	\$	143,857,249
2	Recommended Rate of Return	Schedule E-1	X	7.77%
3	Operating Income, Pro Forma Proposed Rates		= \$	11,177,483
4	Operating Income, Pro Forma Present Rates	Schedule A-1	\$	1,759,598
5	Operating Income Deficit		= \$	9,417,885
6	Gross Revenue Conversion Factor	Schedule A-5	X	1.4303
7	Revenue Deficit		= \$	13,469,988

AQUA PENNSYLVANIA WASTEWATER, INC.

STATEMENT OF UTILITY'S CALCULATION OF RATE OF RETURN  
EARNED IN THE YEAR ENDED MARCH 31, 2018 AND  
ANTICIPATED UNDER PRESENT AND PROPOSED RATES  
FOR THE TEST YEARS ENDED MARCH 31, 2019 AND MARCH 31, 2020

LINE NO.		NET UTILITY OPERATING INCOME	VALUATION AT ORIGINAL COST	RATE OF RETURN
1	Present Rates March 31, 2018	\$ 2,570,656	\$ 84,648,638	3.04%
2	Present Rates March 31, 2019	\$ 3,287,458	\$ 119,992,379	2.74%
3	Present Rates March 31, 2020	\$ 1,759,598	\$ 143,857,249	1.22%
4	Proposed Rates March 31, 2020	\$ 11,177,483	\$ 143,857,249	7.77%

AQUA PENNSYLVANIA WASTEWATER, INC.  
 CALCULATION OF GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	RATE
1	Dollar (Taxable income)	\$ 1.0000
2	Less:	
3	Gross Receipts Tax	0.000% N/A
4	PUC Assessments	0.503% Schedule D-2.1 & Schedule D-2.2
5	Bad Debt	1.171% Schedule C-4.2.i
6	Subtotal (Taxable income)	\$ 0.9833
7	State Tax Rate	9.990%
8	State Tax \$\$ =====>	\$ 0.0982
9	State Factor	\$ 0.8850
10	Federal Tax Rate	21.00%
11	Fed Tax \$\$ =====>	\$ 0.1859
12	Combined Income Tax Factor on Gross Revenues	28.41%
13	Net Operating Income Factor	69.92%
14	Gross Revenue Conversion Factor	1.43026

AQUA PENNSYLVANIA WASTEWATER, INC.  
 STATEMENT OF OPERATING REVENUE FOR THE TWELVE MONTHS ENDING MARCH 31, 2018,  
 MARCH 31, 2019 AND MARCH 31, 2020 UNDER PRESENT AND PROPOSED RATES

LINE NO.	CUSTOMER CLASS (1)	REVENUE FOR 12 MOS. ENDED 3/31/18		PRESENT RATES 3/31/18		PRESENT RATES 3/31/19		PRESENT RATES 3/31/20		REVENUE RATE INCREASE		PROPOSED RATES
		(2)	ADJUSTMENT (3)	AMOUNT (4)	ADJUSTMENT (5)	AMOUNT (6)	ADJUSTMENT (7)	AMOUNT (8)	% (9)	\$ (10)	AMOUNT (11)	
1	Residential	\$ 8,916,017	\$ (14,173)	\$ 8,901,844	\$ 129,067	\$ 9,030,911	\$ -	\$ 9,030,911	110.8%	\$ 10,003,868	\$ 19,034,779	
2	Commercial	2,938,199	(57,857)	2,880,342	70,123	2,950,465	-	2,950,465	88.9%	2,621,603	5,572,068	
3	Industrial	437	(0)	437	-	437	-	437	133.1%	582	1,019	
4	Public	1,161,499	69	1,161,568	-	1,161,568	-	1,161,568	72.7%	843,935	2,005,503	
5	Other	-	-	-	-	-	-	-	0.0%	-	-	
6	Availability Charge	165,828	(165,828)	-	-	-	-	-	0.0%	-	-	
7	Total Sales to General Customers	13,181,980	(237,788)	12,944,191	199,190	13,143,381	-	13,143,381	102.5%	13,469,987	26,613,368	
8	Forfeited Discounts	45,455	-	45,455	-	45,455	-	45,455	0.0%	-	45,455	
9	Other WW Revenues	254,469	-	254,469	-	254,469	-	254,469	0.0%	-	254,469	
10	Miscellaneous WW Service Revenues	-	-	-	-	-	-	-	0.0%	-	-	
11	Total Other WW Revenues	299,923	-	299,923	-	299,923	-	299,923	0.0%	-	299,923	
12	Total Operating Revenue	\$ 13,481,903	\$ (237,788)	\$ 13,244,115	\$ 199,190	\$ 13,443,305	\$ -	\$ 13,443,305	100.2%	\$ 13,469,987	\$ 26,913,292	

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION (1)	REFERENCE (2)	ADJUSTMENT (3)	PRESENT RATES		PRESENT RATES		PRESENT RATES	
				AMOUNT (4)	ADJUSTMENT (5)	AMOUNT (6)	ADJUSTMENT (7)	AMOUNT (8)	
1	Per Books			\$ 13,481,903					
2	Present Rates at 3/31/18					\$ 13,244,115			
3	Present Rates at 3/31/19							\$ 13,443,305	
4	DSIC Annualization	Schedule B-3	(9,315)		-				
5	Annualization Of Acquisition - Tobyhanna	Schedule B-4	-		166,065				
6	Annualization Of Acquisition - Avon Grove	Schedule B-5	-		33,125				
7	Eliminate North Heidelberg Revenue	Schedule B-6	(15,021)		-				
8	Miscellaneous Revenue Adjustments	Schedule B-7	(213,452)		-				
				<hr/>		<hr/>		<hr/>	
9	Pro Forma Adjustment			(237,788)		199,190		-	
10	Pro Forma Present Rates at March 31, 2018			<u>\$ 13,244,115</u>					
11	Pro Forma Present Rates at March 31, 2019					<u>\$ 13,443,305</u>			
12	Pro Forma Present Rates at March 31, 2020							<u>\$ 13,443,305</u>	

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

DSIC ANNUALIZATION

LINE NO.	DESCRIPTION	PER BOOKS	ANNUALIZED	PRESENT RATES
		3/31/2018 DSIC REVENUE	3/31/2018 DSIC REVENUE	3/31/2018 ADJUSTMENT
1	Residential	\$ 372,845	\$ 373,589	\$ 744
2	Commercial	92,620	90,389	(2,231)
3	Industrial	21	21	(0)
4	Public	5,691	5,760	69
5	Other	-	-	-
6	Availability Charge	7,897	-	(7,897)
7	Total Sales to General Customers	479,073	469,758	(9,315)
8	Forfeited Discounts	-	-	-
9	Other WW Revenues	-	-	-
10	Miscellaneous WW Service Revenues	-	-	-
11	Total Other WW Revenues	-	-	-
12	Total Operating Revenue	\$ 479,073	\$ 469,758	\$ (9,315)



AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

ANNUALIZATION OF ACQUISITION - TOBYHANNA

The following adjustment is to annualize the additional revenue from the Tobyhanna Acquisition to give effect of a full twelve months of service.

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 AMOUNT	ANNUALIZED PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2019 ADJUSTMENT
1	Residential	\$ 387,200	\$ 516,267	\$ 129,067
2	Commercial	110,995	147,993	36,998
3	Industrial		-	
4	Public		-	
5	Other		-	
6	Availability Charge		-	
7	Total Sales to General Customers	498,195	664,260	166,065
8	Forfeited Discounts			
9	Other WW Revenues			
10	Miscellaneous WW Service Revenues			
11	Total Other WW Revenues	-	-	-
12	Total Operating Revenue	\$ 498,195	\$ 664,260	\$ 166,065

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

ANNUALIZATION OF ACQUISITION - AVON GROVE

The following adjustment is to annualize the additional revenue from the Avon Grove Acquisition to give effect of a full twelve months of service.

LINE NO.	DESCRIPTION	PER BOOKS	ANNUALIZED	PRESENT RATES
		3/31/2018 AMOUNT	3/31/2019 AMOUNT	3/31/2019 ADJUSTMENT
1	Residential		\$ -	\$ -
2	Commercial	46,375	79,500	33,125
3	Industrial		-	
4	Public		-	
5	Other		-	
6	Availability Charge		-	
7	Total Sales to General Customers	46,375	79,500	33,125
8	Forfeited Discounts			
9	Other WW Revenues			
10	Miscellaneous WW Service Revenues			
11	Total Other WW Revenues	-	-	-
12	Total Operating Revenue	\$ 46,375	\$ 79,500	\$ 33,125

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

ELIMINATE NORTH HEIDELBERG REVENUE

Beginning March 5, 2018, the Company was appointed receiver for the North Heidelberg Sewer Company at Docket No. M-2018-2645983. The following adjustment removes the revenue collected from North Heidelberg during the test year which was recorded above the line. Refer to Schedule C-9.1 of this exhibit for the removal of North Heidelberg expenses.

LINE NO.	DESCRIPTION	PER BOOKS		PRESENT RATES
		3/31/2018 AMOUNT	3/31/2018 ADJUSTMENT	3/31/2018 AMOUNT
1	Residential	\$ 14,917	\$ (14,917)	\$ -
2	Commercial	104	(104)	-
3	Industrial	-	-	-
4	Public	-	-	-
5	Other	-	-	-
6	Availability Charge	-	-	-
7	Total Sales to General Customers	15,021	(15,021)	-
8	Forfeited Discounts	-	-	-
9	Other WW Revenues	-	-	-
10	Miscellaneous WW Service Revenues	-	-	-
11	Total Other WW Revenues	-	-	-
12	Total Operating Revenue	\$ 15,021	\$ (15,021)	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

MISCELLANEOUS REVENUE ADJUSTMENTS

The following adjustments reflect miscellaneous additions or deductions from pro forma revenues.

LINE NO.	DESCRIPTION	PER BOOKS		PRESENT RATES
		3/31/2018 AMOUNT	3/31/2018 ADJUSTMENT	3/31/2018 AMOUNT
1	Residential		\$ -	\$ -
2	Commercial	(a) 55,522	(55,522)	-
3	Industrial		-	-
4	Public		-	-
5	Other		-	-
6	Availability Charge	(b) 157,930	(157,930)	-
7	Total Sales to General Customers	213,452	(213,452)	-
8	Forfeited Discounts		-	-
9	Other WW Revenues		-	-
10	Miscellaneous WW Service Revenues		-	-
11	Total Other WW Revenues	-	-	-
12	Total Operating Revenue	\$ 213,452	\$ (213,452)	\$ -

- (a) Eliminate Backbills
- (b) Eliminate Availability Charge

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/18	PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
	(1)	(2)	(3)	(4)	(5)	(6)
1		--Collection--				
2		-Operations-				
3	7151	Purchased Power	939,503	943,585	959,988	932,734
4	7161	Purchased Power	50,567	50,787	50,981	49,499
5		-Maintenance-				
6	7362	OS Other	144,970	144,970	148,387	151,578
7						
8		Total Collection Expense	<u>\$ 1,135,040</u>	<u>\$ 1,139,342</u>	<u>\$ 1,159,357</u>	<u>\$ 1,133,811</u>
9						
10		--Pumping--				
11		-Operations-				
12	7013	Labor	133,805	133,805	141,703	145,663
13	7153	Purchased Power	3,853	3,869	3,884	3,771
14	7163	Purchased Power	4,347	4,366	4,383	4,255
15	7183	Chemicals	479,445	498,273	502,647	502,741
16	7203	Supplies	98,739	92,000	93,909	95,928
17	7353	OS Lab Testing	1,118	1,118	1,141	1,165
18	7363	OS Other	176,885	176,885	180,555	184,437
19		-Maintenance-				
20	7014	Labor	131	131	139	143
21	7204	Supplies	90	90	92	94
22	7354	OS Lab Testing	233,445	233,445	239,436	244,583
23	7364	OS Other	263,792	263,792	283,061	289,147
24						
25		Total Pumping Expense	<u>\$ 1,395,649</u>	<u>\$ 1,407,774</u>	<u>\$ 1,450,949</u>	<u>\$ 1,471,928</u>
26						

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/18	PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
	(1)	(2)	(3)	(4)	(5)	(6)
27		--Treatment & Disposal--				
28		-Operations-				
29	7015	Labor	25,108	25,108	26,590	27,333
30	75052	Labor	6,755	6,755	7,154	7,354
31	7105	Purchased Wastewater	571,416	571,416	665,819	665,819
32	7115	Sludge	1,043,284	1,043,284	1,071,708	1,094,750
33	7365	OS Other	328,079	322,722	329,419	336,501
34	7505	Transportation	92,513	92,513	94,433	96,463
35		-Maintenance-				
36	7366	OS Other	201,213	201,213	205,388	209,804
37						
38		Total Treatment & Disposal Expense	\$ 2,268,368	\$ 2,263,011	\$ 2,400,511	\$ 2,438,024
39						
40		--Customer Accounting--				
41	7017	Labor	14,594	14,594	15,456	15,887
42	7367	OS Other	196,903	196,903	216,701	223,376
43	7757	Other	50	50	51	52
44	7707	Bad Debt	159,918	151,514	153,845	153,845
45						
46		Total Customer Accounting Expense	\$ 371,465	\$ 363,061	\$ 386,053	\$ 393,161
47						
48		--Administrative and General--				
49	7018	Labor	1,304,460	1,301,799	1,378,743	1,417,290
50	7048	Employee Benefits	888,264	875,462	917,264	942,524
51	7158	Purchased Power	1,622	1,629	1,635	1,588
52	7208	Supplies	42	42	821	838

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/18	PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
	(1)	(2)	(3)	(4)	(5)	(6)
53	7328	OS Accounting	18,788	18,788	19,178	19,591
54	7349	Management Fees	458,379	458,379	489,273	502,445
55	7368	OS Other	127,574	127,574	130,221	133,021
56	7418	Leases	107,165	107,165	107,165	107,165
57	7508	Transportation	3,358	3,358	3,428	3,502
58	7578	Insurance	18,178	18,178	40,515	42,526
59	7588	Insurance	3,958	3,958	10,765	11,343
60	7598	Insurance	3,787	3,787	9,074	9,539
61	7758	Other	102,328	202,192	207,400	211,859
62	7608	Other	474	474	484	494
63	7668	Amortization of Rate Case	-	-	-	27,913
64	4060	Amortization of UPAA	(610,772)	(610,772)	(631,796)	(458,953)
65						
66		Total Admin & General Expense	\$ 2,427,604	\$ 2,512,013	\$ 2,684,170	\$ 2,972,685
67						
68		Total Operating Expenses	\$ 7,598,126	\$ 7,685,202	\$ 8,081,039	\$ 8,409,609

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

SUMMARY OF EXPENSE ACCOUNTS

LINE NO.	PER BOOKS 3/31/18	ADJUSTMENTS 3/31/18	PRESENT RATES 3/31/18	ADJUSTMENTS 3/31/19	PRESENT RATES 3/31/19	ADJUSTMENTS 3/31/20	PRESENT RATES 3/31/20
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1 Labor	\$ 1,484,854	\$ (2,661)	\$ 1,482,192	\$ 87,593	\$ 1,569,785	\$ 43,886	\$ 1,613,670
2 Employee Benefits	888,264	(12,801)	875,462	41,801	917,264	25,260	942,524
3 Purchased Water	-	-	-	-	-	-	-
4 Purchased Wastewater	571,416	-	571,416	94,403	665,819	-	665,819
5 Sludge	1,043,284	-	1,043,284	28,424	1,071,708	23,042	1,094,750
6 Purchased Power	999,892	4,345	1,004,236	16,635	1,020,872	(29,023)	991,848
7 Chemicals	479,445	18,828	498,273	4,374	502,647	94	502,741
8 Supplies	98,871	(6,738)	92,133	2,689	94,822	2,039	96,861
9 OS Engineer	-	-	-	-	-	-	-
10 OS Accounting	18,788	-	18,788	390	19,178	412	19,591
11 OS Legal	-	-	-	-	-	-	-
12 OS Lab Testing	234,563	-	234,563	6,013	240,576	5,172	245,749
13 OS Other	1,439,415	(5,356)	1,434,059	59,673	1,493,732	34,132	1,527,864
14 Management Fees	458,379	-	458,379	30,894	489,273	13,172	502,445
15 Leases	107,165	-	107,165	-	107,165	-	107,165
16 Transportation	95,872	-	95,872	1,989	97,861	2,104	99,965
17 Insurance	25,922	-	25,922	34,433	60,355	3,054	63,409
18 Other	102,852	99,865	202,716	5,218	207,934	4,471	212,405
19 Bad Debt	159,918	(8,404)	151,514	2,332	153,845	-	153,845
20 Amortization of Rate Case	-	-	-	-	-	27,913	27,913
21 Amortization of UPAA	(610,772)	-	(610,772)	(21,024)	(631,796)	172,843	(458,953)
22 Amortization of Tank Painting	-	-	-	-	-	-	-
23 Amortization Other	-	-	-	-	-	-	-
24 Total Operating Expenses	\$ 7,598,126		\$ 7,685,202		\$ 8,081,039		\$ 8,409,609
25 Pro Forma Adjustments		\$ 87,076		\$ 395,838		\$ 328,570	
26 Uncollectibles @ Proposed Rates							\$ 157,668
27 Proposed Rates @ 3/31/20							\$ 8,567,278



AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING EXPENSES

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES		PRESENT RATES		PRESENT RATES	
			ADJUSTMENT	3/31/18 AMOUNT	ADJUSTMENT	3/31/19 AMOUNT	ADJUSTMENT	3/31/20 AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Per Books			\$ 7,598,126				
2	Present Rates at 3/31/18					\$ 7,685,202		
3	Present Rates at 3/31/19							\$ 8,081,039
4	General Price Level Adjustment	Schedule C-4.1	-		68,620		73,459	
5	Uncollectible Accounts	Schedule C-4.2	(8,404)		2,332		-	
6	Page Held For Future Use	Schedule C-4.3	-		-		-	
7	Rate Case Expense	Schedule C-4.4	-		-		27,913	
8	Payroll	Schedule C-4.5	-		87,388		43,669	
9	Insurance Expense	Schedule C-4.6	(8,005)		23,800		2,111	
10	Management Service & Sundry	Schedule C-4.7	-		25,171		7,119	
11	Customer Service & Sundry	Schedule C-4.8	-		17,791		4,553	
12	Miscellaneous Expense Adjustments	Schedule C-4.9	99,865		-		-	
13	Specific Expenses Not Subject To Inflation	Schedule C-4.10	-		-		-	
14	Amortization Of New Positive Acquisition Adjustments	Schedule C-5.1	-		-		172,843	
15	Amortization Of New Negative Acquisition Adjustments	Schedule C-5.2	-		(21,024)		-	
16	Purchased Power Expense	Schedule C-6.1	4,345		3,845		(29,298)	
17	Chemicals	Schedule C-6.2	18,828		-		-	
18	Purchased Wastewater Treatment Expense	Schedule C-7.1	-		94,403		-	
19	Employee Benefits	Schedule C-8.1	(4,796)		52,433		26,201	
20	Eliminate North Heidelberg Expenses	Schedule C-9.1	(14,756)		-		-	
21	Annualization Of Avon Grove	Schedule C-10.1	-		4,556		-	
22	Annualization Of Tobyhanna	Schedule C-10.2	-		36,524		-	
23	Pro Forma Adjustments			<u>\$ 87,076</u>		<u>\$ 395,838</u>		<u>\$ 328,570</u>
24	Pro Forma Present Rates at March 31, 2018			<u>\$ 7,685,202</u>				
25	Pro Forma Present Rates at March 31, 2019					<u>\$ 8,081,039</u>		
26	Pro Forma Present Rates at March 31, 2020							<u>\$ 8,409,609</u>

## AQUA PENNSYLVANIA WASTEWATER, INC.

## NOTES TO STATEMENT OF INCOME

## OPERATING EXPENSES

## GENERAL PRICE LEVEL ADJUSTMENT

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Total Operations and Maintenance Expenses:		
2	Present Rates 3/31/2018	\$ 7,685,202	
3	Present Rates 3/31/2019		\$ 8,081,039
4	Less amounts specifically adjusted in this filing or not otherwise subject to inflation:		
5	Labor	1,472,320	1,559,708
6	Employee Benefits	875,387	917,187
7	Purchased Wastewater	571,416	665,819
8	Sludge	-	-
9	Purchased Power	1,004,236	1,008,081
10	Chemicals	498,273	498,273
11	Supplies	-	-
12	OS Engineer	-	-
13	OS Accounting	-	-
14	OS Legal	-	-
15	OS Lab Testing	-	-
16	OS Other	100,171	117,961
17	Management Fees	182,568	207,739
18	Leases	107,165	107,165
19	Transportation	-	-
20	Insurance	25,922	60,355
21	Other	-	-
22	Bad Debt	151,514	153,845
23	Amortization of Rate Case	-	-
24	Amortization of UPAA	(610,772)	(631,796)
25	Amortization of Tank Painting	-	-
26	Amortization Other	-	-
27	Total Operating Expenses Adjusted/Unadjusted for Separately	\$ 4,378,200	\$ 4,664,337
28	Total Operating Expenses Subject to Effects of Inflation	\$ 3,307,002	\$ 3,416,702
29	Inflation Factor - Schedule C-4.1.i	2.075%	2.150%
30	Estimated Effect of Inflation at Annual Rate Pro Forma Adjustment	\$ 68,620	\$ 73,459

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

INFLATION FACTOR CALCULATION

LINE NO.	GDP Chained Price Index (% Change From Same Quarter Prior Year)		
1	Second Quarter	2018	2.100% (a)
2	Third Quarter	2018	2.100% (a)
3	Fourth Quarter	2018	2.000% (a)
4	First Quarter	2019	2.100% (a)
5	Annual Average for the Period Ending 3/31/2019		2.075%
6	Second Quarter	2019	2.100% (a)
7	Third Quarter	2019	2.100% (a)
8	Fourth Quarter	2019	2.200% (a)
9	First Quarter	2020	2.200% (b)
10	Annual Average for the Period Ending 3/31/2020		2.150%

Source:

- (a) Blue Chip Economic Indicators Volume 43, No. 1, January 10, 2018, Page 5, Forecasted Future Periods
- (b) First Quarter of 2020 not available in Blue Chip Report. Used Prior Quarter, Q4-2019.

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

UNCOLLECTIBLE ACCOUNTS

For the three years ended March 31, 2018, the Company experienced an average uncollectible accounts factor of 1.17051% with regard to sales to general customers.

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Sales to General Customers Excluding Forfeited Discounts and Misc Revenue	\$ 13,181,980	\$ 12,944,191	\$ 13,143,381	\$ 13,143,381
2	Annualized Uncollectible Account based on Experience Factor @ 1.17051%		151,514	153,845	153,845 ‡
3	Less: Amount Charged to Operating Expense				
4	During the Twelve Months Ended 3/31/2018		159,918		
5	Less: Present Rates 3/31/2018			151,514	
6	Less: Present Rates 3/31/2019				153,845
7	Increase/(Decrease)		<u>\$ (8,404)</u>	<u>\$ 2,332</u>	<u>\$ -</u>
8	Pro Forma Adjustment:				
9	7707		\$ (8,404)	\$ 2,332	\$ -

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC.  
 NOTES TO STATEMENT OF INCOME  
 OPERATING EXPENSES  
 DERIVATION OF UNCOLLECTIBLE ACCOUNTS  
 BASED ON THREE YEARS OF HISTORY

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2016 AMOUNT	PRESENT RATES 3/31/2017 AMOUNT	PRESENT RATES 3/31/2018 AMOUNT	THREE YEAR AVERAGE
1	Net Write-Offs	\$ 143,186	\$ 131,319	\$ 159,918	\$ 144,807
2	Sales to General Customers	\$ 11,905,952	\$ 12,025,870	\$ 13,181,980	\$ 12,371,267
3	Factor	0.0120264	0.0109197	0.0121316	0.0117051

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PAGE HELD FOR FUTURE USE

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AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

RATE CASE EXPENSE

The following adjustment reflects the estimated cost of this rate case as summarized below. The total cost is being allocated based on the ratio of wastewater customers served to total water and wastewater customers. The Company proposes to normalize this cost over a thirty-six month period, which is consistent with the rate treatment in previous cases.

LINE NO.	DESCRIPTION				
1	Engineering, Cost Allocation and Depreciation	\$	190,000		
2	Legal		1,200,000		
3	Other Consultants		100,000		
4	Rate of Return		90,000		
5	Notices and Postage		330,000		
6	Miscellaneous		65,000		
7	Total	\$	1,975,000		
8	Allocation of Total Rate Case Expense		Total	Annual Amortization	
9	Water	95.76%	\$ 1,891,260	\$ 630,420	
10	Wastewater	4.24%	\$ 83,740	\$ 27,913	
11	Normalization Period		36 Months		
12			PRESENT RATES	PRESENT RATES	
13			3/31/2019	3/31/2020	
14			AMOUNT	AMOUNT	
15	Annual Expense on a 36 Month Normalized Basis	\$	-	\$ 27,913	‡
16	Less: Amount Charged to Operating Expense				
17	During the Twelve Months Ended 3/31/2018		-		
18	Less: Present Rates 3/31/2019			-	
19	Increase/(Decrease)	\$	-	\$ 27,913	
20	Pro Forma Adjustment:				
21	7668			\$ 27,913	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

## AQUA PENNSYLVANIA WASTEWATER, INC.

## NOTES TO STATEMENT OF INCOME

## OPERATING EXPENSES

## PAYROLL

The following amounts summarize the Company's estimated annualized payroll expense. This results from the calculation of employee compensation levels scheduled to be in effect by March 31, 2019 and March 31, 2020.

LINE NO.	DESCRIPTION	PRESENT RATES	PRESENT RATES	PRESENT RATES	
		3/31/2018 AMOUNT	3/31/2019 AMOUNT	3/31/2020 AMOUNT	
1	<b>Non-Union Payroll</b>				
2	Gross Payroll	\$ 1,317,841	\$ 1,405,675	\$ 1,447,226	
3	Capital Payroll	126,251	134,666	138,646	
4	Non-Operating Payroll	160,306	170,990	176,045	
5	Expense Payroll	1,031,284	1,100,019	1,132,535	‡
6	Non-Union Expense Payroll Increase/(Decrease)		\$ 68,735	\$ 32,516	
7	<b>Union Payroll</b>				
8	Gross Payroll	\$ 449,944	\$ 468,974	\$ 480,352	
9	Capital Payroll	3,491	3,639	3,727	
10	Non-Operating Payroll	5,417	5,646	5,783	
11	Expense Payroll	441,036	459,689	470,842	‡
12	Union Expense Payroll Increase/(Decrease)		\$ 18,653	\$ 11,153	
13	Total Expense Payroll Increase/(Decrease)		<u>\$ 87,388</u>	<u>\$ 43,669</u>	
14	Pro Forma Adjustment:				
15	7013		\$ 7,875	\$ 3,935	
16	7014		\$ 8	\$ 4	
17	7015		\$ 1,478	\$ 738	
18	7017		\$ 859	\$ 429	
19	7018		\$ 76,771	\$ 38,364	
20	75052		\$ 398	\$ 199	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)



## AQUA PENNSYLVANIA WASTEWATER, INC.

## NOTES TO STATEMENT OF INCOME

## OPERATING EXPENSES

## INSURANCE EXPENSE

The Company's self insured policies for General Liability, Workers Compensation, Vehicle, and Other are evaluated annually by a third party insurance broker, using multiple year claims history. The Company has based its expense claim on the actual and projected premiums for the twelve months ending March 31, 2019 and March 31, 2020.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	
1	General Liability	\$ 18,178	\$ 40,515	\$ 42,565	
2	Workers Compensation	3,958	10,765	11,310	
3	Other (Exec Risk, Property, Surety Bond)	3,787	9,074	9,533	
4		<u>25,922</u>	<u>60,355</u>	<u>63,409</u>	‡
5	Capitalized portion not charged to operating expense	30.88% (8,005)	(18,638)	(19,581)	‡
6	Subtotal Insurance	\$ 17,917	\$ 41,717	\$ 43,828	
7	Less: Amount Charged to Operating Expense				
8	During the Twelve Months Ended 3/31/2018	25,922			
9	Less: Present Rates 3/31/2018		17,917		
10	Less: Present Rates 3/31/2019			41,717	
11	Increase/(Decrease)	<u>\$ (8,005)</u>	<u>\$ 23,800</u>	<u>\$ 2,111</u>	
12	Pro Forma Adjustment:				
13	7578	\$ -	\$ 22,338	\$ 2,050	
14	7588	\$ -	\$ 6,808	\$ 545	
15	7598	\$ -	\$ 5,288	\$ 459	
16	7048	\$ (8,005)	\$ (10,633)	\$ (943)	

(a) - Reference in Exhibit 1-A

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

MANAGEMENT SERVICE & SUNDRY

The following amounts summarize the estimated additional annualized payroll expense and the company portion of employee benefit related insurance premiums of the Aqua Services, Inc. employees whose time was charged to Aqua Pennsylvania Wastewater during the test year.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	
1	Management Fees Labor & Benefits	\$ 182,568	\$ 182,568	\$ 207,739	‡
2	Payroll Increase		20,558	5,624	‡
3	Employee Benefit Insurance Increase		4,613	1,495	‡
4	Management Fees All Other	275,810	275,810	275,810	
5	Total Expense Claim	\$ 458,379	\$ 483,549	\$ 490,669	
6	Less: Amount Charged to Operating Expense				
7	During the Twelve Months Ended 3/31/2018	458,379			
8	Less: Present Rates 3/31/2018		458,379		
9	Less: Present Rates 3/31/2019			483,549	
10	Increase/(Decrease)	\$ -	\$ 25,171	\$ 7,119	
11	Pro Forma Adjustment:				
12	7349	\$ -	\$ 25,171	\$ 7,119	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

## AQUA PENNSYLVANIA WASTEWATER, INC.

## NOTES TO STATEMENT OF INCOME

## OPERATING EXPENSES

## CUSTOMER SERVICE &amp; SUNDRY

The following amounts summarize the estimated additional annualized payroll expense and the company portion of employee benefit related insurance premiums of the Aqua Customer Operations employees whose time was charged to Aqua Pennsylvania Wastewater during the test year.

LINE NO.	DESCRIPTION	PRESENT RATES	PRESENT RATES	PRESENT RATES	
		3/31/2018 AMOUNT	3/31/2019 AMOUNT	3/31/2020 AMOUNT	
1	Customer Operations Labor & Benefits	\$ 100,171	\$ 100,171	\$ 117,961	‡
2	Payroll Increase		13,703	2,900	‡
3	Employee Benefit Insurance Increase		4,088	1,653	‡
4	Customer Operations All Other	36,468	36,468	36,468	
5	Total Expense Claim	\$ 136,638	\$ 154,429	\$ 158,982	
6	Less: Amount Charged to Operating Expense				
7	During the Twelve Months Ended 3/31/2018	136,638			
8	Less: Present Rates 3/31/2018		136,638		
9	Less: Present Rates 3/31/2019			154,429	
10	Increase/(Decrease)	\$ -	\$ 17,791	\$ 4,553	
11	Pro Forma Adjustment:				
12	7367	\$ -	\$ 17,791	\$ 4,553	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

MISCELLANEOUS EXPENSE ADJUSTMENTS

The following adjustments reflect miscellaneous additions or deductions from pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES	PRESENT RATES	PRESENT RATES
		3/31/2018 AMOUNT	3/31/2019 AMOUNT	3/31/2020 AMOUNT
1	<b>Additions:</b>			
2	Fines Accrual Reversed in HTY	100,000		
3	<b>Deductions:</b>			
4	Fines	(135)		
5	Increase/(Decrease)	<u>\$ 99,865</u>	<u>\$ -</u>	<u>\$ -</u>
6	Pro Forma Adjustment:			
7	7758	\$ 99,865		

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

SPECIFIC EXPENSES NOT SUBJECT TO INFLATION

The following amounts reflect specific expenses that are not separately adjusted for and are not subject to growth from inflation. These amounts are eliminated from the eligible Operating Expenses subject to inflation on Schedule C-4.1.

LINE NO.	DESCRIPTION	PRESENT RATES	PRESENT RATES	PRESENT RATES	
		3/31/2018 AMOUNT	3/31/2019 AMOUNT	3/31/2020 AMOUNT	
1	Leases	\$ 107,165	\$ 107,165	\$ 107,165	‡
2	Total Specific Expenses Not Subject to Inflation	<u>\$ 107,165</u>	<u>\$ 107,165</u>	<u>\$ 107,165</u>	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

AMORTIZATION OF NEW POSITIVE ACQUISITION ADJUSTMENTS

The Company is proposing to amortize certain positive acquisition adjustments involving acquisitions that were closed after the last AP rate case was filed. Listed below is the first year amortization of the acquisition adjustments. A twenty year amortization period was selected similar to the treatment of prior acquisition adjustments approved by the Commission.

LINE NO.	DESCRIPTION	ORIGINAL ACQUISITION ADJUSTMENT	DATE OF OWNERSHIP	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Treasure Lake	\$ 1,298,027	3/31/2013	\$ -	\$ -	\$ 64,901
2	Bunker Hill WW	\$ 35,598	8/12/2015	\$ -	\$ -	\$ 1,780
3	Tobyhanna WW	\$ 2,048,481	7/1/2017	\$ -	\$ -	\$ 102,424
4	Avon Grove	\$ 74,758	9/8/2017	\$ -	\$ -	\$ 3,738
5		<u>\$ 3,456,864</u>		<u>\$ -</u>	<u>\$ -</u>	<u>\$ 172,843</u>
6	Amortization Period	20 Years				
7	Annual Amortization	\$ 172,843				
8	Less: Amount Charged to Operating Expense					
9	During the Twelve Months Ended 3/31/2018			-		
10	Less: Present Rates 3/31/2018				-	
11	Less: Present Rates 3/31/2019					-
12	Increase/(Decrease)			<u>\$ -</u>	<u>\$ -</u>	<u>\$ 172,843</u>
13	Pro Forma Adjustment:					
14	4060			\$ -	\$ -	\$ 172,843

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

AMORTIZATION OF NEW NEGATIVE ACQUISITION ADJUSTMENTS

The Company is proposing to amortize certain negative acquisition adjustments involving acquisitions that were closed after the last AP rate case was filed. Listed below is the amortization of the acquisition adjustments. A twenty year amortization period was selected similar to the treatment of prior acquisition adjustments approved by the Commission.

LINE NO.	DESCRIPTION	ORIGINAL ACQUISITION ADJUSTMENT	DATE OF OWNERSHIP	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Washington Park (1)	\$ (21,719)	3/31/2009	\$ (1,086)	\$ (1,086)	\$ (1,086)
2	Cove Village	\$ (148,671)	8/6/2009	\$ (7,434)	\$ (7,434)	\$ (7,434)
3	Village at Valley Forge	\$ (1,181,238)	3/31/2012	\$ (59,061)	\$ (59,061)	\$ (59,061)
4	Beech Mountain WW	\$ (17,653)	5/4/2012	\$ (883)	\$ (883)	\$ (883)
5	Sage Hill	\$ (775,662)	12/21/2012	\$ (38,783)	\$ (38,783)	\$ (38,783)
6	Honeycroft	\$ (2,463,624)	11/1/2016	\$ (123,181)	\$ (123,181)	\$ (123,181)
7	Emlenton	\$ (1,681,928)	12/31/2016	\$ (63,072)	\$ (84,096)	\$ (84,096)
8		<u>\$ (6,290,497)</u>		<u>\$ (293,500)</u>	<u>\$ (314,524)</u>	<u>\$ (314,524)</u>
9	Amortization Period	20 Years				
10	Annual Amortization	\$ (314,525)				
11	Kidder Twp	\$ (139,710)	10/1/2012	\$ (5,263)	\$ (5,263)	\$ (5,263)
12	Penn Township Sewer	\$ (4,190,306)	3/29/2014	\$ (210,392)	\$ (210,392)	\$ (210,392)
13				<u>\$ (509,154)</u>	<u>\$ (530,178)</u>	<u>\$ (530,178)</u>
14	Less: Amount Charged to Operating Expense					
15	During the Twelve Months Ended 3/31/2018			(509,154)		
16	Less: Present Rates 3/31/2018				(509,154)	
17	Less: Present Rates 3/31/2019					(530,178)
18	Increase/(Decrease)			<u>\$ -</u>	<u>\$ (21,024)</u>	<u>\$ -</u>
19	Pro Forma Adjustment:					
20	4060			\$ -	\$ (21,024)	\$ -

(1) - Refer to note on Schedule G-3

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PURCHASED POWER EXPENSE

This adjustment summarizes the Company's purchased power expense claim as detailed on Schedule C-6.1.i & Schedule C-6.1.ii.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Claimed Purchased Power Expense - Electric	\$ 939,992	\$ 939,312	\$ 910,014
2	Claimed Purchased Power Expense - Gas	64,244	68,769	68,769
3		<u>\$ 1,004,236</u>	<u>\$ 1,008,081</u>	<u>\$ 978,783</u>
4	Less: Amount Charged to Operating Expense			
5	During the Twelve Months Ended 3/31/2018	999,892		
6	Less: Present Rates 3/31/2018		1,004,236	
7	Less: Present Rates 3/31/2019			1,008,081
8	Increase/(Decrease)	<u>\$ 4,345</u>	<u>\$ 3,845</u>	<u>\$ (29,298)</u>
9	Pro Forma Adjustment:			
10	7151	\$ 4,082	\$ 3,613	\$ (27,529)
11	7153	\$ 17	\$ 15	\$ (113)
12	7155	\$ -	\$ -	\$ -
13	7158	\$ 7	\$ 6	\$ (48)
14	7161	\$ 220	\$ 194	\$ (1,482)
15	7163	\$ 19	\$ 17	\$ (127)

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)



AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PURCHASED POWER - ELECTRIC

LINE NO.	UTILITY	LOCATION	HISTORIC KW HOURS	PRESENT RATES	FUTURE KW HOURS	PRESENT RATES	FULLY PROJECTED	PRESENT RATES
				3/31/2018 AMOUNT		3/31/2019 AMOUNT	FUTURE KW HOURS	3/31/2020 AMOUNT
1	Adams Co-op	Wastewater	118,334	\$ 11,991	118,334	\$ 12,231	118,334	\$ 12,475
2	Central Electric Co-op	Wastewater	1,444	\$ 526	1,444	\$ 537	1,444	\$ 547
3	PECO	Wastewater	4,269,788	\$ 364,596	4,269,788	\$ 355,135	4,269,788	\$ 345,912
4	PenElec	Wastewater	1,560,610	\$ 155,507	1,561,781	\$ 156,342	1,561,781	\$ 153,328
5	PP&L	Wastewater	3,731,830	\$ 337,911	3,731,830	\$ 344,218	3,731,830	\$ 325,484
6	United Electric Co-op	Wastewater	631,872	\$ 69,461	631,872	\$ 70,850	631,872	\$ 72,267
7				\$ 939,992		\$ 939,312		\$ 910,014

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PURCHASED POWER - GAS

LINE NO.	UTILITY	LOCATION	HISTORIC THERMS	PRESENT RATES 3/31/2018 AMOUNT	FUTURE THERMS	PRESENT RATES 3/31/2019 AMOUNT	FULLY PROJECTED FUTURE THERMS	PRESENT RATES 3/31/2020 AMOUNT
1	COLUMBIA GAS OF PA	Wastewater	1,889	\$ 1,940	1,889	\$ 2,134	1,889	\$ 2,134
2	PECO	Wastewater	50,625	\$ 40,235	50,625	\$ 44,259	50,625	\$ 44,259
3	UGI UTILITIES , INC	Wastewater	2,927	\$ 3,069	2,927	\$ 3,376	2,927	\$ 3,376
4	Direct Purchases - Fuel Oil, Propane and Generator Diesel			\$ 19,000		\$ 19,000		\$ 19,000
5				\$ 64,244		\$ 68,769		\$ 68,769

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

CHEMICALS

The chemical expense claim was based on the normalized average expense for the three years ended March 31, 2018, exclusive of acquisitions.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	
1	Chemical Expense Claim (3 Year Average Normalized)	\$ 498,273	\$ 498,273	\$ 498,273	‡
2	Less: Amount Charged to Operating Expense				
3	During the Twelve Months Ended 3/31/2018	479,445			
4	Less: Present Rates 3/31/2018		498,273		
5	Less: Present Rates 3/31/2019			498,273	
6	Increase/(Decrease)	<u>\$ 18,828</u>	<u>\$ -</u>	<u>\$ -</u>	
7	Pro Forma Adjustment:				
8	7183	\$ 18,828	\$ -	\$ -	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PURCHASED WASTEWATER TREATMENT EXPENSE

The Company's claim for purchased wastewater treatment expense normalizes the cost of services provided by two wastewater treatment providers for the Company's Beech Mountain and Village at Valley Forge service areas. The service providers are Butler Township Sewer Authority and Upper Merion Sewer.

LINE NO.	DESCRIPTION	PRESENT RATES	
		3/31/2019 AMOUNT	3/31/2020 AMOUNT
1	Claimed Purchased Wastewater Expense	\$ 665,819	\$ 665,819 ‡
2	Less: Amount Charged to Operating Expense		
3	During the Twelve Months Ended 3/31/2018	571,416	
4	Less: Present Rates 3/31/2019		665,819
5	Increase/(Decrease)	<u>\$ 94,403</u>	<u>\$ -</u>
6	Pro Forma Adjustment:		
7	7105	\$ 94,403	\$ -

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EMPLOYEE BENEFITS

Aqua Pennsylvania Water Operations charges a portion of employee benefits and other related overheads to Aqua Pennsylvania Wastewater through an intracompany transaction which is calculated based on approximately 60% of wastewater payroll expense. Refer to Exhibit 1-A Water, Schedule C-8.4 for the corresponding entry.

LINE NO.	DESCRIPTION	PRESENT RATES	PRESENT RATES	PRESENT RATES	
		3/31/2018 AMOUNT	3/31/2019 AMOUNT	3/31/2020 AMOUNT	
1	Wastewater Intracompany Benefits	\$ 883,392	\$ 935,825	\$ 962,026	‡
2	Less: Amount Charged to Operating Expense				
3	During the Twelve Months Ended 3/31/2018	888,188			
4	Less: Present Rates 3/31/2018		883,392		
5	Less: Present Rates 3/31/2019			935,825	
6	Increase/(Decrease)	<u>\$ (4,796)</u>	<u>\$ 52,433</u>	<u>\$ 26,201</u>	
7	Pro Forma Adjustment:				
8	7048	\$ (4,796)	\$ 52,433	\$ 26,201	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

ELIMINATE NORTH HEIDELBERG EXPENSES

Beginning March 5, 2018, the Company was appointed receiver for the North Heidelberg Sewer Company at Docket No. M-2018-2645983. The following adjustment removes the expenses incurred from operating North Heidelberg during the test year which was recorded above the line. Refer to Schedule B-6 of this exhibit for the removal of North Heidelberg revenues.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT
1	Claimed North Heidelberg Sewer Expenses	\$ -
2	Less: Amount Charged to Operating Expense	
3	During the Twelve Months Ended 3/31/2018	14,756
4	Increase/(Decrease)	<u>\$ (14,756)</u>
5	Pro Forma Adjustment:	
6	7018	\$ (2,661)
7	7203	\$ (6,738)
8	7365	\$ (5,356)

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

ANNUALIZATION OF AVON GROVE

The following adjustment is to annualize the additional expenses, excluding labor, from the Avon Grove Acquisition to give effect of a full twelve months of service.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Annualization of Avon Grove Expenses	\$ 9,112	\$ 9,112
2	Less: Amount Charged to Operating Expense		
3	During the Twelve Months Ended 3/31/2018	4,556	
4	Less: Present Rates 3/31/2019		9,112
5	Increase/(Decrease)	<u>\$ 4,556</u>	<u>\$ -</u>
6	Pro Forma Adjustment:		
7	7183 OM Chemicals	\$ 2,306	\$ -
8	7115 OM Sludge	\$ 1,010	\$ -
9	7208 OM Supplies	\$ 766	\$ -
10	7362 OM OS Other (wo ACO)	\$ 409	\$ -
11	7758 OM Other	\$ 65	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

ANNUALIZATION OF TOBYHANNA

The following adjustment is to annualize the additional expenses, excluding labor and bad debt, from the Tobyhanna Acquisition to give effect of a full twelve months of service.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Annualization of Tobyhanna Expenses	\$ 146,095	\$ 146,095
2	Less: Amount Charged to Operating Expense		
3	During the Twelve Months Ended 3/31/2018	109,571	
4	Less: Present Rates 3/31/2019		146,095
5	Increase/(Decrease)	<u>\$ 36,524</u>	<u>\$ -</u>
6	Pro Forma Adjustment:		
7	7151 OM Purchased Power	\$ 12,790	\$ -
8	7183 OM Chemicals	\$ 2,068	\$ -
9	7115 OM Sludge	\$ 5,766	\$ -
10	7208 OM Supplies	\$ 11	\$ -
11	7354 OM OS Lab Testing	\$ 1,146	\$ -
12	7364 OM OS Other (wo ACO)	\$ 13,795	\$ -
13	7758 OM Other	\$ 947	\$ -



AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

STATEMENT OF DEPRECIATION

LINE NO.	DESCRIPTION	PRESENT RATES	PRESENT RATES	PRESENT RATES
		3/31/18 AMOUNT	3/31/19 AMOUNT	3/31/20 AMOUNT
	(1)	(2)	(3)	(4)
1	(a) Annualized Depreciation Expense	\$ 3,017,474	\$ 4,422,241	\$ 5,349,158
2	Less: Amount Charged to Depreciation Expense			
3	During the Twelve Months Ended 3/31/2018	3,114,235		
4	Less: Present Rates 3/31/2018		3,017,474	
5	Less: Present Rates 3/31/2019			4,422,241
6	Increase/(Decrease)	<u>\$ (96,761)</u>	<u>\$ 1,404,767</u>	<u>\$ 926,917</u>
7	Pro Forma Adjustment:			
8		\$ (96,761)	\$ 1,404,767	\$ 926,917

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO TAXES OTHER THAN INCOME

LINE NO.	DESCRIPTION	PRESENT RATES		PRESENT RATES		PRESENT RATES		PROPOSED RATES	
		ADJUSTMENT	3/31/18 AMOUNT	ADJUSTMENT	3/31/19 AMOUNT	ADJUSTMENT	3/31/20 AMOUNT	ADJUSTMENT	AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Per Books		\$ 210,981						
2	Present Rates at 3/31/18				\$ 219,535				
3	Present Rates at 3/31/19						\$ 220,538		
4	Present Rates at 3/31/20								\$ 220,538
	General Assessment Fees By The Pennsylvania Public Utility								
5	Commission	7,014		844		-		57,084	
	General Assessment Fees By The Consumer Advocate And Small								
6	Business Advocate	1,540		159		-		10,737	
7	Public Utility Realty Tax	-		-		-			
8	Pennsylvania Property Tax	-		-		-			
9									
10	Pro Forma Adjustment		<u>\$ 8,554</u>		<u>\$ 1,003</u>		<u>\$ -</u>		<u>\$ 67,821</u>
11	Pro Forma Present Rates at March 31, 2018		<u><u>\$ 219,535</u></u>						
12	Pro Forma Present Rates at March 31, 2019				<u><u>\$ 220,538</u></u>				
13	Pro Forma Present Rates at March 31, 2020						<u><u>\$ 220,538</u></u>		
14	Pro Forma Proposed Rates at March 31, 2020								<u><u>\$ 67,821</u></u>

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

TAXES OTHER THAN INCOME

GENERAL ASSESSMENT FEES BY THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	PROPOSED RATES AMOUNT
1	Gross Utility Water Revenues	\$ 13,244,115	\$ 13,443,305	\$ 13,443,305	\$ 26,913,292
2	Estimated General Assessment Fee:				
3	Public Utility Commission Fee At 0.004237859666	56,127	56,971	56,971	114,055
4	Total General Assessment Fees	\$ 56,127	\$ 56,971	\$ 56,971	\$ 114,055
5	Less: Amount Charged to Taxes Other Than Income				
6	During the Twelve Months Ended 3/31/2018	49,113			
7	Less: Present Rates 3/31/2018		56,127		
8	Less: Present Rates 3/31/2019			56,971	
9	Less: Present Rates 3/31/2020				56,971
10	Increase/(Decrease)	\$ 7,014	\$ 844	\$ -	\$ 57,084
11	Pro Forma Adjustment:				
12	4081	\$ 7,014	\$ 844	\$ -	\$ 57,084

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

TAXES OTHER THAN INCOME

GENERAL ASSESSMENT FEES BY THE CONSUMER ADVOCATE AND SMALL BUSINESS ADVOCATE

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT	PROPOSED RATES AMOUNT
1	Gross Utility Water Revenues	\$ 13,244,115	\$ 13,443,305	\$ 13,443,305	\$ 26,913,292
2	Estimated General Assessment Fee:				
3	Consumer Advocate Fee At 0.000672671080	8,909	9,043	9,043	18,104
4	Small Business Advocate Fee At 0.000124428392	1,648	1,673	1,673	3,349
5	Total General Assessment Fees	\$ 10,557	\$ 10,716	\$ 10,716	\$ 21,453
6	Less: Amount Charged to Taxes Other Than Income				
7	During the Twelve Months Ended 3/31/2018	9,016			
8	Less: Present Rates 3/31/2018		10,557		
9	Less: Present Rates 3/31/2019			10,716	
10	Less: Present Rates 3/31/2020				10,716
11	Increase/(Decrease)	<u>\$ 1,540</u>	<u>\$ 159</u>	<u>\$ -</u>	<u>\$ 10,737</u>
12	Pro Forma Adjustment:				
13	4081	\$ 1,540	\$ 159	\$ -	\$ 10,737

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

TAXES OTHER THAN INCOME

PUBLIC UTILITY REALTY TAX

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	2018 PURTA Liability	\$ -	\$ -	\$ -
2	Less: Amount Charged to Taxes Other Than Income			
3	During the Twelve Months Ended 3/31/2018	-		
4	Less: Present Rates 3/31/2018		-	
5	Less: Present Rates 3/31/2019			-
6	Increase/(Decrease)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
7	Pro Forma Adjustment:			
8	4082	\$ -	\$ -	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

TAXES OTHER THAN INCOME

PENNSYLVANIA PROPERTY TAX

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Claimed Property Tax Expense	\$ 152,852	\$ 152,852	\$ 152,852
2	Less: Amount Charged to Taxes Other Than Income			
3	During the Twelve Months Ended 3/31/2018	152,852		
4	Less: Present Rates 3/31/2018		152,852	
5	Less: Present Rates 3/31/2019			152,852
6	Increase/(Decrease)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
7	Pro Forma Adjustment:			
8	4081	\$ -	\$ -	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC.

INTEREST ON LONG-TERM DEBT

For the purposes of calculating long-term debt interest expense, the Company is using the pro-forma capital structure and cost rates as noted below:

LINE NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1		PRESENT RATES @ 3/31/18			PRESENT RATES @ 3/31/19			PRESENT RATES @ 3/31/20		
2 Capital Structure		\$	%	Cost Rate	\$	%	Cost Rate	\$	%	Cost Rate
3 Long-term Debt		\$ 1,333,382,818	46.05%	4.42%	\$ 1,484,107,392	46.87%	4.43%	\$ 1,608,093,832	47.15%	4.43%
4 Common Equity		\$ 1,562,180,646	53.95%	10.75%	\$ 1,682,180,646	53.13%	10.75%	\$ 1,802,180,646	52.85%	10.75%
5		<u>\$ 2,895,563,464</u>	<u>100.00%</u>	<u>7.84%</u>	<u>\$ 3,166,288,037</u>	<u>100.00%</u>	<u>7.79%</u>	<u>\$ 3,410,274,478</u>	<u>100.00%</u>	<u>7.77%</u>

		PRESENT RATES 3/31/18	PRESENT RATES 3/31/19	PRESENT RATES 3/31/20
6				
7 Calculation of Interest:				
8 Original Cost Rate Base	Schedule G-1 Col 3, Row 16	\$ 84,648,638	Schedule G-1 Col 4, Row 16 \$ 119,992,379	Schedule G-1 Col 5, Row 16 \$ 143,857,249
9 Applicable Percentage		<u>46.05%</u>	<u>46.87%</u>	<u>47.15%</u>
10 Applicable Portion of Rate Base		\$ 38,979,991	\$ 56,243,012	\$ 67,834,996
11 Cost Rate		4.42%	4.43%	4.43%
12 Pro-Forma Long-term Interest Expense		<u>\$ 1,722,916</u>	<u>\$ 2,491,565</u>	<u>\$ 3,005,090</u>
13 Less: Interest on Long Term Debt Per Books 3/31/18		24,780		
14 Less: Interest on Long Term Debt Present Rates at 3/31/18			1,722,916	
15 Less: Interest on Long Term Debt Present Rates at 3/31/19				<u>2,491,565</u>
16 Long Term Debt Pro Forma Adjustment		<u>\$ 1,698,136</u>	<u>\$ 768,650</u>	<u>\$ 513,525</u>

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

AMORTIZATION OF DEBT ISSUANCE & PREMIUM/DISCOUNT ON DEBT

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Amortization of Debt Discount and Expense Per Books	\$ -	\$ -	\$ -
2	Eliminate Amortization of Debt Discount and Expense	-	-	-
3	Sub-Total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
4	Pro Forma Adjustment:			
5	4276	\$ -	\$ -	\$ -



AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

OTHER INTEREST CHARGES

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Other Interest Charges Per Books	\$ -	\$ -	\$ -
2	Eliminate Other Interest Charges	-	-	-
3	Sub-Total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
4	Pro Forma Adjustment:			
5	4190	\$ -	\$ -	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

INTEREST DURING CONTRUCTION

The Company eliminates interest during construction to allow for full recovery of the Company's interest expense claim (weighted cost of debt times rate base).

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Interest During Construction Per Books	\$ (713,663)	\$ -	\$ -
2	Eliminate Interest During Construction	713,663	-	-
3	Sub-Total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
4	Pro Forma Adjustment:			
5	4200	\$ 713,663	\$ -	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO INCOME TAXES

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES	PRESENT RATES	PRESENT RATES	PROPOSED RATES
			3/31/18 AMOUNT	3/31/19 AMOUNT	3/31/20 AMOUNT	3/31/20 AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)
1	Federal Income Tax - Current	Schedule F-2	\$ 33,432	\$ (1,426,971)	\$ (1,266,504)	\$ 1,236,984
2	Less: Per Book	Schedule A-1	(338,676)			
3	Less: Present Rates at 3/31/18			33,432		
4	Less: Present Rates at 3/31/19				(1,426,971)	
5	Less: Present Rates at 3/31/20					(1,266,504)
6	Pro Forma Adjustment		<u>\$ 372,107</u>	<u>\$ (1,460,402)</u>	<u>\$ 160,466</u>	<u>\$ 2,503,488</u>
7	State Income Tax - Current	Schedule F-2	\$ (79,951)	\$ (851,792)	\$ (766,984)	\$ 556,141
8	Less: Per Book	Schedule A-1	104,614			
9	Less: Present Rates at 3/31/18			(79,951)		
10	Less: Present Rates at 3/31/19				(851,792)	
11	Less: Present Rates at 3/31/20					(766,984)
12	Pro Forma Adjustment		<u>\$ (184,566)</u>	<u>\$ (771,841)</u>	<u>\$ 84,808</u>	<u>\$ 1,323,125</u>
13	Federal Income Tax - Deferred	Schedule F-2	\$ (168,099)	\$ (255,075)	\$ (224,009)	\$ (224,009)
14	Less: Per Book	Schedule A-1	45,865			
15	Less: Present Rates at 3/31/18			(168,099)		
16	Less: Present Rates at 3/31/19				(255,075)	
17	Less: Present Rates at 3/31/20					(224,009)
18	Pro Forma Adjustment		<u>\$ (213,964)</u>	<u>\$ (86,976)</u>	<u>\$ 31,066</u>	<u>\$ -</u>
19	State Income Tax - Deferred	Schedule F-2	\$ (34,134)	\$ (34,134)	\$ (38,101)	\$ (38,101)
20	Less: Per Book	Schedule A-1	(501,135)			
21	Less: Present Rates at 3/31/18			(34,134)		
22	Less: Present Rates at 3/31/19				(34,134)	
23	Less: Present Rates at 3/31/20					(38,101)
24	Pro Forma Adjustment		<u>\$ 467,001</u>	<u>\$ -</u>	<u>\$ (3,967)</u>	<u>\$ -</u>

AQUA PENNSYLVANIA WASTEWATER, INC.  
COMPUTATION OF FEDERAL AND STATE INCOME TAXES  
UNDER PRESENT AND PROPOSED RATES

LINE NO.	REFERENCE	PRESENT RATES 3/31/18		PRESENT RATES 3/31/19		PRESENT RATES 3/31/20		PROPOSED RATES 3/31/20		
		FEDERAL	STATE	FEDERAL	STATE	FEDERAL	STATE	FEDERAL	STATE	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
1	Utility Operating Income Before Tax	Schedule A-1	\$ 2,321,904	\$ 2,321,904	\$ 719,486	\$ 719,486	\$ (536,001)	\$ (536,001)	\$ 12,708,498	\$ 12,708,498
2	Interest Expense	Schedule A-1	(1,722,916)	(1,722,916)	(2,491,565)	(2,491,565)	(3,005,090)	(3,005,090)	(3,005,090)	(3,005,090)
3	State Income Tax	[11]	79,951		851,792		766,984		(556,141)	
4	Tax Repair Deduction		(1,433,504)	(1,433,504)	(7,258,030)	(7,258,030)	(4,350,142)	(4,350,142)	(4,350,142)	(4,350,142)
5	Book Depreciation	Schedule A-1	3,017,474	3,017,474	4,422,241	4,422,241	5,349,158	5,349,158	5,349,158	5,349,158
6	Tax Depreciation		(2,103,711)	(2,983,271)	(3,039,022)	(3,918,582)	(4,255,882)	(5,135,442)	(4,255,882)	(5,135,442)
7	Taxable Income	Sum of Lines [1] : [6]	\$ 159,198	\$ (800,313)	\$ (6,795,098)	\$ (8,526,451)	\$ (6,030,973)	\$ (7,677,517)	\$ 5,890,400	\$ 5,566,982
8	Income Tax Rate		21.00%	9.99%	21.00%	9.99%	21.00%	9.99%	21.00%	9.99%
9	Pro Forma Income Tax : Current	[7] * [8]	33,432	(79,951)	(1,426,971)	(851,792)	(1,266,504)	(766,984)	1,236,984	556,141
10	Other									
11	Total - Current Income Tax	[9] + [10]	\$ 33,432	\$ (79,951)	\$ (1,426,971)	\$ (851,792)	\$ (1,266,504)	\$ (766,984)	\$ 1,236,984	\$ 556,141
12	Deferred Income Tax:									
13	Catch Up Adjustment		\$ (226,865)	\$ (341,678)	\$ (226,865)	\$ (341,678)	\$ (253,235)	\$ (381,392)	\$ (253,235)	\$ (381,392)
14	Income Tax Rate		21.00%	9.99%	21.00%	9.99%	21.00%	9.99%	21.00%	9.99%
15	Deferred Income Tax - Repair Adjustment	[13] * [14]	(47,642)	(34,134)	(47,642)	(34,134)	(53,179)	(38,101)	(53,179)	(38,101)
16	Normalized Book Depreciation		(2,677,317)		(4,026,801)		(4,771,535)		(4,771,535)	
17	Normalized Tax Depreciation		2,103,711		3,039,022		4,255,882		4,255,882	
18	Income Tax Rate		21.00%	9.99%	21.00%	9.99%	21.00%	9.99%	21.00%	9.99%
19	Deferred Income Tax - Tax/Book Depreciation	([16] + [17]) * [18]	(120,457)	-	(207,433)	-	(108,287)	-	(108,287)	-
20	Flowback of TRA-86		-		-		-		-	
21	Flowback of TCJA 2017 (ARAM) - Protected		-		-		(61,651)		(61,651)	
22	Flowback of TCJA 2017 - 10 Years		-		-		(892)		(892)	
23	Total Flow Through		-	-	-	-	(62,543)	-	(62,543)	-
24	Total - Deferred Income Tax	[15] + [19] + [23]	\$ (168,099)	\$ (34,134)	\$ (255,075)	\$ (34,134)	\$ (224,009)	\$ (38,101)	\$ (224,009)	\$ (38,101)
25	Amortization of Income Tax Credit		-		-		-		-	
26	Total - Income Tax	[11] + [24] + [25]	\$ (134,667)	\$ (114,085)	\$ (1,682,046)	\$ (885,926)	\$ (1,490,513)	\$ (805,085)	\$ 1,012,975	\$ 518,040

Enter Additional Calculations or References Below:

AQUA PENNSYLVANIA WASTEWATER, INC.

RATE BASE AS OF MARCH 31, 2018,

MARCH 31, 2019 AND MARCH 31, 2020 UNDER PRESENT AND PROPOSED RATES

LINE NO.	REFERENCE	ORIGINAL COST 3/31/18	ORIGINAL COST 3/31/19	ORIGINAL COST 3/31/20
(1)	(2)	(3)	(4)	(5)
1	Utility Plant in Service	\$ 145,207,627	\$ 182,540,440	\$ 210,253,125
2	Utility Plant Acquisition Adjustment	3,808,150	3,778,311	3,575,629
3		<u>149,015,777</u>	<u>186,318,751</u>	<u>213,828,754</u>
4	Less: Accumulated Depreciation	(38,538,677)	(41,233,220)	(45,564,566)
5	Net Plant in Service	<u>110,477,100</u>	<u>145,085,531</u>	<u>168,264,188</u>
6	Additions:			
7	Materials & Supplies	-	-	-
8	Cash Working Capital	691,000	691,000	691,000
9		<u>691,000</u>	<u>691,000</u>	<u>691,000</u>
10	Deductions:			
11	Contributions in Aid of Construction	(20,636,488)	(20,108,611)	(19,593,228)
12	Customer Advances for Construction	(126,000)	(126,000)	(126,000)
13	Deferred Income Taxes	(5,756,975)	(5,549,542)	(5,378,712)
14	Investment Tax Credit	-	-	-
15		<u>(26,519,463)</u>	<u>(25,784,152)</u>	<u>(25,097,939)</u>
16	Total Rate Base	<u>\$ 84,648,638</u>	<u>\$ 119,992,379</u>	<u>\$ 143,857,249</u>

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

UTILITY PLANT IN SERVICE & ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Utility Plant in Service	\$ 145,207,627	\$ 145,207,627	\$ 182,540,440
2	Plus: Additions		38,771,521	28,898,630
3	Less: Retirements		(1,438,708)	(1,185,946)
4	Utility Plant in Service	<u>\$ 145,207,627</u>	<u>\$ 182,540,440</u>	<u>\$ 210,253,125</u>
5	Accumulated Depreciation		<u>(41,233,220)</u>	<u>(45,564,566)</u>

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

UTILITY PLANT ACQUISITION ADJUSTMENTS

The following adjustment reflects the recognition of the positive Utility Plant Acquisition Adjustments (UPAA) associated with the acquisition of various water utility assets pursuant to the terms of the Commission-approved settlement of the Company's rate cases at Docket Nos. R-00072319, R-2008-2081738, and R-2010-2207833. In addition, the Company is requesting recognition of the positive UPAA associated with its acquisitions of the wastewater assets for Treasure Lake, Bunker Hill, Tobyhanna, and Avon Grove. The Company is also requesting recognition of the negative UPAA associated with its acquisition of the wastewater assets for Washington Park (1).

LINE NO.	DESCRIPTION	DOCKET NO.	ORIGINAL	AMORTIZATION	PRESENT RATES	PRESENT RATES		PRESENT RATES		PRESENT RATES
			ACQUISITION ADJUSTMENT	DATE CLOSED	PERIOD 20 YEARS	3/31/2018 BALANCE	FTY AMORTIZATIONS	3/31/2019 BALANCE	FPPTY AMORTIZATIONS	3/31/2020 BALANCE
1	Rivercrest	R-00072319	\$ 41,118	6/27/2002	10/06 - 9/26	\$ 17,475	\$ 2,056	\$ 15,419	\$ 2,056	\$ 13,364
2	White Haven	R-2008-2081738	\$ 267,972	3/11/2002	10/08 - 9/28	140,686	13,399	127,287	13,399	113,889
3	Masthope	R-2010-2207833	\$ 309,404	1/20/2006	6/11 - 5/31	204,980	15,470	189,510	15,470	174,040
4	Washington Park (1)	Seeking Approval	\$ (21,719)	3/30/2009	4/19 - 3/39	(11,856)	(1,086)	(10,770)	(1,086)	(9,684)
5	Treasure Lake	Seeking Approval	\$ 1,298,027	2/28/2012	4/19 - 3/39	1,298,027	-	1,298,027	64,901	1,233,125
6	Bunker Hill WW	Seeking Approval	\$ 35,598	8/11/2015	4/19 - 3/39	35,598	-	35,598	1,780	33,818
7	Tobyhanna WW	Seeking Approval	\$ 2,048,481	6/30/2017	4/19 - 3/39	2,048,481	-	2,048,481	102,424	1,946,057
8	Avon Grove	Seeking Approval	\$ 74,758	9/7/2017	4/19 - 3/39	74,758	-	74,758	3,738	71,020
9	Effect to Rate Base Element		<u>\$ 4,053,639</u>			<u>\$ 3,808,150</u>	<u>\$ 29,839</u>	<u>\$ 3,778,311</u>	<u>\$ 202,682</u>	<u>\$ 3,575,629</u>

(1) Washington Park is an exception to the treatment of negative acquisition adjustments as provided for in Section 1327 of the Public Utility Code because it was stipulated in the order approving their acquisition (Docket No. A-230550F2000) that rate base for rate making purposes would be limited to purchase price. To accomplish that requirement, the negative acquisition adjustment had to be included as a deduction to rate base.

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

MATERIALS AND SUPPLIES

LINE NO.	MONTH	YEAR	BALANCE
1	March	2017	\$ -
2	April	2017	-
3	May	2017	-
4	June	2017	-
5	July	2017	-
6	August	2017	-
7	September	2017	-
8	October	2017	-
9	November	2017	-
10	December	2017	-
11	January	2018	-
12	February	2018	-
13	March	2018	-
14	Total		<u>\$ -</u>
15	13 Month Average		\$ -
16	Allowance for Materials & Supplies		<u>                    </u>
17	At 3/31/2019 and 3/31/2020		<u><u>\$ -</u></u>



AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL SUMMARY

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Cash Working Capital - Expenses	Schedule G-5.2	\$ 802,000	\$ 802,000	\$ 802,000
2	Cash Working Capital - Taxes	Schedule G-5.3	108,000	108,000	108,000
3	Cash Working Capital - Interest	Schedule G-5.4	(219,000)	(219,000)	(219,000)
4	Total Cash Working Capital Requirement		\$ 691,000	\$ 691,000	\$ 691,000

## AQUA PENNSYLVANIA WASTEWATER, INC.

## NOTES TO RATE BASE ELEMENTS

## CASH WORKING CAPITAL

## CALCULATION OF LAG DAYS IN RECEIPT OF REVENUE

The time between rendering of a bill and receipt of payment is determined by dividing the average accounts receivable balances for the test year by the average daily billing as follows:

LINE NO.	MONTH (1)	YEAR (2)	BALANCE (3)
1	March	2017	\$ 1,323,581
2	April	2017	1,083,654
3	May	2017	1,088,040
4	June	2017	1,228,238
5	July	2017	1,279,539
6	August	2017	1,288,677
7	September	2017	1,713,478
8	October	2017	1,511,588
9	November	2017	1,437,885
10	December	2017	1,492,823
11	January	2018	1,346,968
12	February	2018	1,428,044
13	March	2018	1,519,387
14	Total		\$ 17,741,903
15	Average Accounts Receivable Balance		\$ 1,364,762
16	Gross Utility Water Revenues recorded		
17	During the Twelve Months Ended 3/31/2018		\$ 13,481,903
16	Average Daily Billing		\$ 36,937
18	Lag in Receipt of Payment		36.9
19	Average Use Period (a)		15.2
20	Bill Issue Period		2.0
21	Lag Days in Receipt of Revenue		<u>54.1</u>

Reference:

(a) One-half of monthly billing period.

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN PAYMENT OF EXPENSES

LINE NO.	ITEM (1)	AMOUNT (2)	LAG DAYS (3)	Ref. # (4)	DOLLAR DAYS (5)
1	Hourly Labor	\$ 470,842	7.5	(a)	\$ 3,531,315
2	Non-Union Labor	1,132,535	11.0	(b)	12,457,882
3	Management Fee	502,445	16.0	(d)	8,039,114
4	Electric Power	991,848	23.4	(c)	23,174,300
5	Employee Group Insurance	962,026	16.0	(d)	15,392,417
6	Liability Insurance	63,409	(12.3)	(c)	(779,992)
7	SFI Postage	30,905	(8.0)	(c)	(246,035)
8	Pension	0	302.5	(c)	0
9	SFAS106	0	364.3	(e)	0
10	All Other Expenses (g)	4,532,795	25.4	(f)	115,208,545
11	Total	<u>\$ 8,686,804</u>			<u>\$ 176,777,546</u>
12	Average Lag Days in Payment of Expenses		<u>20.4</u>	Col 5, Row 11 / Col 2, Row 11	
13	Average Lag Days in Receipt of Revenues		<u>54.1</u>	Schedule G-5.1	
14	Average Lag Days between Payment of Expenses				
15	and Receipt of Revenue		<u>33.7</u>	[13] - [12]	
16	WORKING CAPITAL REQUIREMENT				
17	Pro-forma Annual Expense Per Day		\$ 23,799	Col 2, Row 11 / 365	
18	Cash Working Capital Required		\$ 802,042	[15] * [17]	
19	USE		<u>\$ 802,000</u>	* Rounded to nearest thousandth	

Reference:

- (a) Weekly payroll paid on Thursday for preceding weeks work.
- (b) Bi-weekly payroll paid on Thursday for the preceding two weeks work.
- (c) Calculated based on test year actual experience.
- (d) Based on normal payment schedule & Intercompany settlement (1st of each month)
- (e) Payment made last week of calendar year
- (f) Assumes service rendered on 15th of the month, paid 10th of the following month. (Same procedure as prior rate cases.)
- (g) Less annual uncollectible accounts expense and other non-cash items

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN PAYMENT OF TAXES

LINE NO.	ITEM	AMOUNT	LAG DAYS	Ref. #	DOLLAR DAYS
	(1)	(2)	(3)	(4)	(5)
1	PA PUC - General Assessments	\$ 56,971	(288.0)	(a)	\$ (16,407,602)
2	OCA & SBA - General Assessments	10,716	(288.0)	(a)	(3,086,108)
3	Public Utility Realty Tax	-	(230.3)	(a)	-
4	Local, County, School, & Municipal Tax	152,852	(173.6)	(a)	(26,530,796)
5	FICA Taxes - Hourly	-	8.5		-
6	FICA Taxes - Executive & Exempt	-	12.0		-
7	Federal Unemployment Tax	-	75.0		-
8	PA Unemployment Tax	-	75.0		-
9	PA State Income Tax	(766,984)	45.0	(a)	(34,514,277)
10	Federal Income Tax	(1,266,504)	45.0	(a)	(56,992,694)
11	Total	<u>\$ (1,812,950)</u>			<u>\$ (137,531,476)</u>
12	Average Lag Days in Payment of Taxes		<u>75.9</u>	Col 5, Row 11 / Col 2, Row 11	
13	Average Lag Days in Receipt of Revenues		<u>54.1</u>	Schedule G-5.1	
14	Average Lag Days between Payment of Taxes				
15	and Receipt of Revenue		<u>(21.8)</u>	[13] - [12]	
16	<b>WORKING CAPITAL REQUIREMENT</b>				
17	Pro-forma Annual Tax Expense Per Day		\$ (4,967)	Col 2, Row 11 / 365	
18	Cash Working Capital Required		\$ 108,280	[15] * [17]	
19	USE		<u>\$ 108,000</u>	* Rounded to nearest thousandth	

Reference:

(a) The lag days are based on current tax regulation.

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN PAYMENT OF INTEREST

LINE NO.	ITEM (1)	AMOUNT (2)	LAG DAYS (3)	Ref. # (4)	DOLLAR DAYS (5)
1	Long Term Debt- Interest	\$ 2,590,119	91.3	(a)	\$ 236,348,358
2	PennVest-Interest	414,971	15.2	(b)	6,311,022
3	Total	<u>\$ 3,005,090</u>			<u>\$ 242,659,380</u>
4	Average Lag Days in Payment of Interest		<u>80.7</u>	Col 5, Row 3 / Col 2, Row 3	
5	Average Lag Days in Receipt of Revenues		<u>54.1</u>	Schedule G-5.1	
6	Average Lag Days between Payment of Interest				
7	and Receipt of Revenue		<u>(26.6)</u>	[5] - [4]	
8	<b>WORKING CAPITAL REQUIREMENT</b>				
9	Pro-forma Annual Interest Expense Per Day		\$ 8,233		
10	Cash Working Capital Required		\$ (219,001)		
11	USE		<u>\$ (219,000)</u>	* Rounded to nearest thousandth	

Reference:  
 (a) Paid Semi-Annually  
 (b) Paid Monthly

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC)

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Contributions In Aid Of Construction	\$ 20,636,488	\$ 20,636,488	\$ 20,108,611
2	Plus: Contributions		-	-
3	Less: CIAC Amortization		<u>(527,877)</u>	<u>(515,383)</u>
4	Contributions In Aid Of Construction	<u>\$ (20,636,488)</u>	<u>\$ (20,108,611)</u>	<u>\$ (19,593,228)</u>

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

CUSTOMER ADVANCES FOR CONSTRUCTION (CAC)

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Customer Advances for Construction	\$ 126,000	\$ 126,000	\$ 126,000
2	Customer Advances for Construction	<u>\$ (126,000)</u>	<u>\$ (126,000)</u>	<u>\$ (126,000)</u>

AQUA PENNSYLVANIA WASTEWATER, INC.

NOTES TO RATE BASE ELEMENTS

DEFERRED INCOME TAXES

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES 3/31/2018 AMOUNT	PRESENT RATES 3/31/2019 AMOUNT	PRESENT RATES 3/31/2020 AMOUNT
1	Deferred Income Taxes		\$ 5,756,975	\$ 5,756,975	\$ 5,549,542
2	Change in Deferred Tax	Schedule F-2		(207,433)	(170,830)
3	Deferred Income Taxes		<u>\$ (5,756,975)</u>	<u>\$ (5,549,542)</u>	<u>\$ (5,378,712)</u>



AQUA PENNSYLVANIA, INC. & AQUA PENNSYLVANIA WASTEWATER, INC.

TABLE OF CONTENTS TO EXHIBIT 2

<b>Description</b>	<b>Schedule</b>
Payroll Expense by Category - Regular & Overtime	1
Aqua Pennsylvania Water & Wastewater Non-Union Payroll Detail	2
Aqua Pennsylvania Water & Wastewater Union Payroll Detail	3
Aqua Customer Operations Payroll Detail	4
Aqua Services, Inc. Payroll Detail	5
Payroll Increase Assumptions	6

Payroll Expense by Category - Regular & Overtime  
 For the Twelve Months Ending March 31, 2018

**Aqua Pennsylvania Water Operations**

	<b>Regular</b>	<b>Overtime</b>	<b>Total</b>
Operations - Source of Supply	202,050	9,793	211,843
Operations - Transmission & Distribution	6,085,336	795,937	6,881,273
Operations - Treatment	8,044,868	1,058,734	9,103,602
Maintenance - Source of Supply	559,014	50,348	609,362
Maintenance - Transmission & Distribution	1,756,402	411,197	2,167,600
Maintenance - Treatment	168,638	35,109	203,747
Customer Accounting - Customer Accounting	414,920	36,151	451,071
A&G - Administration & General	9,357,325	455,061	9,812,386
Total Water	\$ 26,588,553	\$ 2,852,331	\$ 29,440,884

**Aqua Pennsylvania Wastewater Operations**

	<b>Regular</b>	<b>Overtime</b>	<b>Total</b>
Operations - Pumping	106,309	27,496	133,805
Operations - Transmission & Distribution	26,688	5,176	31,863
Maintenance - Pumping	131	-	131
Customer Accounting - Customer Accounting	12,227	2,367	14,594
A&G - Administration & General	1,205,824	98,636	1,304,460
Total Wastewater	\$ 1,351,178	\$ 133,675	\$ 1,484,854

Aqua Pennsylvania Water & Wastewater Non-Union Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
1	\$ 79,760	\$ 4,400	\$ 84,160	\$ 2,525	\$ 86,684
2	\$ 129,117	\$ 5,786	\$ 134,903	\$ 4,047	\$ 138,950
3	\$ 131,637	\$ 5,089	\$ 136,727	\$ 4,102	\$ 140,829
4	\$ 48,950	\$ 2,508	\$ 51,458	\$ 1,544	\$ 53,002
5	\$ 129,984	\$ 4,477	\$ 134,461	\$ 4,034	\$ 138,494
6	\$ -	\$ 36,824	\$ 36,824	\$ 1,105	\$ 37,929
7	\$ 29,481	\$ (29,350)	\$ 131	\$ 4	\$ 135
8	\$ 51,356	\$ 5,838	\$ 57,194	\$ 1,716	\$ 58,910
9	\$ 76,505	\$ 24,545	\$ 101,049	\$ 3,031	\$ 104,081
10	\$ 41,495	\$ 1,223	\$ 42,718	\$ 1,282	\$ 43,999
11	\$ 57,324	\$ (287)	\$ 57,037	\$ 1,711	\$ 58,748
12	\$ 15,499	\$ 18,761	\$ 34,260	\$ 1,028	\$ 35,288
13	\$ 104,993	\$ 4,386	\$ 109,380	\$ 3,281	\$ 112,661
14	\$ 45,784	\$ 6,216	\$ 52,000	\$ 1,560	\$ 53,560
15	\$ 131,394	\$ 9,046	\$ 140,440	\$ 4,213	\$ 144,654
16	\$ 57,133	\$ 25,050	\$ 82,183	\$ 2,466	\$ 84,649
17	\$ 49,223	\$ 5,928	\$ 55,151	\$ 1,655	\$ 56,806
18	\$ 49,047	\$ 1,539	\$ 50,586	\$ 1,518	\$ 52,104
19	\$ 76,367	\$ 2,315	\$ 78,682	\$ 2,360	\$ 81,042
20	\$ 110,359	\$ 8,447	\$ 118,806	\$ 3,564	\$ 122,370
21	\$ 147,197	\$ 4,626	\$ 151,823	\$ 4,555	\$ 156,378
22	\$ 56,732	\$ 1,818	\$ 58,550	\$ 1,757	\$ 60,307
23	\$ 77,184	\$ 4,127	\$ 81,311	\$ 2,439	\$ 83,750
24	\$ 113,826	\$ 14,712	\$ 128,538	\$ 3,856	\$ 132,394
25	\$ 108,667	\$ 1,487	\$ 110,154	\$ 3,305	\$ 113,459
26	\$ 59,015	\$ 2,854	\$ 61,868	\$ 1,856	\$ 63,724
27	\$ 104,534	\$ 5,684	\$ 110,218	\$ 3,307	\$ 113,525
28	\$ -	\$ 42,056	\$ 42,056	\$ 1,262	\$ 43,317
29	\$ 8,110	\$ (7,967)	\$ 143	\$ 4	\$ 147
30	\$ 39,801	\$ 1,466	\$ 41,267	\$ 1,238	\$ 42,505
31	\$ 51,920	\$ 3,619	\$ 55,538	\$ 1,666	\$ 57,204
32	\$ 63,374	\$ 1,838	\$ 65,212	\$ 1,956	\$ 67,169
33	\$ 38,314	\$ 1,226	\$ 39,540	\$ 1,186	\$ 40,726
34	\$ 106,132	\$ 900	\$ 107,032	\$ 3,211	\$ 110,243
35	\$ 68,072	\$ 3,945	\$ 72,017	\$ 2,161	\$ 74,177
36	\$ 96,510	\$ 7,045	\$ 103,555	\$ 3,107	\$ 106,662
37	\$ 60,367	\$ 1,602	\$ 61,969	\$ 1,859	\$ 63,828
38	\$ 125,236	\$ 5,646	\$ 130,882	\$ 3,926	\$ 134,808
39	\$ 51,084	\$ 946	\$ 52,030	\$ 1,561	\$ 53,590
40	\$ 67,501	\$ 1,926	\$ 69,426	\$ 2,083	\$ 71,509
41	\$ 23,077	\$ 55,786	\$ 78,863	\$ 2,366	\$ 81,228
42	\$ 26,426	\$ (26,426)	\$ -	\$ -	\$ -
43	\$ -	\$ 68,725	\$ 68,725	\$ 2,062	\$ 70,787
44	\$ 46,890	\$ (46,890)	\$ -	\$ -	\$ -
45	\$ 44,300	\$ 2,582	\$ 46,882	\$ 1,406	\$ 48,289
46	\$ 59,172	\$ 1,462	\$ 60,634	\$ 1,819	\$ 62,453
47	\$ 74,095	\$ 8,133	\$ 82,228	\$ 2,467	\$ 84,695
48	\$ 87,599	\$ 10,145	\$ 97,744	\$ 2,932	\$ 100,677
49	\$ 131,983	\$ 4,594	\$ 136,578	\$ 4,097	\$ 140,675
50	\$ 61,176	\$ 2,090	\$ 63,267	\$ 1,898	\$ 65,165
51	\$ 136,028	\$ 8,127	\$ 144,155	\$ 4,325	\$ 148,480
52	\$ 134,052	\$ 7,932	\$ 141,984	\$ 4,260	\$ 146,244
53	\$ 99,275	\$ 5,875	\$ 105,150	\$ 3,154	\$ 108,304
54	\$ 71,489	\$ 3,030	\$ 74,518	\$ 2,236	\$ 76,754
55	\$ 55,422	\$ 5,796	\$ 61,219	\$ 1,837	\$ 63,055
56	\$ 40,897	\$ 3,219	\$ 44,116	\$ 1,323	\$ 45,440
57	\$ 73,126	\$ 3,345	\$ 76,470	\$ 2,294	\$ 78,764
58	\$ -	\$ 45,646	\$ 45,646	\$ 1,369	\$ 47,015

Aqua Pennsylvania Water & Wastewater Non-Union Payroll Detail  
For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
59	\$ 54,525	\$ (53,700)	\$ 825	\$ 25	\$ 849
60	\$ 116,676	\$ 10,320	\$ 126,996	\$ 3,810	\$ 130,806
61	\$ 17,570	\$ 32,214	\$ 49,784	\$ 1,494	\$ 51,277
62	\$ 68,961	\$ 3,250	\$ 72,211	\$ 2,166	\$ 74,377
63	\$ 55,181	\$ 1,175	\$ 56,356	\$ 1,691	\$ 58,047
64	\$ 46,410	\$ 11,565	\$ 57,975	\$ 1,739	\$ 59,714
65	\$ 3,160	\$ (3,160)	\$ -	\$ -	\$ -
66	\$ 60,543	\$ 1,379	\$ 61,922	\$ 1,858	\$ 63,780
67	\$ 39,465	\$ 2,181	\$ 41,646	\$ 1,249	\$ 42,895
68	\$ 21,516	\$ (21,516)	\$ -	\$ -	\$ -
69	\$ -	\$ 50,775	\$ 50,775	\$ 1,523	\$ 52,298
70	\$ 60,329	\$ (53,784)	\$ 6,545	\$ 196	\$ 6,742
71	\$ 95,696	\$ 82	\$ 95,778	\$ 2,873	\$ 98,652
72	\$ 125,012	\$ 5,004	\$ 130,016	\$ 3,900	\$ 133,917
73	\$ 79,552	\$ 6,402	\$ 85,954	\$ 2,579	\$ 88,533
74	\$ 148,390	\$ 6,896	\$ 155,286	\$ 4,659	\$ 159,944
75	\$ 58,830	\$ 1,721	\$ 60,550	\$ 1,817	\$ 62,367
76	\$ 31,739	\$ (31,739)	\$ -	\$ -	\$ -
77	\$ 57,196	\$ 1,322	\$ 58,518	\$ 1,756	\$ 60,274
78	\$ 50,396	\$ 3,022	\$ 53,419	\$ 1,603	\$ 55,021
79	\$ 86,825	\$ 6,035	\$ 92,860	\$ 2,786	\$ 95,645
80	\$ 131,563	\$ 5,064	\$ 136,627	\$ 4,099	\$ 140,725
81	\$ 98,291	\$ 4,784	\$ 103,075	\$ 3,092	\$ 106,167
82	\$ 91,256	\$ 5,648	\$ 96,904	\$ 2,907	\$ 99,811
83	\$ 114,853	\$ 6,336	\$ 121,189	\$ 3,636	\$ 124,824
84	\$ 31,894	\$ 23,496	\$ 55,391	\$ 1,662	\$ 57,052
85	\$ 43,455	\$ (43,455)	\$ -	\$ -	\$ -
86	\$ 134,461	\$ 6,185	\$ 140,646	\$ 4,219	\$ 144,866
87	\$ 46,497	\$ 4,018	\$ 50,515	\$ 1,515	\$ 52,031
88	\$ 84,373	\$ 3,129	\$ 87,501	\$ 2,625	\$ 90,126
89	\$ 58,426	\$ 1,968	\$ 60,393	\$ 1,812	\$ 62,205
90	\$ 106,654	\$ 11,481	\$ 118,136	\$ 3,544	\$ 121,680
91	\$ 118,359	\$ 14,952	\$ 133,310	\$ 3,999	\$ 137,310
92	\$ 36,159	\$ 3,452	\$ 39,610	\$ 1,188	\$ 40,799
93	\$ 74,833	\$ (707)	\$ 74,126	\$ 2,224	\$ 76,350
94	\$ 90,691	\$ 5,098	\$ 95,788	\$ 2,874	\$ 98,662
95	\$ 105,753	\$ 4,805	\$ 110,558	\$ 3,317	\$ 113,875
96	\$ 89,954	\$ 8,162	\$ 98,116	\$ 2,943	\$ 101,059
97	\$ 75,463	\$ 2,489	\$ 77,952	\$ 2,339	\$ 80,290
98	\$ 72,726	\$ 4,118	\$ 76,844	\$ 2,305	\$ 79,149
99	\$ 164,049	\$ 4,959	\$ 169,008	\$ 5,070	\$ 174,078
100	\$ 90,620	\$ 2,395	\$ 93,015	\$ 2,790	\$ 95,805
101	\$ 173,772	\$ 4,888	\$ 178,660	\$ 5,360	\$ 184,020
102	\$ 32,513	\$ (914)	\$ 31,598	\$ 948	\$ 32,546
103	\$ 40,822	\$ 15,112	\$ 55,934	\$ 1,678	\$ 57,612
104	\$ 68,241	\$ 5,158	\$ 73,399	\$ 2,202	\$ 75,601
105	\$ 74,053	\$ 3,315	\$ 77,368	\$ 2,321	\$ 79,689
106	\$ 54,191	\$ 1,418	\$ 55,609	\$ 1,668	\$ 57,277
107	\$ 31,442	\$ 24,974	\$ 56,416	\$ 1,692	\$ 58,109
108	\$ 9,005	\$ (9,005)	\$ -	\$ -	\$ -
109	\$ 165,289	\$ 8,145	\$ 173,434	\$ 5,203	\$ 178,637
110	\$ 27,856	\$ 59,871	\$ 87,727	\$ 2,632	\$ 90,358
111	\$ 37,335	\$ 21,517	\$ 58,852	\$ 1,766	\$ 60,618
112	\$ 31,100	\$ (30,319)	\$ 781	\$ 23	\$ 804
113	\$ 68,040	\$ 60	\$ 68,100	\$ 2,043	\$ 70,143
114	\$ 133,497	\$ 8,962	\$ 142,459	\$ 4,274	\$ 146,733
115	\$ 66,887	\$ 4,236	\$ 71,123	\$ 2,134	\$ 73,256
116	\$ 35,223	\$ (35,223)	\$ -	\$ -	\$ -

Aqua Pennsylvania Water & Wastewater Non-Union Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
117	\$ 110,536	\$ 6,161	\$ 116,697	\$ 3,501	\$ 120,198
118	\$ 72,636	\$ 3,311	\$ 75,947	\$ 2,278	\$ 78,226
119	\$ 72,435	\$ 10,537	\$ 82,972	\$ 2,489	\$ 85,461
120	\$ 108,050	\$ 4,392	\$ 112,442	\$ 3,373	\$ 115,816
121	\$ 98,557	\$ 26,008	\$ 124,565	\$ 3,737	\$ 128,302
122	\$ 42,966	\$ 2,810	\$ 45,776	\$ 1,373	\$ 47,149
123	\$ 123,140	\$ 7,191	\$ 130,331	\$ 3,910	\$ 134,241
124	\$ 35,581	\$ 4,843	\$ 40,424	\$ 1,213	\$ 41,636
125	\$ 67,424	\$ 2,162	\$ 69,586	\$ 2,088	\$ 71,674
126	\$ 64,763	\$ 2,094	\$ 66,857	\$ 2,006	\$ 68,862
127	\$ 51,929	\$ 2,166	\$ 54,095	\$ 1,623	\$ 55,717
128	\$ 238,640	\$ 51,843	\$ 290,483	\$ 8,714	\$ 299,197
129	\$ 7,358	\$ (7,358)	\$ -	\$ -	\$ -
130	\$ 122,576	\$ 6,893	\$ 129,469	\$ 3,884	\$ 133,353
131	\$ -	\$ 105,570	\$ 105,570	\$ 3,167	\$ 108,737
132	\$ 28,210	\$ (28,210)	\$ -	\$ -	\$ -
133	\$ 152,384	\$ 7,606	\$ 159,990	\$ 4,800	\$ 164,790
134	\$ 129,365	\$ 9,752	\$ 139,117	\$ 4,174	\$ 143,290
135	\$ 113,105	\$ 4,715	\$ 117,819	\$ 3,535	\$ 121,354
136	\$ 51,332	\$ 1,911	\$ 53,243	\$ 1,597	\$ 54,840
137	\$ 60,749	\$ 16,058	\$ 76,807	\$ 2,304	\$ 79,111
138	\$ 129,096	\$ 4,848	\$ 133,944	\$ 4,018	\$ 137,962
139	\$ 114,525	\$ 12,456	\$ 126,981	\$ 3,809	\$ 130,791
140	\$ 130,354	\$ 7,792	\$ 138,146	\$ 4,144	\$ 142,290
141	\$ 64,064	\$ 1,889	\$ 65,953	\$ 1,979	\$ 67,931
142	\$ 109,786	\$ 5,540	\$ 115,327	\$ 3,460	\$ 118,786
143	\$ 51,507	\$ 2,818	\$ 54,324	\$ 1,630	\$ 55,954
144	\$ 50,499	\$ 2,607	\$ 53,107	\$ 1,593	\$ 54,700
145	\$ 67,035	\$ 2,056	\$ 69,091	\$ 2,073	\$ 71,164
146	\$ 52,066	\$ 2,650	\$ 54,717	\$ 1,641	\$ 56,358
147	\$ 141,802	\$ 8,453	\$ 150,255	\$ 4,508	\$ 154,763
148	\$ 113,359	\$ 5,003	\$ 118,363	\$ 3,551	\$ 121,914
149	\$ 83,071	\$ 1,551	\$ 84,622	\$ 2,539	\$ 87,161
150	\$ -	\$ 43,287	\$ 43,287	\$ 1,299	\$ 44,585
151	\$ 39,293	\$ (39,293)	\$ -	\$ -	\$ -
152	\$ 63,138	\$ 2,052	\$ 65,191	\$ 1,956	\$ 67,147
153	\$ 115,878	\$ 4,993	\$ 120,872	\$ 3,626	\$ 124,498
154	\$ 60,394	\$ 1,046	\$ 61,440	\$ 1,843	\$ 63,283
155	\$ 63,716	\$ 986	\$ 64,703	\$ 1,941	\$ 66,644
156	\$ 97,563	\$ 4,567	\$ 102,129	\$ 3,064	\$ 105,193
157	\$ 127,813	\$ 9,969	\$ 137,782	\$ 4,133	\$ 141,915
158	\$ 100,748	\$ 4,707	\$ 105,454	\$ 3,164	\$ 108,618
159	\$ 67,052	\$ 13,980	\$ 81,033	\$ 2,431	\$ 83,464
160	\$ 18,358	\$ (17,956)	\$ 401	\$ 12	\$ 413
161	\$ 58,866	\$ 1,406	\$ 60,271	\$ 1,808	\$ 62,079
162	\$ 61,485	\$ 3,187	\$ 64,672	\$ 1,940	\$ 66,612
163	\$ 64,978	\$ 1,909	\$ 66,886	\$ 2,007	\$ 68,893
164	\$ 95,542	\$ 4,566	\$ 100,108	\$ 3,003	\$ 103,112
165	\$ 89,091	\$ 12,731	\$ 101,822	\$ 3,055	\$ 104,877
166	\$ 61,338	\$ 1,729	\$ 63,067	\$ 1,892	\$ 64,959
167	\$ 81,699	\$ 3,192	\$ 84,890	\$ 2,547	\$ 87,437
168	\$ 46,591	\$ 926	\$ 47,516	\$ 1,425	\$ 48,942
169	\$ 40,201	\$ 3,794	\$ 43,996	\$ 1,320	\$ 45,315
170	\$ 69,269	\$ 2,621	\$ 71,890	\$ 2,157	\$ 74,047
171	\$ 76,630	\$ 2,205	\$ 78,834	\$ 2,365	\$ 81,199
172	\$ 226,366	\$ 7,458	\$ 233,824	\$ 7,015	\$ 240,839
173	\$ 216,813	\$ 17,071	\$ 233,884	\$ 7,017	\$ 240,901
174	\$ 45,069	\$ 4,139	\$ 49,209	\$ 1,476	\$ 50,685

Aqua Pennsylvania Water & Wastewater Non-Union Payroll Detail  
For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
175	\$ 46,455	\$ 1,608	\$ 48,063	\$ 1,442	\$ 49,505
176	\$ 41,665	\$ 934	\$ 42,599	\$ 1,278	\$ 43,877
177	\$ 58,703	\$ 1,982	\$ 60,685	\$ 1,821	\$ 62,505
178	\$ -	\$ 39,491	\$ 39,491	\$ 1,185	\$ 40,676
179	\$ 24,869	\$ (24,869)	\$ -	\$ -	\$ -
180	\$ -	\$ 50,775	\$ 50,775	\$ 1,523	\$ 52,298
181	\$ 47,751	\$ (45,805)	\$ 1,945	\$ 58	\$ 2,004
182	\$ 137,879	\$ 4,443	\$ 142,322	\$ 4,270	\$ 146,592
183	\$ 105,772	\$ 3,119	\$ 108,890	\$ 3,267	\$ 112,157
184	\$ 62,158	\$ 1,674	\$ 63,832	\$ 1,915	\$ 65,747
185	\$ 82,295	\$ 18,755	\$ 101,050	\$ 3,032	\$ 104,082
186	\$ 8,484	\$ (8,484)	\$ -	\$ -	\$ -
187	\$ -	\$ 45,215	\$ 45,215	\$ 1,356	\$ 46,572
188	\$ 43,201	\$ (43,201)	\$ -	\$ -	\$ -
189	\$ 99,314	\$ 2,600	\$ 101,914	\$ 3,057	\$ 104,972
190	\$ 77,754	\$ 8,752	\$ 86,506	\$ 2,595	\$ 89,102
191	\$ 79,052	\$ 2,242	\$ 81,293	\$ 2,439	\$ 83,732
192	\$ 109,578	\$ 6,774	\$ 116,353	\$ 3,491	\$ 119,843
193	\$ 156,669	\$ (1,329)	\$ 155,339	\$ 4,660	\$ 160,000
194	\$ 57,780	\$ 1,663	\$ 59,444	\$ 1,783	\$ 61,227
195	\$ 49,830	\$ 2,399	\$ 52,229	\$ 1,567	\$ 53,796
196	\$ -	\$ 42,056	\$ 42,056	\$ 1,262	\$ 43,317
197	\$ 41,577	\$ (41,577)	\$ -	\$ -	\$ -
198	\$ 108,648	\$ 15,352	\$ 124,000	\$ 3,720	\$ 127,720
199	\$ 60,513	\$ (60,513)	\$ -	\$ -	\$ -
200	\$ 101,319	\$ 7,035	\$ 108,354	\$ 3,251	\$ 111,605
201	\$ 111,675	\$ 6,261	\$ 117,937	\$ 3,538	\$ 121,475
202	\$ 83,785	\$ 3,075	\$ 86,861	\$ 2,606	\$ 89,466
203	\$ 84,377	\$ 16,192	\$ 100,569	\$ 3,017	\$ 103,586
204	\$ 78,799	\$ 3,286	\$ 82,084	\$ 2,463	\$ 84,547
205	\$ 102,743	\$ 6,444	\$ 109,187	\$ 3,276	\$ 112,463
206	\$ 30,865	\$ 84,400	\$ 115,266	\$ 3,458	\$ 118,724
207	\$ 57,432	\$ (57,432)	\$ -	\$ -	\$ -
208	\$ 34,598	\$ (988)	\$ 33,610	\$ 1,008	\$ 34,618
209	\$ 69,980	\$ 3,156	\$ 73,137	\$ 2,194	\$ 75,331
210	\$ 61,262	\$ 2,141	\$ 63,403	\$ 1,902	\$ 65,306
211	\$ 123,768	\$ 6,573	\$ 130,341	\$ 3,910	\$ 134,251
212	\$ 72,017	\$ 6,966	\$ 78,983	\$ 2,369	\$ 81,353
213	\$ 62,377	\$ 6,575	\$ 68,952	\$ 2,069	\$ 71,020
214	\$ 196,656	\$ 11,561	\$ 208,217	\$ 6,247	\$ 214,464
215	\$ 856	\$ 44,790	\$ 45,646	\$ 1,369	\$ 47,015
216	\$ 54,843	\$ 3,290	\$ 58,133	\$ 1,744	\$ 59,877
217	\$ 66,710	\$ 7,819	\$ 74,529	\$ 2,236	\$ 76,765
218	\$ 73,242	\$ (716)	\$ 72,525	\$ 2,176	\$ 74,701
219	\$ 48,599	\$ 1,510	\$ 50,109	\$ 1,503	\$ 51,613
220	\$ 39,917	\$ 3,073	\$ 42,990	\$ 1,290	\$ 44,280
221	\$ 2,065	\$ 37,273	\$ 39,338	\$ 1,180	\$ 40,518
222	\$ 49,332	\$ (49,332)	\$ -	\$ -	\$ -
223	\$ 70,432	\$ 2,768	\$ 73,200	\$ 2,196	\$ 75,396
224	\$ 85,488	\$ 3,945	\$ 89,433	\$ 2,683	\$ 92,116
225	\$ 182,826	\$ 35,258	\$ 218,085	\$ 6,543	\$ 224,627
226	\$ 147,451	\$ 5,368	\$ 152,819	\$ 4,585	\$ 157,404
227	\$ 77,998	\$ 2,945	\$ 80,943	\$ 2,428	\$ 83,371
228	\$ 51,311	\$ 3,063	\$ 54,374	\$ 1,631	\$ 56,005
229	\$ 44,425	\$ 1,948	\$ 46,373	\$ 1,391	\$ 47,764
230	\$ 128,856	\$ 5,583	\$ 134,439	\$ 4,033	\$ 138,472
231	\$ 94,989	\$ 9,164	\$ 104,153	\$ 3,125	\$ 107,277
232	\$ 85,665	\$ (682)	\$ 84,983	\$ 2,549	\$ 87,532

Aqua Pennsylvania Water & Wastewater Non-Union Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
233	\$ 100,850	\$ 99	\$ 100,949	\$ 3,028	\$ 103,977
234	\$ 14,373	\$ 13,832	\$ 28,206	\$ 846	\$ 29,052
235	\$ 114,168	\$ 6,167	\$ 120,335	\$ 3,610	\$ 123,945
236	\$ 73,937	\$ 3,422	\$ 77,358	\$ 2,321	\$ 79,679
237	\$ 104,566	\$ 5,498	\$ 110,064	\$ 3,302	\$ 113,366
238	\$ 63,469	\$ 3,305	\$ 66,774	\$ 2,003	\$ 68,777
239	\$ 51,700	\$ 1,551	\$ 53,251	\$ 1,598	\$ 54,848
240	\$ 191,897	\$ 6,031	\$ 197,928	\$ 5,938	\$ 203,866
241	\$ 60,149	\$ 3,166	\$ 63,315	\$ 1,899	\$ 65,214
242	\$ 33,097	\$ 8,992	\$ 42,089	\$ 1,263	\$ 43,352
243	\$ 63,900	\$ 2,003	\$ 65,903	\$ 1,977	\$ 67,880
244	\$ 63,466	\$ 1,853	\$ 65,319	\$ 1,960	\$ 67,278
245	\$ 130,000	\$ 2,816	\$ 132,816	\$ 3,984	\$ 136,800
246	\$ 75,448	\$ (75,448)	\$ -	\$ -	\$ -
247	\$ 93,027	\$ 17,083	\$ 110,110	\$ 3,303	\$ 113,413
248	\$ 38,662	\$ 20,421	\$ 59,083	\$ 1,772	\$ 60,856
249	\$ -	\$ 79,496	\$ 79,496	\$ 2,385	\$ 81,880
250	\$ -	\$ 63,791	\$ 63,791	\$ 1,914	\$ 65,705
251	\$ -	\$ 64,622	\$ 64,622	\$ 1,939	\$ 66,561
252	\$ 12,423	\$ (12,423)	\$ -	\$ -	\$ -
253	\$ 36,572	\$ 100,021	\$ 136,593	\$ 4,098	\$ 140,691
254	\$ 39,057	\$ (39,057)	\$ -	\$ -	\$ -
255	\$ 19,917	\$ 3,274	\$ 23,192	\$ 696	\$ 23,888
256	\$ 31,276	\$ 1,569	\$ 32,845	\$ 985	\$ 33,831
257	\$ 60,160	\$ 29,486	\$ 89,645	\$ 2,689	\$ 92,334
258	\$ 22,697	\$ 2,558	\$ 25,255	\$ 758	\$ 26,013
259	\$ 39,233	\$ 414	\$ 39,648	\$ 1,189	\$ 40,837
260	\$ 26,698	\$ 4,456	\$ 31,154	\$ 935	\$ 32,089
261	\$ -	\$ 31,200	\$ 31,200	\$ -	\$ 31,200
262	\$ -	\$ 31,200	\$ 31,200	\$ -	\$ 31,200
263	\$ 1,200	\$ (1,200)	\$ -	\$ -	\$ -
264	\$ 13,800	\$ (13,800)	\$ -	\$ -	\$ -
265	\$ 13,500	\$ (13,500)	\$ -	\$ -	\$ -
266	\$ 1,200	\$ (1,200)	\$ -	\$ -	\$ -
267	\$ 14,760	\$ (14,760)	\$ -	\$ -	\$ -
268	\$ 15,120	\$ (15,120)	\$ -	\$ -	\$ -
269	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
270	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
271	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
272	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
273	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
274	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
275	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
276	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
277	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
278	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
279	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
280	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
281	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
282	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
283	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
284	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
285	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
286	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
287	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
288	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
289	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
290	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038

Aqua Pennsylvania Water & Wastewater Non-Union Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
291	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
292	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
293	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
294	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
295	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
296	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
297	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
298	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
299	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
300	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
301	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
302	\$ -	\$ 7,038	\$ 7,038	\$ -	\$ 7,038
303	\$ 1,535	\$ (1,535)	\$ -	\$ -	\$ -
304	\$ 5,333	\$ (5,333)	\$ -	\$ -	\$ -
305	\$ 3,878	\$ (3,878)	\$ -	\$ -	\$ -
306	\$ 4,888	\$ (4,888)	\$ -	\$ -	\$ -
307	\$ 3,757	\$ (3,757)	\$ -	\$ -	\$ -
308	\$ 5,171	\$ (5,171)	\$ -	\$ -	\$ -
309	\$ 4,899	\$ (4,899)	\$ -	\$ -	\$ -
310	\$ 3,909	\$ (3,909)	\$ -	\$ -	\$ -
311	\$ 4,308	\$ (4,198)	\$ 109	\$ 3	\$ 113
312	\$ 3,232	\$ (3,232)	\$ -	\$ -	\$ -
313	\$ 3,474	\$ (3,474)	\$ -	\$ -	\$ -
314	\$ 4,525	\$ (4,525)	\$ -	\$ -	\$ -
315	\$ 4,750	\$ (4,578)	\$ 172	\$ 5	\$ 177
316	\$ 1,697	\$ (1,697)	\$ -	\$ -	\$ -
317	\$ 3,666	\$ (3,666)	\$ -	\$ -	\$ -
318	\$ 5,252	\$ (5,252)	\$ -	\$ -	\$ -
319	\$ 4,156	\$ (4,109)	\$ 47	\$ 1	\$ 48
320	\$ 4,121	\$ (4,121)	\$ -	\$ -	\$ -
321	\$ 5,010	\$ (5,010)	\$ -	\$ -	\$ -
322	\$ 4,373	\$ (4,373)	\$ -	\$ -	\$ -
323	\$ 5,414	\$ (5,414)	\$ -	\$ -	\$ -
324	\$ 5,737	\$ (5,737)	\$ -	\$ -	\$ -
325	\$ 4,686	\$ (4,686)	\$ -	\$ -	\$ -
326	\$ 4,525	\$ (4,525)	\$ -	\$ -	\$ -
327	\$ 4,772	\$ (4,601)	\$ 172	\$ 5	\$ 177
328	\$ 4,848	\$ (4,848)	\$ -	\$ -	\$ -
329	\$ 3,899	\$ (3,899)	\$ -	\$ -	\$ -
	\$ 18,871,090	\$ 1,631,037	\$ 20,502,128	\$ 606,013	\$ 21,108,141



Aqua Pennsylvania Water & Wastewater Union Payroll Detail  
For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
330	\$ 66,879	\$ (29)	\$ 66,850	\$ 1,370	\$ 68,220
331	\$ -	\$ 48,266	\$ 48,266	\$ 965	\$ 49,232
332	\$ 50,430	\$ 5,809	\$ 56,239	\$ 940	\$ 57,179
333	\$ 80,692	\$ 4,617	\$ 85,310	\$ 1,594	\$ 86,904
334	\$ 69,381	\$ 1,711	\$ 71,092	\$ 1,369	\$ 72,461
335	\$ 4,350	\$ 35,430	\$ 39,780	\$ 796	\$ 40,576
336	\$ 68,042	\$ (62,904)	\$ 5,139	\$ 154	\$ 5,293
337	\$ 68,652	\$ (38)	\$ 68,614	\$ 1,372	\$ 69,987
338	\$ 76,161	\$ 2,635	\$ 78,796	\$ 1,437	\$ 80,233
339	\$ -	\$ 53,570	\$ 53,570	\$ 1,071	\$ 54,642
340	\$ 41,009	\$ (35,620)	\$ 5,388	\$ 162	\$ 5,550
341	\$ 78,362	\$ 2,924	\$ 81,286	\$ 1,482	\$ 82,768
342	\$ 70,975	\$ 4,498	\$ 75,473	\$ 1,361	\$ 76,834
343	\$ 68,977	\$ 243	\$ 69,220	\$ 1,384	\$ 70,604
344	\$ 76,401	\$ 3,202	\$ 79,602	\$ 1,451	\$ 81,054
345	\$ 46,314	\$ 1,375	\$ 47,689	\$ 905	\$ 48,594
346	\$ -	\$ 39,780	\$ 39,780	\$ 796	\$ 40,576
347	\$ -	\$ 39,780	\$ 39,780	\$ 796	\$ 40,576
348	\$ -	\$ 39,780	\$ 39,780	\$ 796	\$ 40,576
349	\$ 31,031	\$ 14,900	\$ 45,931	\$ 819	\$ 46,750
350	\$ 60,989	\$ 1,995	\$ 62,984	\$ 1,265	\$ 64,248
351	\$ 57,761	\$ 5,401	\$ 63,162	\$ 1,218	\$ 64,379
352	\$ 23,674	\$ (23,318)	\$ 357	\$ 11	\$ 367
353	\$ 51,822	\$ 6,044	\$ 57,866	\$ 968	\$ 58,834
354	\$ 43,608	\$ 4,701	\$ 48,309	\$ 917	\$ 49,226
355	\$ 215	\$ (215)	\$ -	\$ -	\$ -
356	\$ 75,620	\$ 3,264	\$ 78,884	\$ 1,536	\$ 80,420
357	\$ 55,654	\$ 4,314	\$ 59,967	\$ 1,163	\$ 61,131
358	\$ 56,584	\$ 4,866	\$ 61,450	\$ 1,192	\$ 62,642
359	\$ 8,549	\$ 39,851	\$ 48,400	\$ 968	\$ 49,368
360	\$ 18,983	\$ (12,333)	\$ 6,650	\$ 199	\$ 6,849
361	\$ 76,627	\$ 4,537	\$ 81,165	\$ 1,610	\$ 82,775
362	\$ 68,070	\$ 7,743	\$ 75,813	\$ 1,455	\$ 77,267
363	\$ 63,345	\$ 5,034	\$ 68,379	\$ 1,333	\$ 69,713
364	\$ 6,764	\$ (6,615)	\$ 148	\$ 4	\$ 153
365	\$ 45,245	\$ 3,407	\$ 48,652	\$ 973	\$ 49,625
366	\$ 66,005	\$ 3,341	\$ 69,346	\$ 1,362	\$ 70,708
367	\$ -	\$ 44,158	\$ 44,158	\$ 883	\$ 45,042
368	\$ 9,619	\$ (8,023)	\$ 1,596	\$ 48	\$ 1,644
369	\$ 11,880	\$ (10,391)	\$ 1,489	\$ 45	\$ 1,533
370	\$ 7,335	\$ 37,849	\$ 45,184	\$ 904	\$ 46,088
371	\$ 52,015	\$ 4,033	\$ 56,048	\$ 1,099	\$ 57,147
372	\$ 58,784	\$ (56,380)	\$ 2,405	\$ 72	\$ 2,477
373	\$ -	\$ 39,520	\$ 39,520	\$ 790	\$ 40,310
374	\$ 59,641	\$ 1,552	\$ 61,192	\$ 1,254	\$ 62,447
375	\$ 73,124	\$ 1,837	\$ 74,961	\$ 1,508	\$ 76,468
376	\$ 69,593	\$ 1,459	\$ 71,052	\$ 1,440	\$ 72,492
377	\$ 66,746	\$ 1,557	\$ 68,303	\$ 1,385	\$ 69,688
378	\$ 77,156	\$ 2,997	\$ 80,153	\$ 1,599	\$ 81,752
379	\$ 65,137	\$ 1,489	\$ 66,626	\$ 1,351	\$ 67,976
380	\$ 81,803	\$ 2,153	\$ 83,955	\$ 1,710	\$ 85,665
381	\$ 55,642	\$ 950	\$ 56,593	\$ 1,415	\$ 58,007
382	\$ 55,891	\$ 999	\$ 56,890	\$ 1,422	\$ 58,312
383	\$ 40,073	\$ 2,183	\$ 42,256	\$ 1,056	\$ 43,313
384	\$ 45,632	\$ 765	\$ 46,397	\$ 1,160	\$ 47,557
385	\$ 18,367	\$ 21,564	\$ 39,931	\$ 998	\$ 40,929
386	\$ 1,724	\$ (1,660)	\$ 64	\$ 2	\$ 66
387	\$ 4,327	\$ (4,196)	\$ 130	\$ 4	\$ 134

Aqua Pennsylvania Water & Wastewater Union Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
388	\$ 60,684	\$ 1,532	\$ 62,216	\$ 1,555	\$ 63,772
389	\$ 71,671	\$ 1,738	\$ 73,409	\$ 1,835	\$ 75,244
390	\$ 40,220	\$ 1,048	\$ 41,268	\$ 1,032	\$ 42,300
391	\$ 51,587	\$ 726	\$ 52,313	\$ 1,308	\$ 53,621
392	\$ 49,715	\$ 2,461	\$ 52,176	\$ 1,304	\$ 53,480
393	\$ 60,839	\$ 1,192	\$ 62,031	\$ 1,551	\$ 63,581
394	\$ 47,474	\$ 675	\$ 48,150	\$ 1,204	\$ 49,354
395	\$ 76,018	\$ 1,857	\$ 77,875	\$ 1,887	\$ 79,762
396	\$ -	\$ 71,898	\$ 71,898	\$ 1,797	\$ 73,696
397	\$ 78,187	\$ (70,992)	\$ 7,194	\$ 216	\$ 7,410
398	\$ -	\$ 70,718	\$ 70,718	\$ 1,768	\$ 72,486
399	\$ 65,464	\$ (62,555)	\$ 2,909	\$ 87	\$ 2,996
400	\$ 76,483	\$ 1,280	\$ 77,763	\$ 1,884	\$ 79,647
401	\$ 97,968	\$ 3,970	\$ 101,938	\$ 2,494	\$ 104,432
402	\$ 83,184	\$ (1,815)	\$ 81,369	\$ 2,034	\$ 83,403
403	\$ 121,957	\$ 6,219	\$ 128,177	\$ 3,170	\$ 131,346
404	\$ 71,414	\$ 2,908	\$ 74,322	\$ 1,836	\$ 76,159
405	\$ 112,530	\$ 5,194	\$ 117,724	\$ 2,846	\$ 120,570
406	\$ 97,942	\$ (2,292)	\$ 95,650	\$ 2,340	\$ 97,990
407	\$ 73,456	\$ 2,832	\$ 76,288	\$ 1,885	\$ 78,173
408	\$ 4,992	\$ 66,068	\$ 71,059	\$ 1,776	\$ 72,836
409	\$ 74,418	\$ (3,717)	\$ 70,701	\$ 1,768	\$ 72,469
410	\$ 71,749	\$ 3,483	\$ 75,232	\$ 1,857	\$ 77,089
411	\$ 96,560	\$ 4,436	\$ 100,996	\$ 2,471	\$ 103,467
412	\$ 100,387	\$ 3,345	\$ 103,732	\$ 2,540	\$ 106,273
413	\$ 111,377	\$ 5,504	\$ 116,881	\$ 2,891	\$ 119,771
414	\$ 137,311	\$ 6,832	\$ 144,143	\$ 3,565	\$ 147,707
415	\$ 89,228	\$ 3,667	\$ 92,895	\$ 2,289	\$ 95,184
416	\$ 82,122	\$ 2,498	\$ 84,620	\$ 2,072	\$ 86,692
417	\$ 99,071	\$ (750)	\$ 98,321	\$ 2,405	\$ 100,726
418	\$ 92,561	\$ (1,216)	\$ 91,344	\$ 2,284	\$ 93,628
419	\$ 96,756	\$ 49	\$ 96,806	\$ 2,368	\$ 99,174
420	\$ 73,637	\$ 3,005	\$ 76,643	\$ 1,916	\$ 78,559
421	\$ 94,386	\$ 20,302	\$ 114,688	\$ 2,772	\$ 117,460
422	\$ 70,758	\$ 2,795	\$ 73,553	\$ 1,839	\$ 75,392
423	\$ 92,269	\$ 4,452	\$ 96,720	\$ 2,418	\$ 99,138
424	\$ 86,191	\$ 3,506	\$ 89,698	\$ 2,242	\$ 91,940
425	\$ 106,175	\$ 3,539	\$ 109,713	\$ 2,655	\$ 112,368
426	\$ 71,200	\$ 2,871	\$ 74,071	\$ 1,830	\$ 75,902
427	\$ 100,740	\$ 4,389	\$ 105,129	\$ 2,562	\$ 107,691
428	\$ 81,379	\$ 6,244	\$ 87,623	\$ 2,191	\$ 89,814
429	\$ 71,529	\$ 2,443	\$ 73,972	\$ 1,828	\$ 75,800
430	\$ 96,880	\$ (740)	\$ 96,140	\$ 2,371	\$ 98,512
431	\$ 103,998	\$ 2,905	\$ 106,903	\$ 2,584	\$ 109,487
432	\$ 59,750	\$ 4,771	\$ 64,521	\$ 1,586	\$ 66,107
433	\$ 74,140	\$ 2,840	\$ 76,980	\$ 1,902	\$ 78,882
434	\$ 70,348	\$ 2,866	\$ 73,214	\$ 1,809	\$ 75,024
435	\$ 84,912	\$ (994)	\$ 83,919	\$ 2,098	\$ 86,017
436	\$ 93,060	\$ 3,765	\$ 96,826	\$ 2,369	\$ 99,195
437	\$ 88,843	\$ 7,983	\$ 96,826	\$ 2,341	\$ 99,166
438	\$ 70,755	\$ 2,888	\$ 73,643	\$ 1,841	\$ 75,484
439	\$ 96,257	\$ 3,900	\$ 100,157	\$ 2,474	\$ 102,631
440	\$ 100,114	\$ 2,666	\$ 102,780	\$ 2,444	\$ 105,224
441	\$ 75,712	\$ 3,088	\$ 78,801	\$ 1,948	\$ 80,749
442	\$ 69,631	\$ 2,836	\$ 72,467	\$ 1,791	\$ 74,257
443	\$ 90,040	\$ 3,643	\$ 93,683	\$ 2,290	\$ 95,974
444	\$ 93,982	\$ (444)	\$ 93,538	\$ 2,338	\$ 95,877
445	\$ 89,763	\$ 3,650	\$ 93,413	\$ 2,282	\$ 95,695

Aqua Pennsylvania Water & Wastewater Union Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
446	\$ 131,556	\$ 4,655	\$ 136,211	\$ 3,369	\$ 139,580
447	\$ 75,438	\$ 3,079	\$ 78,517	\$ 1,963	\$ 80,480
448	\$ 79,576	\$ 3,237	\$ 82,813	\$ 2,070	\$ 84,883
449	\$ 100,109	\$ (491)	\$ 99,617	\$ 2,490	\$ 102,108
450	\$ 75,483	\$ 3,071	\$ 78,553	\$ 1,964	\$ 80,517
451	\$ 83,817	\$ 3,409	\$ 87,226	\$ 2,181	\$ 89,407
452	\$ 102,459	\$ (1,075)	\$ 101,384	\$ 2,481	\$ 103,864
453	\$ 91,674	\$ (2,698)	\$ 88,976	\$ 2,174	\$ 91,150
454	\$ 71,930	\$ 2,950	\$ 74,880	\$ 1,850	\$ 76,730
455	\$ 98,143	\$ (3,263)	\$ 94,879	\$ 2,340	\$ 97,219
456	\$ 76,749	\$ 3,138	\$ 79,886	\$ 1,997	\$ 81,884
457	\$ -	\$ 68,815	\$ 68,815	\$ 1,720	\$ 70,536
458	\$ 89,702	\$ (1,167)	\$ 88,535	\$ 2,163	\$ 90,697
459	\$ 95,279	\$ 3,860	\$ 99,139	\$ 2,449	\$ 101,588
460	\$ 82,356	\$ 2,817	\$ 85,173	\$ 2,061	\$ 87,235
461	\$ 95,980	\$ (1,639)	\$ 94,341	\$ 2,305	\$ 96,646
462	\$ 80,798	\$ 2,864	\$ 83,661	\$ 2,022	\$ 85,684
463	\$ 92,275	\$ 6,325	\$ 98,600	\$ 2,435	\$ 101,035
464	\$ 79,736	\$ 3,245	\$ 82,980	\$ 2,051	\$ 85,032
465	\$ -	\$ 68,815	\$ 68,815	\$ 1,720	\$ 70,536
466	\$ 74,393	\$ 3,019	\$ 77,413	\$ 1,913	\$ 79,325
467	\$ 93,629	\$ (205)	\$ 93,424	\$ 2,336	\$ 95,759
468	\$ 91,460	\$ (906)	\$ 90,554	\$ 2,233	\$ 92,787
469	\$ 91,219	\$ 2,635	\$ 93,854	\$ 2,297	\$ 96,151
470	\$ -	\$ 71,249	\$ 71,249	\$ 1,781	\$ 73,030
471	\$ 76,147	\$ 3,106	\$ 79,253	\$ 1,959	\$ 81,213
472	\$ 88,277	\$ 3,568	\$ 91,845	\$ 2,241	\$ 94,086
473	\$ 86,408	\$ 3,859	\$ 90,267	\$ 2,207	\$ 92,474
474	\$ 90,380	\$ 3,681	\$ 94,062	\$ 2,352	\$ 96,413
475	\$ 73,572	\$ 3,217	\$ 76,789	\$ 1,920	\$ 78,709
476	\$ 64,442	\$ 2,382	\$ 66,823	\$ 1,671	\$ 68,494
477	\$ 46,046	\$ 31,198	\$ 77,244	\$ 1,931	\$ 79,175
478	\$ 73,582	\$ 2,676	\$ 76,258	\$ 1,906	\$ 78,164
479	\$ 95,540	\$ (1,406)	\$ 94,134	\$ 2,303	\$ 96,436
480	\$ 83,281	\$ (1,329)	\$ 81,951	\$ 2,049	\$ 84,000
481	\$ 96,867	\$ (373)	\$ 96,494	\$ 2,360	\$ 98,854
482	\$ 84,388	\$ 3,096	\$ 87,484	\$ 2,187	\$ 89,671
483	\$ 65,846	\$ 244	\$ 66,090	\$ 1,652	\$ 67,742
484	\$ 85,219	\$ 3,464	\$ 88,682	\$ 2,191	\$ 90,874
485	\$ 117,475	\$ 4,865	\$ 122,340	\$ 3,059	\$ 125,399
486	\$ 92,275	\$ 4,322	\$ 96,597	\$ 2,359	\$ 98,956
487	\$ 85,561	\$ 2,882	\$ 88,443	\$ 2,185	\$ 90,629
488	\$ 112,138	\$ 4,443	\$ 116,581	\$ 2,853	\$ 119,433
489	\$ 104,179	\$ 4,228	\$ 108,407	\$ 2,679	\$ 111,086
490	\$ 97,608	\$ 7,606	\$ 105,214	\$ 2,630	\$ 107,845
491	\$ 69,230	\$ 3,556	\$ 72,787	\$ 1,799	\$ 74,585
492	\$ 68,403	\$ 4,950	\$ 73,354	\$ 1,795	\$ 75,149
493	\$ 106,105	\$ 4,306	\$ 110,411	\$ 2,728	\$ 113,140
494	\$ 72,509	\$ 2,937	\$ 75,446	\$ 1,846	\$ 77,292
495	\$ -	\$ 68,815	\$ 68,815	\$ 1,720	\$ 70,536
496	\$ 112,988	\$ 279	\$ 113,266	\$ 2,832	\$ 116,098
497	\$ 39,989	\$ (31,961)	\$ 8,027	\$ 241	\$ 8,268
498	\$ 79,596	\$ 4,264	\$ 83,860	\$ 2,097	\$ 85,957
499	\$ 75,151	\$ (71,146)	\$ 4,004	\$ 120	\$ 4,125
500	\$ 118,772	\$ 7,135	\$ 125,907	\$ 3,084	\$ 128,990
501	\$ 110,729	\$ 4,494	\$ 115,223	\$ 2,847	\$ 118,071
502	\$ 99,069	\$ (1,969)	\$ 97,100	\$ 2,376	\$ 99,476
503	\$ 80,380	\$ 2,537	\$ 82,917	\$ 2,044	\$ 84,961

Aqua Pennsylvania Water & Wastewater Union Payroll Detail  
For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
504	\$ 84,652	\$ 3,184	\$ 87,836	\$ 2,196	\$ 90,032
505	\$ 80,620	\$ 3,427	\$ 84,047	\$ 2,053	\$ 86,100
506	\$ 98,962	\$ 3,447	\$ 102,409	\$ 2,506	\$ 104,914
507	\$ 34,699	\$ 31,723	\$ 66,422	\$ 1,617	\$ 68,039
508	\$ 83,907	\$ 2,365	\$ 86,271	\$ 2,111	\$ 88,382
509	\$ 97,786	\$ 2,135	\$ 99,920	\$ 2,445	\$ 102,365
510	\$ 36,217	\$ (31,372)	\$ 4,846	\$ 145	\$ 4,991
511	\$ 92,050	\$ (1,586)	\$ 90,463	\$ 2,262	\$ 92,725
512	\$ 89,657	\$ (3,055)	\$ 86,603	\$ 2,110	\$ 88,713
513	\$ 12,638	\$ (12,638)	\$ -	\$ -	\$ -
514	\$ 84,337	\$ 3,406	\$ 87,743	\$ 2,168	\$ 89,911
515	\$ 105,305	\$ 9,583	\$ 114,888	\$ 2,872	\$ 117,760
516	\$ 91,591	\$ (1,900)	\$ 89,691	\$ 2,191	\$ 91,882
517	\$ 78,328	\$ 1,561	\$ 79,890	\$ 1,965	\$ 81,855
518	\$ 71,675	\$ 10,761	\$ 82,436	\$ 2,037	\$ 84,473
519	\$ 97,248	\$ 5,963	\$ 103,211	\$ 2,580	\$ 105,792
520	\$ 69,596	\$ 3,523	\$ 73,119	\$ 1,800	\$ 74,919
521	\$ 72,961	\$ 2,971	\$ 75,932	\$ 1,876	\$ 77,808
522	\$ 31,947	\$ 28,306	\$ 60,253	\$ 1,506	\$ 61,760
523	\$ 20,363	\$ (19,321)	\$ 1,042	\$ 31	\$ 1,073
524	\$ 90,642	\$ 9,594	\$ 100,236	\$ 2,423	\$ 102,659
525	\$ 83,043	\$ 3,385	\$ 86,429	\$ 2,161	\$ 88,590
526	\$ 86,662	\$ 2,002	\$ 88,664	\$ 2,169	\$ 90,834
527	\$ 79,070	\$ 3,223	\$ 82,294	\$ 2,057	\$ 84,351
528	\$ 106,449	\$ 4,330	\$ 110,779	\$ 2,769	\$ 113,548
529	\$ 91,420	\$ 3,735	\$ 95,155	\$ 2,379	\$ 97,534
530	\$ 85,911	\$ 12,307	\$ 98,218	\$ 2,455	\$ 100,673
531	\$ 66,394	\$ (66,088)	\$ 306	\$ 9	\$ 315
532	\$ 34,145	\$ 32,257	\$ 66,402	\$ 1,633	\$ 68,035
533	\$ 94,006	\$ 10,840	\$ 104,845	\$ 2,567	\$ 107,413
534	\$ 89,093	\$ 3,628	\$ 92,721	\$ 2,318	\$ 95,039
535	\$ 82,766	\$ 3,075	\$ 85,841	\$ 2,146	\$ 87,987
536	\$ 95,090	\$ 3,179	\$ 98,269	\$ 2,405	\$ 100,674
537	\$ 70,216	\$ 2,859	\$ 73,075	\$ 1,806	\$ 74,881
538	\$ 79,795	\$ 3,249	\$ 83,044	\$ 2,052	\$ 85,096
539	\$ 71,681	\$ 6,278	\$ 77,959	\$ 1,949	\$ 79,908
540	\$ 68,110	\$ (62,149)	\$ 5,960	\$ 179	\$ 6,139
541	\$ 111,930	\$ 3,418	\$ 115,347	\$ 2,823	\$ 118,170
542	\$ 82,443	\$ 4,832	\$ 87,275	\$ 2,156	\$ 89,431
543	\$ 79,850	\$ 3,436	\$ 83,286	\$ 2,059	\$ 85,345
544	\$ 87,690	\$ 11,604	\$ 99,294	\$ 2,400	\$ 101,694
545	\$ 69,632	\$ 2,835	\$ 72,467	\$ 1,791	\$ 74,257
546	\$ 86,754	\$ (1,208)	\$ 85,546	\$ 2,139	\$ 87,685
547	\$ 100,940	\$ 3,684	\$ 104,624	\$ 2,585	\$ 107,209
548	\$ 117,516	\$ 2,534	\$ 120,050	\$ 2,905	\$ 122,955
549	\$ 73,338	\$ 2,986	\$ 76,324	\$ 1,886	\$ 78,210
550	\$ 95,995	\$ (219)	\$ 95,777	\$ 2,394	\$ 98,171
551	\$ 80,626	\$ 3,274	\$ 83,900	\$ 2,098	\$ 85,998
552	\$ 107,557	\$ 4,946	\$ 112,503	\$ 2,780	\$ 115,283
553	\$ 88,889	\$ 6,243	\$ 95,132	\$ 2,328	\$ 97,460
554	\$ 66,526	\$ 2,508	\$ 69,034	\$ 1,726	\$ 70,760
555	\$ 73,056	\$ 3,087	\$ 76,143	\$ 1,904	\$ 78,047
556	\$ 76,176	\$ 3,092	\$ 79,268	\$ 1,940	\$ 81,207
557	\$ 105,901	\$ 5,112	\$ 111,013	\$ 2,775	\$ 113,788
558	\$ 37,901	\$ 33,296	\$ 71,197	\$ 1,780	\$ 72,977
559	\$ 62,841	\$ 12,517	\$ 75,358	\$ 1,862	\$ 77,220
560	\$ 70,739	\$ 2,771	\$ 73,510	\$ 1,838	\$ 75,348
561	\$ 78,379	\$ (2,458)	\$ 75,921	\$ 1,850	\$ 77,771

Aqua Pennsylvania Water & Wastewater Union Payroll Detail  
For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
562	\$ 85,342	\$ 3,461	\$ 88,802	\$ 2,171	\$ 90,973
563	\$ 72,898	\$ (1,239)	\$ 71,659	\$ 1,746	\$ 73,405
564	\$ 126,679	\$ (1,013)	\$ 125,665	\$ 3,142	\$ 128,807
565	\$ 101,719	\$ 4,997	\$ 106,716	\$ 2,583	\$ 109,298
566	\$ 82,687	\$ 5,198	\$ 87,885	\$ 2,197	\$ 90,082
567	\$ 67,628	\$ 2,749	\$ 70,377	\$ 1,759	\$ 72,137
568	\$ 62,920	\$ 28,973	\$ 91,893	\$ 2,297	\$ 94,190
569	\$ 100,856	\$ 4,103	\$ 104,959	\$ 2,624	\$ 107,583
570	\$ -	\$ 68,815	\$ 68,815	\$ 1,720	\$ 70,536
571	\$ 93,208	\$ (83)	\$ 93,125	\$ 2,279	\$ 95,403
572	\$ 107,936	\$ 4,381	\$ 112,317	\$ 2,776	\$ 115,092
573	\$ 100,122	\$ 3,487	\$ 103,609	\$ 2,555	\$ 106,165
574	\$ 77,233	\$ 3,142	\$ 80,375	\$ 1,980	\$ 82,355
575	\$ 112,207	\$ 12,033	\$ 124,240	\$ 3,003	\$ 127,243
576	\$ 76,184	\$ 10,687	\$ 86,871	\$ 2,172	\$ 89,043
577	\$ 115,545	\$ 4,594	\$ 120,138	\$ 3,003	\$ 123,142
578	\$ 82,487	\$ 5,900	\$ 88,387	\$ 2,163	\$ 90,550
579	\$ 77,983	\$ 22,888	\$ 100,872	\$ 2,522	\$ 103,393
580	\$ 93,231	\$ 3,549	\$ 96,780	\$ 2,368	\$ 99,148
581	\$ 102,342	\$ (229)	\$ 102,113	\$ 2,498	\$ 104,612
582	\$ 79,907	\$ 15,205	\$ 95,112	\$ 2,378	\$ 97,490
583	\$ 91,356	\$ 3,709	\$ 95,064	\$ 2,377	\$ 97,441
584	\$ 69,553	\$ 2,654	\$ 72,207	\$ 1,805	\$ 74,012
585	\$ 125,877	\$ 8,535	\$ 134,412	\$ 3,324	\$ 137,736
586	\$ 55,212	\$ (43,447)	\$ 11,765	\$ 353	\$ 12,117
587	\$ 124,649	\$ 16,098	\$ 140,747	\$ 3,402	\$ 144,149
588	\$ 87,705	\$ 280	\$ 87,986	\$ 2,200	\$ 90,185
589	\$ 98,457	\$ 2,660	\$ 101,118	\$ 2,474	\$ 103,592
590	\$ 66,224	\$ 150	\$ 66,374	\$ 1,659	\$ 68,033
591	\$ 75,660	\$ 3,078	\$ 78,739	\$ 1,968	\$ 80,707
592	\$ 93,333	\$ (2,128)	\$ 91,205	\$ 2,280	\$ 93,485
593	\$ 84,444	\$ 3,431	\$ 87,875	\$ 2,166	\$ 90,041
594	\$ 76,736	\$ 3,114	\$ 79,851	\$ 1,973	\$ 81,824
595	\$ 95,330	\$ 142	\$ 95,472	\$ 2,336	\$ 97,808
596	\$ 81,710	\$ 3,324	\$ 85,034	\$ 2,126	\$ 87,160
597	\$ 80,349	\$ 3,271	\$ 83,620	\$ 2,066	\$ 85,686
598	\$ -	\$ 77,864	\$ 77,864	\$ 1,947	\$ 79,810
599	\$ 103,788	\$ (66,754)	\$ 37,033	\$ 1,111	\$ 38,144
600	\$ 109,418	\$ 4,450	\$ 113,868	\$ 2,847	\$ 116,715
601	\$ 103,588	\$ 4,205	\$ 107,792	\$ 2,659	\$ 110,451
602	\$ 87,057	\$ (756)	\$ 86,300	\$ 2,158	\$ 88,458
603	\$ 102,561	\$ 4,175	\$ 106,736	\$ 2,668	\$ 109,405
604	\$ 99,896	\$ 3,046	\$ 102,941	\$ 2,519	\$ 105,461
605	\$ 110,015	\$ 4,141	\$ 114,156	\$ 2,793	\$ 116,949
606	\$ 103,474	\$ 4,192	\$ 107,667	\$ 2,659	\$ 110,326
607	\$ 129,790	\$ 4,909	\$ 134,698	\$ 3,299	\$ 137,997
608	\$ 89,490	\$ 3,641	\$ 93,131	\$ 2,328	\$ 95,459
609	\$ 91,397	\$ (1,225)	\$ 90,171	\$ 2,203	\$ 92,374
610	\$ 89,353	\$ 4,743	\$ 94,096	\$ 2,303	\$ 96,398
611	\$ 113,577	\$ 5,095	\$ 118,673	\$ 2,935	\$ 121,607
612	\$ 82,475	\$ 3,284	\$ 85,759	\$ 2,096	\$ 87,855
613	\$ 70,243	\$ 2,860	\$ 73,103	\$ 1,806	\$ 74,910
614	\$ 95,377	\$ 2,681	\$ 98,058	\$ 2,400	\$ 100,458
615	\$ 91,684	\$ 3,721	\$ 95,406	\$ 2,353	\$ 97,759
616	\$ 75,938	\$ 298	\$ 76,236	\$ 1,857	\$ 78,093
617	\$ 81,555	\$ 3,133	\$ 84,688	\$ 2,072	\$ 86,760
618	\$ 69,548	\$ 5,059	\$ 74,606	\$ 1,843	\$ 76,450
619	\$ 72,336	\$ 4,553	\$ 76,889	\$ 1,873	\$ 78,762

Aqua Pennsylvania Water & Wastewater Union Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
620	\$ 90,139	\$ 3,511	\$ 93,650	\$ 2,309	\$ 95,958
621	\$ 100,281	\$ 4,763	\$ 105,044	\$ 2,626	\$ 107,670
622	\$ 109,886	\$ 3,797	\$ 113,683	\$ 2,842	\$ 116,525
623	\$ 92,838	\$ 859	\$ 93,697	\$ 2,293	\$ 95,990
624	\$ 96,300	\$ 4,327	\$ 100,627	\$ 2,462	\$ 103,089
625	\$ 71,667	\$ 2,910	\$ 74,577	\$ 1,843	\$ 76,420
626	\$ 1,539	\$ 67,823	\$ 69,361	\$ 1,734	\$ 71,095
627	\$ 32,915	\$ 42,366	\$ 75,281	\$ 1,882	\$ 77,163
628	\$ 69,631	\$ 2,835	\$ 72,467	\$ 1,791	\$ 74,257
629	\$ 103,017	\$ 4,161	\$ 107,178	\$ 2,643	\$ 109,822
630	\$ 87,075	\$ 3,515	\$ 90,590	\$ 2,238	\$ 92,828
631	\$ 88,325	\$ 3,014	\$ 91,339	\$ 2,283	\$ 93,623
632	\$ 129,198	\$ 5,401	\$ 134,600	\$ 3,329	\$ 137,928
633	\$ 118,168	\$ 2,984	\$ 121,152	\$ 2,932	\$ 124,084
634	\$ 70,792	\$ 2,878	\$ 73,670	\$ 1,842	\$ 75,512
635	\$ 76,799	\$ 3,180	\$ 79,979	\$ 1,957	\$ 81,936
636	\$ 33,219	\$ (33,219)	\$ -	\$ -	\$ -
637	\$ 98,401	\$ (3,166)	\$ 95,234	\$ 2,330	\$ 97,565
638	\$ 101,934	\$ 3,885	\$ 105,819	\$ 2,645	\$ 108,465
639	\$ 93,890	\$ 3,818	\$ 97,708	\$ 2,443	\$ 100,151
640	\$ 89,237	\$ 4,480	\$ 93,717	\$ 2,343	\$ 96,060
641	\$ 120,541	\$ 4,216	\$ 124,757	\$ 3,053	\$ 127,810
642	\$ 71,624	\$ 2,923	\$ 74,548	\$ 1,864	\$ 76,411
643	\$ 56,980	\$ 13,571	\$ 70,551	\$ 1,736	\$ 72,286
644	\$ 102,890	\$ 4,171	\$ 107,061	\$ 2,588	\$ 109,649
645	\$ 103,805	\$ 4,377	\$ 108,182	\$ 2,649	\$ 110,831
646	\$ 84,716	\$ 3,440	\$ 88,156	\$ 2,180	\$ 90,336
647	\$ 83,413	\$ (537)	\$ 82,876	\$ 2,024	\$ 84,900
648	\$ 74,212	\$ 2,828	\$ 77,040	\$ 1,926	\$ 78,966
649	\$ 89,376	\$ 2,562	\$ 91,938	\$ 2,265	\$ 94,204
650	\$ 90,543	\$ 4,244	\$ 94,787	\$ 2,370	\$ 97,156
651	\$ 108,947	\$ 5,164	\$ 114,111	\$ 2,820	\$ 116,931
652	\$ 74,641	\$ 2,814	\$ 77,455	\$ 1,936	\$ 79,391
653	\$ 106,121	\$ 4,328	\$ 110,449	\$ 2,732	\$ 113,181
654	\$ 94,878	\$ (1,361)	\$ 93,517	\$ 2,284	\$ 95,801
655	\$ 82,218	\$ 17,883	\$ 100,101	\$ 2,503	\$ 102,603
656	\$ 76,398	\$ 3,111	\$ 79,509	\$ 1,965	\$ 81,474
657	\$ 97,194	\$ 3,945	\$ 101,139	\$ 2,499	\$ 103,638
658	\$ 95,634	\$ 3,876	\$ 99,511	\$ 2,453	\$ 101,964
659	\$ 94,469	\$ 2,352	\$ 96,822	\$ 2,365	\$ 99,187
660	\$ 89,348	\$ 3,620	\$ 92,968	\$ 2,296	\$ 95,264
661	\$ 122,247	\$ 4,471	\$ 126,718	\$ 3,101	\$ 129,819
662	\$ 110,891	\$ 4,514	\$ 115,405	\$ 2,885	\$ 118,290
663	\$ 103,514	\$ 3,761	\$ 107,275	\$ 2,653	\$ 109,928
664	\$ 91,414	\$ 3,702	\$ 95,116	\$ 2,325	\$ 97,441
665	\$ 76,379	\$ 3,099	\$ 79,477	\$ 1,959	\$ 81,437
666	\$ 93,754	\$ 3,821	\$ 97,575	\$ 2,385	\$ 99,960
667	\$ 129,960	\$ 5,674	\$ 135,635	\$ 3,354	\$ 138,989
668	\$ 92,051	\$ 5,748	\$ 97,799	\$ 2,415	\$ 100,214
669	\$ 84,260	\$ (1,072)	\$ 83,188	\$ 2,080	\$ 85,267
670	\$ 103,730	\$ 5,342	\$ 109,073	\$ 2,669	\$ 111,742
671	\$ 84,684	\$ 3,438	\$ 88,121	\$ 2,156	\$ 90,277
672	\$ 87,382	\$ 3,411	\$ 90,792	\$ 2,195	\$ 92,987
673	\$ 87,131	\$ 4,543	\$ 91,674	\$ 2,242	\$ 93,916
674	\$ 33,227	\$ (30,287)	\$ 2,939	\$ 88	\$ 3,028
675	\$ 102,763	\$ (125)	\$ 102,637	\$ 2,511	\$ 105,148
676	\$ 77,608	\$ 490	\$ 78,097	\$ 1,921	\$ 80,019
677	\$ 93,854	\$ (930)	\$ 92,924	\$ 2,323	\$ 95,247

Aqua Pennsylvania Water & Wastewater Union Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
678	\$ 114,754	\$ 5,204	\$ 119,958	\$ 2,967	\$ 122,924
679	\$ 97,683	\$ (445)	\$ 97,238	\$ 2,379	\$ 99,617
680	\$ 73,180	\$ 4,921	\$ 78,101	\$ 1,930	\$ 80,031
681	\$ 117,412	\$ 4,872	\$ 122,284	\$ 3,024	\$ 125,308
682	\$ 76,701	\$ 2,999	\$ 79,701	\$ 1,950	\$ 81,651
683	\$ 92,078	\$ 6,629	\$ 98,707	\$ 2,415	\$ 101,122
684	\$ 107,868	\$ 4,388	\$ 112,256	\$ 2,806	\$ 115,063
685	\$ 75,780	\$ 3,076	\$ 78,856	\$ 1,971	\$ 80,827
686	\$ 89,309	\$ 2,909	\$ 92,218	\$ 2,305	\$ 94,523
687	\$ 72,552	\$ 10,331	\$ 82,883	\$ 2,049	\$ 84,931
688	\$ 94,691	\$ (2,767)	\$ 91,924	\$ 2,246	\$ 94,170
689	\$ 96,864	\$ 4,751	\$ 101,615	\$ 2,513	\$ 104,128
690	\$ 69,357	\$ 12,907	\$ 82,265	\$ 2,032	\$ 84,297
691	\$ 60,906	\$ 9,809	\$ 70,715	\$ 1,740	\$ 72,455
692	\$ 97,633	\$ 2,304	\$ 99,938	\$ 2,498	\$ 102,436
693	\$ 102,382	\$ 4,926	\$ 107,308	\$ 2,626	\$ 109,933
694	\$ 75,788	\$ 18,506	\$ 94,295	\$ 2,357	\$ 96,652
695	\$ 77,759	\$ 20,753	\$ 98,512	\$ 2,463	\$ 100,975
696	\$ 66,399	\$ 11,885	\$ 78,285	\$ 1,957	\$ 80,242
	\$ 28,286,470	\$ 1,673,462	\$ 29,959,932	\$ 726,876	\$ 30,686,808

Aqua Customer Operations Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
697	\$ 48,425	\$ 1,714	\$ 50,139	\$ 1,504	\$ 51,644
698	\$ 31,666	\$ 1,319	\$ 32,985	\$ 990	\$ 33,975
699	\$ 31,544	\$ 1,679	\$ 33,223	\$ 997	\$ 34,220
700	\$ 5,117	\$ 25,725	\$ 30,842	\$ 925	\$ 31,767
701	\$ 18,871	\$ (18,614)	\$ 257	\$ 8	\$ 265
702	\$ -	\$ 31,673	\$ 31,673	\$ 7	\$ 31,680
703	\$ 1,721	\$ (1,710)	\$ 11	\$ 0	\$ 11
704	\$ 4,523	\$ 26,381	\$ 30,904	\$ 927	\$ 31,831
705	\$ 33,949	\$ 4,194	\$ 38,144	\$ 1,144	\$ 39,288
706	\$ 47,036	\$ 2,615	\$ 49,651	\$ 1,490	\$ 51,140
707	\$ 61,750	\$ 305	\$ 62,055	\$ 1,862	\$ 63,916
708	\$ 12,126	\$ 18,946	\$ 31,072	\$ 932	\$ 32,004
709	\$ 14,912	\$ (14,779)	\$ 133	\$ 4	\$ 137
710	\$ 38,480	\$ 1,152	\$ 39,632	\$ 1,189	\$ 40,821
711	\$ -	\$ (71,294)	\$ -	\$ -	\$ -
712	\$ 48,715	\$ 3,408	\$ 52,123	\$ 1,564	\$ 53,687
713	\$ 64,614	\$ 1,275	\$ 65,888	\$ 1,977	\$ 67,865
714	\$ 35,197	\$ 1,953	\$ 37,149	\$ 1,114	\$ 38,264
715	\$ 34,233	\$ 3,151	\$ 37,384	\$ 1,122	\$ 38,506
716	\$ -	\$ 123,561	\$ 123,561	\$ 3,707	\$ 127,267
717	\$ 112,643	\$ (112,643)	\$ -	\$ -	\$ -
718	\$ 13,871	\$ 18,005	\$ 31,876	\$ 956	\$ 32,832
719	\$ 4,042	\$ (4,042)	\$ -	\$ -	\$ -
720	\$ 68,568	\$ 2,595	\$ 71,163	\$ 2,135	\$ 73,298
721	\$ 4,641	\$ 26,265	\$ 30,906	\$ 927	\$ 31,833
722	\$ 15,478	\$ (15,297)	\$ 181	\$ 5	\$ 186
723	\$ 74,178	\$ 4,420	\$ 78,598	\$ 2,358	\$ 80,956
724	\$ 44,405	\$ 2,134	\$ 46,540	\$ 1,396	\$ 47,936
725	\$ 12,196	\$ 18,868	\$ 31,065	\$ 932	\$ 31,997
726	\$ 13,648	\$ (13,321)	\$ 327	\$ 10	\$ 337
727	\$ 33,030	\$ 972	\$ 34,002	\$ 1,020	\$ 35,022
728	\$ 62,208	\$ 2,076	\$ 64,284	\$ 1,929	\$ 66,213
729	\$ 29,517	\$ 1,460	\$ 30,977	\$ 929	\$ 31,906
730	\$ 4,960	\$ 25,929	\$ 30,888	\$ 927	\$ 31,815
731	\$ 13,158	\$ (12,831)	\$ 327	\$ 10	\$ 337
732	\$ 29,310	\$ 5,300	\$ 34,610	\$ 1,038	\$ 35,648
733	\$ 54,091	\$ 3,334	\$ 57,425	\$ 1,723	\$ 59,148
734	\$ 32,919	\$ 846	\$ 33,764	\$ 1,013	\$ 34,777
735	\$ 61,801	\$ 9,605	\$ 71,406	\$ 2,142	\$ 73,548
736	\$ 65,777	\$ 6,147	\$ 71,924	\$ 2,158	\$ 74,082
737	\$ 84,902	\$ 10,761	\$ 95,663	\$ 2,870	\$ 98,533
738	\$ 33,851	\$ 8,104	\$ 41,955	\$ 1,259	\$ 43,214
739	\$ 40,346	\$ (39,824)	\$ 521	\$ 16	\$ 537
740	\$ 12,760	\$ 86,843	\$ 99,603	\$ 2,988	\$ 102,591
741	\$ 47,501	\$ (47,501)	\$ -	\$ -	\$ -
742	\$ 45,348	\$ 746	\$ 46,094	\$ 1,383	\$ 47,477
743	\$ -	\$ 31,696	\$ 31,696	\$ 951	\$ 32,647
744	\$ 22,326	\$ (21,938)	\$ 389	\$ 12	\$ 400
745	\$ 109,753	\$ 6,748	\$ 116,501	\$ 3,495	\$ 119,996
746	\$ -	\$ 30,157	\$ 30,157	\$ 905	\$ 31,062
747	\$ 28,976	\$ (28,638)	\$ 338	\$ 10	\$ 348
748	\$ 61,816	\$ 62	\$ 61,878	\$ 1,856	\$ 63,734
749	\$ 56,192	\$ 2,189	\$ 58,381	\$ 1,751	\$ 60,133
750	\$ -	\$ 26,670	\$ 26,670	\$ 800	\$ 27,470
751	\$ 3,432	\$ (3,432)	\$ -	\$ -	\$ -
752	\$ 31,691	\$ 1,204	\$ 32,895	\$ 987	\$ 33,882
753	\$ 21,340	\$ 21,134	\$ 42,475	\$ 1,274	\$ 43,749
754	\$ 15,739	\$ (15,739)	\$ -	\$ -	\$ -



Aqua Customer Operations Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
755	\$ 45,567	\$ 2,471	\$ 48,038	\$ 1,441	\$ 49,479
756	\$ 29,687	\$ 1,968	\$ 31,654	\$ 950	\$ 32,604
757	\$ 139,411	\$ 4,586	\$ 143,997	\$ 4,320	\$ 148,317
758	\$ 71,046	\$ 7,270	\$ 78,316	\$ 2,349	\$ 80,665
759	\$ 13,017	\$ 18,080	\$ 31,097	\$ 933	\$ 32,030
760	\$ 6,399	\$ (6,312)	\$ 87	\$ 3	\$ 90
761	\$ 38,202	\$ 1,258	\$ 39,460	\$ 1,184	\$ 40,644
762	\$ 33,550	\$ 1,842	\$ 35,392	\$ 1,062	\$ 36,454
763	\$ 27,908	\$ 3,430	\$ 31,339	\$ 940	\$ 32,279
764	\$ 71,884	\$ 2,220	\$ 74,104	\$ 2,223	\$ 76,327
765	\$ 29,421	\$ 2,670	\$ 32,091	\$ 963	\$ 33,054
766	\$ 22,329	\$ 9,020	\$ 31,349	\$ 940	\$ 32,289
767	\$ 46,005	\$ 1,242	\$ 47,247	\$ 1,417	\$ 48,665
768	\$ 58,983	\$ 1,525	\$ 60,508	\$ 1,815	\$ 62,324
769	\$ 24,462	\$ 37,083	\$ 61,545	\$ 1,846	\$ 63,391
770	\$ 108,234	\$ 4,904	\$ 113,138	\$ 3,394	\$ 116,532
771	\$ -	\$ 31,673	\$ 31,673	\$ 7	\$ 31,680
772	\$ 27,938	\$ (26,571)	\$ 1,367	\$ 41	\$ 1,408
773	\$ 5,303	\$ 35,106	\$ 40,409	\$ 1,212	\$ 41,622
774	\$ 15,419	\$ (15,419)	\$ -	\$ -	\$ -
775	\$ 29,741	\$ 11,972	\$ 41,712	\$ 1,251	\$ 42,964
776	\$ 31,581	\$ (30,348)	\$ 1,233	\$ 37	\$ 1,270
777	\$ 31,949	\$ 1,565	\$ 33,514	\$ 1,005	\$ 34,520
778	\$ 22,828	\$ 20,250	\$ 43,078	\$ 1,292	\$ 44,371
779	\$ 11,957	\$ (11,835)	\$ 122	\$ 4	\$ 125
780	\$ 28,910	\$ 7,464	\$ 36,374	\$ 1,091	\$ 37,465
781	\$ 29,701	\$ 894	\$ 30,595	\$ 918	\$ 31,512
782	\$ 30,282	\$ 5,045	\$ 35,327	\$ 1,060	\$ 36,387
783	\$ 19,078	\$ 18,902	\$ 37,980	\$ 1,139	\$ 39,119
784	\$ 8,383	\$ (8,383)	\$ -	\$ -	\$ -
785	\$ 13,237	\$ 18,164	\$ 31,401	\$ 942	\$ 32,343
786	\$ 4,832	\$ (4,745)	\$ 87	\$ 3	\$ 90
787	\$ 1,058	\$ 55,359	\$ 56,416	\$ 1,692	\$ 58,109
788	\$ 47,347	\$ 1,481	\$ 48,829	\$ 1,465	\$ 50,294
789	\$ 46,796	\$ 3,899	\$ 50,695	\$ 1,521	\$ 52,216
790	\$ 43,937	\$ 1,363	\$ 45,300	\$ 1,359	\$ 46,659
791	\$ 54,596	\$ 2,560	\$ 57,156	\$ 1,715	\$ 58,871
792	\$ 52,733	\$ 5,596	\$ 58,330	\$ 1,750	\$ 60,080
793	\$ 32,840	\$ 1,194	\$ 34,034	\$ 1,021	\$ 35,055
794	\$ 5,688	\$ 25,308	\$ 30,996	\$ 930	\$ 31,926
795	\$ 15,995	\$ (15,826)	\$ 169	\$ 5	\$ 174
796	\$ 44,424	\$ 1,639	\$ 46,062	\$ 1,382	\$ 47,444
797	\$ -	\$ 61,545	\$ 61,545	\$ 1,846	\$ 63,391
798	\$ 45,628	\$ (45,628)	\$ -	\$ -	\$ -
799	\$ -	\$ 44,825	\$ 44,825	\$ 1,345	\$ 46,170
800	\$ 56,304	\$ (51,038)	\$ 5,266	\$ 158	\$ 5,424
801	\$ 49,977	\$ 1,850	\$ 51,827	\$ 1,555	\$ 53,382
802	\$ 42,292	\$ 6,136	\$ 48,428	\$ 1,453	\$ 49,881
803	\$ 49,046	\$ 2,833	\$ 51,879	\$ 1,556	\$ 53,435
804	\$ 29,720	\$ 1,349	\$ 31,069	\$ 932	\$ 32,001
805	\$ 5,429	\$ 25,498	\$ 30,927	\$ 928	\$ 31,855
806	\$ 12,900	\$ (12,689)	\$ 211	\$ 6	\$ 218
807	\$ 54,664	\$ 6,459	\$ 61,124	\$ 1,834	\$ 62,957
808	\$ 4,356	\$ 26,477	\$ 30,833	\$ 925	\$ 31,758
809	\$ 20,057	\$ (19,849)	\$ 208	\$ 6	\$ 214
810	\$ 36,172	\$ (7,662)	\$ 28,509	\$ 855	\$ 29,365
811	\$ 38,628	\$ 3,594	\$ 42,222	\$ 1,267	\$ 43,489
812	\$ 88,139	\$ 2,932	\$ 91,071	\$ 2,732	\$ 93,804

Aqua Customer Operations Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
813	\$ 41,813	\$ 1,605	\$ 43,418	\$ 1,303	\$ 44,721
814	\$ 4,440	\$ 26,484	\$ 30,924	\$ 928	\$ 31,852
815	\$ 12,674	\$ (12,050)	\$ 624	\$ 19	\$ 643
816	\$ 1,163	\$ (1,130)	\$ 33	\$ 1	\$ 34
817	\$ 62,813	\$ 10,234	\$ 73,046	\$ 2,191	\$ 75,238
818	\$ 55,529	\$ 2,405	\$ 57,933	\$ 1,738	\$ 59,671
819	\$ 56,390	\$ 1,861	\$ 58,251	\$ 1,748	\$ 59,998
820	\$ 88,788	\$ 8,132	\$ 96,919	\$ 2,908	\$ 99,827
821	\$ -	\$ 30,157	\$ 30,157	\$ 905	\$ 31,062
822	\$ 61,589	\$ 6,195	\$ 67,784	\$ 2,034	\$ 69,817
823	\$ 28,825	\$ 3,366	\$ 32,191	\$ 966	\$ 33,157
824	\$ 30,631	\$ 9,253	\$ 39,884	\$ 1,197	\$ 41,081
825	\$ 62,278	\$ (62,278)	\$ -	\$ -	\$ -
826	\$ 33,549	\$ 1,581	\$ 35,131	\$ 1,054	\$ 36,185
827	\$ -	\$ 30,787	\$ 30,787	\$ 924	\$ 31,711
828	\$ 11,425	\$ (11,302)	\$ 122	\$ 4	\$ 126
829	\$ 977	\$ (977)	\$ -	\$ -	\$ -
830	\$ -	\$ 31,673	\$ 31,673	\$ 7	\$ 31,680
831	\$ 15,313	\$ (14,934)	\$ 378	\$ 11	\$ 390
832	\$ 32,417	\$ 1,011	\$ 33,428	\$ 1,003	\$ 34,431
833	\$ 75,639	\$ 3,325	\$ 78,963	\$ 2,369	\$ 81,332
834	\$ 72,747	\$ 462	\$ 73,209	\$ 2,196	\$ 75,405
835	\$ 115,447	\$ 9,701	\$ 125,149	\$ 3,754	\$ 128,903
836	\$ 33,333	\$ (33,333)	\$ -	\$ -	\$ -
837	\$ -	\$ 42,979	\$ 42,979	\$ 1,289	\$ 44,268
838	\$ 38,760	\$ (38,684)	\$ 76	\$ 2	\$ 78
839	\$ 62,202	\$ 1,854	\$ 64,056	\$ 1,922	\$ 65,978
840	\$ 59,718	\$ 3,247	\$ 62,965	\$ 1,889	\$ 64,854
841	\$ 57,357	\$ 1,826	\$ 59,183	\$ 1,775	\$ 60,959
842	\$ 66,877	\$ 5,774	\$ 72,651	\$ 2,180	\$ 74,831
843	\$ 86,959	\$ 8,277	\$ 95,235	\$ 2,857	\$ 98,092
844	\$ 30,774	\$ 1,622	\$ 32,396	\$ 972	\$ 33,368
845	\$ -	\$ 31,673	\$ 31,673	\$ 7	\$ 31,680
846	\$ 18,857	\$ (18,724)	\$ 133	\$ 4	\$ 137
847	\$ 44,569	\$ 1,237	\$ 45,805	\$ 1,374	\$ 47,180
848	\$ 54,993	\$ 1,511	\$ 56,504	\$ 1,695	\$ 58,199
849	\$ 79,118	\$ 5,700	\$ 84,818	\$ 2,545	\$ 87,363
850	\$ -	\$ 42,158	\$ 42,158	\$ 1,265	\$ 43,423
851	\$ 30,501	\$ (30,501)	\$ -	\$ -	\$ -
852	\$ 61,274	\$ 1,874	\$ 63,148	\$ 1,894	\$ 65,042
853	\$ 23,906	\$ (23,906)	\$ -	\$ -	\$ -
854	\$ 13,523	\$ 18,107	\$ 31,630	\$ 949	\$ 32,579
855	\$ 6,048	\$ (5,959)	\$ 89	\$ 3	\$ 92
856	\$ 49,377	\$ 1,510	\$ 50,887	\$ 1,527	\$ 52,413
857	\$ 30,326	\$ 1,457	\$ 31,783	\$ 953	\$ 32,736
858	\$ 56,590	\$ 2,039	\$ 58,628	\$ 1,759	\$ 60,387
859	\$ 19,827	\$ 11,909	\$ 31,735	\$ 952	\$ 32,687
860	\$ 4,538	\$ (4,472)	\$ 66	\$ 2	\$ 68
861	\$ 65,915	\$ 1,931	\$ 67,846	\$ 2,035	\$ 69,882
862	\$ 32,981	\$ 603	\$ 33,584	\$ 1,008	\$ 34,591
863	\$ 52,815	\$ 1,553	\$ 54,368	\$ 1,631	\$ 55,999
864	\$ 13,015	\$ 18,355	\$ 31,370	\$ 941	\$ 32,311
865	\$ 7,330	\$ (7,230)	\$ 99	\$ 3	\$ 102
866	\$ 25,655	\$ 5,870	\$ 31,524	\$ 946	\$ 32,470
867	\$ 57,998	\$ 1,843	\$ 59,841	\$ 1,795	\$ 61,636
868	\$ 12,471	\$ 18,654	\$ 31,124	\$ 934	\$ 32,058
869	\$ 13,215	\$ (13,062)	\$ 153	\$ 5	\$ 157
870	\$ 18,231	\$ 13,132	\$ 31,363	\$ 941	\$ 32,304

Aqua Customer Operations Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
871	\$ 9,295	\$ (9,126)	\$ 169	\$ 5	\$ 174
872	\$ 36,430	\$ 5,306	\$ 41,737	\$ 1,252	\$ 42,989
873	\$ 39,212	\$ 5,047	\$ 44,259	\$ 1,328	\$ 45,587
874	\$ 11,944	\$ 19,048	\$ 30,992	\$ 930	\$ 31,922
875	\$ 5,659	\$ 25,211	\$ 30,870	\$ 926	\$ 31,796
876	\$ -	\$ 59,494	\$ 59,494	\$ 1,785	\$ 61,278
877	\$ -	\$ 51,287	\$ 51,287	\$ 1,539	\$ 52,826
878	\$ 28,433	\$ 3,245	\$ 31,678	\$ 950	\$ 32,628
879	\$ 31,784	\$ 1,315	\$ 33,100	\$ 993	\$ 34,093
880	\$ 18,306	\$ 12,945	\$ 31,252	\$ 938	\$ 32,189
881	\$ 34,860	\$ 20,389	\$ 55,249	\$ 1,657	\$ 56,906
882	\$ 143,497	\$ 104,168	\$ 247,665	\$ 7,430	\$ 255,095
883	\$ 19,354	\$ 12,215	\$ 31,569	\$ 947	\$ 32,516
884	\$ 4,793	\$ 26,227	\$ 31,020	\$ 931	\$ 31,951
885	\$ 14,300	\$ (14,116)	\$ 184	\$ 6	\$ 190
886	\$ 28,032	\$ 4,244	\$ 32,275	\$ 968	\$ 33,244
887	\$ 28,537	\$ 3,689	\$ 32,226	\$ 967	\$ 33,193
888	\$ 4,572	\$ 26,494	\$ 31,066	\$ 932	\$ 31,998
889	\$ 15,829	\$ (15,439)	\$ 390	\$ 12	\$ 402
890	\$ 28,383	\$ 4,488	\$ 32,871	\$ 986	\$ 33,857
891	\$ -	\$ 66,674	\$ 66,674	\$ 2,000	\$ 68,674
892	\$ -	\$ 59,494	\$ 59,494	\$ 1,785	\$ 61,278
893	\$ 2,335	\$ (2,335)	\$ -	\$ -	\$ -
894	\$ 3,565	\$ (3,510)	\$ 55	\$ 2	\$ 57
895	\$ 2,189	\$ (2,155)	\$ 33	\$ 1	\$ 34
896	\$ 1,375	\$ (1,375)	\$ -	\$ -	\$ -
897	\$ 4,064	\$ (3,965)	\$ 99	\$ 3	\$ 102
898	\$ 3,738	\$ (3,689)	\$ 49	\$ 1	\$ 51
	\$ 6,540,541	\$ 1,059,565	\$ 7,600,105	\$ 224,232	\$ 7,824,337

Aqua Services, Inc. Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
899	\$ 112,586	\$ 3,993	\$ 116,580	\$ 3,497	\$ 120,077
900	\$ 135,639	\$ 14,725	\$ 150,364	\$ 4,511	\$ 154,875
901	\$ 208,105	\$ 40,623	\$ 248,728	\$ 7,462	\$ 256,190
902	\$ 171,517	\$ 12,745	\$ 184,262	\$ 5,528	\$ 189,790
903	\$ 184,208	\$ 33,061	\$ 217,268	\$ 6,518	\$ 223,786
904	\$ 107,725	\$ 5,702	\$ 113,427	\$ 3,403	\$ 116,830
905	\$ 97,307	\$ 8,580	\$ 105,887	\$ 3,177	\$ 109,064
906	\$ 68,588	\$ 5,964	\$ 74,551	\$ 2,237	\$ 76,788
907	\$ 94,843	\$ 781	\$ 95,625	\$ 2,869	\$ 98,493
908	\$ 104,567	\$ 38,383	\$ 142,950	\$ 4,288	\$ 147,238
909	\$ 80,876	\$ 2,667	\$ 83,543	\$ 2,506	\$ 86,049
910	\$ 68,341	\$ 4,931	\$ 73,273	\$ 2,198	\$ 75,471
911	\$ 149,009	\$ 9,706	\$ 158,715	\$ 4,761	\$ 163,476
912	\$ 82,153	\$ 2,803	\$ 84,956	\$ 2,549	\$ 87,505
913	\$ 51,629	\$ 1,755	\$ 53,384	\$ 1,602	\$ 54,986
914	\$ -	\$ 78,863	\$ 78,863	\$ 2,366	\$ 81,228
915	\$ 13,937	\$ (12,959)	\$ 978	\$ 29	\$ 1,008
916	\$ 151,449	\$ 32,933	\$ 184,381	\$ 5,531	\$ 189,913
917	\$ 108,023	\$ 14,610	\$ 122,633	\$ 3,679	\$ 126,312
918	\$ 95,788	\$ (10,096)	\$ 85,693	\$ 2,571	\$ 88,263
919	\$ 65,234	\$ 11,049	\$ 76,283	\$ 2,289	\$ 78,572
920	\$ 208,251	\$ 6,860	\$ 215,111	\$ 6,453	\$ 221,564
921	\$ 84,065	\$ 2,831	\$ 86,896	\$ 2,607	\$ 89,503
922	\$ 57,621	\$ 6,671	\$ 64,292	\$ 1,929	\$ 66,221
923	\$ 248,804	\$ 13,196	\$ 262,000	\$ 7,860	\$ 269,860
924	\$ 71,416	\$ 2,833	\$ 74,249	\$ 2,227	\$ 76,476
925	\$ 159,701	\$ 30,384	\$ 190,086	\$ 5,703	\$ 195,788
926	\$ 110,289	\$ 15,956	\$ 126,245	\$ 3,787	\$ 130,032
927	\$ 95,508	\$ 3,908	\$ 99,416	\$ 2,982	\$ 102,398
928	\$ 219,506	\$ 14,343	\$ 233,849	\$ 7,015	\$ 240,864
929	\$ 41,345	\$ (41,345)	\$ -	\$ -	\$ -
930	\$ 1,673	\$ 92,048	\$ 93,721	\$ 2,812	\$ 96,532
931	\$ 117,022	\$ 2,905	\$ 119,926	\$ 3,598	\$ 123,524
932	\$ 20,196	\$ 25,450	\$ 45,646	\$ 1,369	\$ 47,015
933	\$ 7,864	\$ (7,864)	\$ -	\$ -	\$ -
934	\$ 101,286	\$ 5,546	\$ 106,833	\$ 3,205	\$ 110,038
935	\$ -	\$ 128,830	\$ 128,830	\$ 3,865	\$ 132,695
936	\$ 103,181	\$ (103,181)	\$ -	\$ -	\$ -
937	\$ 577,885	\$ 105,306	\$ 683,191	\$ 20,496	\$ 703,686
938	\$ 1,429,142	\$ 83,627	\$ 1,512,768	\$ 45,383	\$ 1,558,151
939	\$ 104,247	\$ 8,053	\$ 112,300	\$ 3,369	\$ 115,669
940	\$ 43,975	\$ 16,082	\$ 60,057	\$ 1,802	\$ 61,859
941	\$ 27,343	\$ (27,343)	\$ -	\$ -	\$ -
942	\$ 87,112	\$ 3,222	\$ 90,334	\$ 2,710	\$ 93,044
943	\$ 112,013	\$ 6,580	\$ 118,592	\$ 3,558	\$ 122,150
944	\$ 85,956	\$ 2,616	\$ 88,572	\$ 2,657	\$ 91,229
945	\$ 42,404	\$ 2,377	\$ 44,781	\$ 1,343	\$ 46,125
946	\$ 140,161	\$ 22,262	\$ 162,423	\$ 4,873	\$ 167,296
947	\$ 147,864	\$ 8,715	\$ 156,579	\$ 4,697	\$ 161,276
948	\$ 70,076	\$ 11,941	\$ 82,017	\$ 2,461	\$ 84,478
949	\$ 101,625	\$ 9,076	\$ 110,700	\$ 3,321	\$ 114,021
950	\$ 83,496	\$ 4,313	\$ 87,809	\$ 2,634	\$ 90,443
951	\$ -	\$ 165,891	\$ 165,891	\$ 4,977	\$ 170,868
952	\$ 155,748	\$ (155,748)	\$ -	\$ -	\$ -
953	\$ 308,442	\$ 16,347	\$ 324,789	\$ 9,744	\$ 334,532
954	\$ 147,612	\$ 12,562	\$ 160,174	\$ 4,805	\$ 164,979
955	\$ 80,475	\$ 4,366	\$ 84,840	\$ 2,545	\$ 87,385
956	\$ 56,591	\$ (10,567)	\$ 46,024	\$ 1,381	\$ 47,404

Aqua Services, Inc. Payroll Detail  
 For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
957	\$ 78,139	\$ 2,853	\$ 80,992	\$ 2,430	\$ 83,422
958	\$ -	\$ 353,000	\$ 353,000	\$ 10,590	\$ 363,590
959	\$ 230,040	\$ (230,040)	\$ -	\$ -	\$ -
960	\$ 168,475	\$ 20,284	\$ 188,759	\$ 5,663	\$ 194,422
961	\$ 132,204	\$ 34,851	\$ 167,055	\$ 5,012	\$ 172,067
962	\$ 145,552	\$ 5,635	\$ 151,187	\$ 4,536	\$ 155,722
963	\$ 227,525	\$ 23,934	\$ 251,459	\$ 7,544	\$ 259,003
964	\$ 133,662	\$ 7,519	\$ 141,181	\$ 4,235	\$ 145,416
965	\$ 63,749	\$ 10,802	\$ 74,551	\$ 2,237	\$ 76,788
966	\$ 59,046	\$ 4,271	\$ 63,317	\$ 1,899	\$ 65,216
967	\$ 49,434	\$ 2,461	\$ 51,895	\$ 1,557	\$ 53,452
968	\$ 256,627	\$ 7,995	\$ 264,622	\$ 7,939	\$ 272,560
969	\$ 103,858	\$ 10,518	\$ 114,376	\$ 3,431	\$ 117,807
970	\$ 115,314	\$ 3,031	\$ 118,345	\$ 3,550	\$ 121,895
971	\$ 29,791	\$ 10,040	\$ 39,831	\$ 1,195	\$ 41,026
972	\$ 4,296	\$ (4,296)	\$ -	\$ -	\$ -
973	\$ 273,497	\$ 8,522	\$ 282,019	\$ 8,461	\$ 290,479
974	\$ 116,069	\$ 14,531	\$ 130,600	\$ 3,918	\$ 134,518
975	\$ -	\$ 177,683	\$ 177,683	\$ 5,330	\$ 183,014
976	\$ 149,050	\$ (149,050)	\$ -	\$ -	\$ -
977	\$ 127,247	\$ 6,225	\$ 133,472	\$ 4,004	\$ 137,476
978	\$ 82,461	\$ 3,117	\$ 85,578	\$ 2,567	\$ 88,145
979	\$ 130,146	\$ 9,285	\$ 139,432	\$ 4,183	\$ 143,614
980	\$ 54,717	\$ 43,054	\$ 97,771	\$ 2,933	\$ 100,704
981	\$ 507,033	\$ 21,024	\$ 528,058	\$ 15,842	\$ 543,899
982	\$ 111,386	\$ 4,368	\$ 115,753	\$ 3,473	\$ 119,226
983	\$ 67,998	\$ 2,004	\$ 70,002	\$ 2,100	\$ 72,102
984	\$ 106,175	\$ 4,506	\$ 110,682	\$ 3,320	\$ 114,002
985	\$ 123,018	\$ 4,458	\$ 127,475	\$ 3,824	\$ 131,300
986	\$ 76,959	\$ 2,767	\$ 79,726	\$ 2,392	\$ 82,117
987	\$ -	\$ 44,210	\$ 44,210	\$ 1,326	\$ 45,536
988	\$ 40,373	\$ (40,373)	\$ -	\$ -	\$ -
989	\$ -	\$ -	\$ -	\$ -	\$ -
990	\$ 16,199	\$ (16,199)	\$ -	\$ -	\$ -
991	\$ 10,538	\$ 59,725	\$ 70,264	\$ 2,108	\$ 72,372
992	\$ 26,400	\$ (23,521)	\$ 2,878	\$ 86	\$ 2,965
993	\$ 92,577	\$ 125	\$ 92,702	\$ 2,781	\$ 95,484
994	\$ 101,756	\$ 6,066	\$ 107,822	\$ 3,235	\$ 111,057
995	\$ 109,334	\$ 6,941	\$ 116,274	\$ 3,488	\$ 119,763
996	\$ 54,182	\$ 1,597	\$ 55,779	\$ 1,673	\$ 57,452
997	\$ 155,330	\$ 6,387	\$ 161,718	\$ 4,852	\$ 166,569
998	\$ 52,746	\$ 2,481	\$ 55,227	\$ 1,657	\$ 56,884
999	\$ 92,278	\$ 8,826	\$ 101,104	\$ 3,033	\$ 104,137
1000	\$ 73,768	\$ 3,467	\$ 77,234	\$ 2,317	\$ 79,551
1001	\$ 45,936	\$ 3,054	\$ 48,990	\$ 1,470	\$ 50,460
1002	\$ 111,820	\$ 4,127	\$ 115,947	\$ 3,478	\$ 119,425
1003	\$ 131,817	\$ 6,097	\$ 137,913	\$ 4,137	\$ 142,051
1004	\$ 78,480	\$ 3,405	\$ 81,885	\$ 2,457	\$ 84,341
1005	\$ 73,348	\$ 3,798	\$ 77,146	\$ 2,314	\$ 79,460
1006	\$ 82,478	\$ 2,659	\$ 85,137	\$ 2,554	\$ 87,691
1007	\$ 127,367	\$ 7,308	\$ 134,675	\$ 4,040	\$ 138,715
1008	\$ 73,336	\$ 2,589	\$ 75,926	\$ 2,278	\$ 78,203
1009	\$ -	\$ 66,263	\$ 66,263	\$ 1,988	\$ 68,251
1010	\$ 38,498	\$ (38,498)	\$ -	\$ -	\$ -
1011	\$ 78,623	\$ 3,528	\$ 82,151	\$ 2,465	\$ 84,616
1012	\$ 78,695	\$ 2,471	\$ 81,166	\$ 2,435	\$ 83,601
1013	\$ 43,678	\$ (43,678)	\$ -	\$ -	\$ -
1014	\$ 61,555	\$ 8,236	\$ 69,790	\$ 2,094	\$ 71,884

Aqua Services, Inc. Payroll Detail  
For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
1015	\$ 285,326	\$ (285,326)	\$ -	\$ -	\$ -
1016	\$ 327,276	\$ 10,196	\$ 337,472	\$ 10,124	\$ 347,596
1017	\$ 85,100	\$ 19,202	\$ 104,301	\$ 3,129	\$ 107,431
1018	\$ 100,271	\$ 7,345	\$ 107,616	\$ 3,228	\$ 110,844
1019	\$ 59,079	\$ 4,557	\$ 63,636	\$ 1,909	\$ 65,545
1020	\$ 624,031	\$ 32,221	\$ 656,251	\$ 19,688	\$ 675,939
1021	\$ 78,840	\$ 3,005	\$ 81,845	\$ 2,455	\$ 84,300
1022	\$ 76,052	\$ 2,453	\$ 78,505	\$ 2,355	\$ 80,860
1023	\$ 107,865	\$ 17,039	\$ 124,904	\$ 3,747	\$ 128,651
1024	\$ 74,421	\$ 33,887	\$ 108,308	\$ 3,249	\$ 111,557
1025	\$ 4,139	\$ (4,139)	\$ -	\$ -	\$ -
1026	\$ 153,036	\$ 8,514	\$ 161,550	\$ 4,846	\$ 166,396
1027	\$ 54,554	\$ 3,797	\$ 58,351	\$ 1,751	\$ 60,101
1028	\$ 93,620	\$ 338	\$ 93,957	\$ 2,819	\$ 96,776
1029	\$ 592,355	\$ 178,733	\$ 771,088	\$ 23,133	\$ 794,221
1030	\$ 167,586	\$ 6,688	\$ 174,274	\$ 5,228	\$ 179,503
1031	\$ 100,300	\$ 28,102	\$ 128,402	\$ 3,852	\$ 132,255
1032	\$ 230,964	\$ 7,196	\$ 238,160	\$ 7,145	\$ 245,304
1033	\$ 105,142	\$ 2,350	\$ 107,492	\$ 3,225	\$ 110,717
1034	\$ -	\$ 138,978	\$ 138,978	\$ 4,169	\$ 143,147
1035	\$ 149,122	\$ (149,122)	\$ -	\$ -	\$ -
1036	\$ -	\$ 67,392	\$ 67,392	\$ 2,022	\$ 69,414
1037	\$ 8,987	\$ (8,987)	\$ -	\$ -	\$ -
1038	\$ 316,121	\$ 10,081	\$ 326,202	\$ 9,786	\$ 335,988
1039	\$ 60,584	\$ 6,787	\$ 67,370	\$ 2,021	\$ 69,392
1040	\$ 96,950	\$ 5,965	\$ 102,915	\$ 3,087	\$ 106,003
1041	\$ 66,673	\$ 8,455	\$ 75,127	\$ 2,254	\$ 77,381
1042	\$ 95,705	\$ 11,583	\$ 107,288	\$ 3,219	\$ 110,506
1043	\$ 152,284	\$ 7,171	\$ 159,455	\$ 4,784	\$ 164,239
1044	\$ 73,805	\$ 8,767	\$ 82,572	\$ 2,477	\$ 85,049
1045	\$ 119,536	\$ 4,394	\$ 123,930	\$ 3,718	\$ 127,648
1046	\$ 112,602	\$ 7,044	\$ 119,645	\$ 3,589	\$ 123,234
1047	\$ 115,686	\$ 6,372	\$ 122,058	\$ 3,662	\$ 125,719
1048	\$ 99,101	\$ 3,385	\$ 102,486	\$ 3,075	\$ 105,561
1049	\$ 79,249	\$ 87,454	\$ 166,703	\$ 5,001	\$ 171,704
1050	\$ 35,733	\$ (35,733)	\$ -	\$ -	\$ -
1051	\$ 128,462	\$ 61,630	\$ 190,091	\$ 5,703	\$ 195,794
1052	\$ 126,798	\$ 7,786	\$ 134,583	\$ 4,038	\$ 138,621
1053	\$ 108,904	\$ 6,275	\$ 115,179	\$ 3,455	\$ 118,635
1054	\$ 64,068	\$ 4,784	\$ 68,852	\$ 2,066	\$ 70,918
1055	\$ 122,339	\$ 11,414	\$ 133,753	\$ 4,013	\$ 137,765
1056	\$ 125,429	\$ 26,578	\$ 152,007	\$ 4,560	\$ 156,567
1057	\$ 164,183	\$ 6,154	\$ 170,337	\$ 5,110	\$ 175,447
1058	\$ 72,149	\$ 3,210	\$ 75,359	\$ 2,261	\$ 77,620
1059	\$ 155,053	\$ 7,456	\$ 162,508	\$ 4,875	\$ 167,384
1060	\$ 73,609	\$ 5,050	\$ 78,660	\$ 2,360	\$ 81,019
1061	\$ 75,997	\$ 13,603	\$ 89,600	\$ 2,688	\$ 92,288
1062	\$ 4,231	\$ (4,231)	\$ -	\$ -	\$ -
1063	\$ 61,845	\$ 8,553	\$ 70,398	\$ 2,112	\$ 72,510
1064	\$ -	\$ 111,064	\$ 111,064	\$ 3,332	\$ 114,396
1065	\$ 92,218	\$ (92,218)	\$ -	\$ -	\$ -
1066	\$ -	\$ 146,368	\$ 146,368	\$ 4,391	\$ 150,759
1067	\$ 152,203	\$ (152,203)	\$ -	\$ -	\$ -
1068	\$ 91,164	\$ (91,164)	\$ -	\$ -	\$ -
1069	\$ 23,000	\$ 76,107	\$ 99,107	\$ 2,973	\$ 102,080
1070	\$ 13,235	\$ (13,235)	\$ -	\$ -	\$ -
1071	\$ 154,958	\$ 7,903	\$ 162,861	\$ 4,886	\$ 167,747
1072	\$ 10,923	\$ 60,879	\$ 71,803	\$ 2,154	\$ 73,957

Aqua Services, Inc. Payroll Detail  
For the Twelve Months Ending March 31, 2018, 2019 and 2020

Ref No.	Historic Test Year 3/31/2018	Adjustment Annualize FTY Increase	Future Test Year 3/31/2019	Adjustment Annualize FTY Increase	Fully Projected Future Test Year 3/31/2020
(1)	(2)	(3)	(4)	(5)	(6)
1073	\$ 81,232	\$ 4,996	\$ 86,228	\$ 2,587	\$ 88,814
1074	\$ 155,496	\$ 5,314	\$ 160,811	\$ 4,824	\$ 165,635
1075	\$ 80,972	\$ 2,658	\$ 83,630	\$ 2,509	\$ 86,139
1076	\$ 63,754	\$ 51,603	\$ 115,357	\$ 3,461	\$ 118,818
1077	\$ 3,462	\$ (3,462)	\$ -	\$ -	\$ -
1078	\$ -	\$ 112,357	\$ 112,357	\$ 3,371	\$ 115,728
1079	\$ 78,138	\$ (78,138)	\$ -	\$ -	\$ -
1080	\$ 98,231	\$ (98,231)	\$ -	\$ -	\$ -
1081	\$ 22,621	\$ 26,743	\$ 49,365	\$ 1,481	\$ 50,846
1082	\$ 58,885	\$ 4,667	\$ 63,552	\$ 1,907	\$ 65,458
1083	\$ 74,887	\$ 4,022	\$ 78,909	\$ 2,367	\$ 81,276
1084	\$ 121,084	\$ 7,491	\$ 128,575	\$ 3,857	\$ 132,432
1085	\$ 22,875	\$ 75,693	\$ 98,568	\$ 2,957	\$ 101,525
1086	\$ 38,519	\$ (38,519)	\$ -	\$ -	\$ -
1087	\$ 91,749	\$ 29,512	\$ 121,260	\$ 3,638	\$ 124,898
1088	\$ 8,000	\$ 104,034	\$ 112,034	\$ 3,361	\$ 115,395
1089	\$ 106,492	\$ 7,205	\$ 113,697	\$ 3,411	\$ 117,108
1090	\$ -	\$ 97,000	\$ 97,000	\$ 2,910	\$ 99,910
1091	\$ 79,367	\$ (79,367)	\$ -	\$ -	\$ -
1092	\$ -	\$ 111,564	\$ 111,564	\$ 3,347	\$ 114,911
1093	\$ -	\$ 109,356	\$ 109,356	\$ 3,281	\$ 112,637
1094	\$ 83,923	\$ 7,794	\$ 91,717	\$ 2,752	\$ 94,469
1095	\$ 60,356	\$ 31,210	\$ 91,566	\$ 2,747	\$ 94,313
1096	\$ -	\$ 96,000	\$ 96,000	\$ 2,880	\$ 98,880
1097	\$ -	\$ 7,038	\$ 7,038	\$ 211	\$ 7,249
1098	\$ 5,050	\$ (5,050)	\$ -	\$ -	\$ -
1099	\$ 4,798	\$ (4,798)	\$ -	\$ -	\$ -
1100	\$ 4,606	\$ 2,432	\$ 7,038	\$ 211	\$ 7,249
1101	\$ 4,929	\$ 2,109	\$ 7,038	\$ 211	\$ 7,249
1102	\$ -	\$ 7,038	\$ 7,038	\$ 211	\$ 7,249
1103	\$ 2,666	\$ (2,666)	\$ -	\$ -	\$ -
1104	\$ 45,911	\$ 27,273	\$ 73,184	\$ 2,196	\$ 75,380
1105	\$ 6,760	\$ 41,964	\$ 48,723	\$ 1,462	\$ 50,185
1106	\$ 13,508	\$ 56,943	\$ 70,451	\$ 2,114	\$ 72,564
1107	\$ -	\$ 123,991	\$ 123,991	\$ 3,720	\$ 127,711
1108	\$ 17,500	\$ 80,530	\$ 98,030	\$ 2,941	\$ 100,971
1109	\$ 73,588	\$ 40,276	\$ 113,864	\$ 3,416	\$ 117,280
1110	\$ 102,566	\$ 6,230	\$ 108,796	\$ 3,264	\$ 112,060
1111	\$ -	\$ 83,000	\$ 83,000	\$ 2,490	\$ 85,490
1112	\$ 42,103	\$ 26,795	\$ 68,898	\$ 2,067	\$ 70,965
1113	\$ 47,781	\$ 22,347	\$ 70,128	\$ 2,104	\$ 72,232
1114	\$ 7,824	\$ 46,915	\$ 54,738	\$ 1,642	\$ 56,381
1115	\$ 7,673	\$ 49,327	\$ 57,000	\$ 1,710	\$ 58,710
1116	\$ -	\$ 124,530	\$ 124,530	\$ 3,736	\$ 128,266
1117	\$ 8,547	\$ (8,547)	\$ -	\$ -	\$ -
	\$ 21,624,702	\$ 3,083,402	\$ 24,708,104	\$ 741,243	\$ 25,449,347

Payroll Increase Assumptions

Location	Union Code	FTY		FPFTY	
		Effective Date	Increase %	Effective Date	Increase %
All	Non-Union	4/1/2018	3.0000%	4/1/2019	3.0000%
Shenango, PA	285-WS	5/1/2018	2.0500%	5/1/2019	2.0500%
Shenango, PA	285-BS	5/1/2018	2.0000%	5/1/2019	2.0000%
Roaring Creek, PA	334	5/24/2018	2.0000%	5/24/2019	2.0000%
Susquehanna, PA	563	8/15/2018	2.0000%	8/15/2019	2.0000%
White Haven, PA	IUOE542-WH	4/1/2018	2.5000%	4/1/2019	2.5000%
Southeastern, PA	Op Eng SEPA	10/1/2018	2.5000%	10/1/2019	2.5000%
Media Wastewater, PA	Op Eng LWWC	11/1/2018	2.5000%	11/1/2019	2.5000%



**Aqua Pennsylvania, Inc.**  
**Index to Exhibit 3A**

	<u>Section</u>
Sand Springs Water Company, Inc. Original Cost Study and Journal Entry	1
Mifflin Township Water Authority Original Cost Study and Journal Entry	2
Total Environmental Solutions, Inc. (TESI) - Beech Mountain Lakes Resort Community Water System Original Cost Study and Journal Entry	3
C&N Dining LLC (Yalick Farms) Original Cost Study and Journal Entry	4
Total Environmental Solutions, Inc. (TESI) - Treasure Lake Community Water System Original Cost Study and Journal Entry	5
BCWSA/Concord Park Community Original Cost Study and Journal Entry	6
Bristol Township Water System of Newportville-Ferguson Area Original Cost Study and Journal Entry	7
Mt. Jewett Borough Water System Original Cost Study and Journal Entry	8
Factoryville Bunker Hill Water Company, Inc. Original Cost Study and Journal Entry	9
Robin Hood Lakes Water Company, Inc. Original Cost Study and Journal Entry	10
East Cameron Township Municipal Authority Original Cost Study and Journal Entry	11
Sun Valley Lake Village Water System Original Cost Study and Journal Entry	12

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Aqua Pennsylvania, Inc.  
 Sand Springs Water Company, Inc. Costs  
 M92401  
 Journal Entry

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	104000	Utility Plant Purchased/Sold		1,602,651.69
9	108000	AD-General		440,117.51
9	114000	U Plant Acq Adj	4,140.29	
9	271308	CIAC-CASH NON REFUNDABLE BUILDER OR DEVELOPER DEPOSITS		2,186,496.37
9	272000	Accum Amort of CIAC	203,151.73	
9	300000	PPE-Utility Plant in Service	4,021,973.55	
<b>Total</b>			<b>4,229,265.57</b>	<b>4,229,265.57</b>

**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Sand Springs Water Company, Inc.**

<b>Section 1327(a) Criteria</b>	<b>Satisfied (Y/N)</b>	<b>Explanation</b>
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	<p style="text-align: center;">Yes</p>	<p>On November 1, 2011, Aqua Pennsylvania, Inc. (“Aqua”) acquired the Water System Assets (“Assets”) of the Sand Springs Water Company, Inc. (“Seller”). The Seller’s Assets were used and useful in providing water service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	<p style="text-align: center;">Yes</p>	<p>Prior to Aqua’s acquisition of Seller’s Assets, Sand Springs Water Company, Inc. was providing water service to 330 residential customers in portions of Butler Township, Luzerne County, Pennsylvania.</p> <p>Reference: Commission Order Docket Nos. A-2011-2250344 and A-2011-2250345</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p> <p style="text-align: center;">(i)</p>	<p style="text-align: center;">Yes</p>	

<p>violation of statutory or regulatory requirements of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and</p>	<p>Yes</p>	

reasonable service;		
(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;	Yes	Aqua and the Seller entered into an <i>Asset Purchase Agreement</i> , which was negotiated at arm's length. On June 28, 2011, the parties filed a <i>Joint Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered August 25, 2011, at Docket Nos. A-2011-2250344 and A-2011-2250345, the PUC granted the approvals requested in the <i>Joint Application</i> .
(6) the actual purchase price is reasonable;	Yes	The total purchase price for Seller's Assets was \$1,550,000 and was negotiated at arm's length. The Commission approved the company's application to acquire Sand Springs Water Company, Inc. and an original cost study was prepared to support the utility plant purchase.  Reference: Commission Order Docket Nos. A-2011-2250344 and A-2011-2250345
(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;	Yes	The Seller is not an affiliated interest of Aqua.
(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b>	Yes	The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.
(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.	Yes	The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.

**AQUA PENNSYLVANIA, INC.**

***Acquisition of Sand Springs Water Company, Inc.***

**Original Cost of Water Utility Plant and  
Depreciation Reserve Calculations  
at November 1, 2011**

**By**

**Scott D. Fogelsanger  
Principal**

**AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011**

**April 2013**





SCOTT D. FOGELSANGER  
Principal

AUS CONSULTANTS

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April 1, 2013

Ms. Meghan Kreszwick  
Manager of Rates, PA & NJ  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010

RE: Acquisition of  
Sand Springs Water Company, Inc.

Dear Ms. Kreszwick:

In accordance with your request, we have prepared an inventory of the water utility plant of Sand Springs Water Company, Inc. (the "Company") as of November 1, 2011.

The inventory was prepared to conform to the Uniform System of Accounts for Water Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of the Company was determined from a detailed analysis of the books and records of the Company and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Utility Plant in Service (Net)	\$1,806,537	\$236,966

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2, and the depreciation calculations in Section 3.

Respectfully submitted,

AUS Consultants

By: Scott D. Fogelsanger



AQUA PENNSYLVANIA, INC.

Acquisition of Sand Springs Water Company, Inc.

Table of Contents

	Page
	<u>No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Company's Facilities	1-1
Overview of the Study Techniques	1-2
Utility Plant Inventory	1-2
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Contributions In Aid of Construction	1-5
Customer Advances for Construction	1-5
Depreciation Reserve	1-5
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at November 1, 2011	2-1
<b><u>Account 101 - Utility Plant in Service</u></b>	
301 Organization	2-2
303.2 Land & Land Rights - Source of Supply & Pumping	2-3
303.3 Land & Land Rights - Water Treatment	2-4
304.2 Structures & Improvements - Source of Supply & Pumping	2-5
304.3 Structures & Improvements - Water Treatment	2-6
307 Wells & Springs	2-7
311 Pumping Equipment	2-8
320 Water Treatment Equipment	2-9
330 Distribution Reservoirs & Standpipes	2-10
331 Transmission & Distribution Mains	2-11

AQUA PENNSYLVANIA, INC.

Acquisition of Sand Springs Water Company, Inc.

Table of Contents

	Page
	<u>No.</u>
<b><u>SECTION 2 (continued)</u></b>	
<u>Account 101 - Utility Plant in Service (continued)</u>	
333 Services	2-12
334 Meters	2-13
335 Hydrants	2-14
<u>ACCOUNT 271 - CONTRIBUTIONS IN AID OF CONSTRUCTION</u>	
Summary of the Contributions in Aid of Construction at November 1, 2011	
	2-15
331 Transmission & Distribution Mains	2-16
333 Services	2-17
335 Hydrants	2-18
<b><u>SECTION 3</u></b>	
<u>DEPRECIATED ORIGINAL COST</u>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of November 1, 2011	
	3-1

# Section 1

## **AQUA PENNSYLVANIA, INC.**

### Acquisition of Sand Springs Water Company, Inc.

#### Executive Summary

#### **BACKGROUND**

Sand Spring Water Company, Inc. ("Company") makes water service available to approximately 336 customers located in Butler Township, Luzerne County, Pennsylvania. The Company began providing water service in 1998. The Company has continued to grow and expand over the years.

Aqua Pennsylvania, Inc. ("Aqua") and the Company have filed a joint application requesting the Commission to approve the sale of the water system and grant Aqua the right to furnish service in the Company's service territory.

Aqua has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of November 1, 2012. The results of that study are set forth herein.

#### **OVERVIEW OF THE COMPANY'S FACILITIES**

The Company's assets to be acquired consist of facilities for the production, distribution, and storage of water to its customers. The Company's production facilities are comprised of 2 wells. The distribution system consists of approximately 30,360 linear feet of ductile iron pipe. Distribution storage is provided by two (2) storage tanks of 499,392 gallons and 32,000 gallons. Customer service lines, which run from the Company's mains to the curb line, consist of 3/4" and 1" diameter pipe, curb stops, and curb boxes. All of the customers are metered. The water system provides fire protection service.

## **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the Company's assets was conducted in two (2) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by the Company.

Second, the original cost of the inventoried property was determined based on a review of the Company's books of account, construction records, and other sources. For the most part, the Company's records provided reasonable data as to the original cost of its plant in service. In addition, Aqua requested theoretical accrued depreciation calculations be prepared based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at November 1, 2011.

A complete discussion of the methodologies employed in the original cost study is set forth in the following sections of this report.

### **UTILITY PLANT INVENTORY**

A comprehensive inventory of the Company's plant in service as of November 1, 2011 was performed. One of the principal source documents for the inventory was the "as built" maps of the Company's system. The maps were particularly helpful in locating and documenting the sizes, types, and lengths of the pipelines and the sizes, types, and locations of accessories, such as valves, air release valves, and fire hydrants. Significant components of the inventory are discussed below.

#### **Mass Property**

For purposes of this study, "mass" property consists of utility plant recorded in Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters), and

Account 335 (Fire Hydrants). For Account 331, footages of pipe, by size and type, were determined by reviewing the "as-built" maps and were verified by a physical check of the distribution system in place. This same procedure was utilized for valves and air release valves.

Based upon data obtained from Company records, customer service lines (Account 333) and meters (Account 334) were installed when the customer requested service. For Account 335, fire hydrant locations were determined by reviewing the "as-built" maps and were verified by a physical check.

**Non-Mass Property**

A physical inventory of the treatment building and storage building was completed. Detailed results of the plant inventory are set forth in Section 2 of this report by the fixed capital accounts prescribed by the National Association of Regulatory Utility Commissioners. The original cost of all inventoried property units is properly recorded in the following accounts.

Acct.

No.    Account Title

**Non-Depreciable Plant:**

301    Organization  
303.2    Land & Land Rights - Source of Supply & Pumping  
303.3    Land & Land Rights - Water Treatment

**Depreciable Plant**

304.2    Structures & Improvements - Source of Supply & Pumping  
304.3    Structures & Improvements - Water Treatment  
307    Wells & Springs  
311    Pumping Equipment  
320    Water Treatment Equipment  
330    Distribution Reservoirs & Standpipes  
331    Transmission & Distribution Mains  
333    Services  
334    Meters  
335    Hydrants

## **ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the original cost of the Company's plant in service by fixed capital account and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of the Company's property by account. The original cost determinations for Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters), and Account 335 (Hydrants) are explained as follows:

### **Account 331, Account 333, Account 334, and Account 335**

An original cost of mains and accessories was determinable from available records for the Company's distribution system and other source documents. The Company summaries verified that the lengths scaled and units counted from the distribution system maps were accurate. As previously explained, the physical inventory established the total footage of pipe by size and type and the total number of units of accessories. The information contained in the construction summaries was used to develop the footage of pipe, units of accessories, and the resultant unit price for the respective fixed capital asset. The original cost values at November 1, 2011 for the Company's mains, customer services, meters, and fire hydrants as established by the original cost study total \$2,126,854; \$257,047; \$48,333; and \$73,763, respectively.

## **SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the Company's utility plant in service is not less than \$3,993,034, as summarized by plant account in Section 2.

## **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all Company documents that were available. Based on this record research, the Company received contributions in aid of construction are \$2,186,496.

## **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all Company documents that were available. Based on this record research, there are no customer advances for construction.

## **DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at November 1, 2011. The calculated accrued depreciation reserve (less contributions in aid of construction) amounts to \$236,966 at November 1, 2011. The calculations were based upon the Broad Group/Remaining Life Procedure and Technique utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date. The



results of those calculations and detailed supporting documentation are included in Section 3 of this report.

# Section 2

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011

Acct. No.	Account Title	Original Cost
301	Organization	\$18,322.00
303.2	Source of Supply & Pumping - Land & Land Rights	35,670.68
303.3	Water Treatment - Land & Land Rights	42,804.82
304.2	Source of Supply & Pumping Structures	340,076.87
304.3	Water Treatment Structures	160,408.87
307	Wells & Springs	19,036.84
311	Pumping Equipment	82,559.03
320	Water Treatment Equipment	22,530.56
330	Distribution Reservoirs & Standpipes	765,627.34
331	Transmission & Distribution Mains	2,126,853.99
333	Services	257,046.63
334	Meters	48,333.00
335	Hydrants	73,763.08
		-----
	Total Original Cost	\$3,993,033.71 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 301 - Organization

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit No.</u>	<u>Original Cost</u>
Costs Associated with Obtaining a Certificate of Public Convenience	2007		\$18,322.00
Total Account 301			----- \$18,322.00 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011

Account 303.2 - Source of Supply & Pumping - Land & Land Rights

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Land:</u>				
Pump Building & Tank	2009			\$35,670.68
				-----
Total Account 303.2				\$35,670.68
				=====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 303.3 - Water Treatment - Land & Land Rights

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
<u>Land:</u>				
Lot 1 - Water Treatment Bldg.	2009			\$42,804.82
				-----
Total Account 303.3				\$42,804.82
				=====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 304.2 - Source of Supply & Pumping Structures

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
<u>Booster Pump Station:</u> Concrete block structure, concrete floor 44' x 20', electrical control panels, piping, heater and lighting.	2007	Ea.	1	\$340,076.87
Total Account 304.3				<u>\$340,076.87</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 304.3 - Water Treatment Structures

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Treatment Building:</u> Concrete block structure, concrete floor 42' x 19', electrical control panels, piping, heater and lighting.	1994	Ea.	1	\$160,408.87
Total Account 304.3				<u>\$160,408.87</u> =====



**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 307 - Wells & Springs

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Well No. 1:</u> Depth: 455 feet Casing: 140 feet Diameter: 8"	1994	Ea.	1	\$9,518.42
<u>Well No. 2:</u> Depth: 455 feet Casing: 140 feet Diameter: 8"	1994	Ea.	1	9,518.42
Total Account 307				<u>\$19,036.84</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 311 - Pumping Equipment

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<u>Well No. 1:</u>				
Submersible Well Pump, 7.5hp	1994	Ea.	1	\$2,894.24
<u>Well No. 2:</u>				
Submersible Well Pump, 7.5hp	1994	Ea.	1	2,894.24
<u>Treatment Building:</u>				
Booster Pump No. 1, 7.5hp	1999	Ea.	1	1,770.08
Booster Pump No. 2, 25hp	1994	Ea.	1	4,635.25
Booster Pump No. 3, 25hp	1994	Ea.	1	4,635.25
<u>Booster Pump Station:</u>				
Booster Pump No. 1, 60hp	2007	Ea.	1	21,909.99
Booster Pump No. 2, 60hp	2007	Ea.	1	21,909.99
Booster Pump No. 3, 60hp	2007	Ea.	1	21,909.99
Total Account 311				----- <b>\$82,559.03</b> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 320 - Water Treatment Equipment

<u>Item</u>	<u>Year</u> <u>Installed</u>	<u>----- Quantity -----</u> <u>Unit</u>	<u>-----</u> <u>No.</u>	<u>Original</u> <u>Cost</u>
<b><u>Treatment Building:</u></b>				
Calcite Filters - 5,500 Gallons	1999	Ea.	2	\$10,295.96
Iron Filters - 5,500 Gallons	1999	Ea.	2	10,295.96
Brine Storage Tank, 42" Dia.	1999	Ea.	1	834.24
Chemical Feed Pumps	2009	Ea.	2	975.08
Chlorine Storage Tanks	1999	Ea.	2	129.32
				-----
Total Account 320				\$22,530.56
				=====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 330 - Distribution Reservoirs & Standpipes

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Storage Tank - 32,000 Gallons Located at Treatment Building	1994	Ea.	1	\$22,720.00
Storage Tank - 499,392 Gallons	2007	Ea.	1	742,907.34
Total Account 330				<u>\$765,627.34</u> =====

Aqua Pennsylvania, Inc.

Acquisition of Sand Springs Water Company, Inc.

Original Cost at November 1, 2011  
Account 331 - Transmission & Distribution Mains

Item	Year Installed	Quantity		Original Cost
		Unit	No.	
4" Ductile Iron Mains	2005	LF	170	\$9,152.80
6" Ductile Iron Mains	2003	LF	2,035	136,426.40
6" Ductile Iron Mains	2004	LF	685	47,107.45
6" Ductile Iron Mains	2005	LF	715	52,445.25
6" Ductile Iron Mains	2006	LF	1,265	99,365.75
6" Ductile Iron Mains	2007	LF	400	12,234.52
8" Ductile Iron Mains	1998	LF	2,640	151,588.80
8" Ductile Iron Mains	2003	LF	8,200	549,728.00
8" Ductile Iron Mains	2004	LF	8,525	586,264.25
8" Ductile Iron Mains	2005	LF	2,335	171,272.25
8" Ductile Iron Mains	2006	LF	2,250	176,737.50
8" Ductile Iron Mains	2007	LF	1,000	28,547.22
12" Ductile Iron Mains	2007	LF	20	1,087.51
24" Ductile Iron Mains	2007	LF	120	13,050.16
Total Mains			30,360	\$2,035,007.86
Valves, 4"	2007	Ea.	1	\$815.63
Valves, 6"	2003	Ea.	1	705.27
Valves, 6"	2004	Ea.	1	748.59
Valves, 6"	2005	Ea.	2	1,625.42
Valves, 6"	2006	Ea.	1	864.69
Valves, 8"	1998	Ea.	17	13,757.59
Valves, 8"	2003	Ea.	22	20,411.82
Valves, 8"	2004	Ea.	13	12,802.40
Valves, 8"	2005	Ea.	5	5,345.75
Valves, 8"	2006	Ea.	12	13,650.48
Valves, 8"	2007	Ea.	1	1,223.45
Valves, 12"	2007	Ea.	2	4,078.17
Total Valves			78	\$76,029.26
Blow Off Valves, 2"	2003	Ea.	4	3,033.24
Blow Off Valves, 2"	2004	Ea.	3	2,414.67
Blow Off Valves, 2"	2005	Ea.	2	1,747.64
Total Blow Off Valves			9	\$7,195.55
Meter Pit	2005	Ea.	1	8,621.32
Total Account 331				\$2,126,853.99

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 333 - Services

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Services	1998	Ea.	10	\$5,404.70
Services	2003	Ea.	121	72,927.91
Services	2004	Ea.	154	97,862.38
Services	2005	Ea.	44	29,546.00
Services	2006	Ea.	69	51,305.64
			-----	-----
Total Account 333			398	\$257,046.63
				=====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011  
Account 334 - Meters

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Meters, 5/8" x 3/4"	2006	Ea.	335	\$48,178.88
Meter, 1"	2006	Ea.	1	\$154.12
Total Account 334			336	<u>\$48,333.00</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Original Cost at November 1, 2011

Account 335 - Hydrants

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Hydrants	1998	Ea.	6	\$9,040.80
Hydrants	2003	Ea.	12	20,905.80
Hydrants	2004	Ea.	16	28,607.84
Hydrants	2005	Ea.	4	7,347.60
Hydrants	2006	Ea.	4	7,861.04
			---	-----
Total Account 335			42	\$73,763.08 =====





**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

**Account 271 - Contributions in Aid of Construction**

Original Cost at November 1, 2011

<b>Acct. No.</b>	<b>Account Title</b>	<b>Original Cost</b>
331	Transmission & Distribution Mains	\$1,870,132.16
333	Services	251,641.93
335	Hydrants	64,722.28
	<b>Total Contributions in Aid of Construction</b>	<b>\$2,186,496.37</b> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

**Contributions in Aid of Construction**

Original Cost at November 1, 2011

Account 331 - Transmission & Distribution Mains

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
4" Ductile Iron Mains	2005	LF	170	\$9,152.80
6" Ductile Iron Mains	2003	LF	2,035	136,426.40
6" Ductile Iron Mains	2004	LF	685	47,107.45
6" Ductile Iron Mains	2005	LF	430	31,540.50
6" Ductile Iron Mains	2006	LF	1,265	99,365.75
8" Ductile Iron Mains	2003	LF	8,200	549,728.00
8" Ductile Iron Mains	2004	LF	8,525	586,264.25
8" Ductile Iron Mains	2005	LF	2,335	171,272.25
8" Ductile Iron Mains	2006	LF	2,250	176,737.50
Total Mains			----- 25,895	----- \$1,807,594.90
Valves, 6"	2003	Ea.	1	705.27
Valves, 6"	2004	Ea.	1	748.59
Valves, 6"	2005	Ea.	1	812.71
Valves, 6"	2006	Ea.	1	864.69
Valves, 8"	2003	Ea.	22	20,411.82
Valves, 8"	2004	Ea.	13	12,802.40
Valves, 8"	2005	Ea.	5	5,345.75
Valves, 8"	2006	Ea.	12	13,650.48
Total Valves			----- 56	----- \$55,341.71
Blow Off Valves, 2"	2003	Ea.	4	3,033.24
Blow Off Valves, 2"	2004	Ea.	3	2,414.67
Blow Off Valves, 2"	2005	Ea.	2	1,747.64
Total Blow Off Valves			----- 9	----- \$7,195.55
Total Account 331				----- \$1,870,132.16 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

**Contributions in Aid of Construction**

Original Cost at November 1, 2011

Account 333 - Services

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Services	2003	Ea.	121	\$72,927.91
Services	2004	Ea.	154	97,862.38
Services	2005	Ea.	44	29,546.00
Services	2006	Ea.	69	51,305.64
Total Account 333			388	<u>\$251,641.93</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

**Contributions in Aid of Construction**

Original Cost at November 1, 2011

Account 335 - Hydrants

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
Hydrants	2003	Ea.	12	\$20,905.80
Hydrants	2004	Ea.	16	28,607.84
Hydrants	2005	Ea.	4	7,347.60
Hydrants	2006	Ea.	4	7,861.04
			---	-----
Total Account 335			36	\$64,722.28 =====

# Section 3

**Aqua Pennsylvania, Inc.**

*Acquisition of Sand Springs Water Company, Inc.*

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of November 1, 2011  
Based Upon Whole Life Depreciation

Acct. No.	Description	Original Cost at 11/1/11	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 11/1/11
<b>Non-Depreciable Plant:</b>					
301	Organization	\$18,322.00		\$0.00	\$18,322.00
303.2	Source of Supply & Pumping - Land & Land Rights	35,670.68		0.00	35,670.68
303.3	Water Treatment - Land & Land Rights	42,804.82		0.00	42,804.82
	<b>Total Non-Depreciable Plant</b>	<b>\$96,797.50</b>		<b>\$0.00</b>	<b>\$96,797.50</b>
<b>Depreciable Plant:</b>					
304.2	Source of Supply & Pumping Structures	\$340,076.87	50-R3	\$29,419.22	\$310,657.65
304.3	Water Treatment Structures	160,408.87	50-R3	53,079.22	107,329.65
307	Wells & Springs	19,036.84	50-R3	5,683.66	13,353.18
311	Pumping Equipment	82,559.03	25-R3	21,354.66	61,204.37
320	Water Treatment Equipment	22,530.56	15-R3	15,308.31	7,222.25
330	Distribution Reservoirs & Standpipes	765,627.34	50-R3	71,785.13	693,842.21
331	Mains & Accessories:				
331.11	Ductile Iron Pipe, 4" & Under	\$9,152.80	65-R3	\$884.13	\$8,268.67
331.12	Ductile Iron Pipe, 6" to 8"	2,011,717.39	90-R3	169,878.12	1,841,839.27
331.13	Ductile Iron Pipe, 10" to 14"	1,087.51	100-R3	47.19	1,040.32
331.14	Ductile Iron Pipe, 16" & Over	13,050.16	110-R3	514.93	12,535.23
331.51	Valves, 4" & Under	815.63	50-R3	70.56	745.07
331.52	Valves, 6" to 8"	71,135.46	80-R3	7,224.60	63,910.86
331.53	Valves, 10" to 14"	4,078.17	100-R3	176.95	3,901.22
331.70	Air Release / Blow Off Valves	7,195.55	50-R3	1,064.32	6,131.23
331.75	Meter Pit	8,621.32	90-R3	602.73	8,018.59
	<b>Total Account 331</b>	<b>\$2,126,853.99</b>		<b>\$180,463.53</b>	<b>\$1,946,390.46</b>
333	Services	\$257,046.63	35-R3	\$47,122.25	\$209,924.38
334	Meters	48,333.00	30-R2	7,704.03	40,628.97
335	Hydrants	73,763.08	65-R2	8,197.50	65,565.58
	<b>Total Depreciable Plant</b>	<b>\$3,896,236.21</b>		<b>\$440,117.51</b>	<b>\$3,456,118.70</b>
	<b>Total Plant in Service</b>	<b>\$3,993,033.71</b>		<b>\$440,117.51</b>	<b>\$3,552,916.20</b>
<b>Deduct: Contributions in Aid of Construction:</b>					
331	Mains & Accessories:				
331.11	Ductile Iron Pipe, 4" & Under	\$9,152.80	65-R3	\$884.13	\$8,268.67
331.12	Ductile Iron Pipe, 6" to 8"	1,798,442.10	90-R3	144,436.94	1,654,005.16
331.52	Valves, 6" to 8"	55,341.71	80-R3	4,850.84	50,490.87
331.70	Air Release / Blow Off Valves	7,195.55	50-R3	1,064.32	6,131.23
	<b>Total Account 331</b>	<b>\$1,870,132.16</b>		<b>\$151,236.23</b>	<b>\$1,718,895.93</b>
333	Services	\$251,641.93	35-R3	\$45,358.59	\$206,283.34
335	Hydrants	64,722.28	65-R2	6,556.91	58,165.37
	<b>Total Contributions in Aid of Construction</b>	<b>\$2,186,496.37</b>		<b>\$203,151.73</b>	<b>\$1,983,344.64</b>
	<b>Total Plant in Service (Net)</b>	<b>\$1,806,537.34</b>		<b>\$236,965.78</b>	<b>\$1,569,571.56</b>

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 304.20 Source of Supply & Pumping Structures

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2007	340,076.87	45.67	50.00	0.08651	29,419
<b>Total</b>	340,076.87				29,419.22



**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 304.30 Water Treatment Structures

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1994	160,408.87	33.46	50.00	0.33090	53,079
<b>Total</b>	160,408.87				53,079.22

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 307.00 Wells & Springs

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1994	19,036.84	35.07	50.00	0.29856	5,684
<b>Total</b>	19,036.84				5,683.66

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
**311.00 Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1994	15,058.98	9.63	25.00	0.61494	9,260
1999	1,770.08	13.52	25.00	0.45930	813
2007	65,729.97	20.71	25.00	0.17163	11,281
<b>Total</b>	<b>82,559.03</b>				<b>21,354.66</b>

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 320.00 Water Treatment Equipment

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 15 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	21,555.48	4.45	15.00	0.70309	15,155
2009	975.08	12.65	15.00	0.15675	153
<b>Total</b>	22,530.56				15,308.31

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 330.00 *Distribution Reservoirs & Standpipes*

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1994	22,720.00	33.46	50.00	0.33090	7,518
2007	742,907.34	45.67	50.00	0.08651	64,267
<b>Total</b>	765,627.34				71,785.13

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 331.11 Ductile Iron Mains, 4" & Under

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2005	9,152.80	58.72	65.00	0.09660	884
<b>Total</b>	9,152.80				884.13

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 331.12 Ductile Iron Mains, 6" to 8"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	151,588.80	76.93	90.00	0.14522	22,014
2003	686,154.40	81.76	90.00	0.09154	62,813
2004	633,371.70	82.73	90.00	0.08074	51,137
2005	223,717.50	83.71	90.00	0.06991	15,640
2006	276,103.25	84.68	90.00	0.05906	16,308
2007	40,781.74	85.66	90.00	0.04820	1,966
<b>Total</b>	2,011,717.39				169,878.12

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 331.13 Ductile Iron Mains, 10" to 14"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2007	1,087.51	95.66	100.00	0.04339	47
<b>Total</b>	1,087.51				47.19



**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 331.14 Ductile Iron Mains, 16" & Over

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 110 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2007	13,050.16	105.66	110.00	0.03946	515
<b>Total</b>	13,050.16				514.93

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 331.51 Valves, 4" & Under

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2007	815.63	45.67	50.00	0.08651	71
<b>Total</b>	815.63				70.56

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 331.52 Valves, 6" to 8"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	13,757.59	66.95	80.00	0.16308	2,244
2003	21,117.09	71.77	80.00	0.10290	2,173
2004	13,550.99	72.74	80.00	0.09076	1,230
2005	6,971.17	73.71	80.00	0.07860	548
2006	14,515.17	74.69	80.00	0.06641	964
2007	1,223.45	75.66	80.00	0.05421	66
<b>Total</b>	71,135.46				7,224.60

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 331.53 Valves, 10" to 14"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2007	4,078.17	95.66	100.00	0.04339	177
<b>Total</b>	4,078.17				176.95

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 331.70 Air Release/Blow Off Valves

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2003	3,033.24	41.82	50.00	0.16367	496
2004	2,414.67	42.77	50.00	0.14451	349
2005	1,747.64	43.74	50.00	0.12526	219
<b>Total</b>	<b>7,195.55</b>				<b>1,064.32</b>

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 331.75 Meter Pit

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2005	8,621.32	83.71	90.00	0.06991	603
<b>Total</b>	8,621.32				602.73

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 333.00 Services

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 35 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	5,404.70	23.58	35.00	0.32632	1,764
2003	72,927.91	27.64	35.00	0.21018	15,328
2004	97,862.38	28.49	35.00	0.18610	18,213
2005	29,546.00	29.34	35.00	0.16177	4,780
2006	51,305.64	30.20	35.00	0.13719	7,039
<b>Total</b>	257,046.63				47,122.25

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 334.00 Meters & Meter Installations

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 30 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2006	48,333.00	25.22	30.00	0.15939	7,704
<b>Total</b>	48,333.00				7,704.03



**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc.**  
 335.00 Hydrants

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	9,040.80	53.20	65.00	0.18146	1,641
2003	20,905.80	57.51	65.00	0.11525	2,409
2004	28,607.84	58.38	65.00	0.10179	2,912
2005	7,347.60	59.26	65.00	0.08827	649
2006	7,861.04	60.15	65.00	0.07468	587
<b>Total</b>	73,763.08				8,197.50



**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc. - CIAC**  
**331.11 Ductile Iron Mains, 4" & Under**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2005	9,152.80	58.72	65.00	0.09660	884
<b>Total</b>	9,152.80				884.13

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc. - CIAC**  
**331.12 Ductile Iron Mains, 6" to 8"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2003	686,154.40	81.76	90.00	0.09154	62,813
2004	633,371.70	82.73	90.00	0.08074	51,137
2005	202,812.75	83.71	90.00	0.06991	14,179
2006	276,103.25	84.68	90.00	0.05906	16,308
<b>Total</b>	1,798,442.10				144,436.94

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc. - CIAC**  
 331.52 Valves, 6" to 8"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2003	21,117.09	71.77	80.00	0.10290	2,173
2004	13,550.99	72.74	80.00	0.09076	1,230
2005	6,158.46	73.71	80.00	0.07860	484
2006	14,515.17	74.69	80.00	0.06641	964
<b>Total</b>	55,341.71				4,850.84

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc. - CIAC**  
 333.00 Services

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 35 Survivor Curve: R2**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2003	72,927.91	27.64	35.00	0.21018	15,328
2004	97,862.38	28.49	35.00	0.18610	18,213
2005	29,546.00	29.34	35.00	0.16177	4,780
2006	51,305.64	30.20	35.00	0.13719	7,039
<b>Total</b>	<b>251,641.93</b>				<b>45,358.59</b>

**Aqua Pennsylvania, Inc.**  
**Sand Springs Water Company, Inc. - CIAC**  
 335.00 Hydrants

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of November 01, 2011**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2003	20,905.80	57.51	65.00	0.11525	2,409
2004	28,607.84	58.38	65.00	0.10179	2,912
2005	7,347.60	59.26	65.00	0.08827	649
2006	7,861.04	60.15	65.00	0.07468	587
<b>Total</b>	64,722.28				6,556.91

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority Costs**  
**M92406**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	103000	Property Held for Future Use	11,012.30	
9	104000	Utility Plant Purchased/Sold		1,161,812.12
9	108000	AD-General		390,509.84
9	114000	U Plant Acq Adj	418,224.87	
9	114000	U Plant Acq Adj		24,125.21
9	271308	CIAC-CASH NON REFUNDABLE BUILDER OR DEVELOPER DEPOSITS		67,469.63
9	272000	Accum Amort of CIAC	47,119.73	
9	300000	PPE-Utility Plant in Service	1,186,368.24	
9	300000	PPE-Utility Plant in Service		18,808.34
	<b>Total</b>		<b>1,662,725.14</b>	<b>1,662,725.14</b>



**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Mifflin Township Water Authority**

<b>Section 1327(a) Criteria</b>	<b>Satisfied (Y/N)</b>	<b>Explanation</b>
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	<p style="text-align: center;">Yes</p>	<p>On April 2, 2012, Aqua Pennsylvania, Inc. (“Aqua”) acquired the Water System Assets (“Assets”) of the Mifflin Township Water Authority (“Seller”). The Seller’s Assets were used and useful in providing water service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	<p style="text-align: center;">Yes</p>	<p>Prior to Aqua’s acquisition of Seller’s Assets, Mifflin Township Water Authority, Inc. was providing water service to 483 residential customers and 5 commercial customers in portions of Mifflin Township, Columbia County, Pennsylvania.</p> <p>Reference: Commission Order Docket No. A-2011-2272163</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p> <p style="text-align: center;">(i)</p> <p>violation of statutory or regulatory requirements</p>	<p style="text-align: center;">Yes</p>	

<p>of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and reasonable service;</p>	<p>Yes</p>	

<p>(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;</p>	<p>Yes</p>	<p>Aqua and the Seller entered into an <i>Asset Purchase Agreement</i>, which was negotiated at arm's length. On November 8, 2011, Aqua filed an <i>Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered February 17, 2012, at Docket No. A-2011-2272163, the PUC granted the approvals requested in the <i>Application</i>.</p>
<p>(6) the actual purchase price is reasonable;</p>	<p>Yes</p>	<p>The total purchase price for Seller's Assets was \$1,114,000 and was negotiated at arm's length. The Commission approved the company's application to acquire Mifflin Township Water Authority and an original cost study was prepared to support the utility plant purchase.</p> <p>Reference: Commission Order Docket No. A-2011-2272163</p>
<p>(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;</p>	<p>Yes</p>	<p>The Seller is not an affiliated interest of Aqua.</p>
<p>(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b></p>	<p>Yes</p>	<p>The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.</p>
<p>(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.</p>	<p>Yes</p>	<p>The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.</p>

**AQUA PENNSYLVANIA, INC.**

***Acquisition of the Mifflin Township Water Authority's  
Water System***

**Original Cost of Water Utility Plant and  
Depreciation Reserve Calculations  
at March 30, 2012**

**By**

**Scott D. Fogelsanger  
Principal**

**AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011**

**April 2013**





SCOTT D. FOGELSANGER  
Principal

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April 1, 2013

Mr. William C. Packer  
Controller, Mid Atlantic Region  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010

RE: Acquisition of the Mifflin Township Water  
Authority's Water System

Dear Mr. Packer:

In accordance with your request, we have prepared an inventory of the water utility plant of the Mifflin Township Water Authority (the "Authority") as of March 30, 2012.

The inventory was prepared to conform to the Uniform System of Accounts for Water Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of the Authority was determined from a detailed analysis of the books and records of the Authority and has been segregated as follows:

	Original <u>Cost</u>	Calculated <u>Reserve</u>
Utility Plant in Service (Net)	\$1,074,158	\$343,390
Materials & Supplies	\$12,862	

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2, and the depreciation calculations in Section 3.

Respectfully submitted,

AUS Consultants

  
By: Scott D. Fogelsanger

**AQUA PENNSYLVANIA, INC.**

***Acquisition of the Mifflin Township Water Authority's  
Water System***

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Authority's Facilities	1-1
Overview of the Study Techniques	1-2
Utility Plant Inventory	1-2
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Contributions In Aid of Construction	1-5
Customer Advances for Construction	1-5
Materials & Supplies	1-5
Depreciation Reserve	1-6
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at March 30, 2012	2-1
<b><u>Account 101 - Utility Plant in Service</u></b>	
303.2 Land & Land Rights - Source of Supply	2-2
303.4 Land & Land Rights - Transmission & Distribution	2-3
304.2 Structures & Improvements - Source of Supply & Pumping	2-4
304.5 Structures & Improvements - General	2-5
307 Wells & Springs	2-6
311 Pumping Equipment	2-7
320 Water Treatment Equipment	2-8
330 Distribution Reservoirs & Standpipes	2-9
331 Transmission & Distribution Mains	2-11
333 Services	2-12

**AQUA PENNSYLVANIA, INC.**

***Acquisition of the Mifflin Township Water Authority's  
Water System***

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 2 (continued)</u></b>	
<u>Account 101 - Utility Plant in Service (continued)</u>	
334 Meters	2-13
335 Hydrants	2-14
343 Tools, Shop & Garage Equipment	2-15
<u>CONTRIBUTIONS IN AID OF CONSTRUCTION</u>	
Summary of the Contributions in Aid of Construction at March 30, 2012	2-16
<u>Account 271 - Contributions in Aid of Construction</u>	
304.5 Structures & Improvements - General	2-17
307 Wells & Springs	2-18
311 Pumping Equipment	2-19
330 Distribution Reservoirs & Standpipes	2-20
<u>Account 151 - Materials &amp; Supplies</u>	
Summary of the Materials & Supplies at March 30, 2012	2-21
<b><u>SECTION 3</u></b>	
<u>DEPRECIATED ORIGINAL COST</u>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of March 30, 2012	3-1



# Section 1

## **AQUA PENNSYLVANIA, INC.**

### **Acquisition of the Mifflin Township Water Authority's Water System**

#### **Executive Summary**

#### **BACKGROUND**

The Mifflin Township Water Authority ("Authority") makes water service available to approximately 488 customers located in Mifflin Township, Columbia County, Pennsylvania.

The Authority began providing water service in 1971. The Authority has continued to grow and expand over the years.

Aqua Pennsylvania, Inc. ("Aqua") and the Authority have filed a joint application requesting the Commission to approve the sale of the water system and grant Aqua the right to furnish service in the Authority's service territory.

Aqua has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of March 30, 2012. The results of that study are set forth herein.

#### **OVERVIEW OF THE AUTHORITY'S FACILITIES**

The Authority's assets to be acquired consist of facilities for the production, distribution, and storage of water to its customers. The Authority's production facilities are comprised of 2 wells. The distribution system consists of approximately 63,445 linear feet of plastic pipe. Distribution storage is provided by a 300,000 gallon storage tank. Customer service lines, which run from the Authority's mains to the curb line, consist of

3/4", 1", 1 1/2", and 2" diameter pipe, curb stops, and curb boxes. All of the customers are metered. The water system provides fire protection service.

### **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the Authority's assets was conducted in two (2) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by the Authority.

Second, the original cost of the inventoried property was determined based on a review of the Authority's books of account, construction records, and other sources. For the most part, the Authority's records provided reasonable data as to the original cost of its plant in service. In addition, Aqua requested theoretical accrued depreciation calculations be prepared based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at March 30, 2012.

A complete discussion of the methodologies employed in the original cost study is set forth in the following sections of this report.

### **UTILITY PLANT INVENTORY**

A comprehensive inventory of the Authority's plant in service as of March 30, 2012 was performed. One of the principal source documents for the inventory was the "as built" maps of the Authority's system. The maps were particularly helpful in locating and documenting the sizes, types, and lengths of the pipelines and the sizes, types, and locations of accessories, such as valves, air release valves, and fire hydrants. Significant components of the inventory are discussed below.

### **Mass Property**

For purposes of this study, "mass" property consists of utility plant recorded in Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters), and Account 335 (Fire Hydrants). For Account 331, footages of pipe, by size and type, were determined by reviewing the "as-built" maps and were verified by a physical check of the distribution system in place. This same procedure was utilized for valves and air release valves.

Based upon data obtained from Authority records, customer service lines (Account 333) and meters (Account 334) were installed when the customer requested service. For Account 335, fire hydrant locations were determined by reviewing the "as-built" maps and were verified by a physical check.

### **Non-Mass Property**

A physical inventory of the treatment building and storage building was completed. Detailed results of the plant inventory are set forth in Section 2 of this report by the fixed capital accounts prescribed by the National Association of Regulatory Utility Commissioners. The original cost of all inventoried property units is properly recorded in the following accounts.

Acct.

No.   Account Title

#### **Non-Depreciable Plant:**

303.2 Land & Land Rights - Source of Supply

303.4 Land & Land Rights - Transmission & Distribution

Depreciable Plant

- 304.3 Structures & Improvements - Water Treatment
- 304.5 Structures & Improvements - General
- 307 Wells & Springs
- 311 Pumping Equipment
- 320 Water Treatment Equipment
- 330 Distribution Reservoirs & Standpipes
- 331 Transmission & Distribution Mains
- 333 Services
- 334 Meters
- 335 Fire Hydrants
- 343 Tools, Shop & Garage Equipment

**ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the original cost of the Authority's plant in service by fixed capital account and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of the Authority's property by account. The original cost determinations for Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters), and Account 335 (Fire Hydrants) are explained as follows:

**Account 331, Account 333, Account 334, and Account 335**

An original cost of mains and accessories was determinable from available records for the Authority's distribution system and other source documents. The Authority summaries verified that the lengths scaled and units counted from the distribution system maps were accurate. As previously explained, the physical inventory established the total footage of pipe by size and type and the total number of units of accessories. The information contained in the construction summaries was used to develop the footage of pipe, units of accessories, and the resultant unit price for the respective fixed capital asset.

The original cost values at March 30, 2012 for the Authority's mains, customer services, meters, and fire hydrants as established by the original cost study total \$631,064; \$163,478; \$58,543; and \$27,385, respectively.

#### **SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the Authority's utility plant in service is not less than \$1,141,628, as summarized by plant account in Section 2 (p. 2-1).

#### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all Authority documents that were available. Based on this record research, the Authority received grants funds from the Commonwealth of Pennsylvania. The total contributions in aid of construction are \$67,470.

#### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all Authority documents that were available. Based on this record research, there are no customer advances for construction.

#### **MATERIALS & SUPPLIES**

AUS Consultants completed an extensive research of records to determine the amount of materials & supplies. Based on the physical inventory, the Authority has two (2)

new complete sets of pumps of motors. The cost for these assets was \$12,862 and documented by the invoices.

### **DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at March 30, 2012. The calculated accrued depreciation reserve (less contributions in aid of construction) amounts to \$343,390 at March 30, 2012. The calculations were based upon the Broad Group/Remaining Life Procedure and Technique utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date. The results of those calculations and detailed supporting documentation are included in Section 3 of this report.

# Section 2



**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012

Acct. No.	Account Title	Original Cost
303.2	Source of Supply - Land & Land Rights	\$14,764.10
303.4	Transmission & Distribution - Land & Land Rights	7,207.16
304.3	Water Treatment Structures	120,057.09
304.5	General Structures	11,059.91
307	Wells & Springs	21,029.91
311	Pumping Equipment	15,529.14
320	Water Treatment Equipment	4,950.67
330	Distribution Reservoirs & Standpipes	57,567.56
331	Transmission & Distribution Mains	631,063.94
333	Services	163,478.47
334	Meters	58,542.82
335	Fire Hydrants	27,385.26
343	Tools, Shop & Garage Equipment	8,991.75
	Total Original Cost	<u>\$1,141,627.78</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 303.2 - Source of Supply - Land & Land Rights

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit No.</u>	<u>Original Cost</u>
<u>Land:</u>			
Well - Lots 48 & 59 D.B. 266, Pgs. 623 to 825	1974		\$14,763.10
<u>Land Rights:</u>			
Well Bill of Sale	1975		1.00
Total Account 303.2			<u>----- \$14,764.10 =====</u>

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 303.4 - Transmission & Distribution - Land & Land Rights

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit No.</u>	<u>Original Cost</u>
<u>Land:</u>			
Storage Tank			
D.B. 250, Pgs. 356 to 359	1970		\$1,015.50
<u>Land Rights:</u>			
Water Mains & Services	2011		6,191.66
Total Account 303.4			----- \$7,207.16 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water authority*

Original Cost at March 30, 2012  
Account 304.3 - Water Treatment Structures

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
<u>Treatment Building:</u> Concrete block structure, concrete floor 25' x 16', electrical control panels, piping, heater and lighting.	1998	Ea.	1	\$120,057.09
Total Account 304.3				<u>\$120,057.09</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 304.5 - General Structures

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Storage Building:</u> Concrete block structure, concrete floor with pitched concrete roof. Size: 12' x 10'	1971	Ea.	1	\$11,059.91
Total Account 304.5				<u>-----</u> \$11,059.91 <u>=====</u>

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 307 - Wells & Springs

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<u>Well No. 2:</u>				
Depth: 200 feet				
Casing: 80 feet				
Diameter: 8"				
	1971	Ea.	1	\$8,118.75
<u>Well No. 3:</u>				
Depth: 200 feet				
Casing: 131 feet				
Diameter: 8"				
	1998	Ea.	1	12,911.16
Total Account 307				<u>\$21,029.91</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 311 - Pumping Equipment

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Well No. 2:</u> Submersible Well Pump, 15hp	1971	Ea.	1	\$2,719.75
<u>Well No. 3:</u> Submersible Well Pump, 50hp	2010	Ea.	1	12,809.39
Total Account 311				<u>-----</u> \$15,529.14 <u>=====</u>

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 320 - Water Treatment Equipment

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Treatment Building:</u>				
Chemical Feed Pump	2011	Ea.	1	\$1,944.93
Chemical Solution Tank, 300 gallon on Elevated Stand w/ Mixer	1998	Ea.	1	3,005.74
Total Account 320				<u>----- \$4,950.67 =====</u>



**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 330 - Distribution Reservoirs & Standpipes

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
Storage Tank - 300,000 gallon	1971	Ea.	1	\$57,567.56
Total Account 331				----- \$57,567.56 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Authority*

Original Cost at March 30, 2012  
Account 331 - Transmission & Distribution Mains

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
2" Plastic Mains	1971	LF	500	\$1,264.73
2" Plastic Mains	2000	LF	685	12,261.50
2" Plastic Mains	2001	LF	900	16,875.00
3" Plastic Mains	1971	LF	17,000	43,000.66
3" Plastic Mains	1985	LF	640	10,336.00
3" Plastic Mains	1992	LF	400	7,832.00
3" Plastic Mains	1998	LF	380	8,781.80
3" Plastic Mains	2002	LF	850	23,001.00
3" Plastic Mains	2004	LF	2,250	63,292.50
4" Plastic Mains	1971	LF	1,200	4,553.01
6" Plastic Mains	1971	LF	22,600	85,748.35
6" Plastic Mains	1973	LF	2,000	14,960.00
6" Plastic Mains	1974	LF	2,090	17,242.50
6" Plastic Mains	1975	LF	370	4,070.00
6" Plastic Mains	1985	LF	930	15,447.30
6" Plastic Mains	1990	LF	500	11,610.00
6" Plastic Mains	1992	LF	540	10,870.20
6" Plastic Mains	1993	LF	2,000	42,460.00
6" Plastic Mains	1994	LF	1,155	24,266.55
6" Plastic Mains	1995	LF	1,500	33,675.00
6" Plastic Mains	1998	LF	70	2,587.65
6" Plastic Mains	2004	LF	460	13,312.40
6" Plastic Mains	2005	LF	390	12,402.00
6" Plastic Mains	2006	LF	870	31,781.10
6" Plastic Mains	2007	LF	900	36,144.00
8" Plastic Mains	1971	LF	1,400	7,436.59
10" DI Mains	1998	LF	865	52,246.00
Total Mains			----- 63,445	----- \$607,457.84

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Authority*

Original Cost at March 30, 2012  
Account 331 - Transmission & Distribution Mains

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
Valves, 2"	1971	Ea.	1	\$113.83
Valves, 3"	1971	Ea.	18	2,048.85
Valves, 3"	1985	Ea.	1	395.73
Valves, 3"	1992	Ea.	1	484.54
Valves, 3"	2004	Ea.	3	2,019.18
Valves, 4"	1971	Ea.	1	113.83
Valves, 6"	1971	Ea.	18	2,504.16
Valves, 6"	1973	Ea.	2	346.56
Valves, 6"	1974	Ea.	2	381.22
Valves, 6"	1975	Ea.	1	253.00
Valves, 6"	1992	Ea.	2	1,077.84
Valves, 6"	1993	Ea.	2	1,112.48
Valves, 6"	1995	Ea.	2	1,150.62
Valves, 6"	2007	Ea.	2	1,836.82
Total Valves			56	\$13,838.66
Air Release/Blow Off Valves	1971	Ea.	21	\$2,655.93
Air Release/Blow Off Valves	1998	Ea.	1	661.42
Total Air Release/Blow Off Valves			22	\$3,317.35
3" Water Line Bored Crossing	1971	Ea.	1	\$3,035.34
6" Water Line Bored Crossing	1971	Ea.	1	3,414.75
Total Water Line Bored Crossings			2	\$6,450.09
Total Account 331				\$631,063.94 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 333 - Services

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
Services 3/4"	1971	Ea.	187	\$18,892.43
Services 3/4"	1973	Ea.	25	4,094.50
Services 3/4"	1974	Ea.	26	4,897.10
Services 3/4"	1975	Ea.	5	1,007.25
Services 3/4"	1985	Ea.	27	9,772.65
Services 3/4"	1990	Ea.	6	2,574.60
Services 3/4"	1992	Ea.	19	8,806.50
Services 3/4"	1993	Ea.	24	11,477.76
Services 3/4"	1994	Ea.	38	18,670.92
Services 3/4"	1995	Ea.	18	9,050.40
Services 3/4"	1998	Ea.	5	2,702.35
Services 3/4"	2000	Ea.	8	4,559.60
Services 3/4"	2001	Ea.	11	6,377.58
Services 3/4"	2002	Ea.	10	5,896.10
Services 3/4"	2004	Ea.	39	24,783.33
Services 3/4"	2005	Ea.	4	2,686.00
Services 3/4"	2006	Ea.	14	10,409.84
Services 3/4"	2007	Ea.	16	12,709.28
Services 1"	1971	Ea.	1	150.04
Services 1"	2007	Ea.	1	817.62
Services 1 1/2"	1971	Ea.	2	528.14
Services 2"	2005	Ea.	2	2,614.48
Total Account 333			----- 488	----- \$163,478.47 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012

Account 334 - Meters

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Meters, 5/8"x 3/4"	1971	Ea.	90	\$5,598.00
Meters, 5/8"x 3/4"	1973	Ea.	25	1,439.75
Meters, 5/8"x 3/4"	1974	Ea.	26	1,392.56
Meters, 5/8"x 3/4"	1975	Ea.	5	267.80
Meters, 5/8"x 3/4"	1985	Ea.	27	2,098.98
Meters, 5/8"x 3/4"	1990	Ea.	6	549.42
Meters, 5/8"x 3/4"	1992	Ea.	19	2,144.53
Meters, 5/8"x 3/4"	1993	Ea.	24	2,695.20
Meters, 5/8"x 3/4"	1994	Ea.	38	3,829.64
Meters, 5/8"x 3/4"	1995	Ea.	18	2,073.24
Meters, 5/8"x 3/4"	1998	Ea.	5	567.25
Meters, 5/8"x 3/4"	2000	Ea.	8	944.48
Meters, 5/8"x 3/4"	2001	Ea.	11	1,304.93
Meters, 5/8"x 3/4"	2002	Ea.	10	1,192.10
Meters, 5/8"x 3/4"	2004	Ea.	39	4,649.19
Meters, 5/8"x 3/4"	2005	Ea.	4	492.96
Meters, 5/8"x 3/4"	2006	Ea.	14	1,999.48
Meters, 5/8"x 3/4"	2007	Ea.	16	2,662.88
Meters, 5/8"x 3/4"	2008	Ea.	12	2,577.60
Meters, 5/8"x 3/4"	2009	Ea.	32	6,873.60
Meters, 5/8"x 3/4"	2010	Ea.	31	6,712.43
Meters, 5/8"x 3/4"	2011	Ea.	13	2,837.38
Meters, 5/8"x 3/4"	2012	Ea.	9	1,964.34
Meters, 1"	1971	Ea.	1	67.12
Meters, 1"	2007	Ea.	1	179.60
Meters, 1 1/2"	1971	Ea.	2	436.60
Meters, 2"	2005	Ea.	2	991.76
Total Account 334			488	\$58,542.82

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012

Account 335 - Hydrants

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Hydrants	1971	Ea.	15	\$6,076.03
Hydrants	1975	Ea.	1	437.07
Hydrants	1985	Ea.	1	871.08
Hydrants	1992	Ea.	3	3,465.96
Hydrants	1994	Ea.	1	1,195.05
Hydrants	1996	Ea.	1	1,277.58
Hydrants	1998	Ea.	1	1,506.80
Hydrants	2005	Ea.	1	1,836.90
Hydrants	2006	Ea.	1	1,965.27
Hydrants	2007	Ea.	1	2,060.01
Hydrants	2009	Ea.	1	2,243.39
Hydrants	2010	Ea.	2	4,450.12
Total Account 335				<u>\$27,385.26</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 343 - Tools, Shop & Garage Equipment

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
3" Underground Piercing Tool	2009	Ea.	1	\$7,156.86
Towable Air Compressor	2009	Ea.	1	1,834.89
Total Account 343				<u>-----</u> \$8,991.75 <u>=====</u>





**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

**Account 271 - Contributions in Aid of Construction**

Original Cost at March 30, 2012

<b>Acct. No.</b>	<b>Account Title</b>	<b>Original Cost</b>
304.5	General Structures	\$11,059.91
307	Wells & Springs	8,118.75
311	Pumping Equipment	2,719.75
330	Distribution Reservoirs & Standpipes	45,571.22
	<b>Total Original Cost</b>	<b>\$67,469.63</b>

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

**Account 271 - Contributions in Aid of Construction**

Original Cost at March 30, 2012

Account 304.5 - General Structures

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
<u>Storage Building:</u> Concrete block structure, concrete floor with pitched concrete roof. Size: 12' x 10'	1971	Ea.	1	\$11,059.91
Total Account 304.5				<u>\$11,059.91</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

**Account 271 - Contributions in Aid of Construction**

Original Cost at March 30, 2012

Account 307 - Wells & Springs

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
<u>Well No. 2:</u> Depth: 200 feet Casing: 80 feet Diameter: 8"	1971	Ea.	1	\$8,118.75
Total Account 307				<u>\$8,118.75</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

**Account 271 - Contributions in Aid of Construction**

Original Cost at March 30, 2012  
Account 311 - Pumping Equipment

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
<u>Well No. 2:</u>				
Submersible Well Pump, 15hp	1971	Ea.	1	\$2,719.75
				-----
Total Account 311				\$2,719.75
				=====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

**Account 271 - Contributions in Aid of Construction**

Original Cost at March 30, 2012

Account 330 - Distribution Reservoirs & Standpipes

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Storage Tank - 300,000 gallon	1971	Ea.	1	\$45,571.22
Total Account 331				----- \$45,571.22 =====



**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Original Cost at March 30, 2012  
Account 151 - Materials & Supplies

<u>Item</u>	<u>Year</u> <u>Purchased</u>	<u>----- Quantity -----</u> <u>Unit</u>	<u>No.</u>	<u>Original</u> <u>Cost</u>
<u>Pumps</u>				
50 HP Pump & Motor	2011	Ea.	1.0	\$11,012.30
LMI G Pump & Motor	2012	Ea.	1.0	1,850.00
Total Account 151				<u>-----</u> \$12,862.30 <u>=====</u>

# **Section 3**



**Aqua Pennsylvania, Inc.**

*Acquisition of the Mifflin Township Water Authority*

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of March 30, 2012  
Based Upon Whole Life Depreciation

Acct. No.	Description	Original Cost at 3/30/12	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 3/30/12
<b>Non-Depreciable Plant:</b>					
303.2	Source of Supply - Land & Land Rights	\$14,764.10		\$0.00	\$14,764.10
303.4	Transmission & Distribution - Land & Land Rights	7,207.16		0.00	7,207.16
	<b>Total Non-Depreciable Plant</b>	<b>\$21,971.26</b>		<b>\$0.00</b>	<b>\$21,971.26</b>
<b>Depreciable Plant:</b>					
304.3	Water Treatment Structures	\$120,057.09	50-R3	\$31,702.85	\$88,354.24
304.5	General Structures	11,059.91	50-R3	7,691.23	3,368.68
307	Wells & Springs	21,029.91	50-R2	8,160.49	12,869.42
311	Pumping Equipment	15,529.14	25-R3	3,541.17	11,987.97
320	Water Treatment Equipment	4,950.67	15-R3	2,365.34	2,585.33
330	Distribution Reservoirs & Standpipes	57,567.56	50-R3	40,033.38	17,534.18
331	Mains & Accessories:				
331.13	Ductile Iron Pipe, 10"	\$52,246.00	100-R3	\$7,005.99	\$45,240.01
331.31	Plastic Pipe, 4" & Under	429,824.40	50-R3	128,646.14	301,178.26
331.32	Plastic Pipe, 6" to 8"	125,387.44	80-R3	58,061.17	67,326.27
331.51	Valves, 4" & Under	5,175.96	50-R3	2,262.46	2,913.50
331.52	Valves, 6" to 8"	8,662.70	80-R3	2,455.97	6,206.73
331.70	Air Release/Blow Off Valves	3,317.35	50-R3	2,021.63	1,295.72
331.80	Line Bored Crossings	6,450.09	50-R3	4,485.49	1,964.60
	<b>Total Account 331</b>	<b>\$631,063.94</b>		<b>\$204,938.85</b>	<b>\$426,125.09</b>
333	Services	\$163,478.47	35-R2	\$65,062.31	\$98,416.16
334	Meters	58,542.82	30-R2	19,435.34	39,107.48
335	Hydrants	27,385.26	65-R2	5,978.69	21,406.57
343	Tools, Shop & Garage Equipment	8,991.75	15-R3	1,600.19	7,391.56
	<b>Total Depreciable Plant</b>	<b>\$1,119,656.52</b>		<b>\$390,509.84</b>	<b>\$729,146.68</b>
	<b>Total Plant in Service</b>	<b>\$1,141,627.78</b>		<b>\$390,509.84</b>	<b>\$751,117.94</b>
<b>Deduct: Contributions in Aid of Construction:</b>					
304.5	General Structures	\$11,059.92	50-R3	\$7,691.00	\$3,368.92
307	Wells & Springs	8,118.75	50-R2	5,075.70	3,043.05
311	Pumping Equipment	2,719.75	25-R3	2,661.86	57.89
330	Distribution Reservoirs & Standpipes	45,571.22	50-R3	31,690.94	13,880.28
	<b>Total Contributions in Aid of Construction</b>	<b>\$67,469.64</b>		<b>\$47,119.50</b>	<b>\$20,350.14</b>
	<b>Total Plant in Service (Net)</b>	<b>\$1,074,158.14</b>		<b>\$343,390.34</b>	<b>\$730,767.80</b>

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
 304.30 Water Treatment Structures

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	120,057.09	36.80	50.00	0.26406	31,703
<b>Total</b>	120,057.09				31,702.85

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**304.50 General Plant Structures**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	11,059.91	15.23	50.00	0.69542	7,691
<b>Total</b>	11,059.91				7,691.23

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
 307.00 Wells & Springs

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	8,118.75	18.74	50.00	0.62518	5,076
1998	12,911.16	38.05	50.00	0.23892	3,085
<b>Total</b>	21,029.91				8,160.49

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**311.00 Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	2,719.75	0.53	25.00	0.97871	2,662
2010	12,809.39	23.28	25.00	0.06865	879
<b>Total</b>	15,529.14				3,541.17

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**320.00 Water Treatment Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 15 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	3,005.74	3.67	15.00	0.75517	2,270
2011	1,944.93	14.26	15.00	0.04910	96
<b>Total</b>	4,950.67				2,365.34

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**330.00 Distribution Reservoirs & Standpipes**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	57,567.56	15.23	50.00	0.69542	40,033
<b>Total</b>	57,567.56				40,033.38

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**331.13 Ductile Iron Mains, 10" to 14"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	52,246.00	86.59	100.00	0.13410	7,006
<b>Total</b>	52,246.00				7,005.99



**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**331.31 Plastic Mains, 4" & Under**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	48,818.40	15.23	50.00	0.69542	33,949
1975	4,070.00	17.89	50.00	0.64210	2,613
1985	25,783.30	25.46	50.00	0.49080	12,654
1990	11,610.00	29.64	50.00	0.40711	4,727
1992	18,702.20	31.38	50.00	0.37233	6,963
1993	42,460.00	32.27	50.00	0.35468	15,060
1994	24,266.55	33.16	50.00	0.33686	8,174
1995	33,675.00	34.06	50.00	0.31888	10,738
1998	11,369.45	36.80	50.00	0.26406	3,002
2000	12,261.50	38.66	50.00	0.22680	2,781
2001	16,875.00	39.60	50.00	0.20799	3,510
2002	23,001.00	40.55	50.00	0.18906	4,349
2004	76,604.90	42.45	50.00	0.15090	11,560
2005	12,402.00	43.42	50.00	0.13168	1,633
2006	31,781.10	44.38	50.00	0.11237	3,571
2007	36,144.00	45.35	50.00	0.09298	3,361
<b>Total</b>	<b>429,824.40</b>				<b>128,646.14</b>

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
 331.32 Plastic Mains, 6" to 8"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	93,184.94	42.41	80.00	0.46984	43,782
1973	14,960.00	44.08	80.00	0.44904	6,718
1974	17,242.50	44.92	80.00	0.43854	7,562
<b>Total</b>	<b>125,387.44</b>				<b>58,061.17</b>

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**331.51 Valves, 4" & Under**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	2,276.51	15.23	50.00	0.69542	1,583
1985	395.73	25.46	50.00	0.49080	194
1992	484.54	31.38	50.00	0.37233	180
2004	2,019.18	42.45	50.00	0.15090	305
<b>Total</b>	5,175.96				2,262.46

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
 331.52 Valves, 6" to 8"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	2,504.16	42.41	80.00	0.46984	1,177
1973	346.56	44.08	80.00	0.44904	156
1974	381.22	44.92	80.00	0.43854	167
1975	253.00	45.76	80.00	0.42797	108
1992	1,077.84	60.97	80.00	0.23792	256
1993	1,112.48	61.90	80.00	0.22621	252
1995	1,150.62	63.79	80.00	0.20268	233
2007	1,836.82	75.34	80.00	0.05827	107
<b>Total</b>	8,662.70				2,455.97

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**331.70 Air Release/Blow Off Valves**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	2,655.93	15.23	50.00	0.69542	1,847
1998	661.42	36.80	50.00	0.26406	175
<b>Total</b>	<b>3,317.35</b>				<b>2,021.63</b>

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**331.80 Line Bored Crossings**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	6,450.09	15.23	50.00	0.69542	4,485
<b>Total</b>	6,450.09				4,485.49

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**333.00 Services**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 35 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	19,570.61	7.23	35.00	0.79350	15,529
1973	4,094.50	8.02	35.00	0.77080	3,156
1974	4,897.10	8.44	35.00	0.75878	3,716
1975	1,007.25	8.88	35.00	0.74628	752
1985	9,772.65	14.18	35.00	0.59483	5,813
1990	2,574.60	17.43	35.00	0.50205	1,293
1992	8,806.50	18.83	35.00	0.46213	4,070
1993	11,477.76	19.54	35.00	0.44164	5,069
1994	18,670.92	20.27	35.00	0.42075	7,856
1995	9,050.40	21.02	35.00	0.39951	3,616
1998	2,702.35	23.32	35.00	0.33380	902
2000	4,559.60	24.90	35.00	0.28844	1,315
2001	6,377.58	25.72	35.00	0.26529	1,692
2002	5,896.10	26.54	35.00	0.24185	1,426
2004	24,783.33	28.20	35.00	0.19416	4,812
2005	5,300.48	29.05	35.00	0.16991	901
2006	10,409.84	29.91	35.00	0.14541	1,514
2007	13,526.90	30.78	35.00	0.12068	1,632
<b>Total</b>	<b>163,478.47</b>				<b>65,062.31</b>

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**334.00 Meters & Meter Installations**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 30 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	6,101.72	4.22	30.00	0.85922	5,243
1973	1,439.75	4.85	30.00	0.83826	1,207
1974	1,392.56	5.18	30.00	0.82719	1,152
1975	267.80	5.53	30.00	0.81568	218
1985	2,098.98	9.95	30.00	0.66824	1,403
1990	549.42	12.89	30.00	0.57039	313
1992	2,144.53	14.19	30.00	0.52701	1,130
1993	2,695.20	14.86	30.00	0.50452	1,360
1994	3,829.64	15.56	30.00	0.48144	1,844
1995	2,073.24	16.26	30.00	0.45789	949
1998	567.25	18.47	30.00	0.38426	218
2000	944.48	20.01	30.00	0.33286	314
2001	1,304.93	20.80	30.00	0.30653	400
2002	1,192.10	21.61	30.00	0.27979	334
2004	4,649.19	23.25	30.00	0.22509	1,046
2005	1,484.72	24.08	30.00	0.19719	293
2006	1,999.48	24.93	30.00	0.16890	338
2007	2,842.48	25.79	30.00	0.14028	399
2008	2,577.60	26.66	30.00	0.11134	287
2009	6,873.60	27.54	30.00	0.08205	564
2010	6,712.43	28.43	30.00	0.05247	352
2011	2,837.38	29.32	30.00	0.02260	64
2012	1,964.34	29.89	30.00	0.00377	7
<b>Total</b>	<b>58,542.82</b>				<b>19,435.34</b>



**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**335.00 Hydrants**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R2**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	6,076.03	32.12	65.00	0.50586	3,074
1975	437.07	34.91	65.00	0.46296	202
1985	871.08	42.36	65.00	0.34838	303
1992	3,465.96	47.93	65.00	0.26259	910
1994	1,195.05	49.57	65.00	0.23732	284
1996	1,277.58	51.24	65.00	0.21171	270
1998	1,506.80	52.92	65.00	0.18580	280
2005	1,836.90	58.97	65.00	0.09278	170
2006	1,965.27	59.85	65.00	0.07922	156
2007	2,060.01	60.74	65.00	0.06559	135
2009	2,243.39	62.52	65.00	0.03814	86
2010	4,450.12	63.42	65.00	0.02433	108
<b>Total</b>	<b>27,385.26</b>				<b>5,978.69</b>

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority**  
**343.00 Tools, Shop & Garage Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 15 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2009	8,991.75	12.33	15.00	0.17796	1,600
<b>Total</b>	8,991.75				1,600.19



**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority - CIAC**  
**304.50 General Plant Structures**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	11,059.91	15.23	50.00	0.69542	7,691
<b>Total</b>	11,059.91				7,691.23

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority - CIAC**  
 307.00 Wells & Springs

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	8,118.75	18.74	50.00	0.62518	5,076
<b>Total</b>	8,118.75				5,075.70

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority - CIAC**  
**311.00 Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0% Average Service Life: 25 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	2,719.75	0.53	25.00	0.97871	2,662
<b>Total</b>	2,719.75				2,661.86

**Aqua Pennsylvania, Inc.**  
**Mifflin Township Water Authority - CIAC**  
**330.00 Distribution Reservoirs & Standpipes**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 30, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	45,571.22	15.23	50.00	0.69542	31,691
<b>Total</b>	45,571.22				31,690.94

**Aqua Pennsylvania, Inc.**  
**Total Environmental Solutions, Inc. (TESI) - Beech Mountain Lakes Resort Community Water System Costs**  
**M92413**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	104000	Utility Plant Purchased/Sold		1,142,282.97
9	108000	AD-General		813,853.23
9	114000	U Plant Acq Adj	157,298.61	
9	184070	RWIP-CASH SALVAGE		4,100.00
9	184070	RWIP-CASH SALVAGE		1,750.00
9	184070	RWIP-CASH SALVAGE		500.00
9	300000	PPE-Utility Plant in Service	1,805,187.59	
<b>Total</b>			<b>1,962,486.20</b>	<b>1,962,486.20</b>



**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Total Environmental Solutions, Inc. (TESI) - Beech Mountain Lakes Resort Community Water System**

Section 1327(a) Criteria	Satisfied (Y/N)	Explanation
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	<p>Yes</p>	<p>On May 4, 2012, Aqua Pennsylvania, Inc. (“Aqua”) acquired the Water System Assets (“Assets”) of the Total Environmental Solutions, Inc. (“Seller”). The Seller’s Assets were used and useful in providing water service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	<p>Yes</p>	<p>Prior to Aqua’s acquisition of Seller’s Assets, Total Environmental Solutions, Inc. was providing water service to 962 customers in the Beech Mountain Lakes Resort Community in portions of Butler and Dennison Township, Luzerne County, Pennsylvania.</p> <p>Reference: Commission Order Docket Nos. A-2011-2276845, A-2011-2276847, A-2011-2276856, and A-2011-2276857</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p>	<p>Yes</p>	

<p>(i) violation of statutory or regulatory requirements of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the</p>	<p>Yes</p>	

property will receive adequate, efficient, safe and reasonable service;		
(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;	Yes	Aqua and the Seller entered into an <i>Asset Purchase Agreement</i> , which was negotiated at arm's length. On December 1, 2011, the parties filed a <i>Joint Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered February 17, 2012, at Docket Nos. A-2011-2276845, A-2011-2276847, A-2011-2276856, and A-2011-2276857, the PUC granted the approvals requested in the <i>Joint Application</i> .
(6) the actual purchase price is reasonable;	Yes	The total purchase price for Seller's Assets was \$1,500,000 for the combined water and wastewater system and was negotiated at arm's length. The Commission approved the company's application to acquire Total Environmental Solutions, Inc. (TESI) - Beech Mountain Lakes Resort Community Water System and an original cost study was prepared to support the utility plant purchase.  Reference: Commission Order Docket Nos. A-2011-2276845, A-2011-2276847, A-2011-2276856, and A-2011-2276857
(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;	Yes	The Seller is not an affiliated interest of Aqua.
(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b>	Yes	The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.
(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense	Yes	The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base

over a reasonable period of time with corresponding reductions in the rate base.		rates become effective.
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# **AQUA PENNSYLVANIA INC.**

## ***Acquisition of the Water System Assets of Beech Mountain Lakes***

**Original Cost of Water Utility Plant and  
Depreciation Reserve Calculations**

**at  
May 4, 2012**

**Gary D. Shambaugh, Principal & Director  
David A. Sheffer, Senior Associate**

**AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011  
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**May 2013**





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Principal & Director

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May 13, 2013

Ms. Meghan Kreszwick  
Manager of Rates, PA & NJ  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010

RE: Acquisition of the Water System Assets of  
Beech Mountain Lakes

Dear Ms. Kreszwick:

In accordance with your request, we have prepared an inventory of the water utility plant of the Beech Mountain Lakes community ("Beech Mountain") as of May 4, 2012.

The inventory was prepared to conform with the Uniform System of Accounts for Water Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of Beech Mountain Lakes was determined from a detailed analysis of the books and records of the water system and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service (Net)	\$1,759,576	\$780,948

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2, and the depreciation calculations are contained in Section 3.

Respectfully submitted,

AUS Consultants

By: Gary D. Shambaugh

# AQUA PENNSYLVANIA INC.

## Acquisition of Beech Mountain Lakes Water System

### Table of Contents

	<u>Page</u> <u>No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Borough's Facilities	1-1
Overview of the Study Techniques	1-2
Explanation of the Study	1-2
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Contributions in Aid of Construction	1-5
Customer Advances for Construction	1-5
Depreciation Reserve	1-6
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at May 4, 2012	2-1
<b><u>Non-Depreciable Plant:</u></b>	
303.20 Other Source of Land Supply	2-2
303.40 Reservoir Land	2-3
303.50 General Office Land	2-4
<b><u>Depreciable Plant</u></b>	
304.30 Purification Buildings	2-5
304.40 Distribution Buildings	2-9
304.50 General Building	2-10
307.20 Wells & Springs	2-11
311.20 Electric Pumping Equipment	2-12
320.30 Water Treatment	2-13



**AQUA PENNSYLVANIA INC.**

**Acquisition of Beech Mountain Lakes Water System**

**Table of Contents**

	<b>Page <u>No.</u></b>
<b><u>SECTION 2 (continued)</u></b>	
331.00 Total Mains & Accessories	2-14
333.00 Services	2-15
334.00 Meters	2-16
334.01 Meters-Remotes	2-17
335.00 Hydrants	2-18
336.00 Backflow Prevention	2-19
340.00 Office Furniture & Equipment	2-20
341.00 Transportation Equipment	2-21
343.00 Tools, Shop & Work Equipment	2-22
345.00 Power Operated Equipment	2-23
347.00 Miscellaneous Equipment	2-24
 <b><u>SECTION 3</u></b>	
<b><u>Depreciated Original Cost</u></b>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of May 4, 2012	3-1

# **SECTION 1**

## **AQUA PENNSYLVANIA, INC.**

### **Acquisition of the Water Assets of Beech Mountain Lakes**

#### **Executive Summary**

#### **BACKGROUND**

The Beech Mountain Lakes (the "Beech Mountain") provides water service available to the Beech Mountain Lakes community serving approximately 961 customers located in portions of Butler, Foster and Dennison Townships, Luzerne County, Pennsylvania. Total Environmental Solutions, Inc. of Baton Rouge, Louisiana was the latest entity to own the water facilities prior to the acquisition by Aqua Pennsylvania Inc. (the "Aqua").

Aqua Pennsylvania and Beech Mountain filed an application requesting the Commission to approve the sale of the water system, granting Aqua the right to furnish service in the Beech Mountain community and authorize Beech Mountain to abandon service.

Aqua has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of May 4, 2012. The results of this study are set forth herein.

#### **OVERVIEW OF BEECH MOUNTAIN'S FACILITIES**

Beech Mountain's assets to be acquired consist of facilities for the production, distribution & storage of water to its customers. The water production facilities are comprised of 2 wells. The distribution system consists of approximately 65,209 linear feet of pipe, plus the associated valves, air release valves, hydrants, valve boxes and

services. Distribution storage is provided by a 150,000 gallon underground storage tank. All customers are metered and the water system provides fire protection service.

### **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of Beech Mountain's assets was conducted in two (2) phases. First, thoroughly researching the prior owners' files to obtain all necessary purchase orders and invoices available as related to the a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by Beech Mountain.

Second, the original cost of the inventoried property was determined based on a review of Beech Mountain's books of account, construction records, "as-built" maps and other Company provided data. Beech Mountain's records provided reasonable data as to the original cost of its plant in service. AUS Consultants calculated the theoretical accrued depreciation calculations based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at May 4, 2012.

A complete discussion of the methodologies employed in the original cost study is set forth in the sections of this report that follows.

### **EXPLANATION OF THE STUDY**

#### **Utility Plant Inventory**

A comprehensive inventory of Beech Mountain's plant in service as of May 4, 2012 was performed. One of the principal source documents for the inventory was the "as built" maps of Beech Mountain's water system, which were used in completing the current study. The maps were particularly helpful in locating and documenting the sizes, types, and lengths of the pipelines and the sizes, types, and locations of accessories, valves, air

release valves, valve boxes, and hydrants. Significant components of the inventory are discussed below. A few discrepancies were found in some accounts and were adjusted when the inventory was completed and cost records were obtained from Beech Mountain files.

### **Mass Property**

For purposes of this study, "mass" property consists of utility plant recorded in Account 331 (Mains & Accessories), Account 333 (Services), Account 334 (Meters) and Account 335 (Fire Hydrants).

For Account 331, footages of pipe, by size and type, were determined by reviewing the "as-built" maps and were verified by a physical check of the collection system in place. This same procedure was utilized for valve, valve boxes, and air release valves. For Account 334 (Meters) company invoices for meter purchased were reviewed. The inventory for Account 335 (Fire Hydrants) was determined by reviewing the "as-built" maps and verified by a physical check.

### **Non-Mass Property**

A physical inventory of the Purification Building, Distribution Building, General Building, Wells & Springs, Office Equipment, and Transportation equipment was completed.

### **Utility Plant In Service**

Detailed results of the plant inventory are set forth in Section 2 of this report by the following fixed capital accounts:

<u>Acct.</u> <u>No.</u>	<u>Account Title</u>
<u>Non-Depreciable Plant:</u>	
303.20	Other Source of Land Supply

303.40 Reservoir Land  
303.50 General Office Land

Depreciable Plant

304.30 Purification Buildings  
304.40 Distribution Buildings  
304.50 General Building  
307.20 Wells & Springs  
311.20 Electric Pumping Equipment  
320.30 Water Treatment  
331.00 Total Mains & Accessories  
333.00 Services  
334.00 Meters  
334.01 Meters-Remotes  
335.00 Hydrants  
336.00 Backflow Prevention  
340.00 Office Furniture & Equipment  
341.00 Transportation Equipment  
343.00 Tools, Shop & Work Equipment  
345.00 Power Operated Equipment  
347.00 Miscellaneous Equipment

**ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the value of Beech Mountain's surviving water plant in service by fixed capital account and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of Beech Mountain's property by account. The available data consists of records and information compiled by Beech Mountain as to the construction cost and approximate dates of installation. These records were augmented by information obtained from the field inventory and interviews with system operators.

The original cost determination for Account 331 (Mains & Accessories) was determinable from available records for Beech Mountain's collection system and other

source documents. Beech Mountain has had limited additions to the water system since 1993, under previous owners.

As previously explained, the prior physical inventory established the total footage of pipe by size and type and the total number of units of accessories. Summaries of construction projects maintained by Beech Mountain contained detail as to the footage of pipe and numbers of accessories. The information contained in the construction summaries was used to develop the footage of pipe, units of accessories, and the resultant unit price for the respective fixed capital asset.

The original cost values at May 4, 2012 for Beech Mountain's water mains & accessories were established by the original cost study, total \$872,841.

#### **SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of Beech Mountain's utility plant in service is not less than \$1,759,576, as summarized by plant account in Section 2 (p. 2-1).

#### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all documents that were available. Based on this record research, the water system never received or collected any CIAC.

#### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants also completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included

documents that were available. Based on this record research, the water system was not funded by CAC.

### **DEPRECIATION RESERVE**

AUS Consultants prepared a theoretical calculated depreciation reserve of the utility plant in service at May 4, 2012. The calculated accrued depreciation reserve amounts to \$780,948 at May 4, 2012.

The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and detailed supporting documentation are included in Section 3 of this report.



# **SECTION 2**

**Aqua - Beech Mountain Water Company**  
**Valuation of the Beech Mountain Water System**  
**Summary of Original Cost at May 4, 2012**

<u>Acct. No.</u>	<u>Account Title</u>	<u>Original Cost</u>
<u>Depreciable Plant</u>		
304.30	Purification Buildings	\$ 136,747.00
304.40	Distribution Buildings	\$ 153,957.00
304.50	General Building	\$ 78,239.00
307.20	Wells & Springs	\$ 12,196.55
311.20	Electric Pumping Equipment	\$ 104,860.99
320.30	Water Treatment	\$ 1,415.00
<u>Mains &amp; Accessories</u>		
331.01	Mains - C.I. & D.I, 6" Pipe	\$ 98,616.35
331.02	Mains - Asbestos Cement, 6" Pipe	\$ 234,066.00
331.03	Mains - Asbestos Cement, 8" Pipe	\$ 70,268.40
331.04	Mains - Plastic, 4" Pipe	\$ 61,902.88
331.05	Mains - Plastic, 6" Pipe	\$ 230,182.33
331.06	Mains - Plastic, 8" Pipe	\$ 52,225.80
331.07	Mains - 4" Valves	\$ 4,584.80
331.08	Mains - 6" Valves	\$ 22,404.92
331.09	Mains - 8" Valves	\$ 4,635.24
331.10	Air Release Valves	\$ 87,354.29
331.11	Valves Boxes	\$ 6,599.84
	Total Pipe & Accessories	\$ 872,840.85
333.00.	Services	\$ 56,556.34
<u>Meters</u>		
334.00	Meters	\$ 67,288.94
334.01	Meters-Remotes	\$ 936.70
	Total Meters	\$ 68,225.64
335.00	Hydrants	\$ 150,469.89
336.00	Backflow Prevention	\$ 829.87
340.00	Office Furniture & Equipment	\$ 1,183.52
341.00	Transportation Equipment	\$ 31,091.00
343.00	Tools, Shop & Work Equipment	\$ 22,517.00
345.00	Power Operated Equipment	\$ 61,368.70
347.00	Miscellaneous Equipment	\$ 2,577.00
	Total Depreciable Plant	\$ 1,755,075.35
<u>Non-Depreciable Plant</u>		
303.20	Other Source of Land Supply	\$ 2,000.00
303.40	Reservoir Land	\$ 2,500.00
303.50	General Office Land	\$ 1.00
	Total Depreciable Plant	\$ 4,501.00
	Total Plant in Service	\$ 1,759,576.35

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012**

**Account 303.20 - Other Source of Land Supply**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Well #1: Four Seasons Lane Land (37' x 130.5' x 45.5' x 100')	1971			\$1,000.00
Well #2: White Cap Lane Land (34' x 180' x 34' x 180')	1971			<u>\$1,000.00</u>
<b>Total Account 303.20</b>				<u><u>\$2,000.00</u></u>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012  
Account 303.40 - Reservoir Land**

<b>Item</b>	<b>Year Installed</b>	<b>Quantity Unit</b>	<b>No.</b>	<b>Original Cost</b>
<b>Land (1/4 Acre)</b>	<b>1971</b>	<b>1</b>	<b>1</b>	<b>\$ 2,500.00</b>
<b>Total Account 303.40</b>				<b>\$ <u>2,500.00</u></b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012  
Account 303.50 - General Office Land**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Land	1993	\$ 1.00
<b>Total Account 303.50</b>		<u><u>\$ 1.00</u></u>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

Original Cost at May 4, 2012  
Account 304.30 - Purification Buildings

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Chlorination Building #1</u></b>				
Concrete Block Structure - 13' 8" X 11' 8" X 9' 6"	1982			
Flourescent Lights	1982	Each	4	
Electric Box Service Sq. D 200 Amp	1982	Each	1	
Breaker Box Sq. D	1982	Each	1	
Electrical Outlets	1982	Each	3	
Electrical Switch	1982	Each	1	
Stainless Steel Sink 1' 10" X 2'	1982	Each	1	
Chromalox - Electric Space Heater - Ser.# S-77433	1982	Each	1	
LMI - Chemical Feeders 120V - Model A771-450BI Ser.# 0309792540-1	2006	Each	1	
Petrometer Model 1329 Type 227	1982	Each	1	
3" Rockwell Meter Ser.# 1117037	1982	Each	1	
Check Valve 3"	1982	Each	1	
3" Gate Valve - Clow Corporation	1982	Each	1	
3" D.I.C.I. Pipe	1982	Fott	6	
3" 90o Elbow D.I.C.I. Pipe	1982	Each	2	
1/2" Copper Corporations	1982	Each	2	
1/2" Copper Tubing Type "L"	1982	Foot	14	
1" Copper Tubing Type "L"	1982	Foot	20	
Brass Faucet	1982	Each	2	
1 1/2" PVC Pipe (Sewer Pipe)	1982	Foot	2.5	
Fuses	2002			\$ 750.00
<b>Total Cost - Well House Structure</b>				<b>\$ 27,636.00</b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

Original Cost at May 4, 2012  
Account 304.30 - Purification Buildings

Enclosure, NFMA 17	1982	Each	1
Circuit Breaker, GE THQC32090WL	1982	Each	1
Circuit Breaker, GE THQC32060WL	1982	Each	1
Circuit Breaker, GE TQC1110WL	1982	Each	1
Starter, Furnas 14EF32AA81	1982	Each	1
Starter, Furnas 14GF32AA81	1982	Each	1
O.L. Heaters, Furnas K77	1982	Each	3
O.L. Heaters, Furnas K68	1982	Each	3
Alternator, Water Guard, Duplex	1982	Each	1
Switch, Furnas, 52SZABAB 52BAK 52BAK	1982	Each	2
Switch, Furnas, 52SZABA8 52BAJ 52BAK	1982	Each	5
Pilot Light, Diallight, 123-9363-1233-463	1982	Each	2
pilot Light, Diallight, 123-9363-1231-463	1982	Each	5
Run Time Meters, EMN 4160-115V	1982	Each	2
Time Delay, Agastat, SCARX011XXAPXA	1982	Each	2
Relay, Guardian, 1210-3C-120A	1982	Each	2
Relay, Guardian, 1210-2C-120A	1982	Each	7
Relay, Automatic Electric, 1-PP3031-992	1982	Each	1
Power Pack Water Guard	1982	Each	1
Socket, Customer Connector, RB-11	1982	Each	2
socket, Customer Connector, RB-8	1982	Each	11
Relay Warrick, 1G1DO	1982	Each	3
Terminal, Buchanan, 430	1982	Each	4
End Section, Buchanan 430	1982	Each	1
Terminal, Buchanan, 824	1982	Each	6
End Section, Buchanan 830	1982	Each	1
Terminal Buchanan, P724	1982	Each	22
End Section, Buchanan P730	1982	Each	2
Flow Switch, McDonnel Miller, FS8V	1982	Each	2
Alarm Light, RAB, VBR-1	1982	Each	1
Alarm Bell, Faraday, 3430-100V-3004 W/3014WB	1982	Each	1
Holder, Warrick, E-5	1982	Each	1
Suspended Electrodes, 3W2	1982	Each	5
Electrode Rod, 5' Threaded Both Ends	1982	Each	1
Adapters, Warrick, 321B	1982	Each	3
 Total Cost - Control Panel			\$ 38,337.50
 Total Chlorination Building #1			\$ 65,973.50

Aqua Pennsylvania, Inc. - Beech Mountain Water Company

Valuation of the Beech Mountain Water System

Original Cost at May 4, 2012  
Account 304.30 - Purification Buildings

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<u>Chlorination Building #2</u>				
Concrete Block Structure - 13' 8" X 11' 8" X 9' 6"	1982			
Flourescent Lights	1982	Each	4	
Electric Box Service Sq. D 200 Amp	1982	Each	1	
Breaker Box Sq. D	1982	Each	1	
Electrical Outlets	1982	Each	3	
Electrical Switch	1982	Each	1	
Stainless Steel Sink 1' 10" X 2'	1982	Each	1	
Chromalox - Electric Space Heater - Ser.# S-77442	1982	Each	1	
LMI - Chemical Feeders 120V - Model A771-450BI Ser.# 0309792540-1	2009	Each	1	
Petrometer Model 1329 Type 227	1982	Each	1	
3" Rockwell Meter Ser.# 1117037	1982	Each	1	
Check Valve 3"	1982	Each	1	
3" Gate Valve - Clow Corporation	1982	Each	1	
3" D.I.C.I. Pipe	1982	Foot	6	
3" 90o Elbow D.I.C.I. Pipe	1982	Each	2	
1/2" Copper Corporations	1982	Each	2	
1/2" Copper Tubing Type "L"	1982	Foot	21	
1" Copper Tubing Type "L"	1982	Foot	24	
Brass Faucet	1982	Each	2	
1 1/2" PVC Pipe (Sewer Pipe)	1982	Foot	2.5	
Fuses	2002			\$ 750.00
Power Construction	2011			\$ 4,800.00
<b>Total Cost - Well House Structure</b>				<b>\$ 32,436.00</b>
Enclosure, NEMA 12	1982	Each	1	
Circuit Breaker, GE THQC32090WL	1982	Each	1	
Circuit Breaker, GE THQC32060WL	1982	Each	1	
Circuit Breaker, GE TQC1110WL	1982	Each	1	
Starter, Furnas 14EF32AA81	1982	Each	1	
Starter, Furnas 14GF32AA81	1982	Each	1	
O.L. Heaters, Furnas K77	1982	Each	3	
O.L. Heaters, Furnas K74	1982	Each	3	
Switch, Furnas, 52SZABA8 52BAK 52BAK	1982	Each	2	



Aqua Pennsylvania, Inc. - Beech Mountain Water Company

Valuation of the Beech Mountain Water System

Original Cost at May 4, 2012  
Account 304.30 - Purification Buildings

Switch, Furnas, 52SZABAB 52BAK 52BAK	1982	Each	4
Pilot Light, Dialight, 123-9363-1233-463	1982	Each	2
pilot Light, Dialight, 123-9363-1231-463	1982	Each	4
Run Time Meters, EMN 4160-115V	1982	Each	2
Time Delay, Agastat, SCARX011XXAPXA	1982	Each	2
Relay, Guardian, 1210-3C-120A	1982	Each	1
Relay, Guardian, 1210-2C-120A	1982	Each	4
Relay, Automatic Electric, 1-PP3031-992	1982	Each	1
Relay, Guardian 1380-3C-120V	1982	Each	1
Socket, Struthers Dinn, PTF14	1982	Each	1
socket, Customer Connector, RB-8	1982	Each	7
Relay Warrick, 1G1D0	1982	Each	3
Terminal, Buchanan, 426	1982	Each	4
End Section, Buchanan 430	1982	Each	1
Terminal, Buchanan, 824	1982	Each	6
End Section, Buchanan 830	1982	Each	1
Terminal Buchanan, P724	1982	Each	15
End Section, Buchanan P730	1982	Each	1
Flow Switch, McDonnel Miller, FSBV	1982	Each	2
Alarm Light, RAB, VBR-1	1982	Each	1
Alarm Bell, Faraday, 3430-100V-3004 W/3014WB	1982	Each	1
Holder, Warrick, E-5	1982	Each	1
Suspended Electrodes, 3WZ	1982	Each	5
Electrode Rod, 5' Threaded Both Ends	1982	Each	1
Adapters, Warrick, 321B	1982	Each	3
<b>Total Cost - Control Panel</b>			<b>\$ 38,337.50</b>
<b>Total Chlorination Building #2</b>			<b>\$ 70,773.50</b>
<b>Total Cost - Account 304.30</b>			<b>\$ 136,747.00</b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012  
Account 304.40 - Distribution Buildings**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Reinforce Concrete Below Ground Structure 44' 6" X 44' 6" X 15'. 150,000 Gal. Capacity Access Building, 7' 4" X 7' 4" X 8' with Built-Up Composite Roof. One Metal Entrance Door	1982			
Electric Service	1982	Each	1	
Flow Gauge	1982	Each	1	
<b>Total</b>				<b>\$ 144,000.00</b>
Various	2005			\$ 5,445.00
Various	2006			\$ 2,288.00
Various	2008			\$ 2,224.00
<b>Total Account 304.40</b>				<b><u>\$ 153,957.00</u></b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012  
Account 304.50 - General Building**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Wiring for Building	2001	\$ 8,779.00
30' x 60' Pole Barn	2001	\$ 60,000.00
Construction and Security Installation	2002	\$ 8,860.00
Materials for Window Addition	2007	\$ 600.00
<b>Total Account 304.50</b>		<b><u><u>\$ 78,239.00</u></u></b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012  
Account 307.20 - Wells & Springs**

<u>Item</u>	<u>Year</u> <u>Installed</u>	<u>Quantity</u> <u>Unit</u> <u>No.</u>	<u>Original</u> <u>Cost</u>
<b>Well #1</b>			
8" Well Approximately 400' Deep Including Submerible Pump	1971		\$6,000.00
Well Casing Extended to 500' Deep	2010		
<b>Well #2</b>			
White Cap Lane - 8" Well Approximately 480' Deep Including Submersible Pump	1971		\$6,000.00
Well Casing Extended to 480' Deep	2008		
Miscellaneous	2007		\$196.55
<b>Total Account 307.20</b>			<u><u>\$12,196.55</u></u>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

Original Cost at May 4, 2012

Account 311.20 - Electric Pumping Equipment

<u>Item</u>	<u>Year Installed</u>	<u>Quantity Unit</u>	<u>No.</u>	<u>Original Cost</u>
 <b><u>Booster Pumping Station #1</u></b>				
Water System Pump Station Complete in Place with 5,000 Gallon Retention Tank	1982	Each	1	\$ 26,886.00
Telemetry Control System	2003	Each	1	\$ 1,500.00
Labor & Materials for Circuit Breakers	2003	Each	1	\$ 1,500.00
Telemetry System	2005	Each	1	\$ 2,722.50
20 HP pump and Motor	2008	Each	1	\$ 8,508.00
20 HP Goulds Pump	2009	Each	1	\$ 7,816.00
AMCO T-4000 Turbine Meter and Flange	2010	Each	1	\$ 977.27
Labor and Reinstall of 20 HP Pump	2011	Each	1	\$ <u>3,245.00</u>
Total				\$ 53,154.77
 <b><u>Booster Pumping Station #2</u></b>				
Water System Pump Station Complete in Place with 5,000 Gallon Retention Tank	1982	Each	1	\$ 26,886.00
Telemetry Control System	2003	Each	1	\$ 1,500.00
Labor & Materials for Circuit Breakers	2003	Each	1	\$ 1,500.00
2-20 HP 3 Phase Pumps, 24 VDC Power Supply, Hoffman Box, Power Cord, Control Relays and Switch, Controller and Labor	2004			\$ 7,277.67
Telemetry System	2005	Each	1	\$ 2,722.50
20 HP Pump and Motor	2007	Each	1	\$ 5,109.55
Labor and Intall of 15 HP Pump	2007	Each	1	\$ 2,857.00
Labor to Pull and Replace Pump	2009			\$ <u>3,853.50</u>
Total				\$ 51,706.22
<b>Total Account 311.20</b>				\$ <u><u>104,860.99</u></u>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012  
Account 320.30 - Water Treatment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Miscellaneous Treatment Equipment	2009	\$ 1,215.00
Miscellaneous Treatment Equipment	2010	\$ 200.00
<b>Total Account 320.30</b>		<b><u><u>\$ 1,415.00</u></u></b>

Aqua Pennsylvania, Inc. - Beech Mountain Water Company

Valuation of the Beech Mountain Water System

Original Cost at May 4, 2012

Summary of Account 331 - Mains & Accessories

Item	Year Installed	Size	Quantity		Original Cost
			Unit	No.	
Mains - Ductile Iron	1971	6"	Feet	175	\$ 1,100.75
Mains - Ductile Iron	1982	6"	Feet	5187	\$ 97,515.60
					\$ 98,616.35
Mains - Asbestos Cement	1971	6"	Feet	31068	\$ 190,135.76
Mains - Asbestos Cement	1982	6"	Feet	1350	\$ 5,330.00
Mains - Asbestos Cement	1993	6"	Feet	1832	\$ 38,600.24
					\$ 234,066.00
Mains - Asbestos Cement	1971	8"	Feet	8940	\$ 70,268.40
Mains - Plastic	1982	4"	Feet	738	\$ 9,815.40
Mains - Plastic	1991	4"	Feet	746	\$ 14,920.00
Mains - Plastic	1993	4"	Feet	2058	\$ 37,167.48
					\$ 61,902.88
Mains - Plastic	1982	6"	Feet	5314	\$ 102,184.68
Mains - Plastic	1989	6"	Feet	4615	\$ 120,497.65
Mains - Plastic	2009	6"	Feet	230	\$ 7,500.00
					\$ 230,182.33
Mains - Plastic	1982	8"	Feet	2706	\$ 52,225.80
					\$ 52,225.80
Valves	1982	4"	Each	1	\$ 440.00
Valves	1991	4"	Each	5	\$ 1,737.12
Valves	1993	4"	Each	4	\$ 2,407.68
					\$ 4,584.80
Valves	1971	6"	Each	74	\$ 3,281.76
Valves	1982	6"	Each	42	\$ 13,741.00
Valves	1989	6"	Each	4	\$ 2,580.48
Valves	1993	6"	Each	9	\$ 2,801.68
					\$ 22,404.92
Valves	1971	8"	Each	14	\$ 1,425.24
Valves	1982	8"	Each	13	\$ 3,210.00
					\$ 4,635.24
Air Release Valves	1982		Each	73	\$ 77,198.40
Air Release Valves	1991		Each	2	\$ 2,822.04
Air Release Valves	1993		Each	5	\$ 7,333.85
					\$ 87,354.29
Valve Boxes	1971		Each	60	\$ 1,438.24
Valve Boxes	1982		Each	35	\$ 3,300.00
Valve Boxes	1989		Each	4	\$ 504.00
Valve Boxes	1991		Each	2	\$ 263.20
Valve Boxes	1993		Each	8	\$ 1,094.40
					\$ 6,599.84
<b>Total Account 331</b>					<b>\$872,840.85</b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012**

**Account 333 - Services**

Item	Year Installed	Quantity		Unit Cost	Original Cost
		Unit	No.		
Plastic - Service	1971	Each	986	\$ 18.03	\$17,777.58
Plastic - Service	1982	Each	277	\$ 42.16	\$11,678.32
Plastic - Service	1989	Each	140	\$ 54.09	\$7,572.60
Plastic - Service	1991	Each	23	\$ 56.62	\$1,302.26
Plastic - Service	1993	Each	117	\$ 61.34	\$7,176.78
Plastic - Service	2002	Each	43	\$ 75.95	\$3,265.80
Plastic - Service	2004	Each	6	\$ 79.33	\$476.00
Plastic - Service	2005	Each	72	\$ 85.90	\$6,185.00
Plastic - Service	2006	Each	12	\$ 93.50	\$1,122.00
<b>Total Account 333</b>					<u><u>\$56,556.34</u></u>



**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

Original Cost at May 4, 2013  
Account 334 - Meters

Item	Year Installed	Quantity		Unit Cost	Original Cost
		Unit	No.		
Meters 5/8" x 3/4"	2001	Each	580	\$ 61.43	\$ 35,628.57
Meters 6"	2001	Each	1	\$ 1,915.43	\$ 1,915.43
Meters 5/8" x 3/4"	2003	Each	18	\$ 61.49	\$ 1,106.82
Meters 5/8" x 3/4"	2004	Each	72	\$ 61.39	\$ 4,420.08
Meters 5/8" x 3/4"	2005	Each	60	\$ 63.06	\$ 3,783.41
Meters 3"	2006	Each	1	\$ 543.98	\$ 543.98
Meters 5/8" x 3/4"	2006	Each	60	\$ 65.48	\$ 3,928.96
Meters 3"	2006	Each	1	\$ 765.95	\$ 765.95
Meters 5/8" x 3/4"	2007	Each	42	\$ 84.14	\$ 3,533.78
Meters 5/8" x 3/4"	2008	Each	30	\$ 83.15	\$ 2,494.50
Meters 5/8" x 3/4"	2009	Each	24	\$ 90.95	\$ 2,182.80
Meters 5/8" x 3/4"	2010	Each	42	\$ 99.45	\$ 4,176.96
Meters 5/8" x 3/4"	2011	Each	24	\$ 85.75	\$ 2,058.00
Meters 5/8" x 3/4"	2012	Each	6	\$ 124.95	\$ 749.70
<b>Total Account 334</b>					<u><u>\$ 67,288.94</u></u>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2013  
Account 334.01 - Meters-Remotes**

Item	Year Installed	Quantity		Unit Cost	Original Cost
		Unit	No.		
Remote Readers	2004	Each	10	\$23.95	\$239.50
Remote Readers	2010	Each	30	\$23.24	\$697.20
<b>Total Account 334.01</b>					<b><u>\$936.70</u></b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012**

**Account 335 - Fire Hydrants**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Hydrants	1971	Each	25	\$67,765.25
Hydrants	1982	Each	19	\$67,735.43
Hydrants	1989	Each	1	\$4,694.31
Hydrants	1991	Each	2	\$10,274.90
<b>Total Account 335</b>				<b><u><u>\$150,469.89</u></u></b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2013  
Account 336 - Backflow Prevention**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Backflow Preventor	2007	\$ 829.87
<b>Total Account 336</b>		<u><u>\$ 829.87</u></u>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012**

**Account 340 - Office Furniture and Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
50% Allocation of Dell Desktop Computer	2008	\$ 691.65
50% Allocation of Kyocera Printer/Fax Machine	2009	\$ 491.87
<b>Total Account 340</b>		<b><u><u>\$ 1,183.52</u></u></b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012  
Account 341 - Transportation Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
1988 Ford Diesel	2003	\$ 1,765.00
Dump Truck	2004	\$ 3,000.00
1996 Ford F-150	2004	\$ 7,557.00
2006 Dodge Ram 1500	2007	\$ 18,769.00
<b>Total Account 341</b>		<b><u><u>\$ 31,091.00</u></u></b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012**

**Account 343 - Tools, Shop & Work Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Various Tools	1999	\$ 307.86
Various Tools	2002	\$ 2,546.32
Various Tools	2003	\$ 2,473.01
Various Tools	2004	\$ 4,129.00
Various Tools	2005	\$ 1,744.00
Various Tools	2006	\$ 586.00
Various Tools	2007	\$ 1,502.23
Various Tools	2008	\$ 2,069.46
Various Tools	2009	\$ 3,476.12
Various Tools	2010	\$ 3,683.00
<b>Total Account 343</b>		<b><u><u>\$ 22,517.00</u></u></b>

**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012  
Account 345 - Power Operating Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
John Deere Backhoe	2005	\$ 61,368.70
<b>Total Account 345</b>		<b><u><u>\$ 61,368.70</u></u></b>



**Aqua Pennsylvania, Inc. - Beech Mountain Water Company**

**Valuation of the Beech Mountain Water System**

**Original Cost at May 4, 2012  
Account 347 - Miscellaneous Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Miscellaneous Equipment	2007	\$ 874.21
Miscellaneous Equipment	2008	\$ 378.74
Miscellaneous Equipment	2009	\$ 1,324.05
<b>Total Account 347</b>		<b><u><u>\$ 2,577.00</u></u></b>

# **SECTION 3**

**AQUA PENNSYLVANIA, INC.**  
**Beech Mountain Water Company**

Valuation of the Beech Mountain Lakes Water System

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of May 4, 2012  
Based Upon Whole Life Depreciation

<u>Acct. No.</u>	<u>Account Title</u>	<u>Original Cost</u>	<u>ASL/Iowa Curve</u>	<u>Depreciation Reserve</u>	<u>Depreciated Original Cost</u>
<b><u>Depreciable Plant</u></b>					
304.30	Purification Buildings	\$ 136,747.00	70-R1.5	\$ 77,074.61	\$ 59,672.39
304.40	Distribution Buildings	\$ 153,957.00	50-R3	\$ 91,704.83	\$ 62,252.17
304.50	General Building	\$ 78,239.00	50-R3	\$ 21,840.64	\$ 56,398.36
307.20	Wells & Springs	\$ 12,196.55	60-R3	\$ 9,886.14	\$ 2,310.41
311.20	Electric Pumping Equipment	\$ 104,860.99	30-R1.5	\$ 43,357.09	\$ 61,503.90
320.30	Water Treatment	\$ 1,415.00	20-R3	\$ 191.42	\$ 1,223.58
<b><u>Mains &amp; Accessories</u></b>					
331.01	Mains - C.I. & D.I, 6" Pipe	\$ 98,616.35	85-R3	\$ 33,075.97	\$ 65,540.38
331.02	Mains - Asbestos Cement, 6" Pipe	\$ 234,066.00	70-R3	\$ 113,003.64	\$ 121,062.36
331.03	Mains - Asbestos Cement, 8" Pipe	\$ 70,268.40	70-R3	\$ 37,269.76	\$ 32,998.64
331.04	Mains - Plastic, 4" Pipe	\$ 61,902.88	60-R3	\$ 20,653.51	\$ 41,249.37
331.05	Mains - Plastic, 6" Pipe	\$ 230,182.33	65-R3	\$ 84,467.00	\$ 145,715.33
331.06	Mains - Plastic, 8" Pipe	\$ 52,225.80	65-R3	\$ 21,704.55	\$ 30,521.25
331.07	Mains - 4" Valves	\$ 4,584.80	50-R3	\$ 1,781.44	\$ 2,803.36
331.08	Mains - 6" Valves	\$ 22,404.92	65-R3	\$ 9,390.60	\$ 13,014.32
331.09	Mains - 8" Valves	\$ 4,635.24	65-R3	\$ 2,181.71	\$ 2,453.53
331.10	Air Release Valves	\$ 87,354.29	65-R3	\$ 36,007.00	\$ 51,347.29
331.11	Valves Boxes	\$ 6,599.84	65-R3	\$ 2,782.25	\$ 3,817.59
	Total Pipe & Accessories	\$ 872,840.85		\$ 362,317.43	\$ 510,523.42
333.00	Services	\$ 56,556.34	40-L1.5	\$ 24,494.69	\$ 32,061.65
<b><u>Meters</u></b>					
334.00	Meters	\$ 67,288.94	30-R3	\$ 17,659.91	\$ 49,629.03
334.01	Meters-Remotes	\$ 936.70	30-R3	\$ 104.47	\$ 832.23
	Total Meters	\$ 68,225.64		\$ 17,764.38	\$ 50,461.26
335.00	Hydrants	\$ 150,469.89	70-R1.5	\$ 55,910.83	\$ 94,559.06
336.00	Backflow Prevention	\$ 829.87	50-R3	\$ 79.85	\$ 750.02
340.00	Office Furniture & Equipment	\$ 1,183.52	5-R3	\$ 724.18	\$ 459.34
341.00	Transportation Equipment	\$ 31,091.00	7-R3	\$ 22,070.70	\$ 9,020.30
343.00	Tools, Shop & Work Equipment	\$ 22,517.00	7-R3	\$ 14,410.23	\$ 8,106.77
345.00	Power Operated Equipment	\$ 61,368.70	10-R3	\$ 37,483.60	\$ 23,885.10
347.00	Miscellaneous Equipment	\$ 2,577.00	5-R3	\$ 1,637.21	\$ 939.79
	Total Depreciable Plant	\$ 1,755,075.35		\$ 780,947.83	\$ 974,127.52
<b><u>Non-Depreciable Plant</u></b>					
303.20	Other Source of Land Supply	\$ 2,000.00			\$ 2,000.00
303.40	Reservoir Land	\$ 2,500.00			\$ 2,500.00
303.50	General Office Land	\$ 1.00			\$ 1.00
	Total Depreciable Plant	\$ 4,501.00			\$ 4,501.00
	Total Plant In Service	\$ 1,759,576.35			\$ 978,628.52

320.3

341

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**304.30 Purification Buildings**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
<i>Salvage Value: 0 %</i>					
<b>Well House #1</b>					
<i>Interim Survivor Curve: Iowa 70 R1.5</i>					
<i>Probable Retirement Year: 2032</i>					
1982	65,223.50	18.65	45.00	0.58553	38,191
2002	750.00	19.28	28.52	0.32384	243
<b>Total</b>	65,973.50				38,434
<b>Well House #2</b>					
<i>Interim Survivor Curve: Iowa 70 R1.5</i>					
<i>Probable Retirement Year: 2032</i>					
1982	65,223.50	18.65	45.00	0.58553	38,191
2002	750.00	19.28	28.52	0.32384	243
2011	4,800.00	19.46	20.33	0.04281	206
<b>Total</b>	70,773.50				38,640
<b>Account</b>					
<b>Total</b>	136,747.00				77,074.61

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**304.40 Distribution Building**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 %</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
<b>Reservoir</b>					
<i>Interim Survivor Curve: Iowa 50 R3</i>					
<i>Probable Retirement Year: 2032</i>					
1982	144,000.00	16.66	44.48	0.62089	89,408
2005	5,445.00	19.64	26.47	0.25815	1,406
2006	2,288.00	19.68	25.53	0.22918	525
2008	2,224.00	19.76	23.84	0.16417	366
<b>Total</b>	<b>163,957.00</b>				<b>91,705</b>
<b>Account</b>					
<b>Total</b>	<b>163,957.00</b>				<b>91,704.83</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**304.50 General Building**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0                      %</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
<b>Office/Garage Building</b>					
<i>Interim Survivor Curve: Iowa 50 R3</i>					
<i>Probable Retirement Year: 2041</i>					
2001	68,779.00	27.08	37.74	0.28241	19,425
2002	8,860.00	27.25	38.95	0.26255	2,327
2007	600.00	27.93	32.78	0.14793	89
<b>Total</b>	78,239.00				21,841
 <i>Account</i>					
<b>Total</b>	78,239.00				21,840.64

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
 307.20 Well and Spring

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

Salvage Value: 0 %					
Year	Original Cost	Expectancy	Avg. Service Life	Reserve Ratio	Calculated Reserve
(1)	(2)	(3)	(4)	(5)	(6)
<b>Well House #1</b>					
<i>Interim Survivor Curve: Iowa 60 R3</i>					
<i>Probable Retirement Year: 2021</i>					
1971	6,000.00	8.52	46.82	0.81797	4,908
<b>Total</b>	6,000.00				4,908
<b>Well House #2</b>					
<i>Interim Survivor Curve: Iowa 60 R3</i>					
<i>Probable Retirement Year: 2021</i>					
1971	6,000.00	8.52	46.82	0.81797	4,908
2007	196.55	9.05	13.95	0.35102	69
<b>Total</b>	6,196.55				4,978
<b>Account Total</b>	12,196.55				9,886.14

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**311.20 Electric Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 30 Survivor Curve: R1.5*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	53,772.00	9.69	30.00	0.67711	36,410
2003	6,000.00	22.95	30.00	0.23502	1,410
2004	7,277.67	23.71	30.00	0.20969	1,528
2005	5,445.00	24.48	30.00	0.18411	1,002
2007	7,966.55	26.04	30.00	0.13215	1,063
2008	8,508.00	26.83	30.00	0.10578	900
2009	11,869.50	27.63	30.00	0.07915	924
2010	977.27	28.43	30.00	0.05225	51
2011	3,245.00	29.25	30.00	0.02511	81
<b>Total</b>	<b>104,880.99</b>				<b>43,357.09</b>



**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**320.30 Water Treatment Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 20 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2009	1,215.00	17.16	20.00	0.14211	173
2010	200.00	18.12	20.00	0.09380	19
<b>Total</b>	1,415.00				191.42

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.01 Mains - 6" CI & DI Pipe**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 85 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	1,100.75	47.04	85.00	0.44653	492
1982	97,515.80	56.60	85.00	0.33415	32,584
<b>Total</b>	<b>98,616.35</b>				<b>33,075.97</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.02 Mains - 6" AC Pipe**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 70 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	190,135.76	32.87	70.00	0.53039	100,846
1982	5,330.00	41.96	70.00	0.40057	2,135
1993	38,600.24	51.83	70.00	0.25964	10,022
<b>Total</b>	<b>234,066.00</b>				<b>113,003.64</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.03 Mains - 8" AC Pipe**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 70 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	70,268.40	32.87	70.00	0.53039	37,270
<b>Total</b>	70,268.40				37,269.76

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.04 Mains - 4" Plastic Pipe**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1982	9,815.40	32.34	60.00	0.48093	4,524
1991	14,920.00	40.13	60.00	0.33115	4,941
1993	37,167.48	41.94	60.00	0.30103	11,188
<b>Total</b>	<b>61,902.88</b>				<b>20,653.41</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.05 Mains - 6" Plastic Pipe**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	102,184.68	37.13	65.00	0.42871	43,808
1989	120,497.65	43.25	65.00	0.33468	40,329
2009	7,500.00	62.13	65.00	0.04408	331
<b>Total</b>	<b>230,182.33</b>				<b>84,467.28</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.06 Mains - 8" Plastic Pipe**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1983	52,225.80	37.99	65.00	0.41559	21,705
<b>Total</b>	52,225.80				21,704.55

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.07 Mains - 4" Valves**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	440.00	22.94	50.00	0.54121	238
1991	1,737.12	30.36	50.00	0.39272	682
1993	2,407.68	32.12	50.00	0.35765	861
<b>Total</b>	4,584.80				1,781.44



**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.08 Mains - 6" Valves**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	3,281.76	28.26	65.00	0.56519	1,855
1982	13,741.00	37.13	65.00	0.42871	5,891
1989	2,580.48	43.25	65.00	0.33468	864
1993	2,801.68	46.88	65.00	0.27882	781
<b>Total</b>	<b>22,404.92</b>				<b>9,390.60</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.09 Mains - 8" Valves**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	1,425.24	28.26	65.00	0.56619	806
1982	3,210.00	37.13	65.00	0.42871	1,376
<b>Total</b>	4,635.24				2,181.71

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.10 Mains - Air Release**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	77,198.40	37.13	65.00	0.42871	33,098
1981	2,822.04	45.05	65.00	0.30693	866
1983	7,333.85	46.88	65.00	0.27882	2,045
<b>Total</b>	<b>87,354.29</b>				<b>36,007.00</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**331.11 Mains - Valve Boxes**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	1,438.24	28.26	65.00	0.56519	813
1982	3,300.00	37.13	65.00	0.42671	1,415
1989	504.00	43.25	65.00	0.33488	169
1991	263.20	45.05	65.00	0.30693	81
1993	1,094.40	46.88	65.00	0.27882	305
<b>Total</b>	<b>6,599.84</b>				<b>2,782.25</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**333.00 Services**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 40 Survivor Curve: L1.5*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	17,777.58	16.93	40.00	0.57673	10,253
1982	11,678.32	20.12	40.00	0.49694	5,803
1989	7,572.60	22.86	40.00	0.42859	3,246
1991	1,302.26	23.83	40.00	0.40438	627
1993	7,176.78	24.90	40.00	0.37742	2,709
2002	3,265.80	31.11	40.00	0.22231	726
2004	476.00	32.75	40.00	0.18139	86
2005	6,185.00	33.60	40.00	0.16007	990
2006	1,122.00	34.47	40.00	0.13826	165
<b>Total</b>	<b>56,556.34</b>				<b>24,494.69</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
 334.00 Meters

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 30 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2001	37,544.00	19.66	30.00	0.34479	12,945
2003	1,108.82	21.46	30.00	0.28451	315
2004	4,420.08	22.39	30.00	0.25374	1,122
2005	4,327.39	23.32	30.00	0.22263	963
2006	4,694.91	24.26	30.00	0.19118	898
2007	3,533.78	25.22	30.00	0.16942	563
2008	2,494.50	26.18	30.00	0.12740	318
2009	2,182.80	27.15	30.00	0.09515	208
2010	4,176.96	28.12	30.00	0.06268	262
2011	2,058.00	29.10	30.00	0.03005	62
2012	749.70	29.79	30.00	0.00684	5
<b>Total</b>	67,288.94				17,659.91

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**334.01 Meters - Remotes**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 30 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2004	239.50	22.39	30.00	0.25374	61
2010	697.20	28.12	30.00	0.06268	44
<b>Total</b>	936.70				104.47

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**335.00 Fire Hydrants**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 70 Survivor Curve: R1.5*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	67,765.25	39.18	70.00	0.44036	29,841
1982	67,735.43	48.82	70.00	0.33119	22,433
1989	4,694.31	51.96	70.00	0.25771	1,210
1991	10,274.90	53.46	70.00	0.23623	2,427
<b>Total</b>	<b>150,469.89</b>				<b>55,910.83</b>



**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**336.00 Backflow Prevention**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2007	829.87	45.19	50.00	0.09622	80
<b>Total</b>	829.87				79.85

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
 340.00 Office Furniture & Equipment

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 5 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2008	691.65	1.64	5.00	0.67152	464
2009	491.87	2.36	5.00	0.52803	260
<b>Total</b>	1,183.52				724.18

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**341.00 Transportation Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 7 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2003	1,765.00	0.81	7.00	0.88379	1,560
2004	10,557.00	1.09	7.00	0.84441	8,914
2007	18,769.00	2.68	7.00	0.61785	11,596
<b>Total</b>	<b>31,091.00</b>				<b>22,070.70</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**343.00 Tools, Shop and Work Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 7 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	307.86	0.00	0.00	1.00000	308
2002	2,546.32	0.60	7.00	0.91415	2,328
2003	2,473.01	0.81	7.00	0.88379	2,186
2004	4,129.00	1.09	7.00	0.84441	3,487
2005	1,744.00	1.48	7.00	0.78837	1,376
2006	586.00	2.02	7.00	0.71208	417
2007	1,502.23	2.68	7.00	0.61785	928
2008	2,069.46	3.43	7.00	0.50991	1,055
2009	3,476.12	4.26	7.00	0.39095	1,359
2010	3,683.00	5.16	7.00	0.26280	968
<b>Total</b>	<b>22,517.00</b>				<b>14,410.23</b>

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**345.00 Power Operating Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 10 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2005	61,368.70	3.89	10.00	0.61079	37,484
<b>Total</b>	61,368.70				37,483.00

**Aqua - Pennsylvania, Inc.**  
**Beech Mountain Lakes Water System**  
**347.00 Miscellaneous Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 5 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2007	874.21	1.09	5.00	0.78212	684
2008	378.74	1.64	5.00	0.67152	254
2009	1,324.05	2.36	5.00	0.52803	699
<b>Total</b>	<b>2,577.00</b>				<b>1,637.21</b>

Aqua Pennsylvania, Inc.  
 C&N Dining LLC (Yalick Farms) Costs  
 M92152 & M91892  
 Journal Entry

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	300000	PPE-Utility Plant in Service	1,353,900.20	
9	104000	Utility Plant Purchased/Sold		284,584.79
9	108000	AD-General		75,357.67
9	114000	U Plant Acq Adj		993,957.74
<b>Total</b>			<b>1,353,900.20</b>	<b>1,353,900.20</b>



March 23, 2018

**VIA FEDERAL EXPRESS**

Rosemary Chiavetta, Secretary  
Commonwealth of Pennsylvania  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Application of Aqua Pennsylvania, Inc. for approval to begin to offer, render, furnish, or supply water service to the public in an additional portion of Dallas Township, Luzerne County, Pennsylvania.

Docket No: A-210104F0080

Dear Secretary Chiavetta:

Pursuant to the Commission's Statement Policy relating to water and wastewater system acquisitions at 52 Pa. Code § 69.721(f), enclosed is a copy of the original plant-in-service valuation of the water system assets acquired from C&N Dining LLC for the Yalick Farms Water System. Aqua Pennsylvania, Inc. is also serving these documents to the Bureau of Technical Utility Services.

Should you have any questions regarding this filing, please contact me at (610) 645-1021.

Sincerely,

A handwritten signature in blue ink, appearing to read "Renee T. Marquis", written over a horizontal line.

Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.

Enclosures  
cc: Certificate of Service



**BEFORE THE**  
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Aqua Pennsylvania, Inc.

Docket No. A-210104F0080

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of the following document, the original cost plant-in-service valuation, in accordance with the requirements of 52 Pa. Code § 1.54 upon the person(s) and in the manner indicated below:

**VIA FEDERAL EXPRESS**

Christine Hoover, Esq.  
Office of Consumer Advocate  
555 Walnut Avenue  
Fifth Floor, Forum Place  
Harrisburg, PA 17101-1923

Richard Kanaskie, Director  
Bureau of Investigation and Enforcement  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Larry Treaster  
Bureau of Audits  
Pennsylvania Public Utility Commission  
Three East Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17102

John R. Evans  
Office of Small Business Advocate  
Suite 202, Commerce Bldg.  
300 North Second Street  
Harrisburg, PA 17101

Paul Diskin, Director  
Bureau of Technical Utility Services  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Dated: March 23, 2018



Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.  
762 W. Lancaster Ave.  
Bryn Mawr, PA 19010  
610-645-1021  
[RTMarquis@AquaAmerica.com](mailto:RTMarquis@AquaAmerica.com)

Aqua Pennsylvania, Inc.

Acquisition of the Water System Assets of  
C&N Dining LLC - Yalick Farms Water System

Original Cost of Water Utility Plant and  
Related Accrued Depreciation  
As of December 31, 2015

762 W. Lancaster Avenue, Bryn Mawr, PA 19010

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Aqua Pennsylvania, Inc.

Original Cost and Related Accrued Depreciation of  
C&N Dining LLC - Yalick Farms Water System  
As of December 31, 2015

The C&N Dining LLC - Yalick Farms Water System was built to provide water service to 283 proposed residential single-family dwelling units and 42 proposed commercial units to a development known locally as Yalick Farms consisting of approximately 56 acres in a portion of Dallas Township, Luzerne County. The water system consists of two wells, a treatment facility, and a water distribution system, including mains, fire hydrants, and service lines.

On June 27, 2007 Aqua Pennsylvania, Inc. filed an Application for approval to begin to offer, render, furnish, or supply water service to the public. An Order was entered on May 22, 2008 closing Docket No. A-210104F0080 and a Certificate of Public Convenience was issued with an effective date of May 22, 2008. The original cost of the assets of the water system are based on construction records and other information and data provided by the developer.

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Aqua Pennsylvania, Inc.  
Acquisition of C&N Dining LLC - Yalick Farms Water System  
Depreciated Original Cost

Account	Account Title	Description	In Service Date	Quantity	Original Cost	Depreciation Rate	Accumulated Depreciation	Depreciated Original Cost
<b>DEPRECIABLE PLANT</b>								
304.00	Structures and Improvements	Well House	12/31/2012	1	\$ 36,753.07	2.2160%	\$ 2,443.38	\$ 34,309.69
	<b>TOTAL ACCOUNT 304</b>				<u>\$ 36,753.07</u>		<u>\$ 2,443.38</u>	<u>\$ 34,309.69</u>
307.20	Wells and Springs	Well #1	12/31/2012	1	\$ 82,613.37	1.9970%	\$ 4,949.38	\$ 77,663.99
307.20	Wells and Springs	Well #2	12/31/2012	1	82,613.38	1.9970%	4,949.38	77,664.00
	<b>TOTAL ACCOUNT 307.2</b>				<u>\$ 165,226.75</u>		<u>\$ 9,898.76</u>	<u>\$ 155,327.99</u>
311.00	Pumping Equipment	Electric Pumping Equipment	12/31/2012	1	\$ 67,211.77	3.2296%	\$ 6,512.00	\$ 60,699.77
	<b>TOTAL ACCOUNT 311</b>				<u>\$ 67,211.77</u>		<u>\$ 6,512.00</u>	<u>\$ 60,699.77</u>
320.30	Water Treatment Equipment	Water Treatment Equipment	12/31/2012	1	\$ 6,785.76	2.7749%	\$ 564.88	\$ 6,220.88
	<b>TOTAL ACCOUNT 320.3</b>				<u>\$ 6,785.76</u>		<u>\$ 564.88</u>	<u>\$ 6,220.88</u>
330.40	Distribution Reservoirs and Standpipes	Tank	12/31/2012	1	\$ 261,458.29	1.8227%	\$ 14,296.84	\$ 247,161.45
	<b>TOTAL ACCOUNT 330.4</b>				<u>\$ 261,458.29</u>		<u>\$ 14,296.84</u>	<u>\$ 247,161.45</u>
331.00	Transmission and Distribution Mains	PVC Main, 8"	12/31/2012	8849	459,438.85	1.6904%	\$ 23,298.47	\$ 436,140.38
331.00	Transmission and Distribution Mains	Valves, 8"	12/31/2012	47	69,572.75	1.7186%	3,587.08	65,985.67
	<b>TOTAL ACCOUNT 331</b>				<u>\$ 529,011.60</u>		<u>\$ 26,885.55</u>	<u>\$ 502,126.05</u>
333.40	Services	Services, 3/4"	12/31/2012	296	\$ 198,811.05	1.6452%	\$ 9,812.57	\$ 188,998.48
333.40	Services	Service, 2"	12/31/2012	1	1,862.57	1.6452%	91.93	1,770.64
333.40	Services	Service, 1"	12/31/2012	1	4,689.43	1.6452%	231.45	4,457.98
	<b>TOTAL ACCOUNT 333.4</b>				<u>\$ 205,363.05</u>		<u>\$ 10,135.95</u>	<u>\$ 195,227.10</u>
335.40	Hydrants	Hydrants	12/31/2012	15	\$ 76,455.62	2.0144%	\$ 4,620.31	\$ 71,835.31
	<b>TOTAL ACCOUNT 335.4</b>				<u>\$ 76,455.62</u>		<u>\$ 4,620.31</u>	<u>\$ 71,835.31</u>
		<b>TOTAL DEPRECIABLE PLANT</b>			<u>\$ 1,348,265.91</u>		<u>\$ 75,357.67</u>	<u>\$ 1,272,908.24</u>
		<b>TOTAL UTILITY PLANT IN SERVICE</b>			<u>\$ 1,348,265.91</u>		<u>\$ 75,357.67</u>	<u>\$ 1,272,908.24</u>

**Aqua Pennsylvania, Inc.**  
**Total Environmental Solutions, Inc. (TESI) - Treasure Lake Community Water System Costs**  
**M92478**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	104000	Utility Plant Purchased/Sold		5,153,785.90
9	104000	Utility Plant Purchased/Sold	3,121.19	
9	108000	AD-General		1,996,053.52
9	114000	U Plant Acq Adj	3,024,801.42	
9	184070	RWIP-CASH SALVAGE		415.70
9	271308	CIAC-CASH NON REFUNDABLE BUILDER OR DEVELOPER DEPOSITS		826,584.50
9	272000	Accum Amort of CIAC	395,150.13	
9	300000	PPE-Utility Plant in Service	4,553,766.88	
	<b>Total</b>		<b>7,976,839.62</b>	<b>7,976,839.62</b>

**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Total Environmental Solutions, Inc. (TESI) - Treasure Lake Community Water System**

<b>Section 1327(a) Criteria</b>	<b>Satisfied (Y/N)</b>	<b>Explanation</b>
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	Yes	<p>On March 1, 2013, Aqua Pennsylvania, Inc. (“Aqua”) acquired the Water System Assets (“Assets”) of the Total Environmental Solutions, Inc. (“Seller”). The Seller’s Assets were used and useful in providing water service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	Yes	<p>Prior to Aqua’s acquisition of Seller’s Assets, Total Environmental Solutions, Inc. was providing water service to 2,175 customers in the Treasure Lake Community in a portion of Sandy Township, Clearfield County, Pennsylvania.</p> <p>Reference: Commission Order Docket Nos. A-2012-2322416, A-2012-2322501, A-2012-2322448, and A-2012-2322509</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p> <p style="text-align: center;">(i)</p>	Yes	

<p>violation of statutory or regulatory requirements of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and</p>	<p>Yes</p>	

reasonable service;		
(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;	Yes	Aqua and the Seller entered into an <i>Asset Purchase Agreement</i> , which was negotiated at arm's length. On August 31, 2012, the parties filed a <i>Joint Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered December 20, 2012, at Docket Nos. A-2012-2322416, A-2012-2322501, A-2012-2322448, and A-2012-2322509, the PUC granted the approvals requested in the <i>Joint Application</i> .
(6) the actual purchase price is reasonable;	Yes	The total purchase price for Seller's Assets was \$11,800,000 for the combined water and wastewater system and was negotiated at arm's length. The Commission approved the company's application to acquire Total Environmental Solutions, Inc. (TESI) - Treasure Lake Community Water System and an original cost study was prepared to support the utility plant purchase.  Reference: Commission Order Docket Nos. A-2012-2322416, A-2012-2322501, A-2012-2322448, and A-2012-2322509
(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;	Yes	The Seller is not an affiliated interest of Aqua.
(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b>	Yes	The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.
(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with	Yes	The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.



corresponding reductions in the rate base.		
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# **AQUA PENNSYLVANIA INC.**

## *Acquisition of the Water System Assets of Treasure Lake Water System*

**Original Cost of Water Utility Plant and  
Depreciation Reserve Calculations  
at  
February 28, 2013**

**Gary D. Shambaugh, Principal & Director  
David A. Sheffer, Senior Associate  
Selby P. Jones, Associate**

**AUS CONSULTANTS  
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Camp Hill, PA 17011  
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September 2013



GARY D. SHAMBAUGH  
Principal & Director

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September 17, 2013

Ms. Meghan Kreszwick  
Manager of Rates, PA & NJ  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010

RE: Acquisition of the Water System Assets of  
Treasure Lake Water System

Dear Ms. Kreszwick:

In accordance with your request, we have prepared an inventory of the water utility plant of the Treasure Lake system ("Treasure Lake") as of February 28, 2013.

The inventory was prepared to conform with the Uniform System of Accounts for Water Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of Treasure Lake was determined from a detailed analysis of the books and records of the water system and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service (NET)	\$3,657,527	\$1,600,903

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2, and the depreciation calculations are contained in Section 3.

Respectfully submitted,  
AUS Consultants

By: Gary D. Shambaugh

# AQUA PENNSYLVANIA INC.

## Acquisition of Treasure Lake Water System

### Table of Contents

	<u>Page</u> <u>No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of Treasure Lake's Facilities	1-1
Overview of the Study Techniques	1-2
Explanation of the Study	1-2
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Contributions in Aid of Construction	1-5
Customer Advances for Construction	1-6
Depreciation Reserve	1-6
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at February 28, 2013	2-1
<b><u>Non-Depreciable Plant:</u></b>	
303.20 Source of Supply Land & Water Rights	2-3
303.40 Transmission & Distribution Land & Right of Way	2-4
303.50 Distribution Reservoir & Standpipe Land	2-5
<b><u>Depreciable Plant</u></b>	
304.20 Power & Pumping Structures	2-6
304.30 Purification Buildings	2-7
305.00 Storage Reservoir & Standpipe	2-8
307.00 Wells & Springs	2-9
310.00 Power Generation Equipment	2-10
311.00 Electric Pumping Equipment	2-11
320.00 Water Treatment Equipment	2-12
331.00 Mains & Accessories	2-13

# AQUA PENNSYLVANIA INC.

## Acquisition of Treasure Lake Water System

### Table of Contents

	<u>Page</u> <u>No.</u>
<b><u>SECTION 2 (continued)</u></b>	
333.00 Services	2-16
334.00 Meters	2-17
335.00 Hydrants	2-18
339.00 Backflow Prevention	2-19
340.00 Office Furniture & Equipment	2-20
341.00 Transportation Equipment	2-21
343.00 Tools, Shop & Work Equipment	2-22
344.00 Laboratory Equipment	2-23
345.00 Power Operated Equipment	2-24
346.00 Communication Equipment	2-25
347.00 Miscellaneous Equipment	2-26
<u>Contribution In Aid of Construction</u>	
304.20 Power & Pumping Structures	2-27
305.00 Storage Reservoirs & Standpipe	2-28
307.00 Well and Springs	2-29
311.00 Electric Pumping Equipment	2-30
320.00 Purification System	2-31
331.50 Plastic Mains, 4" & Under	2-32
331.51 Plastic Mains, 6" - 8"	2-33
331.52 Plastic Mains, 10" - 14"	2-34
331.60 Valves, 4" & Under	2-35
331.61 Valves, 6" - 8"	2-36
331.62 Valves, 10" - 14"	2-37
333.00 Services	2-38
335.00 Fire Hydrants	2-39
343.00 Tools & Work Equipment	2-40
<u>Customer's Advances for Construction</u>	
331.51 Plastic Mains, 6" - 8"	2-41

**AQUA PENNSYLVANIA INC.**

**Acquisition of Treasure Lake Water System**

Table of Contents

	<b>Page <u>No.</u></b>
<b><u>SECTION 3</u></b>	
<u>Depreciated Original Cost</u>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of February 28, 2013	3-1
Plant in Service	3-3
Contributions In Aid of Construction	3-31
Customer's Advances for Construction	3-45

# **SECTION 1**

## **AQUA PENNSYLVANIA, INC.**

### **Acquisition of the Water Assets of Treasure Lake Water System**

#### **Executive Summary**

#### **BACKGROUND**

The Treasure Lake Water System provides water service available to the Treasure Lake community serving approximately 2,152 customers located in Dubois, Pennsylvania. Total Environmental Solutions, Inc. ("TESI") of Baton Rouge, Louisiana was the latest entity to own the water facilities prior to the acquisition by Aqua Pennsylvania Inc. ("Aqua").

Aqua Pennsylvania and TESI filed an application requesting the Commission to approve the sale of the water system, granting Aqua the right to furnish service in the Treasure Lake community and authorize TESI to abandon service.

Aqua has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of February 28, 2013. The results of this study are set forth herein.

#### **OVERVIEW OF TREASURE LAKE'S FACILITIES**

Treasure Lake's assets to be acquired consist of facilities for the production, distribution & storage of water to its customers. The water production facilities are comprised of 5 wells. The distribution system consists of approximately 360,728 linear feet of pipe, plus the associated valves, air release valves, hydrants, valve boxes and services. Distribution storage is provided by a 41 foot diameter, 55 foot tall storage tank. All customers are metered and the water system does not provide fire protection service.



## **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of Treasure Lake's assets was conducted in two (2) phases. First, thoroughly researching the prior owners' files to obtain all necessary purchase orders and invoices available as related to the a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by Treasure Lake.

Second, the original cost of the inventoried property was determined based on a review of Treasure Lake's books of account, construction records, "as-built" maps and other Company provided data. Treasure Lake's records provided reasonable data as to the original cost of its plant in service. AUS Consultants calculated the theoretical accrued depreciation calculations based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at February 28, 2013.

A complete discussion of the methodologies employed in the original cost study is set forth in the sections of this report that follows.

## **EXPLANATION OF THE STUDY**

### **Utility Plant Inventory**

A comprehensive inventory of Treasure Lake's plant in service as of February 28, 2013 was performed. One of the principal source documents for the inventory was the "as built" maps of Treasure Lake's water system, which were used in completing the current study. The maps were particularly helpful in locating and documenting the sizes, types, and lengths of the pipelines and the sizes, types, and locations of accessories, valves, air release valves, valve boxes, and hydrants. Significant components of the inventory are discussed below. A few discrepancies were found in some accounts and

were adjusted when the inventory was completed and cost records were obtained from Treasure Lake files.

**Mass Property**

For purposes of this study, mass property consists of utility plant recorded in Account 331 (Mains & Accessories), Account 333 (Services), Account 334 (Meters) and Account 335 (Fire Hydrants).

For Account 331, footages of pipe, by size and type, were determined by reviewing the “as-built” maps and were verified by a physical check of the collection system in place. This same procedure was utilized for valves, valve boxes, and air release valves. For Account 334 (Meters) the Company’s customer accounts for meters purchased was reviewed. The inventory for Account 335 (Fire Hydrants) was determined by reviewing the “as-built” maps and verified by a physical check.

**Non-Mass Property**

A physical inventory of the Purification Building, Pumping Structures, General Building, Wells & Springs, Office Equipment, and Transportation equipment was completed.

**Utility Plant in Service**

Detailed results of the plant inventory are set forth in Section 2 of this report by the following fixed capital accounts:

<u>Acct.</u> <u>No.</u>	<u>Account Title</u>
<b><u>Non-Depreciable Plant:</u></b>	
303.20	Source of Supply Land & Water Rights
303.40	Transmission & Distribution Land & Right of Way
303.50	Distribution Reservoir & Standpipe Land

Depreciable Plant

304.20	Power & Pumping Structures
304.30	Purification Buildings
305.00	Storage Reservoir & Standpipe
307.00	Wells & Springs
310.00	Power Generation Equipment
311.00	Electric Pumping Equipment
320.00	Purification System
331.00	Mains & Accessories
333.00	Services
334.00	Meters
335.00	Fire Hydrants
339.00	Backflow Prevention
340.00	Office Furniture & Equipment
341.00	Transportation Equipment
343.00	Tools, Shop & Work Equipment
344.00	Laboratory Equipment
345.00	Power Operated Equipment
346.00	Communication Equipment
347.00	Miscellaneous Equipment

ORIGINAL COST ANALYSIS

The goal of the original cost analysis was to ascertain the value of Treasure Lake's surviving water plant in service by fixed capital account and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of Treasure Lake's property by account. The available data consists of records and information compiled by Treasure Lake as to the construction cost and approximate dates of installation. These records were augmented by information obtained from the field inventory and interviews with system operators.

The original cost determination for Account 331 (Mains & Accessories) was determinable from available records for Treasure Lake's collection system and other

source documents. Treasure Lake has had the addition of Well N-32 to the water system since 1996, under previous owners.

As previously explained, the prior physical inventory established the total footage of pipe by size and type and the total number of units of accessories. Summaries of construction projects maintained by Treasure Lake contained detail as to the footage of pipe and numbers of accessories. The information contained in the construction summaries was used to develop the footage of pipe, units of accessories, and the resultant unit price for the respective fixed capital asset.

The original cost values at February 28, 2013 for Treasure Lake's water mains & accessories were established by the original cost study, total \$3,004,388.

#### **SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of Treasure Lake's utility plant in service is not less than \$4,484,111, as summarized by plant account in Section 2 (p. 2-1).

#### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all documents that were available. Based on this record research, the water system received or collected CIAC. The calculated CIAC amounts to \$729,023. The results of those calculations and detailed supporting schedules are included in Section 3 of this report.

### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants also completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all documents that were available. Based on this record research, the water system was partially funded by CAC. The calculated CAC amounts to \$97,561. The results of those calculations and detailed supporting schedules are included in Section 3 of this report.

### **DEPRECIATION RESERVE**

AUS Consultants prepared a theoretical calculated depreciation reserve of the utility plant in service at February 28, 2013. The calculated accrued depreciation reserve amounts to \$1,272,893 at February 28, 2013.

The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and detailed supporting documentation are included in Section 3 of this report.

# **SECTION 2**

## Aqua-PA Treasure Lake Water System

Original Cost at February 28, 2013

Account No.	Account Description	Totals
<b><u>Non-Depreciable Plant</u></b>		
303.20	Source of Supply Land & Rights	\$ 53,181.00
303.40	Transmission & Distribution Land & Rights	9,496.00
303.50	Distribution Reservoirs & Standpipe Land	<u>17,850.00</u>
	<b>Total Non-Depreciable Plant</b>	<b>\$ 80,527.00</b>
<b><u>Depreciable Plant</u></b>		
304.20	Power & Pumping Structures	\$ 51,635.59
304.30	Purification Buildings	33,882.88
305.00	Storage Reservoirs & Standpipes	83,290.00
307.00	Wells & Springs	70,566.16
310.00	Power Generation Equipment	28,000.00
311.00	Electric Pumping Equipment	98,835.98
320.00	Purification System	139,037.95
331.00	Mains & Accessories	3,004,388.44
333.00	Services	534,515.13
334.00	Meters	217,297.28
335.00	Fire Hydrants	27,107.00
339.00	Back Flow Preventer	10,250.00
340.00	Office Furniture & Equipment	2,082.00
341.00	Transportation Equipment	57,123.00
343.00	Tools & Work Equipment	12,144.00
344.00	Laboratory Equipment	2,611.00
345.00	Power Operated Equipment	30,303.00
346.00	Communication Equipment	50.00
347.00	Miscellaneous Equipment	<u>465.00</u>
	<b>Total Depreciable Plant</b>	<b>\$ 4,403,584.41</b>
	<b>Total Plant in Service</b>	<b><u><u>\$ 4,484,111.41</u></u></b>

## Aqua-PA Treasure Lake Water System

Original Cost at February 28, 2013

<u>Account No.</u>	<u>Account Description</u>	<u>Totals</u>
<u>Deduct: Contributions in Aid of Construction (CIAC):</u>		
304.20	Power & Pumping Structures	\$7,732.00
305.00	Storage Reservoir & Standpipe	27,633.00
307.00	Well and Spring	9,832.00
311.00	Electric Pumping Equipment	14,563.00
320.00	Water Treatment Equipment	18,915.00
331.00	Mains	\$624,654.50
333.00	Services	\$17,057.00
335.00	Fire Hydrants	8,553.00
343.00	Tools, Shop and Work Equipment	84.00
	<b>Total Contributions in Aid of Construction (CIAC)</b>	<b>\$729,023.50</b>
<u>Deduct: Customers Advances for Construction (CAC):</u>		
331.00	Mains	\$97,561.00
	<b>Total Plant in Service (Net)</b>	<b><u><u>\$3,657,526.91</u></u></b>



**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 303.20 - Source of Supply Land and Water Rights**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Land</u></b>				
Well N-1, Section #18 (Lots 414, 415, 416 & 417)	1973	Lot		\$ 25,180.00
Well N-12, Section #21 (Lots 120, 121, 122, 123, 128, 129 & 130)	1980	Lot		28,000.00
				<u>\$ 53,180.00</u>
Water Rights - Deed to draw from and use water for, both lakes.	1973	Lot		\$ 1.00
<b>Total Account 303.20</b>				<u><u>\$ 53,181.00</u></u>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 303.40 - Transmission and Distribution Land & Right of Way**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Land:</u></b>				
Lot #413, Section #18 - Contains line to N-12	1980	Lot		\$ 5,495.00
Lot #59, Section #21 - Contains line to N-12	1980	Lot		<u>4,000.00</u>
Total Land				\$ <u>9,495.00</u>
Rights of Way - Deeds grant easements in " Treasure Lakes"	1973	Lot		\$ 1.00
Total Account 303.40				<u>\$ 9,496.00</u>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013**  
**Account 303.50 - Distribution Reservoirs and Standpipe Land**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Wood Building 30'x30'	1970	Lot		\$ 17,850.00
Total Account 303.50				<u>\$ 17,850.00</u>

**Aqua-PA Treasure Lake Water System**

Original Cost at February 28, 2013  
Account 304.20 - Power and Pumping Structures

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<u>Wood Building 30'x30'</u>				
Block Building 12'x16"	1970	Ea.	1	\$ 3,800.00
Dayton electric heaters	1970	Ea.	2	600.00
Exhaust fan	1970	Ea.	1	150.00
<b>Total Well #N-4</b>			<u>4</u>	<u>\$ 4,550.00</u>
<u>Well #N-12, Section #21</u>				
Block Building 8'6"x12'7"	1980	Ea.	1	\$ 10,135.00
King Electric Heater (6000 watts)		Ea.	1	406.00
Dayton exhaust fan	1980	Ea.	1	150.00
Perfection gas heater	1980	Ea.	1	200.00
<b>Total Well #N-12</b>			<u>4</u>	<u>\$ 10,891.00</u>
<u>Well #N-14, Section #19</u>				
Block Building 16'x18'	1985	Ea.	1	\$ 12,566.73
CI2 Exhaust Fan	1985	Ea.	1	50.00
Electric Heating (King 7500kw)	1985	Ea.	2	200.00
<b>Total Well #N-14</b>			<u>4</u>	<u>\$ 12,816.73</u>
<u>Well #N-32</u>				
Wood Building(T1-11) 17'x11'	1997	LOT		\$ 13,469.65
Electric Services and Control Panel	1997	LOT		4,425.79
Piping	1997	LOT		4,071.47
Additional Building Cost	1998	LOT		600.00
Additional Electric Cost	1998	LOT		696.27
Building Supplies	2006	LOT		114.68
<b>Total Well #N-32</b>				<u>\$ 23,377.86</u>
<b>Total Account 304.20</b>				<u><u>\$ 51,635.59</u></u>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 304.30 - Purification Buildings**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Well #N-23, Section #7:</u></b>				
Wood Building 30'x30'				
CL2 Exhaust Fan				
Gas Heater				
Electric				
Piping	1995	Lot		\$ 33,882.88
<b>Total Account 304.30</b>				<b><u><u>\$ 33,882.88</u></u></b>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 305.00 - Storage Reservoirs and Standpipes**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Storage Tank</u></b>				
Foundation, valve pit & appurtenances	1973	Lot		\$ 8,290.00
Steel tank, covered (41' dia. X 55' high)	1973	Ea.	1	75,000.00
<b>Total Account 305.00</b>				<b><u><u>\$ 83,290.00</u></u></b>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 307.00 - Wells and Springs**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Well N-4, Section #17	1970	Ea.	1	\$ 8,080.00
Well N-12, Section #21	1980	Ea.	1	5,820.00
Well N-14, Section #19	1985	Ea.	1	15,080.73
Well N-23, Section #7	1995	Ea.	1	20,100.99
Well N-32	1997	NEW	1	21,078.44
Well N-32 (Ground Water Test)	1995	Ea.	1	406.00
<b>Total Account 307.00</b>				<b><u><u>\$ 70,566.16</u></u></b>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 310.00 - Power Generation Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Kohler Diesel Generator	1992	Ea.	1	\$ 28,000.00
Total Account 310.00				<u>\$ 28,000.00</u>



**Aqua-PA Treasure Lake Water System**

Original Cost at February 28, 2013  
Account 311.00 - Electric Pumping Equipment

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Submersible pump & motor, 10 hp (Well N-4)	1970	Ea	1	\$ 5,300.00
Allis Chalmers, turbine pump, 23hp ( Well N-4)	1970	Ea.	1	6,200.00
Submersible pump & motor, 30 hp (Well N-12)	1980	Ea.	1	10,135.00
Submersible pump & motor 10 hp (Well N- 14)	1985	Ea.	1	3,600.00
Submersible pump & motor 25 hp (Well N-14)	1985	Ea.	1	5,000.00
Submersible pump & motor 15 hp (Well N-17)	1988	Ea.	1	4,000.00
Aroc Roto Phase (Well N-17)	1988	Ea.	1	5,000.00
Submersible pump & motor 20 hp (Well N-18)	1990	Ea.	1	8,239.87
Submersible pump & motor 30 hp (Well N-23)	1995	Ea.	3	31,289.31
Flow Switch (Well N-32)	1997	Ea.	1	114.58
Magnetic Switch (Well N-32)	1997	Ea.	1	13.52
3 hp Pump (Well N-32)	1997	Ea.	1	7,795.34
2 hp Pump (Well N-32)	1997	Ea.	1	4,417.76
Starter (Well N-32)	1997	Ea.	1	1,141.90
Pressure Gauge (Well N-32)	1997	Ea.	1	62.59
Switches (Well N-32)	1997	Ea.	1	1,534.32
25 hp Pump (Well N-32)	1998	Ea.	1	4,991.79
<b>Total Account 311.00</b>				<b>\$ 98,835.98</b>

**Aqua-PA Treasure Lake Water System**

Original Cost at February 28, 2013  
Account 320.00 - Purification System

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Well N-12</u></b>				
Weinman Chlorine Pump	1970	Ea.	1	\$ 1,569.00
Modern Chlorinator with Injector	1970	Ea.	1	2,998.00
Calgon P-16 CL-50 Pump	1970	Ea.	1	1,833.00
Pr. Platform Scale	1970	Ea.	1	1,153.00
Hach Water Analyzer (S/N 110345000052)	2010	Ea.	1	4,700.00
<b>Total Well N-12</b>			<b>5</b>	<b>\$ 12,253.00</b>
<b><u>Well N-4</u></b>				
Aurora Chlorine Pump	1970	Ea.	1	\$ 3,129.00
Aurora Chlorine Pump	1970	Ea.	1	2,122.00
Modern Chlorinator with Injector	1970	Ea.	1	2,998.00
Calgon P-16 CL-50 Pump	1970	Ea.	1	1,960.00
Pr. Platform Scale	1970	Ea.	1	1,153.00
Hach Water Analyzer	2010	Ea.	1	4,700.00
<b>Total Well N-4</b>			<b>6</b>	<b>\$ 16,062.00</b>
<b><u>Well N-14</u></b>				
CL2 Booser Pump	1985	Ea.	1	\$ 1,000.00
T-10 Chlorinator w/ Injector	1985	Ea.	1	1,750.00
LMI CL-50 Pump	1985	Ea.	1	350.00
CL2 Platform Scale	1985	Ea.	1	1,200.00
50 Gallon Mixing Tank	1985	Ea.	1	500.00
Hach Water Analyzer (S/N 1103450000553)	2010	Ea.	1	4,700.00
<b>Total Well N-14</b>			<b>6</b>	<b>\$ 9,500.00</b>
<b><u>Well N-23</u></b>				
4'x8' Green Sand Filters	1995	Ea.	7	\$ 79,940.00
Potassium Mixer & Tank	1995	Ea.	1	1,888.13
CL2 Platform Scale	1995	Ea.	1	
CL2 Booster Pump	1995	Ea.	1	
LMI CL-50 Pump	1995	Ea.	1	
LMI Caustic Soda Pump	1995	Ea.	1	
LMI Potassium Pump	1995	Ea.	1	
T-10 Chlorinator w/injector	1995	Ea.	1	6,738.53
Hach Water Analyzer (S/N 1101450000310)	2010	Ea.	1	4,700.00
<b>Total Well N-23</b>			<b>15</b>	<b>\$ 93,266.66</b>
<b><u>Well N-32</u></b>				
Regal Gas Chlorinator & Accessories	1997	Ea.	1	\$ 3,007.29
Healthometer Scale	1997	Ea.	1	249.00
Hach Water Analyzer (S/N 1101450000526)	2010	Ea.	1	4,700.00
<b>Total Well N-32</b>			<b>3</b>	<b>\$ 7,956.29</b>
<b>Total Account 320.00</b>				<b>\$ 139,037.95</b>

**Aqua-PA Treasure Lake Water System**

Original Cost at February 28, 2013  
Account 331.00 - Mains and Accessories

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>			<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>		
Cast Iron Pipe, 6"	1973	Ft.	360	\$	1,918.80
Plastic Pipe, 2"	1982	Ft.	140	\$	172.20
Plastic Pipe, 3"	1982	Ft.	120	\$	190.80
Plastic Pipe, 4"	1973	Ft.	2,025	\$	6,925.00
Plastic Pipe, 4"	1974	Ft.	26,490		119,205.00
Plastic Pipe, 4"	1980	Ft.	17,140		129,235.60
Plastic Pipe, 4"	1981	Ft.	40,762		237,234.84
Plastic Pipe, 4"	1982	Ft.	2,442		7,423.68
Plastic Pipe, 4"	1984	Ft.	6,436		57,344.76
Plastic Pipe, 4"	1985	Ft.	33,656		304,923.36
Plastic Pipe, 4"	1986	Ft.	3,188		28,692.00
Plastic Pipe, 4"	1995	Ft.			15,065.66
<b>Total Plastic Pipe, 4"</b>			<b>132,139</b>	<b>\$</b>	<b>906,049.90</b>
Plastic Pipe, 6"	1972	Ft.	250	\$	1,065.00
Plastic Pipe, 6"	1973	Ft.	21,446		91,361.66
Plastic Pipe, 6"	1974	Ft.	23,415		118,011.60
Plastic Pipe, 6"	1980	Ft.	2,700		23,004.00
Plastic Pipe, 6"	1981	Ft.	36,129		251,819.13
Plastic Pipe, 6"	1984	Ft.	9,060		102,740.40
Plastic Pipe, 6"	1985	Ft.	21,404		246,788.12
Plastic Pipe, 6"	1986	Ft.	14,087		161,296.15
<b>Total Plastic Pipe, 6"</b>			<b>128,491</b>	<b>\$</b>	<b>996,086.06</b>
Plastic Pipe, 8"	1973	Ft.	9,004	\$	55,461.56
Plastic Pipe, 8"	1974	Ft.	5,885		29,483.85
Plastic Pipe, 8"	1981	Ft.	900		9,693.00
Plastic Pipe, 8"	1984	Ft.	16,463		186,690.42
Plastic Pipe, 8"	1985	Ft.	4,470		51,539.10
Plastic Pipe, 8"	1997	Ft.	500		5,869.50
<b>Total Plastic, 8"</b>			<b>37,222</b>	<b>\$</b>	<b>338,737.43</b>
Plastic Pipe, 10"	1973	Ft.	17,839	\$	148,237.94
Plastic Pipe, 14"	1972	Ft.	3,150	\$	35,815.50
Plastic Pipe, 14"	1973	Ft.	42,027		418,246.28
<b>Total Plastic Pipe, 14"</b>			<b>45,177</b>	<b>\$</b>	<b>454,061.78</b>

**Aqua-PA Treasure Lake Water System**

Original Cost at February 28, 2013  
Account 331.00 - Mains and Accessories

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>			<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>		
Valves, 1"	1973	Ea.	14	\$	2,240.00
Valves, 1"	1974	Ea.	25		6,848.25
Valves, 1"	1980	Ea.	9		3,600.00
Valves, 1"	1981	Ea.	19		20,357.17
Valves, 1"	1985	Ea.	1		285.36
<b>Total Valves, 1"</b>			<b>68</b>	<b>\$</b>	<b>33,330.78</b>
Valves, 2"	1972	Ea.	1	\$	160.00
Valves, 2"	1973	Ea.	35		5,600.00
Valves, 2"	1974	Ea.	3		650.88
Valves, 2"	1982	Ea.	3		870.00
Valves, 2"	1984	Ea.	1		272.93
Valves, 2"	1985	Ea.	18		5,136.48
Valves, 2"	1986	Ea.	2		568.14
<b>Total Valves, 2"</b>			<b>63</b>	<b>\$</b>	<b>13,258.43</b>
Valves, 3"	1982	Ea.	3	\$	1,086.00
Valves, 4"	1972	Ea.	1	\$	130.00
Valves, 4"	1973	Ea.	35		4,550.00
Valves, 4"	1974	Ea.	54		7,938.00
Valves, 4"	1980	Ea.	15		3,750.00
Valves, 4"	1981	Ea.	36		11,700.00
Valves, 4"	1982	Ea.	1		392.00
Valves, 4"	1983	Ea.	5		2,000.00
Valves, 4"	1984	Ea.	4		1,091.72
Valves, 4"	1985	Ea.	32		9,131.52
Valves, 4"	1986	Ea.	6		1,704.42
<b>Total Valves, 4"</b>			<b>189</b>	<b>\$</b>	<b>42,387.66</b>
Valves, 6"	1972	Ea.	1	\$	155.00
Valves, 6"	1973	Ea.	34		5,270.00
Valves, 6"	1974	Ea.	26		5,200.78
Valves, 6"	1980	Ea.	1		375.00
Valves, 6"	1981	Ea.	31		12,382.02
Valves, 6"	1982	Ea.	9		4,158.00
Valves, 6"	1984	Ea.	7		2,127.58
Valves, 6"	1985	Ea.	17		5,402.43
Valves, 6"	1986	Ea.	8		2,530.72
<b>Total Valves, 6"</b>			<b>134</b>	<b>\$</b>	<b>37,601.53</b>

**Aqua-PA Treasure Lake Water System**

Original Cost at February 28, 2013  
Account 331.00 - Mains and Accessories

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Valves, 8"	1973	Ea.	9	\$ 1,755.00
Valves, 8"	1974	Ea.	5	1,155.00
Valves, 8"	1984	Ea.	4	1,215.76
Valves, 8"	1985	Ea.	3	953.37
<b>Total Vales, 8"</b>			<u>21</u>	<u>\$ 5,079.13</u>
Valves, 10"	1973	Ea.	8	\$ 2,200.00
Valves, 12"	1973	Ea.	11	\$ 3,850.00
Valves, 14"	1972	Ea.	2	\$ 1,350.00
Valves, 14"	1973	Ea.	6	4,050.00
<b>Total Valves, 14"</b>			<u>8</u>	<u>\$ 5,400.00</u>
Blow Offs, 2"	1973	Ea.	3	\$ 820.00
Blow Offs, 2"	1974	Ea.	20	6,455.00
Blow Offs, 2"	1980	Ea.	1	665.00
Blow Offs, 2"	1981	Ea.	8	6,400.00
<b>Total Blow Offs, 2"</b>			<u>32</u>	<u>\$ 14,340.00</u>
Blow Offs, 4"	1974	Ea.	1	\$ 400.00
<b>Total Account 331.00</b>			<u><u>362,026</u></u>	<u><u>\$ 3,004,388.44</u></u>

Aqua-PA Treasure Lake Water System

Original Cost at February 28, 2013  
Account 333.00 - Services

Item	Year Installed	Quantity		Original Cost
		Unit	No.	
Services, 3/4"	1974	Ea.	7	\$ 431.55
Services, 3/4"	1975	Ea.	5	331.95
Services, 3/4"	1976	Ea.	4	278.92
Services, 3/4"	1977	Ea.	4	299.36
Services, 3/4"	1978	Ea.	4	311.20
Services, 3/4"	1979	Ea.	5	429.40
Services, 3/4"	1980	Ea.	7	657.72
Services, 3/4"	1981	Ea.	3	297.21
Services, 3/4"	1982	Ea.	2	213.00
Services, 3/4"	1983	Ea.	6	666.72
Services, 3/4"	1984	Ea.	12	1,389.12
Services, 3/4"	1985	Ea.	20	2,377.80
Services, 3/4"	1986	Ea.	6	729.48
<b>Total Services, 3/4"</b>			<b>85</b>	<b>\$ 8,413.43</b>
Double Services, 1"	1974	Ea.	207	\$ 22,333.23
Double Services, 1"	1975	Ea.	224	26,024.32
Double Services, 1"	1976	Ea.	145	17,692.90
Double Services, 1"	1977	Ea.	124	16,241.52
Double Services, 1"	1978	Ea.	141	19,198.56
Double Services, 1"	1979	Ea.	149	22,393.21
Double Services, 1"	1980	Ea.	211	34,694.73
Double Services, 1"	1981	Ea.	133	23,059.94
Double Services, 1"	1982	Ea.	108	20,129.04
Double Services, 1"	1983	Ea.	253	49,418.49
Double Services, 1"	1984	Ea.	288	58,345.92
Double Services, 1"	1985	Ea.	604	125,662.20
Double Services, 1"	1986	Ea.	185	39,360.60
Double Services, 1" (Incorrectly Expensed)	1996	Ea.		2,122.00
<b>Total Double Services, 1"</b>			<b>2772</b>	<b>\$ 476,676.66</b>
Services, 2" & Over	1974	Ea.	2	\$ 344.02
Services, 2" & Over	1975	Ea.	2	370.46
Services, 2" & Over	1976	Ea.	1	194.54
Services, 2" & Over	1977	Ea.	1	208.81
Services, 2" & Over	1978	Ea.	1	217.07
Services, 2" & Over	1979	Ea.	1	239.61
Services, 2" & Over	1980	Ea.	1	262.14
Services, 2" & Over	1981	Ea.	1	276.41
Services, 2" & Over	1982	Ea.	1	297.14
Services, 2" & Over	1983	Ea.	2	622.84
<b>Total Services, 2" &amp; Over</b>			<b>13</b>	<b>\$ 3,033.04</b>
Services	2004	Ea.	132	\$ 13,541.00
Services	2005	Ea.	77	7,849.00
Services	2006	Ea.	121	12,179.00
Services	2007	Ea.	26	2,593.00
Services	2008	Ea.	101	10,230.00
Services	2010	Ea.	45	
<b>Total Services</b>			<b>502</b>	<b>\$ 46,392.00</b>
<b>Total Account 333.00</b>			<b>3372</b>	<b>\$ 534,515.13</b>

**Aqua-PA Treasure Lake Water System**

Original Cost at February 28, 2013  
Account 334.00 - Meters

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Meters, 3/4"	1985	Ea.	295	\$ 23,762.25
Meters, 3/4"	1986	Ea.	287	23,117.85
Meters, 3/4"	1987	Ea.	225	18,364.50
Meters, 3/4"	1988	Ea.	177	14,816.67
Meters, 3/4"	1989	Ea.	131	11,708.78
Meters, 3/4"	1990	Ea.	94	8,889.58
Meters, 3/4"	1991	Ea.	128	12,372.48
Meters, 3/4"	1992	Ea.	107	12,529.70
Meters, 3/4"	1993	Ea.	100	11,635.00
Meters, 3/4"	1994	Ea.	92	9,623.20
Meters, 3/4" (Incorrectly Expensed)	1996	Ea.		10,555.00
Meters, 3/4"	2004	Ea.	64	6,983.00
Meters, 3/4"	2005	Ea.	67	7,283.00
Meters, 3/4"	2006	Ea.	146	15,745.25
Meters, 3/4"	2007	Ea.	69	7,522.00
Meters, 3/4"	2008	Ea.	59	6,421.00
Meters, 3/4"	2009	Ea.	74	7,977.00
Meters, 3/4"	2010	Ea.	15	1,628.00
<b>Total Meters, 3/4"</b>			<u>2130</u>	<u>\$ 210,934.26</u>
Meters, 1"	2006	Ea.	6	\$ 647.06
Meters, 1 1/2"	2006	Ea.	1	\$ 107.84
Meters, 2"	1985	Ea.	10	\$ 2,102.40
Meters, 3"	1980	Ea.	1	\$ 800.00
Meters, 3"	1997	Ea.	1	597.88
<b>Total Meters, 3"</b>			<u>2</u>	<u>\$ 1,397.88</u>
Meters, 4"	1970	Ea.	1	\$ 1,000.00
Meters, 6"	1985	Ea.	1	\$ 1,000.00
Meters, 6"	2006	Ea.	1	107.84
<b>Total Meters, 6"</b>			<u>2</u>	<u>\$ 1,107.84</u>
<b>Total Account 334.00</b>			<u><u>2152</u></u>	<u><u>\$ 217,297.28</u></u>

**Aqua-PA Treasure Lake Water System**

Original Cost at February 28, 2013  
Account 335.00 - Fire Hydrants

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Fire Hydrants, 2"	1980	Ea.	5	\$ 1,820.00
Fire Hydrants, 2"	1981	Ea.	29	14,471.00
Total Hydrants, 2"			<u>34</u>	<u>\$ 16,291.00</u>
Fire Hydrants, 4"	1973	Ea.	1	\$ 495.00
Fire Hydrants, 4"	1983	Ea.	5	3,440.00
Total Hydrants, 4"			<u>6</u>	<u>\$ 3,935.00</u>
Fire Hydrants, 6"	1973	Ea.	5	\$ 1,540.00
Fire Hydrants, 6"	1981	Ea.	7	5,341.00
Total Hydrants, 6"			<u>12</u>	<u>\$ 6,881.00</u>
Total Account 335.00			<u><u>52</u></u>	<u><u>\$ 27,107.00</u></u>

**Note:**

The 1996 Pa. P.U.C. Annual Report lists 100 fire hydrants. Included in this count are blow-offs. The actual number of fire hydrants is 52.



**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 339.00 - Backflow Prevention**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Backflow Prevention	1998	Ea.	1	\$ 4,288.00
Backflow Prevention	2004	Ea.	1	4,654.00
Backflow Prevention	2009	Ea.	1	1,308.00
<b>Total Account 339.00</b>			<u>3</u>	<u>\$ 10,250.00</u>

**Aqua-PA Treasure Lake Water System**

Original Cost at February 28, 2013  
Account 340.00 - Office Furniture & Equipment

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Office Furniture:</u></b>				
Cabinet Locker, 6 Drawer	1980	Ea.	1	\$ 50.00
Metal Desk, Black	1980	Ea.	1	250.00
Metal Desk, Brown	1980	Ea.	1	250.00
Metal File Cabinet	1980	Ea.	1	200.00
Metal File Cabinet	1980	Ea.	1	200.00
File Cabinet, Yellow	1980	Ea.	1	100.00
Various	2007			557.00
<b>Total Furniture</b>			<u>6</u>	<u>\$ 1,607.00</u>
<b><u>Office Equipment:</u></b>				
Water Cooler	1980	Ea.	1	\$ 150.00
Bunn Pour-O-Matic Coffee Maker	1980	Ea.	1	200.00
Electric Heater	1980	Ea.	1	75.00
Sharp Calculator	1980	Ea.	1	50.00
<b>Total Equipment</b>			<u>4</u>	<u>\$ 475.00</u>
<b>Total Account 340.00</b>				<u><u>\$ 2,082.00</u></u>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 341.00 - Transportation Equipment**

<u>Item</u>		<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
			<u>Unit</u>	<u>No.</u>	
Dodge Ram 1500 4x4	1D7HU16N82J165183	2002	Ea.	1	\$ 22,220.00
Dodge Ram 1500 4x4	1D7HU16NX6J218200	2006	Ea.	1	25,745.00
Dodge Ram 1500 4X4 (50% Water)	1D3HV18P89S800761	2009	Ea.	1	9,158.00
<b>Total Account 341.00</b>					<b><u><u>\$ 57,123.00</u></u></b>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 343.00 - Tools & Work Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Various Tools	1995	\$ 6,946.00
Various Tools	2004	266.00
Various Tools	2005	822.00
Various Tools	2006	912.00
Various Tools	2007	502.00
Various Tools	2008	454.00
Various Tools	2009	106.00
Various Tools	2010	<u>2,136.00</u>
<b>Total Account 343.00</b>		<u><u>\$ 12,144.00</u></u>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 344.00 - Laboratory Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Various Equipment	1990	\$ 2,431.00
Various Equipment	2006	180.00
<b>Total Account 344.00</b>		<b><u><u>\$ 2,611.00</u></u></b>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 345.00 - Power Operated Equipment**

<u>Item</u>		<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
			<u>Unit</u>	<u>No.</u>	
John Deer 310SG Backhoe (50%)	T0310SG954805	2006	Ea.	1	\$ 30,303.00
Total Account 345.00					<u><u>\$ 30,303.00</u></u>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 346.00 - Communication Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Various Radios	1990	\$ 50.00
Total Account 346.00		<u>\$ 50.00</u>

**Aqua-PA Treasure Lake Water System**

**Original Cost at February 28, 2013  
Account 347.00 - Miscellaneous Equipment**

<u>Item</u>	<u>Year Installed</u>	<u>Original Cost</u>
Various	2007	\$ 465.00
Total Account 347.00		<u>\$ 465.00</u>





**Aqua-PA Treasure Lake Water System**

**Contributions In Aid of Construction  
Original Cost at February 28, 2013  
Account 304.20 - Power & Pumping Structures**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Pump House (Well N-4)	1970	\$ 4,550.00
Pump House (Well N-12)	1980	<u>3,182.00</u>
Total Account 304.20		<u><u>\$ 7,732.00</u></u>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 305.00 - Storage Reservoirs & Standpipe**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Storage Tank	1973	\$ 27,633.00
Total Account 305.00		<u>\$ 27,633.00</u>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 307.00 - Well and Springs**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Well N-4	1970	\$ 8,080.00
Well N-12	1980	<u>1,752.00</u>
Total Account 307.00		<u><u>\$ 9,832.00</u></u>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction**

**Original Cost at February 28, 2013**

**Account 311.00 - Electric Pumping Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Pump	1970	Ea.	1	\$ 11,500.00
Pump	1980	Ea.	1	<u>3,063.00</u>
<b>Total Account 311.00</b>				<b><u><u>\$ 14,563.00</u></u></b>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction**

**Original Cost at February 28, 2013**

**Account 320.00 - Purification System**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Equipment	1970	\$ 18,915.00
Total Account 320.00		<u>\$ 18,915.00</u>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction**

**Original Cost at February 28, 2013**

**Account 331.50 - Plastic Mains, 4" & Under**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Plastic Mains, 4" & Under	1980	\$ 45,992.00
Plastic Mains, 4" & Under	1981	<u>143,194.00</u>
Total Account 331.50		<u><u>\$ 189,186.00</u></u>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction**

Original Cost at February 28, 2013

Account 331.51 - Plastic Mains, 6" - 8"

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Plastic Mains, 6" - 8"	1972	\$ 1,065.00
Plastic Mains, 6" - 8"	1974	<u>88,499.00</u>
Total Account 331.51		<u><u>\$ 89,564.00</u></u>



**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction**

**Original Cost at February 28, 2013**

**Account 331.52 - Plastic Mains, 10" - 14"**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Plastic Mains, 10" - 14"	1972	\$ 35,815.50
Plastic Mains, 10" - 14"	1973	<u>270,288.00</u>
<b>Total Account 331.52</b>		<u><u>\$ 306,103.50</u></u>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 331.60 - Valves, 4" & Under**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Valves, 4" & Under	1972	\$ 290.00
Valves, 4" & Under	1974	9,510.00
Valves, 4" & Under	1980	2,534.00
Valves, 4" & Under	1981	14,594.00
Valves, 4" & Under	1982	<u>1,350.00</u>
Total Account 331.60		<u>\$ 28,278.00</u>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction**

Original Cost at February 28, 2013

Account 331.61 - Valves, 6" - 8"

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Valves, 4" & Under	1972	\$ 155.00
Total Account 331.61		<u>\$ 155.00</u>

**Aqua-PA Treasure Lake Water System**

**Contributions In Aid of Construction**

**Original Cost at February 28, 2013**

**Account 331.62 - Valves, 10" - 14"**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Valves, 10" - 14"	1972	\$ 1,350.00
Valves, 10" - 14"	1973	<u>10,018.00</u>
<b>Total Account 331.62</b>		<u><u>\$ 11,368.00</u></u>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction**

**Original Cost at February 28, 2013**

**Account 333.00 - Services**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Services	1982	\$ 17,057.00
<b>Total Account 333.00</b>		<b><u><u>\$ 17,057.00</u></u></b>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction**

**Original Cost at February 28, 2013**

**Account 335.00 - Fire Hydrants**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Hydrants	1973	\$ 724.00
Hydrants	1980	548.00
Hydrants	1981	5,694.00
Hydrants	1983	1,587.00
<b>Total Account 335.00</b>		<b><u>\$ 8,553.00</u></b>

**Aqua-PA Treasure Lake Water System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 343.00 - Tools & Work Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Equipment	1982	\$ 84.00
Total Account 343.00		<u>\$ 84.00</u>





**Aqua-PA Treasure Lake Water System**

**Customer's Advances for Construction**  
**Original Cost at February 28, 2013**  
**Account 331.51 Plastic Mains, 6" - 8"**

<u>Item:</u>	<u>Year Installed</u>	<u>Original Cost</u>
Plastic Mains, 6" - 8"	1984	\$ 97,561.00
Total Account 331.51		<u>\$ 97,561.00</u>

# **SECTION 3**

**Aqua Pennsylvania, Inc.**

*Acquisition of Treasure Lake Water System*

**Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of February 28, 2013  
Based Upon Whole Life Depreciation**

Acct. No.	Account Description	Original Cost at 2/28/13	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 2/28/13
<b><u>Non-Depreciable Plant:</u></b>					
303.20	Source of Supply Land & Water Rights	\$53,181.00			\$53,181.00
303.40	Transmission & Distribution Land & Right of Way	9,496.00			9,496.00
303.50	Distribution Reservoirs and Standpipe Land	17,850.00			17,850.00
	<b>Total Non-Depreciable Plant</b>	<b>\$80,527.00</b>			<b>\$80,527.00</b>
<b><u>Depreciable Plant:</u></b>					
304.20	Power & Pumping Structures	\$51,635.59	60-R3	\$19,616.15	\$32,019.44
304.30	Purification Buildings	33,882.88	60-R3	9,554.04	24,328.84
305.00	Storage Reservoir & Standpipe	83,290.00	65-R3	45,847.29	37,442.71
307.00	Well and Spring	70,566.16	80-R2	17,650.04	52,916.12
310.00	Power Generation Equipment	28,000.00	25-R3	19,676.51	8,323.49
311.00	Electric Pumping Equipment	98,835.98	25-R3	71,820.61	27,015.37
320.00	Water Treatment Equipment	139,037.95	40-R3	57,887.58	81,150.37
<b>331</b>	<b><u>Mains &amp; Accessories:</u></b>				
331.11	Mains - Cast Iron, 6" to 8"	\$1,918.80	100-R3	\$717.29	\$1,201.51
331.50	Mains - Plastic, 4" & Under	906,412.90	50-R3	501,987.66	404,425.24
331.51	Mains - Plastic, 6" to 8"	1,334,823.49	80-R3	489,067.25	845,756.24
331.52	Mains - Plastic, 10" to 14"	602,299.72	90-R3	248,523.51	353,776.21
331.60	Mains - Valves, 4" & Under	90,062.87	50-R3	53,012.31	37,050.56
331.61	Mains - Valves, 6" to 8"	44,880.66	80-R3	17,449.65	27,431.01
331.62	Mains - Valves, 10" to 14"	9,250.00	90-R3	3,824.38	5,425.62
331.70	Mains, Blow-offs	14,740.00	65-R3	7,340.48	7,399.52
	<b>Total Account 331</b>	<b>\$3,004,388.44</b>		<b>\$1,321,922.53</b>	<b>\$1,682,465.91</b>
333.00	Services	\$534,515.13	60-R3	\$235,872.20	\$298,642.93
334.00	Meter	217,297.28	30-R2	108,551.71	108,745.57
335.00	Fire Hydrants	27,107.00	65-R2	11,125.64	15,981.36
339.00	Backflow Prevention	10,250.00	50-R3	2,082.63	8,167.37
340.00	Office Furniture & Equipment	2,082.00	15-L1	1,410.43	671.57
341.00	Transportation Equipment	57,123.00	7-R3	44,887.29	12,235.71
343.00	Tools, Shop and Work Equipment	12,144.00	15-R3	7,626.20	4,517.80
344.00	Laboratory Equipment	2,611.00	20-R3	2,127.75	483.25
345.00	Power Operating Equipment	30,303.00	10-R3	17,957.79	12,345.21
346.00	Communication Equipment	50.00	15-R3	47.54	2.46
347.00	Miscellaneous Equipment	465.00	5-R3	389.59	76.41
	<b>Total Depreciable Plant</b>	<b>\$4,403,584.41</b>		<b>\$1,996,053.52</b>	<b>\$2,407,530.89</b>
	<b>Total Plant in Service</b>	<b>\$4,484,111.41</b>		<b>\$1,996,053.52</b>	<b>\$2,488,057.89</b>

**Aqua Pennsylvania, Inc.**

*Acquisition of Treasure Lake Water System*

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of February 28, 2013  
Based Upon Whole Life Depreciation

Acct. No.	Account Description	Original Cost at 2/28/13	ASL/lowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 2/28/13
<b><u>Deduct: Contributions in Aid of Construction (CIAC):</u></b>					
304.20	Power & Pumping Structures	\$7,732.00	60-R3	\$4,432.27	3,299.73
305.00	Storage Reservoir & Standpipe	27,633.00	65-R3	15,211.02	12,421.98
307.00	Well and Spring	9,832.00	80-R2	4,161.46	5,670.54
311.00	Electric Pumping Equipment	14,563.00	25-R3	14,267.24	295.76
320.00	Water Treatment Equipment	18,915.00	40-R3	15,649.33	3,265.67
331.50	Mains - Plastic, 4" & Under	\$189,186.00	50-R3	\$108,167.45	81,018.55
331.51	Mains - Plastic, 6" to 8"	89,564.00	80-R3	40,162.44	49,401.56
331.52	Mains - Plastic, 10" to 14"	306,103.50	90-R3	126,473.11	179,630.39
331.60	Mains - Valves, 4" & Under	28,278.00	50-R3	17,070.95	11,207.05
331.61	Mains - Valves, 6" to 8"	155.00	80-R3	72.69	82.31
331.62	Mains - Valves, 10" to 14"	11,368.00	90-R3	4,697.12	6,670.88
	Total Account 331	\$624,654.50		\$296,643.76	\$328,010.74
333.00	Services	\$17,057.00	60-R3	\$8,038.29	\$9,018.71
335.00	Fire Hydrants	8,553.00	65-R2	3,505.78	5,047.22
343.00	Tools, Shop and Work Equipment	84.00	15-R3	84.00	-
	Total Contributions in Aid of Construction (CIAC)	\$729,023.50		\$361,993.15	\$367,030.35
<b><u>Deduct: Customers Advances for Construction (CAC):</u></b>					
331.51	Mains - Plastic, 6" to 8"	\$97,561.00	80-R3	\$33,156.98	\$64,404.02
	Total Plant in Service (Net)	<u>\$3,657,526.91</u>		<u>\$1,600,903.39</u>	<u>\$2,056,623.52</u>

626,584.50

335,150.13

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

304.20 Power & Pumping Structures

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

		Salvage Value: 0	%			
Year	Original Cost	Expectancy	Avg. Service Life	Reserve Ratio	Calculated Reserve	
(1)	(2)	(3)	(4)	(5)	(6)	
WELL N-4						
<i>Interim Survivor Curve: Iowa</i>		60	R3			
<i>Probable Retirement Year:</i>		0				
1970	4,550.00	22.48	60.00	0.62532	2,846	
<b>Total</b>	4,550.00				2,846	
WELL N-12						
<i>Interim Survivor Curve: Iowa</i>		60	R3			
<i>Probable Retirement Year:</i>		0				
1980	10,891.00	30.09	60.00	0.49845	5,429	
<b>Total</b>	10,891.00				5,429	
WELL N-14						
<i>Interim Survivor Curve: Iowa</i>		60	R3			
<i>Probable Retirement Year:</i>		0				
1985	12,816.73	34.23	60.00	0.42943	5,504	
<b>Total</b>	12,816.73				5,504	
WELL N-32						
<i>Interim Survivor Curve: Iowa</i>		60	R3			
<i>Probable Retirement Year:</i>		0				
1997	21,966.91	44.93	60.00	0.25117	5,518	
1998	1,286.27	45.86	60.00	0.23564	306	
2006	114.68	53.48	60.00	0.10861	13	

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**304.20 Power & Pumping Structures**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

	Salvage Value: 0		%		
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
<b>Total</b>	23,377.86				5,837
<b>Account Total</b>	51,635.59				19,616.15

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**304.30 Purification Buildings**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

		Salvage Value: 0		%	
Year	Original Cost	Expectancy	Avg. Service Life	Reserve Ratio	Calculated Reserve
(1)	(2)	(3)	(4)	(5)	(6)
WELL N-23					
<i>Interim Survivor Curve: Iowa</i>		60	R3		
<i>Probable Retirement Year:</i>		0			
1996	33,882.88	43.08	60.00	0.28198	9,554
<b>Total</b>	33,882.88				9,554
<i>Account</i>					
<b>Total</b>	33,882.88				9,554.04

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**305.00 Storage Reservoir & Standpipe**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

Salvage Value: 0 %

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>

**RESERVOIR**

*Interim Survivor Curve: Iowa 65 R3*

*Probable Retirement Year: 0*

1973	83,290.00	29.22	65.00	0.55045	45,847
<b>Total</b>	83,290.00				45,847
<i>Account</i>					
<b>Total</b>	83,290.00				45,847.29



**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**307.00 Well and Spring**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

		Salvage Value: 0		%			
Year	Original Cost	Expectancy	Avg. Service Life	Reserve Ratio	Calculated Reserve		
(1)	(2)	(3)	(4)	(5)	(6)		
WELL N-4							
<i>Interim Survivor Curve: Iowa</i>		<b>80</b>	<b>R2</b>				
<i>Probable Retirement Year:</i>		<b>0</b>					
1970	8,080.00	44.81	80.00	0.43991	3,555		
1980	5,820.00	52.33	80.00	0.34590	2,014		
<b>Total</b>	<b>13,900.00</b>				<b>5,569</b>		
WELL N-14							
<i>Interim Survivor Curve: Iowa</i>		<b>80</b>	<b>R2</b>				
<i>Probable Retirement Year:</i>		<b>0</b>					
1985	15,080.73	56.27	80.00	0.28657	4,473		
<b>Total</b>	<b>15,080.73</b>				<b>4,473</b>		
WELL N-23							
<i>Interim Survivor Curve: Iowa</i>		<b>80</b>	<b>R2</b>				
<i>Probable Retirement Year:</i>		<b>0</b>					
1995	20,100.99	64.51	80.00	0.19366	3,893		
<b>Total</b>	<b>20,100.99</b>				<b>3,893</b>		
WELL N-32							
<i>Interim Survivor Curve: Iowa</i>		<b>80</b>	<b>R2</b>				
<i>Probable Retirement Year:</i>		<b>0</b>					
1995	406.00	64.51	80.00	0.19366	79		
1997	21,078.44	66.20	80.00	0.17247	3,636		

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**307.00 Well and Spring**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

	Salvage Value: 0		%		
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
<b>Total</b>	21,484.44				3,715
<b>Account Total</b>	70,586.16				17,650.04

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**310.00 Power Generation Equipment**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1992	28,000.00	7.43	25.00	0.70273	19,677
<b>Total</b>	<b>28,000.00</b>				<b>19,676.51</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**311.00 Electric Pumping Equipment**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1970	11,500.00	0.00	0.00	1.00000	11,500
1980	10,135.00	2.41	25.00	0.90344	9,156
1985	8,600.00	3.93	25.00	0.84263	7,247
1988	9,000.00	5.21	25.00	0.79167	7,125
1990	8,239.87	6.25	25.00	0.75012	6,181
1995	31,289.31	9.45	25.00	0.62211	19,466
1997	15,080.01	10.92	25.00	0.56301	8,490
1998	4,991.79	11.70	25.00	0.53206	2,656
<b>Total</b>	<b>98,835.98</b>				<b>71,820.61</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**320.00 Water Treatment Equipment**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1970	18,915.00	6.91	40.00	0.82735	15,849
1985	4,800.00	15.55	40.00	0.61135	2,934
1995	88,566.88	23.49	40.00	0.41284	36,564
1997	3,258.29	25.22	40.00	0.36940	1,203
2010	23,500.00	37.38	40.00	0.06540	1,537
<b>Total</b>	<b>139,037.95</b>				<b>57,887.58</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**331.11 Mains, Cast Iron - 6" - 8"**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1973	1,918.80	62.62	100.00	0.37382	717
<b>Total</b>	<b>1,918.80</b>				<b>717.29</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**331.50 Mains, Plastic - 4" & Under**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1973	6,925.00	15.93	50.00	0.68144	4,719
1974	119,205.00	16.59	50.00	0.68823	79,657
1980	129,235.80	20.84	50.00	0.58315	75,364
1981	237,234.84	21.60	50.00	0.56809	134,771
1982	7,786.68	22.36	50.00	0.55280	4,304
1984	57,344.76	23.92	50.00	0.52155	29,908
1985	304,923.36	24.72	50.00	0.50560	154,169
1986	28,692.00	25.53	50.00	0.48944	14,043
1995	15,065.66	33.23	50.00	0.33537	5,053
<b>Total</b>	<b>906,412.90</b>				<b>501,987.66</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**331.51 Mains, Plastic 6" - 8"**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	1,065.00	42.48	80.00	0.46899	499
1973	146,823.22	43.31	80.00	0.45864	67,339
1974	147,495.45	44.15	80.00	0.44817	66,104
1980	23,004.00	49.28	80.00	0.38402	8,834
1981	281,512.13	50.15	80.00	0.37309	97,568
1984	289,430.82	52.81	80.00	0.33986	98,366
1985	298,327.22	53.71	80.00	0.32867	98,050
1986	181,296.15	54.61	80.00	0.31738	51,192
1987	5,869.60	64.81	80.00	0.18987	1,114
<b>Total</b>	<b>1,334,823.49</b>				<b>489,067.25</b>



**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**331.52 Mains, Plastic 10" - 14"**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	35,815.50	52.08	90.00	0.42156	15,098
1973	566,484.22	52.91	90.00	0.41206	233,425
<b>Total</b>	<b>602,299.72</b>				<b>248,523.51</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**331.60 Mains, Valves - 4" & Under**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	290.00	15.28	50.00	0.69435	201
1973	12,390.00	15.93	50.00	0.68144	8,443
1974	15,437.13	16.59	50.00	0.66823	10,316
1980	7,350.00	20.84	50.00	0.58315	4,286
1981	32,057.17	21.60	50.00	0.56809	18,211
1982	2,348.00	22.36	50.00	0.55280	1,298
1983	2,000.00	23.14	50.00	0.53728	1,075
1984	1,364.65	23.92	50.00	0.52155	712
1985	14,553.36	24.72	50.00	0.50560	7,358
1986	2,272.56	25.53	50.00	0.48944	1,112
<b>Total</b>	<b>90,062.87</b>				<b>53,012.31</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**331.61 Mains, Valves - 6" - 8"**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	155.00	42.48	80.00	0.46899	73
1973	9,225.00	43.31	80.00	0.45864	4,231
1974	6,355.78	44.15	80.00	0.44817	2,848
1980	375.00	49.28	80.00	0.38402	144
1981	12,382.02	50.15	80.00	0.37309	4,620
1982	4,158.00	51.04	80.00	0.36206	1,505
1984	3,343.34	52.81	80.00	0.33986	1,136
1985	6,355.80	53.71	80.00	0.32867	2,089
1986	2,530.72	54.61	80.00	0.31738	803
<b>Total</b>	<b>44,880.66</b>				<b>17,449.65</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**331.62 Mains, Valves - 10" - 14"**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	1,350.00	52.06	90.00	0.42156	569
1973	7,900.00	52.91	90.00	0.41206	3,255
<b>Total</b>	<b>9,250.00</b>				<b>3,824.38</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**331.70 Mains, Blow-offs**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1973	820.00	29.22	65.00	0.55045	451
1974	6,855.00	30.00	65.00	0.53850	3,691
1980	665.00	34.83	65.00	0.48420	309
1981	6,400.00	35.66	65.00	0.45141	2,889
<b>Total</b>	<b>14,740.00</b>				<b>7,340.48</b>

***Aqua - Pennsylvania, Inc.***

***Treasure Lake Water***

***333.00 Services***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1974	23,108.80	25.41	60.00	0.57650	13,322
1975	44,419.83	26.17	60.00	0.56390	25,048
1976	473.46	26.93	60.00	0.55110	261
1977	16,749.69	27.71	60.00	0.53816	9,014
1978	19,728.83	28.49	60.00	0.52509	10,358
1979	23,062.22	29.29	60.00	0.51184	11,804
1980	35,614.59	30.09	60.00	0.49845	17,752
1981	23,633.56	30.90	60.00	0.48494	11,461
1982	20,639.18	31.72	60.00	0.47126	9,726
1983	50,708.05	32.55	60.00	0.45745	23,196
1984	59,735.04	33.39	60.00	0.44352	26,494
1985	128,769.48	34.23	60.00	0.42943	55,298
1986	39,360.60	35.08	60.00	0.41522	16,343
1986	2,122.00	44.00	60.00	0.26662	566
2004	13,541.00	51.55	60.00	0.14077	1,906
2005	7,849.00	52.52	60.00	0.12472	979
2006	12,179.00	53.48	60.00	0.10861	1,323
2007	2,593.00	54.45	60.00	0.09244	240
2008	10,230.00	55.43	60.00	0.07623	780
<b><i>Total</i></b>	<b><i>534,515.13</i></b>				<b><i>235,872.20</i></b>

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water**  
334.00 Meters

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 30 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	1,000.00	3.85	30.00	0.87839	878
1980	800.00	7.11	30.00	0.76313	611
1985	26,864.65	9.47	30.00	0.68445	18,387
1986	23,117.85	10.00	30.00	0.66674	15,414
1987	18,364.50	10.55	30.00	0.64839	11,907
1988	14,816.67	11.12	30.00	0.62935	9,325
1989	11,708.78	11.71	30.00	0.60972	7,139
1990	8,889.58	12.32	30.00	0.58948	5,240
1991	12,372.48	12.94	30.00	0.56859	7,035
1992	12,529.70	13.59	30.00	0.54716	6,656
1993	11,635.00	14.24	30.00	0.52517	6,110
1994	9,623.20	14.92	30.00	0.50258	4,836
1996	10,555.00	16.32	30.00	0.45592	4,612
1997	597.88	17.05	30.00	0.43179	258
2004	6,983.00	22.49	30.00	0.25034	1,748
2005	7,283.00	23.32	30.00	0.22279	1,623
2006	16,607.99	24.16	30.00	0.19482	3,236
2007	7,522.00	25.00	30.00	0.16853	1,253
2008	6,421.00	25.86	30.00	0.13789	885
2009	7,977.00	26.73	30.00	0.10889	869
2010	1,628.00	27.61	30.00	0.07960	130
<b>Total</b>	<b>217,297.28</b>				<b>108,551.71</b>

***Aqua - Pennsylvania, Inc.***

***Treasure Lake Water***

***335.00 Fire Hydrants***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R2***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1973	2,035.00	32.86	65.00	0.49440	1,006
1980	1,820.00	37.87	65.00	0.41737	760
1981	19,812.00	38.61	65.00	0.40597	8,043
1983	3,440.00	40.12	65.00	0.38283	1,317
<b><i>Total</i></b>	<b><i>27,107.00</i></b>				<b><i>11,125.84</i></b>



***Aqua - Pennsylvania, Inc.***

***Treasure Lake Water***

***339.00 Backflow Prevention***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1998	4,288.00	35.95	50.00	0.28094	1,205
2004	4,654.00	41.58	50.00	0.16844	784
2009	1,308.00	46.41	50.00	0.07190	94
<b><i>Total</i></b>	<b><i>10,250.00</i></b>				<b><i>2,082.63</i></b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**340.00 Office Furniture & Equipment**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 15 Survivor Curve: L1*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1980	1,525.00	2.71	15.00	0.81904	1,249
2007	557.00	10.65	15.00	0.28975	161
<b>Total</b>	<b>2,082.00</b>				<b>1,410.43</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**341.00 Transportation Equipment**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 7 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2002	22,220.00	0.50	7.00	0.92835	20,628.29
2006	25,745.00	1.60	7.00	0.77115	19,853
2009	9,158.00	3.63	7.00	0.48112	4,406
<b>Total</b>	<b>57,123.00</b>				<b>44,887.29</b>

***Aqua - Pennsylvania, Inc.***

***Treasure Lake Water***

***343.00 Tools, Shop and Work Equipment***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 15 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1995	6,946.00	2.02	15.00	0.86563	6,013
2004	266.00	7.13	15.00	0.52494	140
2005	822.00	7.93	15.00	0.47115	387
2006	912.00	8.77	16.00	0.41514	379
2007	502.00	9.64	15.00	0.35710	179
2008	454.00	10.54	15.00	0.29717	136
2009	106.00	11.47	15.00	0.23561	25
2010	2,136.00	12.41	15.00	0.17268	369
<b><i>Total</i></b>	<b><i>12,144.00</i></b>				<b><i>7,626.20</i></b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**344.00 Laboratory Equipment**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 20 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1990	2,431.00	2.96	20.00	0.85176	2,071
2006	180.00	13.65	20.00	0.31735	57
<b>Total</b>	<b>2,611.00</b>				<b>2,127.75</b>

***Aqua - Pennsylvania, Inc.***

***Treasure Lake Water***

***345.00 Power Operating Equipment***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of February 28, 2013***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 10 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
<b><i>2006</i></b>	<b><i>30,303.00</i></b>	<b><i>4.07</i></b>	<b><i>10.00</i></b>	<b><i>0.59261</i></b>	<b><i>17,958</i></b>
<b><i>Total</i></b>	<b><i>30,303.00</i></b>				<b><i>17,957.79</i></b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water**

**346.00 Communication Equipment**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 15 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1990	50.00	0.74	15.00	0.95071	48
<b>Total</b>	<b>50.00</b>				<b>47.54</b>

***Aqua - Pennsylvania, Inc.***

***Treasure Lake Water***

***347.00 Miscellaneous Equipment***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of February 28, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 5 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
2007	465.00	0.81	5.00	0.83782	390
<b><i>Total</i></b>	<b><i>465.00</i></b>				<b><i>389.59</i></b>





**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**304.20 Power & Pumping Structures**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

Salvage Value: 0 %					
Year	Original Cost	Expectancy	Avg. Service Life	Reserve Ratio	Calculated Reserve
(1)	(2)	(3)	(4)	(5)	(6)
WELL N-4					
<i>Interim Survivor Curve: Iowa 60 R3</i>					
<i>Probable Retirement Year: 0</i>					
1970	4,550.00	22.48	60.00	0.62532	2,846
<b>Total</b>	4,550.00				2,846
WELL N-12					
<i>Interim Survivor Curve: Iowa 60 R3</i>					
<i>Probable Retirement Year: 0</i>					
1980	3,182.00	30.09	60.00	0.49845	1,587
<b>Total</b>	3,182.00				1,587
<b>Account Total</b>	7,732.00				4,432.27

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**305.00 Storage Reservoir & Standpipe**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
<i>Salvage Value: 0 %</i>					
<b>RESERVIOR</b>					
<i>Interim Survivor Curve: Iowa 65 R3</i>					
<i>Probable Retirement Year: 0</i>					
1973	27,633.00	29.22	65.00	0.55045	15,211
<b>Total</b>	27,633.00				15,211
 <i>Account</i>					
<b>Total</b>	27,633.00				15,211.02

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
 307.00 Well and Spring

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

		Salvage Value: 0	%			
Year	Original Cost	Expectancy	Avg. Service Life	Reserve Ratio	Calculated Reserve	
(1)	(2)	(3)	(4)	(5)	(6)	
WELL N-4						
<i>Interim Survivor Curve: Iowa</i>		80	R2			
<i>Probable Retirement Year:</i>		0				
1970	8,080.00	44.81	80.00	0.43991	3,555	
<b>Total</b>	8,080.00				3,555	
WELL N-12						
<i>Interim Survivor Curve: Iowa</i>		80	R2			
<i>Probable Retirement Year:</i>		0				
1980	1,752.00	52.33	80.00	0.34590	607	
<b>Total</b>	1,752.00				607	
<b>Account Total</b>	9,832.00				4,161.46	

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**311.00 Electric Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	11,500.00	0.00	0.00	1.00000	11,500
1980	3,063.00	2.41	25.00	0.90344	2,787
<b>Total</b>	<b>14,563.00</b>				<b>14,287.24</b>

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**320.00 Water Treatment Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	18,915.00	6.91	40.00	0.82735	15,649
<b>Total</b>	18,915.00				15,649.33

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**331.50 Mains, Plastic - 4" & Under**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1980	45,992.00	20.84	50.00	0.58315	26,820
1981	143,194.00	21.60	50.00	0.58809	81,347
<b>Total</b>	<b>189,186.00</b>				<b>108,167.45</b>

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**331.51 Mains, Plastic 6" - 8"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	1,065.00	42.48	80.00	0.46899	499
1974	88,499.00	44.15	80.00	0.44817	39,663
<b>Total</b>	<b>89,564.00</b>				<b>40,162.44</b>



**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**331.52 Mains, Plastic 10" - 14"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	35,815.50	52.06	90.00	0.42156	15,098
1973	270,288.00	52.91	90.00	0.41206	111,375
<b>Total</b>	<b>306,103.50</b>				<b>126,473.11</b>

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
 331.60 Mains, Valves - 4" & Under

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	290.00	15.28	50.00	0.69436	201
1974	9,510.00	16.59	50.00	0.66823	6,355
1980	2,534.00	20.84	50.00	0.58315	1,478
1981	14,594.00	21.60	50.00	0.56809	8,291
1982	1,350.00	22.36	50.00	0.55280	748
<b>Total</b>	<b>28,278.00</b>				<b>17,070.95</b>

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**331.61 Mains, Valves - 6" - 8"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	155.00	42.48	80.00	0.46899	73
<b>Total</b>	155.00				72.69

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**331.62 Mains, Valves - 10" - 14"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	1,350.00	52.06	90.00	0.42156	569
1973	10,018.00	52.91	90.00	0.41206	4,128
<b>Total</b>	<b>11,368.00</b>				<b>4,697.12</b>

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**333.00 Services**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	17,057.00	31.72	60.00	0.47126	8,038
<b>Total</b>	17,057.00				8,038.29

**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CIAC**  
**335.00 Fire Hydrants**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	724.00	32.86	65.00	0.49440	358
1980	548.00	37.87	65.00	0.41737	229
1981	5,694.00	38.61	65.00	0.40597	2,312
1983	1,587.00	40.12	65.00	0.38283	608
<b>Total</b>	<b>8,553.00</b>				<b>3,505.78</b>

**Aqua - Pennsylvania, Inc.**

**Treasure Lake Water - CIAC**

**343.00 Tools, Shop and Work Equipment**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 15 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1982	84.00	0.00	0.00	1.00000	84
<b>Total</b>	<b>84.00</b>				<b>84.00</b>





**Aqua - Pennsylvania, Inc.**  
**Treasure Lake Water - CAC**  
**331.51 Mains, Plastic 6" - 8"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1984	97,561.00	52.81	80.00	0.33986	33,157
<b>Total</b>	97,561.00				33,156.98

Aqua Pennsylvania, Inc.  
 BCWSA/Concord Park Community Costs  
 M92511  
 Journal Entry

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	104000	Utility Plant Purchased/Sold		413,509.76
9	108000	AD-General		152,103.80
2810	114000	U Plant Acq Adj	52,201.83	
9	300000	PPE-Utility Plant in Service	513,411.73	
<b>Total</b>			<b>565,613.56</b>	<b>565,613.56</b>

**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**BCWSA/Concord Park Community**

<b>Section 1327(a) Criteria</b>	<b>Satisfied (Y/N)</b>	<b>Explanation</b>
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	Yes	<p>On March 30, 2013, Aqua Pennsylvania, Inc. (“Aqua”) acquired the Concord Park Water System Assets (“Assets”) of Bucks County Water &amp; Sewer Authority (“Seller”). The Seller’s Assets were used and useful in providing water service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	Yes	<p>Prior to Aqua’s acquisition of Seller’s Assets, Bucks County Water &amp; Sewer Authority was providing water service to 168 customers in the Concord Park section in a portion of Bensalem Township, Bucks County, Pennsylvania.</p> <p>Reference: Commission Order Docket No. A-2012-2282709</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p> <p style="text-align: center;">(i)</p> <p>violation of statutory or regulatory requirements</p>	Yes	

<p>of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and reasonable service;</p>	<p>Yes</p>	

<p>(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;</p>	<p>Yes</p>	<p>Aqua and the Seller entered into an <i>Asset Purchase Agreement</i>, which was negotiated at arm's length. On December 28, 2011, Aqua filed an <i>Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered March 15, 2012, at Docket No. A-2012-2282709, the PUC granted the approvals requested in the <i>Application</i>.</p>
<p>(6) the actual purchase price is reasonable;</p>	<p>Yes</p>	<p>The total purchase price for the Seller's Assets was \$399,336 and was negotiated at arm's length. The Commission approved the company's application to acquire the Concord Park assets of Bucks County Water &amp; Sewer Authority and an original cost study was prepared to support the utility plant purchase.</p> <p>Reference: Commission Order Docket No. A-2012-2282709</p>
<p>(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;</p>	<p>Yes</p>	<p>The Seller is not an affiliated interest of Aqua.</p>
<p>(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b></p>	<p>Yes</p>	<p>The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.</p>
<p>(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.</p>	<p>Yes</p>	<p>The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.</p>

# **AQUA PENNSYLVANIA INC.**

## ***Acquisition of The Concord Park Section of Bensalem Township***

**Original Cost of Sewer Utility Plant and  
Depreciation Reserve Calculations**

**at  
October 24, 2011**

**Gary D. Shambaugh, Principal & Director  
David A. Sheffer, Senior Associate**

**AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011  
[www.ausinc.com](http://www.ausinc.com)**

**May 2013**





GARY D. SHAMBAUGH  
Principal & Director

AUS CONSULTANTS

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May 17, 2013

Ms. Meghan Kreszwick  
Manager of Rates, PA & NJ  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010

RE: Acquisition of the Concord Park section of  
Bensalem Township

Dear Ms. Kreszwick:

In accordance with your request, we have prepared an inventory of the water utility plant of the Concord Park section of Bensalem Township. (the "System") as of October 24, 2011.

The inventory was prepared to conform to the Uniform System of Accounts for Water Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of the System was determined from a detailed analysis of the books and records of the System and has been segregated as follows:

	Original <u>Cost</u>	Calculated <u>Reserve</u>
Utility Plant in Service (Net)	\$499,238	\$152,104

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2, and the depreciation calculations in Section 3.

Respectfully submitted,

AUS Consultants

By: Gary D. Shambaugh



**AQUA PENNSYLVANIA, INC.**

**Acquisition of The Concord Park Section of Bensalem Township**

Table of Contents

	Page <u>No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Company's Facilities	1-1
Overview of the Study Techniques	1-2
Utility Plant Inventory	1-2
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Contributions In Aid of Construction	1-5
Customer Advances for Construction	1-5
Depreciation Reserve	1-5
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at October 24, 2011	2-1
<b><u>Account 101 - Utility Plant in Service</u></b>	
331 Transmission & Distribution Mains	2-2
333 Services	2-3
334 Meters	2-4
335 Hydrants	2-5
<b><u>SECTION 3</u></b>	
<b><u>DEPRECIATED ORIGINAL COST</u></b>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of October 24, 2011	3-1

# **SECTION 1**

## **AQUA PENNSYLVANIA, INC.**

### **Acquisition of The Concord Park section of Bensalem Township**

#### **Executive Summary**

#### **BACKGROUND**

The Concord Park section of Bensalem Township ("System") makes water service available to approximately 167 customers located in Bensalem Township, Bucks County, Pennsylvania. The System began providing water service in 1987 and has continued to grow and expand over the years.

Aqua Pennsylvania, Inc. ("Aqua") and the Bucks County Water & Sewer Authority have filed a joint application requesting the Commission to approve the sale of the water system and grant Aqua the right to furnish service in the System's service territory.

Aqua has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of October 24, 2011. The results of that study are set forth herein.

#### **OVERVIEW OF THE SYSTEM'S FACILITIES**

The System's assets to be acquired consist of facilities for the distribution of water to its customers. The distribution system consists of approximately 9,825 linear feet of ductile iron pipe. Customer service lines, which run from the System's mains to the curb line, consist of 3/4" and 1" diameter pipe, curb stops, and curb boxes. All of the customers are metered. The water system provides fire protection service.

## **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the System's assets was conducted in two (2) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property that is owned and operated.

Second, the original cost of the inventoried property was determined based on a review of the books of account, construction records, and other sources. For the most part, the System's records provided reasonable data as to the original cost of its plant in service.

In addition, Aqua requested theoretical accrued depreciation calculations be prepared based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at October 24, 2011.

A complete discussion of the methodologies employed in the original cost study is set forth in the following sections of this report.

### **UTILITY PLANT INVENTORY**

A comprehensive inventory of the System's plant in service as of October 24, 2011 was performed. One of the principal source documents for the inventory was the "as built" maps of the system. The maps were particularly helpful in locating and documenting the sizes, types, and lengths of the pipelines and the sizes, types, and locations of accessories, such as valves, and fire hydrants. Significant components of the inventory are discussed below.

#### **Mass Property**

For purposes of this study, "mass" property consists of utility plant recorded in Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters), and

Account 335 (Fire Hydrants). For Account 331, footages of pipe, by size and type, were determined by reviewing the “as-built” maps and were verified by a physical check of the distribution system in place. This same procedure was utilized for valves.

Based upon data obtained from the System records, customer service lines (Account 333) and meters (Account 334) were installed when the customer requested service. For Account 335, fire hydrant locations were determined by reviewing the “as-built” maps and were verified by a physical check.

The original cost of all inventoried property units is properly recorded in the following accounts.

<u>Acct. No.</u>	<u>Account Title</u>
331	Transmission & Distribution Mains
333	Services
334	Meters
335	Hydrants

### **ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the original cost of the System’s plant in service by fixed capital account and, within each account, to determine the original costs by size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of the System’s property by account. The original cost determinations for Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters), and Account 335 (Hydrants) are explained as follows:

#### **Account 331, Account 333, Account 334, and Account 335**

An original cost of mains and accessories was determinable from available records for the System’s distribution system and other source documents. The System summaries

verified that the lengths scaled and units counted from the distribution system maps were accurate. As previously explained, the physical inventory established the total footage of pipe by size and type and the total number of units of accessories. The information contained in the construction summaries was used to develop the footage of pipe, units of accessories, and the resultant unit price for the respective fixed capital asset. The original cost values at October 24, 2011 for the System's mains, customer services, meters, and fire hydrants as established by the original cost study total \$412,669; \$62,907; \$19,908; \$3,753, respectively.

### **SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the System's utility plant in service is not less than \$499,238, as summarized by plant account in Section 2.

### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all System documents that were available. Based on this record research, there are no contributions in aid of construction.

### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all documents that were available. Based on this record research, there are no customer advances for construction.

## **DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at October 24, 2011. The calculated accrued depreciation reserve amounts to \$152,104 at October 24, 2011. The calculations were based upon the Broad Group/Remaining Life Procedure and Technique utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date. The results of those calculations and detailed supporting documentation are included in Section 3 of this report.

# **SECTION 2**



**Aqua Pennsylvania, Inc.**

**Acquisition of Concord Park Water System**

**Original Cost at October 24, 2011**

<u>Acct. No.</u>	<u>Account Title</u>	<u>Original Cost 10-24-2011</u>
<u>Transmission &amp; Distribution Mains</u>		
331.01	Mains - CI/DI, 6"	\$397,440.40
331.02	Mains - CI/DI, 8"	4,795.60
331.03	Mains - CI/DI, 12"	2,189.55
331.11	Valves, 6"	7,806.50
331.12	Valves, 8"	341.94
331.13	Valves, 12"	95.44
	TOTAL Account 331	<u>\$412,669.43</u>
333.00	Services	\$62,907.23
334.00	Meters	19,908.07
335.00	Hydrants	3,753.24
	TOTAL Depreciable Plant	<u>\$499,237.97</u>
	TOTAL Plant in Service	<u><u>\$499,237.97</u></u>

**Aqua Pennsylvania, Inc.**

*Acquisition of the Water Assets in the Concord Park Section  
of Bensalem Township from the Bucks County Water & Sewer Authority*

Original Cost at October 24, 2011  
Account 331 - Transmission & Distribution Mains

Item	Year Installed	Quantity Unit	No.	Original Cost
6" Ductile Iron Mains	1987	LF	7,480	\$317,376.40
6" Ductile Iron Mains	1988	LF	1,800	80,064.00
8" Ductile Iron Mains	1966	LF	380	4,795.60
12" Ductile Iron Mains	1966	LF	165	2,189.55
<b>Total Mains</b>			<u>9,825</u>	<u>\$404,425.55</u>
Valves, 6"	1987	Ea.	15	\$6,836.10
Valves, 6"	1988	Ea.	2	970.40
Valves, 8"	1966	Ea.	2	341.94
Valves, 12"	1966	Ea.	1	95.44
<b>Total Valves</b>			<u>20</u>	<u>\$8,243.88</u>
<b>Total Account 331</b>				<u>\$412,669.43</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Water Assets in the Concord Park Section  
of Bensalem Township from the Bucks County Water & Sewer Authority*

Original Cost at October 24, 2011  
Account 333 - Services

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
Services	1987	Ea.	167	\$62,907.23
Total Account 333			167	\$62,907.23

**Aqua Pennsylvania, Inc.**

*Acquisition of the Water Assets in the Concord Park Section  
of Bensalem Township from the Bucks County Water & Sewer Authority*

Original Cost at October 24, 2011  
Account 334 - Meters

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Meters, 5/8" x 3/4"	1996	Ea.	167	\$19,908.07
Total Account 334			167	\$19,908.07 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Water Assets in the Concord Park Section  
of Bensalem Township from the Bucks County Water & Sewer Authority*

Original Cost at October 24, 2011  
Account 335 - Hydrants

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
Hydrants	1987	Ea.	4	\$3,753.24
Total Account 335			4	\$3,753.24

# **SECTION 3**

**Aqua Pennsylvania, Inc.**

Acquisition of Concord Park Water System

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as October 24, 2011  
Based Upon Whole Life Depreciation

<u>Acct. No.</u>	<u>Account Title</u>	<u>Original Cost 10-24-2011</u>	<u>ASL Iowa Curve</u>	<u>Calculated Depreciation Reserve</u>	<u>Depreciated Original Cost at 10-24-2011</u>
	<u>Transmission &amp; Distribution Mains</u>				
331.01	Mains - CI/DI, 6"	\$397,440.40	90-R3	\$ 102,415.64	\$ 295,024.76
331.02	Mains - CI/DI, 8"	4,795.60	90-R3	2,230.63	2,564.97
331.03	Mains - CI/DI, 12"	2,189.55	100-R3	925.78	1,263.77
331.11	Valves, 6"	7,806.50	90-R3	2,017.85	5,788.65
331.12	Valves, 8"	341.94	90-R3	159.05	182.89
331.13	Valves, 12"	95.44	100-R3	40.35	55.09
	TOTAL Account 331	<u>\$412,669.43</u>		<u>\$107,789.30</u>	<u>\$304,880.13</u>
333.00	Services	\$62,907.23	35-R2	\$ 34,682.40	\$ 28,224.83
334.00	Meters	19,908.07	30-R2	8,433.87	11,474.20
335.00	Hydrants	3,753.24	65-R2	1,198.23	2,555.01
	TOTAL Depreciable Plant	<u>\$499,237.97</u>		<u>\$152,103.80</u>	<u>\$347,134.17</u>
	TOTAL Plant in Service	<u><u>\$499,237.97</u></u>		<u><u>\$152,103.80</u></u>	<u><u>\$347,134.17</u></u>

***Aqua-Pennsylvania, Inc.***

***Concord Park***

***331.01 CI/DI Mains, 6"***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 24, 2011  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0% Average Service Life: 90 Survivor Curve: R3***

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1987	317,376.40	66.62	90.00	0.25976	82,443
1988	80,064.00	67.55	90.00	0.24946	19,972
<b><i>Total</i></b>	<b>397,440.40</b>				<b>102,415.64</b>



***Aqua-Pennsylvania, Inc.***

***Concord Park***

***331.02 CI/DI Mains, 8"***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 24, 2011  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
<b><i>1966</i></b>	<b><i>4,795.60</i></b>	<b><i>48.14</i></b>	<b><i>90.00</i></b>	<b><i>0.46514</i></b>	<b><i>2,231</i></b>
<b><i>Total</i></b>	<b><i>4,795.60</i></b>				<b><i>2,230.63</i></b>

***Aqua-Pennsylvania, Inc.***

***Concord Park***

***331.03 CI/DI Mains, 12"***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 24, 2011  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1966	2,189.55	57.72	100.00	0.42282	926
<b><i>Total</i></b>	2,189.55				925.78

***Aqua-Pennsylvania, Inc.***

***Concord Park***

***331.11 Valves, 6"***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 24, 2011  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1987	6,836.10	66.62	90.00	0.25976	1,776
1988	970.40	67.55	90.00	0.24946	242
<b><i>Total</i></b>	<b><i>7,806.50</i></b>				<b><i>2,017.85</i></b>

***Aqua-Pennsylvania, Inc.***

***Concord Park***

***331.12 Valves, 8"***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 24, 2011  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1966	341.94	48.14	90.00	0.46514	159
<b><i>Total</i></b>	341.94				159.05

***Aqua-Pennsylvania, Inc.***

***Concord Park***

***331.13 Valves, 12"***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 24, 2011  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1966	95.44	57.72	100.00	0.42282	40
<b><i>Total</i></b>	95.44				40.35

***Aqua-Pennsylvania, Inc.***

***Concord Park***

***333.00 Services***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 24, 2011  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 35 Survivor Curve: R2***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1987	62,907.23	15.70	35.00	0.55133	34,682
<b><i>Total</i></b>	<b><i>62,907.23</i></b>				<b><i>34,682.40</i></b>

***Aqua-Pennsylvania, Inc.***

***Concord Park***

***334.00 Meters & Meter Installations***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 24, 2011  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 30 Survivor Curve: R2***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
<b><i>1996</i></b>	<b><i>19,908.07</i></b>	<b><i>17.29</i></b>	<b><i>30.00</i></b>	<b><i>0.42364</i></b>	<b><i>8,434</i></b>
<b><i>Total</i></b>	<b><i>19,908.07</i></b>				<b><i>8,433.87</i></b>

***Aqua-Pennsylvania, Inc.***

***Concord Park***

***335.00 Hydrants***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 24, 2011  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R2***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1987	3,753.24	44.25	65.00	0.31925	1,198
<b><i>Total</i></b>	<b><i>3,753.24</i></b>				<b><i>1,198.23</i></b>



Aqua Pennsylvania, Inc.  
 Bristol Township Water System of Newportville-Ferguson Area Costs  
 M92512  
 Journal Entry

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	300000	PPE-Utility Plant in Service	5,917,133.10	
9	271308	CIAC-CASH NON REFUNDABLE BUILDER OR DEVELOPER DEPOSITS		240,022.00
9	104000	Utility Plant Purchased/Sold		3,514,964.56
9	108000	AD-General		1,959,461.00
9	272000	Accum Amort of CIAC	22,249.00	
9	114000	U Plant Acq Adj		224,934.54
<b>Total</b>			<b>5,939,382.10</b>	<b>5,939,382.10</b>



Aqua Pennsylvania, Inc.  
762 W. Lancaster Avenue  
Bryn Mawr, PA 19010

www.aquaamerica.com

July 25, 2014

**VIA FEDERAL EXPRESS**

Rosemary Chiavatta, Secretary  
Pennsylvania Public Utility Commission  
Two North Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Aqua Pennsylvania, Inc. Original Cost Study – Bristol Township Water System

Dear Secretary Chiavatta:

Pursuant to Pa. Code 69.721(f), enclosed are two copies each of Aqua Pennsylvania's Original Cost Study valuation for the Bristol Township Water System.

If you have any questions regarding this filing, please contact me at (610) 645-4241.

Sincerely,

Meghan Kreszwick  
Manager of Rates – PA & NJ

MPK/  
Certificate of Service

**AQUA PENNSYLVANIA, INC.**  
**CERTIFICATE OF SERVICE**

**BEFORE THE**  
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Aqua Pennsylvania, Inc. : Original Cost Study – Bristol  
Township Water System

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day filed the Original Cost Study for the Bristol Township Water System with the PA Public Utility Commission and upon the person(s) and in the manner indicated below:

**VIA EMAIL**

Tanya J. McCloskey, Esq.  
Office of Consumer Advocate  
555 Walnut Avenue, Fifth Floor  
Forum Place  
Harrisburg, PA 17101-1923  
(email to [choover@paoca.org](mailto:choover@paoca.org))

John Sims, Director  
Bureau of Investigation and Enforcement  
Two West Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17102  
(email [rkanaskie@state.pa.us](mailto:rkanaskie@state.pa.us))

William R. Lloyd, Esq.  
Office of Small Business Advocate  
Suite 1102, Commerce Bldg.  
300 N. Second Street  
Harrisburg, PA 17101-1921  
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Larry Treaster  
Bureau of Audits  
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Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17102  
(email to [latreaster@state.pa.us](mailto:latreaster@state.pa.us) &  
[lburger@pa.gov](mailto:lburger@pa.gov))

Edwin Rodrock  
Festus Odubo  
Bureau of Technical Utility Services  
Two West Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17102  
(email to [hrodock@state.pa.us](mailto:hrodock@state.pa.us) &  
[ebodubo@state.pa.us](mailto:ebodubo@state.pa.us))

Dated: July 25, 2014



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Meghan Kreszwick  
Manager of Rates – PA & NJ

**AQUA PENNSYLVANIA, INC.**

***ACQUISITION OF THE  
BRISTOL TOWNSHIP'S WATER SYSTEM***

Original Cost of Water Utility Plant and  
Depreciation Reserve Calculations  
As of July 31, 2013

David A. Sheffer, Senior Associate  
Gary D. Shambaugh, Principal & Director

AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011  
[www.ausinc.com](http://www.ausinc.com)

March 2014

AQUA PENNSYLVANIA, INC.

Acquisition of The Bristol Township's Water System

Table of Contents

	Page
	<u>No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Township's Facilities	1-1
Overview of the Study Techniques	1-2
Explanation of the Study	1-2
Original Cost Analysis	1-3
Summary of Original Cost	1-4
Contributions In Aid of Construction	1-5
Customer Advances for Construction	1-5
Depreciation Reserve	1-5
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at July 31, 2013	2-1
<b><u>Depreciable Plant</u></b>	
331 Mains & Accessories	2-2
333 Services	2-5
334 Meters	2-7
335 Hydrants	2-9
<b><u>Contribution In Aid of Construction</u></b>	
331 Mains & Accessories	2-10
333 Services	2-11
335 Hydrants	2-12

AQUA PENNSYLVANIA, INC.

Acquisition of The Bristol Township's Water System

Table of Contents

	Page
	<u>No.</u>
 <b><u>SECTION 3</u></b>	
<b><u>DEPRECIATED ORIGINAL COST</u></b>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of July 31, 2013	3-1
Plant in Service	3-2
Contributions in Aid of Construction	3-15

# **SECTION 1**

# **AQUA PENNSYLVANIA, INC.**

## **Acquisition of Bristol Township's Water System**

### **Executive Summary**

#### **BACKGROUND**

Bristol Township ("Township") provides water service to approximately 574 customers located in the area known as the Newportville-Ferguson & Keystone Park, situated in a portion of Bristol Township, Bucks County, Pennsylvania. The Township began providing water service in the early 1970's and has continued to grow and expand over the years.

On December 28, 2011, Aqua Pennsylvania, Inc. ("Aqua-Pa") and the Township filed an application requesting the Commission to approve the sale of the water system and grant Aqua-Pa the right to furnish service in Bristol Township and authorizing the Township to abandon service.

Aqua-Pa has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of July 31, 2013. The results of that study are set forth herein.

#### **OVERVIEW OF THE TOWNSHIP'S FACILITIES**

The Township's assets to be acquired consist of facilities for the distribution of water to its customers. The distribution system consists of approximately 68,000 linear feet of pipe, plus the associated valves, air release valves, hydrants, valve boxes, services and meters. All of the customers are metered and the water system also provides fire protection service.



## **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the Bristol Township's assets was conducted in two (2) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by the Township.

Second, the original cost of the inventoried property was to be determined. Original Construction Cost was not able to be located or obtained from the Township. In addition, Aqua-Pa requested theoretical accrued depreciation calculations performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at July 31, 2013.

A complete discussion of the methodologies employed in the original cost study is set forth in the following sections of this report.

## **EXPLANATION OF THE STUDY**

### ***Utility Plant Inventory***

A comprehensive inventory of the Township's water system in service as of July 31, 2013 was performed. The main principal source of documents for the inventory was the "as built" map of the Township's water system, which was verified by a physical inspection. The map was particularly helpful in locating and documenting the sizes, types, and lengths of the pipelines and sizes, types, and locations of accessories, such as valves, and fire hydrants. Significantly components of the inventory are discussed below.

### ***Mass Property***

For purposes of this study, "mass" property consists of utility plant recorded in Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters)

and Account 335 (Hydrants).

For Account 331, footage of pipe, by size and type, were determined by reviewing the "as-built" map and were verified by a physical check of the distribution system in place. Due to the lack of information on the installation years of the plant, on each street during the physical inspection, the casting date on each fire hydrant was noted. This information was then utilized in determining the estimated installation date for the mains and accessories installed in that area. This same procedure was utilized for valves, valve boxes, and air release valves on a street by street basis.

For customer service lines (account 333) and meters (Account 334) a customer billing list was obtained from Aqua-Pa and the Township. The customer billing list was employed in determining the number and size of the services and meters. The installed years were again based upon the estimated installed date of the main, which was determined by utilizing the casting date on the fire hydrants as a guide for estimating the installed years. For Account 335, fire hydrant locations were determined by reviewing the "as-built" map and were verified by a physical check. The same method, as discussed above, was used in estimating the installed years.

The original cost of all inventoried property units is properly recorded in the following accounts:

<u>Acct.</u> <u>No.</u>	<u>Account Title</u>
331	Mains and Accessories
333	Services
334	Meters
335	Hydrants

### **ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the value of the

Township's surviving water plant in service by fixed capital account and within each account, to determine the original costs by size and type (for mass property) and by vintage year. The original cost determinations for Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters) and Account 335 (Hydrants) are explained below.

***Account 331, Account 333, Account 334 and Account 335***

As previously explained, the information contained on the Township map was used to develop the footage of pipe, size of pipe, as well as the location and number of valves and hydrants. This was then verified by conducting a physical inventory of the system. During the physical inventory, the footage and accuracy of the map was verified, also the cast date and location of each fire hydrants was noted. It was the casting dates on the hydrant which was utilized in estimating the age assets.

Due to the absence of construction cost and other source documents, the original cost of mains and accessories were determinable from utilizing current unitized installed cost from Aqua-Pa of similar material. This information was used for the resultant unit price for the respective fixed capital asset.

The original cost values at July 31, 2013 for the Township's mains, customer services, meters, and fire hydrants was established by the original cost study total \$5,166,311; \$441,589; \$139,959 and \$127,167, respectively.

**SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the Township's utility plant in service is not less than \$5,875,026, as summarized by Plant Account in Section 2 (p. 2-1)

### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all Township documents that were available and discussed with Aqua-Pa personnel. Based on the available information, the water system received or collected CIAC. The calculated CIAC amounts to \$240,022. The results of those calculations and detailed supporting schedules are included in Section 3 of this report.

### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all documents that were available. Based on this record research, the water system was not funded by customer advances for construction.

### **DEPRECIATION RESERVE**

ASU Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at July 31, 2013. The calculated accrued depreciation reserve amounts to \$1,959,461 at July 31, 2013.

The calculations were based upon the Broad Group/Remaining Life Procedure and Technique utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date. The results of those calculations and detailed supporting documentation are included in Section 3 of this report.

## **SECTION 2**

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Original Cost at July 31, 2013

Acct No.	Account Title	Original Cost
331	Mains & Accessories	\$5,166,311.00
333	Services	441,589.00
334	Meters	139,959.00
335	Hydrants	127,167.00
	Total Original Cost	<u>\$5,875,026.00</u>
<u>Deduct: Contributions in Aid of Construction (CIAC):</u>		
331	Mains & Accessories	\$ 214,804.00
333	Services	15,671.00
335	Hydrants	9,547.00
	Total Contributions in Aid of Construction	<u>\$ 240,022.00</u>
	Total Net Plant	<u><u>\$5,635,004.00</u></u>

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Original Cost at July 31, 2013

Account 331 - Mains & Accessories

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
6" D.I. Mains	1984	LF	1,275 \$	75,659.00
6" D.I. Mains	1988	LF	5,015	331,692.00
6" D.I. Mains	1989	LF	8,950	621,399.00
6" D.I. Mains	2007	LF	1,715	214,804.00
8" D.I. Mains	1971	LF	1,018	23,160.00
8" D.I. Mains	1979	LF	2,900	125,831.00
8" D.I. Mains	1984	LF	3,620	214,811.00
8" D.I. Mains	1988	LF	1,665	110,123.00
8" D.I. Mains	1989	LF	4,672	324,377.00
10" D.I. Mains	1971	LF	3,720	124,657.00
10" D.I. Mains	1972	LF	1,850	63,289.00
10" D.I. Mains	1982	LF	1,340	103,247.00
10" D.I. Mains	1984	LF	3,400	297,194.00
10" D.I. Mains	1985	LF	2,510	228,937.00
10" D.I. Mains	1988	LF	1,690	164,657.00
10" D.I. Mains	1989	LF	9,113	931,987.00
12" D.I. Mains	1971	LF	3,125	112,813.00
12" D.I. Mains	1979	LF	880	60,597.00
12" D.I. Mains	1987	LF	1,850	185,222.00
12" D.I. Mains	1989	LF	6,564	723,156.00
16" D.I. Mains	1972	LF	645	25,110.00
16" D.I. Mains	1989	LF	707	82,295.00
<b>Total Mains</b>			<b>68,224 \$</b>	<b>5,145,017.00</b>

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Original Cost at July 31, 2013

Account 331 - Mains & Accessories

Item	Year Installed	----- Quantity ----- Unit	----- No.		Original Cost
6" Valves	1984	Ea.	4	\$	1,057.00
6" Valves	1988	Ea.	5		1,472.00
6" Valves	1989	Ea.	11		3,400.00
8" Valves	1971	Ea.	1		101.00
8" Valves	1979	Ea.	1		193.00
8" Valves	1984	Ea.	4		1,057.00
8" Valves	1988	Ea.	3		883.00
8" Valves	1989	Ea.	7		2,164.00
10" Valves	1971	Ea.	7		709.00
10" Valves	1972	Ea.	4		413.00
10" Valves	1973	Ea.	2		209.00
10" Valves	1982	Ea.	1		233.00
10" Valves	1984	Ea.	8		2,113.00
10" Valves	1985	Ea.	4		1,103.00
10" Valves	1989	Ea.	9		2,782.00
12" Valves	1971	Ea.	7		709.00
12" Valves	1979	Ea.	1		193.00
12" Valves	1987	Ea.	2		562.00
12" Valves	1989	Ea.	4		1,236.00
16" Valves	1972	Ea.	3		310.00
Total Valves			88	\$	20,899.00
Check Valve	1971	Ea.	1	\$	101.00
Total Check Valves			1	\$	101.00



**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Original Cost at July 31, 2013

Account 331 - Mains & Accessories

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>		<u>Original Cost</u>
Air Release	1988	Ea.	1	\$	294.00
			1	\$	294.00
TOTAL ACCOUNT 331				\$	<u>5,166,311.00</u>

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Original Cost at July 31, 2013

Account 333 - Services

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Services, 3/4"	1971	Ea.	3	\$ 715.00
Services, 3/4"	1973	Ea.	6	1,606.00
Services, 3/4"	1979	Ea.	36	15,414.00
Services, 3/4"	1982	Ea.	16	8,478.00
Services, 3/4"	1984	Ea.	56	32,220.00
Services, 3/4"	1985	Ea.	34	20,108.00
Services, 3/4"	1987	Ea.	1	615.00
Services, 3/4"	1988	Ea.	161	105,556.00
Services, 3/4"	1989	Ea.	151	104,253.00
Services, 3/4"	2002	Ea.	17	16,377.00
Services, 3/4"	2007	Ea.	12	15,671.00
Services, 1"	1971	Ea.	3	715.00
Services, 1"	1972	Ea.	21	5,395.00
Services, 1"	1979	Ea.	15	6,423.00
Services, 1"	1987	Ea.	1	615.00
Services, 1 1/2"	1971	Ea.	2	476.00
Services, 1 1/2"	1973	Ea.	2	535.00
Services, 1 1/2"	1979	Ea.	4	1,713.00
Services, 1 1/2"	1988	Ea.	1	656.00
Services, 1 1/2"	1989	Ea.	2	1,381.00
Services, 2"	1971	Ea.	2	704.00
Services, 2"	1973	Ea.	6	2,372.00
Services, 2"	1979	Ea.	2	1,265.00
Services, 2"	1987	Ea.	4	3,638.00
Services, 2"	1988	Ea.	3	2,906.00
Services, 2"	1989	Ea.	5	5,101.00

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Original Cost at July 31, 2013

Account 333 - Services

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
Services, 3"	1973	Ea.	3	1,072.00
Services, 3"	1979	Ea.	3	1,715.00
Services, 3"	1988	Ea.	1	876.00
Services, 3"	1989	Ea.	1	922.00
Services, 4"	1973	Ea.	1	885.00
Services, 4"	1987	Ea.	1	2,036.00
Services, 4"	1988	Ea.	1	2,169.00
Services, 4"	1989	Ea.	1	2,284.00
Services, 6"	1971	Ea.	1	690.00
Services, 6"	1973	Ea.	7	5,424.00
Services, 6"	1979	Ea.	14	17,357.00
Services, 6"	1987	Ea.	2	3,564.00
Services, 6"	1989	Ea.	6	11,995.00
Services, 8"	1971	Ea.	2	1,900.00
Services, 8"	1973	Ea.	8	8,539.00
Services, 8"	1979	Ea.	4	6,831.00
Services, 8"	1987	Ea.	1	2,455.00
Services, 8"	1989	Ea.	2	5,507.00
Services, 10"	1988	Ea.	4	10,460.00
TOTAL ACCOUNT 333			629	\$ 441,589.00

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Original Cost at July 31, 2013

Account 334 - Meters

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Meters, 5/8" x 3/4"	1971	Ea.	3 \$	179.00
Meters, 5/8" x 3/4"	1973	Ea.	6	331.00
Meters, 5/8" x 3/4"	1979	Ea.	36	2,146.00
Meters, 5/8" x 3/4"	1982	Ea.	16	1,130.00
Meters, 5/8" x 3/4"	1984	Ea.	56	4,575.00
Meters, 5/8" x 3/4"	1985	Ea.	34	2,533.00
Meters, 5/8" x 3/4"	1987	Ea.	1	76.00
Meters, 5/8" x 3/4"	1988	Ea.	161	12,440.00
Meters, 5/8" x 3/4"	1989	Ea.	151	12,501.00
Meters, 5/8" x 3/4"	2002	Ea.	17	1,942.00
Meters, 5/8" x 3/4"	2007	Ea.	12	1,697.00
Meters, 1"	1971	Ea.	3	202.00
Meters, 1"	1972	Ea.	21	1,388.00
Meters, 1"	1979	Ea.	15	1,010.00
Meters, 1"	1987	Ea.	1	85.00
Meters, 1 1/2"	1971	Ea.	2	310.00
Meters, 1 1/2"	1973	Ea.	2	287.00
Meters, 1 1/2"	1979	Ea.	4	619.00
Meters, 1 1/2"	1988	Ea.	1	201.00
Meters, 1 1/2"	1989	Ea.	2	430.00
Meters, 2"	1971	Ea.	2	337.00
Meters, 2"	1973	Ea.	6	936.00
Meters, 2"	1979	Ea.	2	337.00
Meters, 2"	1987	Ea.	4	855.00
Meters, 2"	1988	Ea.	3	655.00
Meters, 2"	1989	Ea.	5	1,170.00

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Original Cost at July 31, 2013

Account 334 - Meters

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Meters, 3"	1973	Ea.	3	1,380.00
Meters, 3"	1979	Ea.	3	1,491.00
Meters, 3"	1988	Ea.	1	644.00
Meters, 3"	1989	Ea.	1	690.00
Meters, 4"	1973	Ea.	1	645.00
Meters, 4"	1987	Ea.	1	883.00
Meters, 4"	1988	Ea.	1	902.00
Meters, 4"	1989	Ea.	1	967.00
Meters, 6"	1971	Ea.	1	1,167.00
Meters, 6"	1973	Ea.	7	7,566.00
Meters, 6"	1979	Ea.	14	16,343.00
Meters, 6"	1987	Ea.	2	2,962.00
Meters, 6"	1989	Ea.	6	9,728.00
Meters, 8"	1971	Ea.	2	4,083.00
Meters, 8"	1973	Ea.	8	15,123.00
Meters, 8"	1979	Ea.	4	8,166.00
Meters, 8"	1987	Ea.	1	2,590.00
Meters, 8"	1989	Ea.	2	5,671.00
Meters, 10"	1988	Ea.	4	10,586.00
TOTAL ACCOUNT 334			629	\$ 139,959.00

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Original Cost at July 31, 2013

Account 335 - Fire Hydrants

Item	Year Installed	----- Quantity -----		Original Cost
		Unit	No.	
Fire Hydrants	1971	Ea.	4	\$ 2,322.00
Fire Hydrants	1972	Ea.	4	2,504.00
Fire Hydrants	1973	Ea.	4	2,609.00
Fire Hydrants	1979	Ea.	5	5,217.00
Fire Hydrants	1982	Ea.	2	2,582.00
Fire Hydrants	1984	Ea.	13	18,227.00
Fire Hydrants	1985	Ea.	3	4,324.00
Fire Hydrants	1987	Ea.	2	3,000.00
Fire Hydrants	1988	Ea.	10	15,977.00
Fire Hydrants	1989	Ea.	32	53,841.00
Fire Hydrants	1990	Ea.	1	1,709.00
Fire Hydrants	1994	Ea.	1	1,956.00
Fire Hydrants	2007	Ea.	3	9,547.00
Fire Hydrants	2008	Ea.	1	3,352.00
TOTAL ACCOUNT 335			85	\$ 127,167.00



**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

**Contributions in Aid of Construction**

Original Cost at July 31, 2013

Account 331 - Mains & Accessories

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
6" D.I. Mains	2007	LF	1,715 \$	214,804.00
TOTAL ACCOUNT 331			<u>----- 1,715 \$ =====</u>	<u>----- 214,804.00 =====</u>



**Contributions in Aid of Construction**  
Original Cost at July 31, 2013

Account 333 - Services

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
1" & Under Services	2007	Ea.	12 \$	15,671.00
TOTAL ACCOUNT 333			----- 12 \$	----- 15,671.00
			=====	=====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

**Contributions In Aid of Construction**

Original Cost at July 31, 2013

Account 335 - Fire Hydrants

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>		<u>Original Cost</u>
Fire Hydrants	2007	Ea.	3	\$	9,547.00
TOTAL ACCOUNT 335			<u>3</u>	<u>\$</u>	<u>9,547.00</u>

## **SECTION 3**

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bristol Township's Water System*

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciation Original Cost as of July 31, 2013  
Based Upon Whole Life Depreciation

Acct. No.	Description	Original Cost at 7/31/2013	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 7/31/2013
<b><u>Depreciable Plant:</u></b>					
<u>Mains &amp; Accessories</u>					
331.12	Ductile Iron Pipe, 6" - 8"	\$ 2,041,856.00	65-R3	\$ 707,773.00	\$ 1,334,083.00
331.13	Ductile Iron Pipe, 10" - 14"	2,995,756.00	90-R3	866,799.00	2,128,957.00
331.14	Ductile Iron Pipe, 16" & Over	107,405.00	95-R3	30,256.00	77,149.00
331.22	Valves, 6" - 8"	10,327.00	45-R3	5,356.00	4,971.00
331.23	Valves, 10" - 14"	10,262.00	70-R3	4,037.00	6,225.00
331.24	Valves, 16" & Over	310.00	75-R3	155.00	155.00
331.51	Check Valve	101.00	25-R3	99.00	2.00
331.52	Air Release	294.00	25-R3	235.00	59.00
	Total Account 331	\$ 5,166,311.00		\$ 1,614,710.00	\$ 3,551,601.00
<u>Services</u>					
333.10	Services, 1" & Under	\$ 334,161.00	55-R3	\$ 140,161.00	\$ 194,000.00
333.20	Services, Over 1"	107,428.00	60-R3	50,192.00	57,236.00
	Total Account 333	\$ 441,589.00		\$ 190,353.00	\$ 251,236.00
<u>Meters</u>					
334.10	Meters, 1" & Under	\$42,235.00	30-R3	\$ 29,610.00	\$ 12,625.00
334.20	Meters, Over 1"	97,724.00	30-R3	79,454.00	18,270.00
	Total Account 334	\$139,959.00		\$109,064.00	\$30,895.00
335.00	Hydrants	127,167.00	65-R3	\$ 45,334.00	\$ 81,833.00
	Total Depreciable Plant	\$ 5,875,026.00		\$ 1,959,461.00	\$ 3,915,565.00
<b><u>Deduct: Contributions in Aid of Construction (CIAC):</u></b>					
331.12	Ductile Iron Pipe, 6" - 8"	\$ 214,804.00	65-R3	\$ 19,679.00	\$ 195,125.00
333.10	Services, 1" & Under	15,671.00	55-R3	1,695.00	13,976.00
335.00	Hydrants	9,547.00	65-R3	875.00	8,672.00
	Total Contributions in Aid of Construction	\$ 240,022.00		\$ 22,249.00	\$ 217,773.00
	Total Net Plant	\$ 5,635,004.00		\$ 1,937,212.00	\$ 3,697,792.00

***Aqua-Pennsylvania, Inc.***

***Bristol Township***

***331.12 D.I. Pipe - Mains, 6" to 8"***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of July 31, 2013***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1971	23,160.00	27.38	65.00	0.57878	13,404
1979	125,831.00	33.66	65.00	0.48213	60,667
1984	290,470.00	37.84	65.00	0.41780	121,360
1988	441,815.00	41.32	65.00	0.36435	160,974
1989	945,776.00	42.20	65.00	0.35071	331,689
2007	214,804.00	59.05	65.00	0.09161	19,679
<b><i>Total</i></b>	<b><i>2,041,856.00</i></b>				<b><i>707,772.66</i></b>

**Aqua-Pennsylvania, Inc.**  
**Bristol Township**

331.13 D.I. Pipe - Mains, 10" to 14"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of July 31, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3

Year	Original Cost	Expectancy	Avg. Service Life	Reserve Ratio	Calculated Reserve
(1)	(2)	(3)	(4)	(5)	(6)
1971	237,470.00	50.86	90.00	0.43494	103,286
1972	63,289.00	51.70	90.00	0.42553	26,931
1979	60,597.00	57.78	90.00	0.35798	21,692
1982	103,247.00	60.46	90.00	0.32825	33,891
1984	297,194.00	62.27	90.00	0.30816	91,583
1985	228,937.00	63.18	90.00	0.29806	68,236
1987	185,222.00	65.01	90.00	0.27771	51,438
1988	164,657.00	65.93	90.00	0.26748	44,042
1989	1,655,143.00	66.85	90.00	0.25720	425,699
<b>Total</b>	<b>2,995,756.00</b>				<b>866,799.24</b>

**Aqua-Pennsylvania, Inc.**

**Bristol Township**

**331.14 D.I. Pipe - Mains, 16" & Over**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of July 31, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 95 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	25,110.00	56.53	95.00	0.40493	10,168
1989	82,295.00	71.81	95.00	0.24410	20,088
<b>Total</b>	<b>107,405.00</b>				<b>30,255.74</b>

***Aqua-Pennsylvania, Inc.***

***Bristol Township***

***331.22 Valves, 6" - 8"***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of July 31, 2013***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 45 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1971	101.00	10.54	45.00	0.76579	77
1979	193.00	15.41	45.00	0.65754	127
1984	2,114.00	18.99	45.00	0.57792	1,222
1988	2,355.00	22.10	45.00	0.50889	1,198
1989	5,564.00	22.91	45.00	0.49099	2,732
<b><i>Total</i></b>	<b>10,327.00</b>				<b>5,356.24</b>



***Aqua-Pennsylvania, Inc.***

***Bristol Township***

***331.23 Valves, 10" - 14"***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of July 31, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 70 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1971	1,418.00	31.96	70.00	0.54343	771
1972	413.00	32.74	70.00	0.53229	220
1973	209.00	33.53	70.00	0.52100	109
1979	193.00	38.42	70.00	0.45118	87
1982	233.00	40.96	70.00	0.41489	97
1984	2,113.00	42.68	70.00	0.39026	825
1985	1,103.00	43.56	70.00	0.37777	417
1987	562.00	45.32	70.00	0.35257	198
1989	4,018.00	47.11	70.00	0.32704	1,314
<b><i>Total</i></b>	<b>10,262.00</b>				<b>4,036.53</b>

***Aqua-Pennsylvania, Inc.***

***Bristol Township***

***331.24 Valves" 16" & Over***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of July 31, 2013***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 75 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1972	310.00	37.41	75.00	0.50116	155
<b><i>Total</i></b>	310.00				155.36

***Aqua-Pennsylvania, Inc.***

***Bristol Township***

***331.51 Check Valve***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of July 31, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1971	101.00	0.50	25.00	0.98000	99
<b><i>Total</i></b>	101.00				98.98

***Aqua-Pennsylvania, Inc.***

***Bristol Township***

***331.52 Air Release***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of July 31, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1988	294.00	5.01	25.00	0.79944	235
<b><i>Total</i></b>	294.00				235.04

***Aqua-Pennsylvania, Inc.***

***Bristol Township***

***333.10 Services, 1" & Under***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of July 31, 2013***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 55 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1971	1,430.00	18.55	55.00	0.66282	948
1972	5,395.00	19.23	55.00	0.65042	3,509
1973	1,606.00	19.92	55.00	0.63780	1,024
1979	21,837.00	24.33	55.00	0.55771	12,179
1982	8,478.00	26.67	55.00	0.51510	4,367
1984	32,220.00	28.28	55.00	0.48576	15,651
1985	20,108.00	29.10	55.00	0.47085	9,468
1987	1,230.00	30.77	55.00	0.44053	542
1988	105,556.00	31.62	55.00	0.42517	44,879
1989	104,253.00	32.47	55.00	0.40961	42,703
2002	16,377.00	44.26	55.00	0.19524	3,197
2007	15,671.00	49.05	55.00	0.10812	1,694
<b><i>Total</i></b>	<b>334,161.00</b>				<b>140,161.29</b>

**Aqua-Pennsylvania, Inc.**

**Bristol Township**

**333.20 Services, Over 1"**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of July 31, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	3,770.00	22.90	60.00	0.61837	2,331
1973	18,827.00	24.35	60.00	0.59412	11,185
1979	28,881.00	28.96	60.00	0.51739	14,943
1987	11,693.00	35.59	60.00	0.40688	4,758
1988	17,067.00	36.45	60.00	0.39248	6,699
1989	27,190.00	37.32	60.00	0.37794	10,276
<b>Total</b>	<b>107,428.00</b>				<b>50,191.67</b>

***Aqua-Pennsylvania, Inc.***

***Bristol Township***

***334.10 Meters, 1" & Under***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of July 31, 2013***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 30 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1971	381.00	2.15	30.00	0.92842	354
1972	1,388.00	2.40	30.00	0.91985	1,277
1973	331.00	2.66	30.00	0.91124	302
1979	3,156.00	4.40	30.00	0.85329	2,693
1982	1,130.00	5.57	30.00	0.81437	920
1984	4,575.00	6.50	30.00	0.78328	3,583
1985	2,533.00	7.01	30.00	0.76617	1,941
1987	161.00	8.14	30.00	0.72878	117
1988	12,440.00	8.74	30.00	0.70865	8,816
1989	12,501.00	9.37	30.00	0.68753	8,595
2002	1,942.00	19.51	30.00	0.34975	679
2007	1,697.00	24.11	30.00	0.19643	333
<b><i>Total</i></b>	<b>42,235.00</b>				<b>29,609.85</b>

***Aqua-Pennsylvania, Inc.***

***Bristol Township***

***334.20 Meters, Over 1"***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of July 31, 2013  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 30 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1971	5,897.00	2.15	30.00	0.92842	5,475
1973	25,937.00	2.66	30.00	0.91124	23,635
1979	26,956.00	4.40	30.00	0.85329	23,001
1987	7,290.00	8.14	30.00	0.72878	5,313
1988	12,988.00	8.74	30.00	0.70865	9,204
1989	18,656.00	9.37	30.00	0.68753	12,827
<b><i>Total</i></b>	<b><i>97,724.00</i></b>				<b><i>79,454.37</i></b>



**Aqua-Pennsylvania, Inc.**  
**Bristol Township**  
335.00 Hydrants

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of July 31, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	2,321.60	27.38	65.00	0.57878	1,344
1972	2,504.20	28.14	65.00	0.56714	1,420
1973	2,608.56	28.90	65.00	0.55541	1,449
1979	5,217.10	33.66	65.00	0.48213	2,515
1982	2,582.46	36.15	65.00	0.44388	1,146
1984	18,227.30	37.84	65.00	0.41780	7,615
1985	4,323.69	38.70	65.00	0.40458	1,749
1987	2,999.84	40.44	65.00	0.37785	1,133
1988	15,977.40	41.32	65.00	0.36435	5,821
1989	53,840.64	42.20	65.00	0.35071	18,882
1990	1,708.60	43.09	65.00	0.33701	576
1994	1,956.41	46.72	65.00	0.28117	550
2007	9,547.29	59.05	65.00	0.09161	875
2008	3,351.99	60.02	65.00	0.07665	257
<b>Total</b>	127,167.08				45,333.58



**Aqua-Pennsylvania, Inc.**  
**Bristol Township- CIAC**  
 331.12 D.I. Pipe - Mains, 6" to 8"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of July 31, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0% Average Service Life: 65 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2007	214,804.00	59.05	65.00	0.09161	19,679
<b>Total</b>	214,804.00				19,678.76

**Aqua-Pennsylvania, Inc.**  
**Bristol Township- CIAC**  
 333.10 Services, 1" & Under

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of July 31, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 55 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2007	15,671.00	49.05	55.00	0.10812	1,694
<b>Total</b>	15,671.00				1,694.35

**Aqua-Pennsylvania, Inc.**  
**Bristol Township- CIAC**  
 335.00 Hydrants

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of July 31, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0% Average Service Life: 65 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2007	9,547.00	59.05	65.00	0.09161	875
<b>Total</b>	9,547.00				874.63

Aqua Pennsylvania, Inc.  
 Mt. Jewett Borough Water System Costs  
 M92747  
 Journal Entry

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	300000	PPE-Utility Plant in Service	2,462,128.83	
9	104000	Utility Plant Purchased/Sold		1,241,366.12
9	108000	AD-General		1,270,221.39
9	114000	U Plant Acq Adj	49,458.68	
<b>Total</b>			<b>2,511,587.51</b>	<b>2,511,587.51</b>

**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Mt. Jewett Borough Water System**

<b>Section 1327(a) Criteria</b>	<b>Satisfied (Y/N)</b>	<b>Explanation</b>
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	<p style="text-align: center;">Yes</p>	<p>On May 6, 2015, Aqua Pennsylvania, Inc. (“Aqua”) acquired the Water System Assets (“Assets”) of the Mount Jewett Borough (“Seller”). The Seller’s Assets were used and useful in providing water service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	<p style="text-align: center;">Yes</p>	<p>Prior to Aqua’s acquisition of Seller’s Assets, Mount Jewett Borough was providing water service to 453 residential, 17 commercial, 2 industrial, 9 institutional, and 3 “other” customers in Mount Jewett Borough and a portion of Hamlin Township, McKean County, Pennsylvania.</p> <p>Reference: Commission Order Docket Nos. A-2014-2448000</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p> <p style="text-align: center;">(i)</p>	<p style="text-align: center;">Yes</p>	

<p>violation of statutory or regulatory requirements of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p style="text-align: center;">(ii)</p> <p>a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p style="text-align: center;">(iii)</p> <p>a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p style="text-align: center;">(iv)</p> <p>a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p style="text-align: center;">(v)</p> <p>any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p style="text-align: center;">(4)</p> <p>reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and</p>	<p style="text-align: center;">Yes</p>	



reasonable service;		
(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;	Yes	Aqua and the Seller entered into an <i>Asset Purchase Agreement</i> , which was negotiated at arm's length. On October 15, 2014, Aqua filed an <i>Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered February 26, 2015, at Docket No. A-2014-2448000, the PUC granted the approvals requested in the <i>Application</i> .
(6) the actual purchase price is reasonable;	Yes	The total purchase price for Seller's Assets was \$1,126,350 and was negotiated at arm's length. The Commission approved the company's application to acquire Mount Jewett Borough assets and an original cost study was prepared to support the utility plant purchase.  Reference: Commission Order Docket No. A-2014-2448000
(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;	Yes	The Seller is not an affiliated interest of Aqua.
(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b>	Yes	The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.
(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.	Yes	The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.

Final 11/24/15



**Aqua Pennsylvania, Inc.**

***Acquisition of the Water System Assets  
of Mt. Jewett Water System***

**Original Cost of the Water Utility Plant  
and Depreciation Reserve Calculations  
at May 5, 2015**

By

David A. Sheffer, Principal  
Selby P. Jones, CRRA, Principal

**AUS CONSULTANTS**  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011



November 2015



**SELBY P. JONES III, CRRA**  
Principal

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Mount Laurel, NJ 08054  
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Sjones@ausconsultants.com

November 20, 2015

Mr. Chad Nardelli  
Manager, Property Accounting  
Aqua Pennsylvania, Inc.  
762 West Lancaster Ave.  
Bryn Mawr, PA 19010

RE: Acquisition of the Water System Assets  
of the Mt. Jewett Water System

Dear Mr. Nardelli:

In accordance with your request, we have prepared an inventory of the water utility plant of the Mt. Jewett Water System ("Mt. Jewett") as of May 5, 2015.

The inventory was prepared to conform to the Uniform System of Accounts for Water/Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of Mt. Jewett was determined from a detailed analysis of the books and records of Mt. Jewett and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service	\$2,387,391	\$1,270,221

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2 and the depreciation calculations in Section 3.

Respectfully submitted,  
AUS Consultants

By: Selby P. Jones III

Aqua Pennsylvania, Inc.  
Acquisition of the Water Utility Plant  
of the Mt. Jewett Water System

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of Mt. Jewett's Facilities	1-1
Overview of the Study Techniques	1-4
Explanation of the Study	1-5
Original Cost Analysis	1-7
Summary of Original Cost	1-7
Depreciation Reserve	1-8
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at May 5, 2015	2-1
<b><u>Account 101 - Utility Plant in Service</u></b>	
303.1 Land & Land Rights – Source of Supply	2-2
304.0 Pumping Structures	2-3
305.0 Collecting & Impounding Reservoirs	2-4
307.0 Wells & Springs	2-5
310.0 Power Generation Equipment	2-6
311.0 Electric Pumping Equipment	2-7
330.0 Distribution Reservoirs & Standpipes	2-8
331.0 Mains & Accessories	2-9
333.0 Services	2-10
334.0 Meters	2-11
335.0 Hydrants	2-12

Aqua Pennsylvania, Inc.  
Acquisition of the Water Utility Plant  
of the Mt. Jewett Water System

Table of Contents

	<u>Page No.</u>
341.0 Transportation Equipment	2-13
 <b><u>SECTION 3</u></b>	
<b><u>Depreciated Original Cost</u></b>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of May 5, 2015	3-1
 <b><u>SECTION 4</u></b>	
Photographs of Plant Assets (site visit)	4-1

# SECTION 1

## **AQUA PENNSYLVANIA, INC.**

### **ACQUISITION OF THE MT. JEWETT WATER SYSTEM**

#### **BACKGROUND**

The Mt. Jewett Water System ("Mt. Jewett") provides water service to approximately 480 customers located in Mount Jewett, McKeon County, Pennsylvania. The Company began providing water service to the town of Mt. Jewett in the 1950's. Mt. Jewett's water system also provides fire protection service to the town of Mt. Jewett and the surrounding service area.

On May 5, 2015, Aqua and Mt. Jewett Borough finalized the deal to sell the water assets of the town to Aqua. The sale included all assets of the production facilities and the various components of the water distribution system. Easements with Collins Pine Company of Kane, PA were also exchanged and are currently maintained.

#### **OVERVIEW OF MT. JEWETT'S FACILITIES**

The system assets acquired, for the production and distribution of water, consists of nine wells and one operational spring source, two storage tanks (1 – 250,000 gallon capacity and 1 – 100,000 gallon capacity), one raw water reservoir (250,000 gallon capacity), one water treatment plant with various pumps, pumping station and pump house, approximately forty-five (45) hydrants and approximately 42,000 feet of distribution piping and various valves and services. The 100,000 gallon and 250,000 gallon storage tanks were refurbished in 2008 and 2010, respectively.

The estimated combined output of the plant is estimated at 165 gpm. Well #6, which is one of the smaller wells, provides 15 gpm of output, while other wells provide higher output.

At the time of sale all customers were metered, which the meters are in the process of being replaced by Aqua. The largest meter in the system is a 1", which is the meter size for the Municipal Building, the Ambulance Station, the Fire House, Medical center and the VFW building. There are approximately 480 customers connected to the Mt. Jewett system. Approximately 97% of those are residential and less than 20 customers being commercial properties.

Across from Well #4 sits a maintenance shed. The building structure was measured at 30' X 25' and was in good condition. Located inside was an Ingersoll Rand diesel generator, model #P-185B-W-JD. In addition to the maintenance shed there was a Ford F-150 pickup truck that was part of the acquisition but was relocated and sold at auction on October 15, 2015.

#### Treatment Facilities

The Treatment Plant is of cinder block construction with a pitched asphalt shingled roof, believed to have been constructed in 1990. The condition of this structure appears to be a well maintained facility. All wells used in the system flow to the well pit next to the plant. All controls for the various wells as well as two (2) 30 HP effluent pumps are located inside the plant. Also located inside the building are four (4) chemical pumps used to treat the water, as well as various pneumatic valves that are control by air compression. There are also three (3) filter control panels located in the building that were installed in 1990's.



Next to the treatment plant sits a raw spring water reservoir. The reservoir structure is 90' x 105', while the reservoir itself is 80' x 80'. It is filtered water, but not disinfected and is five (5) feet deep that is attached to a wet well, then the water moves towards the chemical feeder. The wet well building is a 10' x 15' foot building and houses two pumps that push 165 GPM out of the plant. The piping from the wet well to the system is an 8" CT pipe and has been DEP certified.

There are a total of six (6) wells and one natural spring that provides the water to the system. All wells and the spring are located around the treatment plant via easements between Mount Jewett and Collins Pines Lumber Company. Each source has a different depth and provides anywhere from approximately 15 gpm to 80 gpm. In addition, there is a wash water building that allows for water from the various sources to flow through and settle in order to remove sediment and other contaminants before pushing the water to the treatment plant.

#### Distribution System

The water mains are well accounted for, with all mains being documented as cast iron. The majority of mains in the system are of 6" in diameter, but there are various other sizes including 1.25", 2", 3", 4" and 8" main. As stated, 6" diameter pipe represents the majority of mains, accounting for approximately 44% of total mains in the ground.

The footage of the distribution mains were verified by using a measuring wheel and walking the system from valve to valve, along with the aid of Aqua personnel providing knowledge of the possible location of the main. Three other points of note in regards to the mains was the main on Maple Lane and pipe coming from the wet well. Maple Lane is a

relatively new addition to the town and a walking wheel was used to verify the length of pipe in the street, which measured at 475 feet. Phillips Street is also a relatively new addition and inventory details provided showed 600 feet of pipe was laid at the time of the addition. Lastly, pipe coming from the wet well out into the system was verified via DEP Reports and measured as 2,100 feet and 8" CT Pipe.

Each customer has their own service line running from the main to the meter. The number of customers was verified via conversations with Aqua personnel as also for hydrants and services. Hydrants were also verified by a physical check of the system. Hydrants were of various ages based on casting dates and ranged from the late 1950's/early 1960's through the mid-2000's, with the majority being between the 1970's and 1980's.

Through additional conversations with Aqua personnel and due diligence of the personnel, AUS Consultants has garnered appropriate information as to the quality of the system. Photos of the above ground assets are contained in section 4 of this report.

#### **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the system's assets was conducted in three (3) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the type and quality of the property owned and operated by Mt. Jewett.

Second, the original cost of the inventoried property was determined based on a review of the system's maps, construction records and other sources. In addition to conversations with Aqua personnel, AUS Consultants received adequate data and maps in order to appropriately develop an accurate cost. The age of the plant was determined using information

obtained from system maps and Aqua personnel's knowledge of the system. Construction costs were developed utilizing Aqua's installed costs and or installed costs from comparable water systems.

In addition, Aqua requested theoretical accrued depreciation calculations performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at May 5, 2015.

A complete discussion of the methodologies employed in the original cost study is set forth in the following sections of this report.

#### **EXPLANATION OF THE STUDY**

##### **Utility Plant Inventory**

A comprehensive inventory of the system's assets as of May 5, 2015 was performed, based upon a complete physical inventory taken at the site on August 20, 2015. At this time a count of the customers, valves and fire hydrants was conducted. Also, the footage of the mains was verified by using a measuring wheel and walking the system, including reviewing components of the pump house. Aqua personnel also provided any additional knowledge of the system to aid in the inventory process.

##### **Mass Property**

For the purpose of this study, "mass" property consists of utility Plant recorded on Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters), and Account 335 (Hydrants).

For Account 331, footage of pipe was determined by reviewing maps as well as speaking with Aqua personnel and was verified by a physical check of the distribution system in place. This same procedure was utilized for valves, services and hydrants. As previously noted, all customers are metered (Account 334), being serviced through a 5/8" or 1" meter.

Non-Mass Property

A physical inventory of the water system's well house was completed. Detail results of the plant inventory are set forth in Section 2 of this report by fixed capital accounts prescribed by the National Company of Regulatory Utility Commissioners. The original cost of all inventory property units are properly recorded in the following accounts:

Non-Depreciable Plant:

303.1 Land & Land Rights – Source of Supply & Pumping

Depreciable Plant:

- 304 Pumping Structures
- 305 Collecting & Impounding Reservoirs
- 307 Wells & Springs
- 310 Power Generation Equipment
- 311 Electric Pumping Equipment
- 330 Distribution Reservoirs & Standpipes
- 331 Mains & Accessories
- 333 Services
- 334 Meters
- 335 Hydrants
- 341 Transportation Equipment

## **ORIGINAL COST ANALYSIS**

The goal of the original cost study was to ascertain the original cost of the system's plant in service by fixed capital account and, within each account, to determine the original cost by retirement unit (for non-mass) or size and type (for mass property) and by vintage year. Reliable data exists to establish the age and original cost of the system's assets by account. The original cost determinations for Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters), and Account 335 (Hydrants) are explained as follows:

### **Account 331, Account 333, Account 334 and Account 335**

The original cost and footage of mains and accessories was determinable from available system maps and other source documents. A conversation with Aqua personnel revealed that the pipe shown on the system maps is accurate. As previously explained, the physical inventory provided the total number of valves, hydrants, and meters. Unit costs were developed utilizing Aqua installed costs and cost information from other available sources. The original cost values at May 5, 2015 for the system's mains, services, meters and hydrants as established by the original cost total \$1,051,291; \$73,846; \$99,216; \$40,444, respectively.

## **SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the system's utility plant in service is not less than \$2,387,391, as summarized by plant account in Section 2 (Pg. 2-1).

## **DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at May 5, 2015. The calculated accrued depreciation reserve amounts to \$1,270,221 at May 5, 2015. The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and details supporting documentation are included in Section 3 of this report.

## **SECTION 2**

**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015

Acct. No.	Account Title	Original Cost
NON-DEPRECIABLE		
303.10	Land/Land Rights - Source of Supply	\$11.00
	Total Non-Depreciable	\$11.00
		=====
DEPRECIABLE		
304.00	Pumping Structures	\$119,036.87
305.00	Collection and Impounding Reservoirs	\$613,485.75
307.00	Wells and Springs	\$30,724.81
310.00	Power Generation Equipment	\$26,471.03
311.00	Electric Pumping Equipment	\$37,524.76
330.10	Distribution Reservoirs & Standpipes	\$139,600.00
330.20	Distribution Reservoirs & Standpipes - Refurbished	\$139,600.00
<u>Acct. 331: Mains &amp; Accessories</u>		
331.11	4" & Under Cast Iron Main	\$469,603.08
331.12	6"-8" Under Cast Iron Main	\$555,959.74
331.21	4" and Under Valves	\$7,965.86
331.22	6"-8" Valves	\$15,861.78
331.30	Blow Off Valves	\$1,900.35
	Total Account 331	\$1,051,290.81
333.00	Services	\$73,845.90
334.00	Meters	\$99,215.71
335.00	Hydrants	\$40,443.75
341.00	Transportation Equipment	\$16,141.07
	Total Depreciable Plant	\$2,387,380.46
		=====
	Total Original Cost	\$2,387,391.46
		=====



**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 303.10 - Land/Land Rights - Source of Supply

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Land</u>				
Source of Supply Land - Easement	1953	Acres	6.9	\$9.00
Easement Expansion	1990	Lot		\$1.00
Easement to Storage Tanks	1962	Lot		\$1.00
Total Account 303.10				----- \$11.00 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 304 - Pumping Structures

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Treatment Plant				
35' x 30' Building				
Pneumatic Valves				
165 GPM capacity				
4 Chemical Barrels				
3 Pneumatic Filter Control Panels	1990	Lot		\$119,036.87
Total Account 304.0				<u>\$119,036.87</u> =====

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 305 - Collection and Impounding Reservoirs

Item	Year Installed	----- Quantity ----- Unit      No.	Original Cost
250,000 Gallon Raw Water Reservoir 80' x 80' in size 90" x 105' chain link fence	1990	Lot	\$613,485.75
Total Account 305.0			----- \$613,485.75 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 307 - Wells & Springs

Item	Year Installed	----- Quantity ----- Unit No.	Original Cost
Spring A 50-80 gallons per minute	1960	Lot	\$1.00
Well #4 - 140 Ft. Depth 20 GPM	1981	Lot	\$6,224.80
Well #5 - 84 Ft. Depth 46 GPM	1981	Lot	\$3,734.88
Well #6 14 GPM	1981	Lot	\$6,224.79
Well #7 - 155 Ft. Depth 40 GPM	1981	Lot	\$6,891.74
Well #8 - 100 Ft. Depth 5 HP, 30 GPM	1981	Lot	\$4,446.28
Well # 9 - 72 Ft. Depth 20 GPM	1981	Lot	\$3,201.32
Total Account 307.0			<u>\$30,724.81</u> =====

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 310 - Power Generation Equipment

Item	Year Installed	----- Quantity ----- Unit No.	Original Cost
100 KW Generator	1990	1 Ea.	\$26,471.03
Total Account 310.0			<u>\$26,471.03</u>

**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 311 - Electric Pumping Equipment

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Treatment Plant Pump #1 30 HP effluent pump	1990	Ea.	1	\$18,762.38
Treatment Plant Pump #2 30 HP effluent pump	1990	Ea.	1	\$18,762.38
Total Account 311.0				<u>\$37,524.76</u>

**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 330 - Distribution Reservoirs & Standpipes

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
100,000 Gallon Storage Tank	1986		Lot	\$39,600.00
Refurbished in 2008	2008		Lot	\$39,600.00
250,000 Gallon Storage Tank	1962		Lot	\$100,000.00
Refurbished in 2010	2010		Lot	\$100,000.00
Total Account 330.0				----- \$279,200.00 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 331 - Mains & Accessories

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<u>Mains</u>				
4" & Under Cast Iron Main	1960	Ft.	19,518	\$469,603.08
<u>6"-8" Cast Iron Mains</u>				
6" Cast Iron Main	1960	Ft.	17,676	\$353,166.48
6" Cast Iron Main	1990	Ft.	600	\$50,604.00
8" Cast Iron Main	1990	Ft.	475	\$40,061.50
8" Cast Iron Main	1960	Ft.	5,612	\$112,127.76
Total 6-8" Cast Iron Main				\$555,959.74
Total Cast Iron Mains				\$1,025,562.82
<u>Valves</u>				
4" and Under Valves	1960	Ea.	34	\$7,965.86
<u>6"-8" Valves</u>				
6" - 8" Valves	1960	Ea.	16	\$3,923.04
6" - 8" Valves	1990	Ea.	11	\$11,938.74
Total 6"-8" Valves				\$15,861.78
Blow Off Valves	1960	Ea.	15	\$1,900.35
Total Valves				\$25,727.99
Total Account 331.0				\$1,051,290.81



**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 333 - Services

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
Services - 2" & Under	1960	Ea.	465	\$64,532.70
Services - 2" & Under	1990	Ea.	15	\$9,313.20
Total Account 333.0				----- \$73,845.90 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 334 - Meters

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Meters - 5/8"	1960	Ea.	50	\$3,645.00
Meters - 5/8"	1980	Ea.	115	\$13,112.30
Meters - 5/8"	2000	Ea.	160	\$30,654.40
Meters - 5/8"	2010	Ea.	140	\$49,064.40
Meters - 1"	1960	Ea.	9	\$974.25
Meters - 1"	1990	Ea.	8	\$1,765.36
				-----
Total Account 334.0				\$99,215.71
				=====

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 335 - Hydrants

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Hydrants	1960	Ea.	5	\$943.85
	1970	Ea.	15	\$5,194.50
	1980	Ea.	15	\$13,440.75
	1990	Ea.	5	\$7,856.70
	2005	Ea.	5	\$13,007.95
Total Account 335.0				<u>\$40,443.75</u> =====

*Acquisition of Mt. Jewett Water System*

Original Cost at May 5, 2015  
Account 341 - Transportation Equipment

Item	Year Installed	----- Quantity ----- Unit No.	Original Cost
Ford F-150 Truck Vin #: 1FTRF14W77KIC61344 53,290 miles	2007	14 Ea.	\$16,141.07
Total Account 341.0			----- \$16,141.07 =====

## **SECTION 3**

**Aqua Pennsylvania, Inc.**

*Acquisition of Mt. Jewett Water System*

Original Cost and Depreciation Reserve  
as of May 5, 2015  
Based Upon Whole Life Depreciation

Acct. No.	Description	Original Cost at 5/5/2015	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 5/5/2015
<u>Non-Depreciable Plant:</u>					
303.10	Land/Land Rights - Source of Supply	\$11.00		\$0.00	\$11.00
Total Non-Depreciable Plant		\$11.00		\$0.00	\$11.00
<u>Depreciable Plant:</u>					
304.00	Pumping Structures	\$119,036.87	40-R3	\$66,678.72	\$52,358.15
305.00	Collection and Impounding Reservoirs	\$613,485.75	65-R3	\$222,118.28	\$391,367.47
307.00	Wells & Springs	\$30,724.81	80-R2	\$10,999.36	\$19,725.45
310.00	Power Generation Equipment	\$26,471.03	25-R3	\$21,082.40	\$5,388.63
311.00	Electric Pumping Equipment	\$37,524.76	25-R3	\$29,885.95	\$7,638.81
330.10	Distribution Reservoirs & Standpipes	\$139,600.00	65-R3	\$85,944.50	\$53,655.50
330.20	Distribution Reservoirs & Standpipes - Refurbished	\$139,600.00	10-R3	\$69,677.41	\$69,922.59
<u>Acct. 331: Mains &amp; Accessories</u>					
331.11	4" & Under Cast Iron Main	\$469,603.08	75-R3	\$300,639.95	\$168,963.13
331.12	6"-8" Under Cast Iron Main	\$555,959.74	80-R3	\$309,700.74	\$246,259.00
331.21	4" and Under Valves	\$7,965.86	75-R3	\$5,099.74	\$2,866.12
331.22	6" - 8" Valves	\$15,861.78	80-R3	\$5,935.85	\$9,925.93
331.30	Blow Off Valves	\$1,900.35	40-R3	\$1,750.49	\$149.86
Total Account 331		\$1,051,290.81		\$623,126.77	\$428,164.04
333.00	Services	\$73,845.90	50-R3	\$58,488.97	\$15,356.93
334.00	Meters	\$99,215.71	20-R3	\$50,832.57	\$48,383.14
335.00	Hydrants	\$40,443.75	65-R3	\$15,245.39	\$25,198.36
341.00	Transportation Equipment	\$16,141.07	5-R4	\$16,141.07	\$0.00
Total Depreciable Plant		\$2,387,380.46		\$1,270,221.39	\$1,117,159.07
Total Plant in Service		\$2,387,391.46		\$1,270,221.39	\$1,117,170.07

**Aqua-Pennsylvania, Inc.**  
**Mount Jewett Water System**  
**304.00 Pumping Structures**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 01, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1990	119,036.87	17.59	40.00	0.56015	66,679
<b>Total</b>	119,036.87				66,678.72

***Aqua-Pennsylvania, Inc.***

***Mount Jewett Water System***

***305.00 Collection & Impounding Reservoirs***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of May 01, 2015***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0% Average Service Life: 65 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1990	613,485.75	41.47	65.00	0.36206	222,118
<b><i>Total</i></b>	613,485.75				222,118.28



**Aqua-Pennsylvania, Inc.**  
**Mount Jewett Water System**  
 307.00 Wells & Springs

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 01, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 80 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	1.00	36.35	80.00	0.54564	1
1981	30,723.82	51.36	80.00	0.35799	10,999
<b>Total</b>	30,724.82				10,999.36

**Aqua-Pennsylvania, Inc.**  
**Mount Jewett Water System**  
**310.00 Power Generation Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 01, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1990	26,471.03	5.09	25.00	0.79643	21,082
<b>Total</b>	26,471.03				21,082.40

***Aqua-Pennsylvania, Inc.***  
***Mount Jewett Water System***  
***311.00 Electric Pumping Equipment***

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of May 01, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0% Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1990	37,524.76	5.09	25.00	0.79643	29,886
<b><i>Total</i></b>	37,524.76				29,885.95

***Aqua-Pennsylvania, Inc.***  
***Mount Jewett Water System***  
***330.10 Dist. Reservoirs & Standpipes***

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of May 01, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0% Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1962	100,000.00	19.83	65.00	0.69487	69,487
1986	39,600.00	37.99	65.00	0.41559	16,457
<b><i>Total</i></b>	139,600.00				85,944.50

***Aqua-Pennsylvania, Inc.***  
***Mount Jewett Water System***  
***330.20 Dist. Reservoirs & Standpipes - Refurbished***  
***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of May 01, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0% Average Service Life: 10 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2008	39,600.00	3.89	10.00	0.61079	24,187
2010	100,000.00	5.45	10.00	0.45490	45,490
<b><i>Total</i></b>	139,600.00				69,677.41

**Aqua-Pennsylvania, Inc.**  
**Mount Jewett Water System**  
**331.11 4" & Under Cast Iron Main**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 01, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 75 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	469,603.08	26.98	75.00	0.64020	300,640
<b>Total</b>	469,603.08				300,639.95

**Aqua-Pennsylvania, Inc.**  
**Mount Jewett Water System**  
**331.12 6"-8" Cast Iron Main**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 01, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	465,294.24	31.39	80.00	0.60763	282,725
1990	90,665.50	56.20	80.00	0.29753	26,976
<b>Total</b>	555,959.74				309,700.74

***Aqua-Pennsylvania, Inc.***  
***Mount Jewett Water System***  
***331.21 4" & Under Valves***

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of May 01, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0% Average Service Life: 75 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	7,965.86	26.98	75.00	0.64020	5,100
<b><i>Total</i></b>	7,965.86				5,099.74



**Aqua-Pennsylvania, Inc.**  
**Mount Jewett Water System**  
 331.22 6"-8" Valves

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 01, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	3,923.04	31.39	80.00	0.60763	2,384
1990	11,938.74	56.20	80.00	0.29753	3,552
<b>Total</b>	15,861.78				5,935.85

**Aqua-Pennsylvania, Inc.**  
**Mount Jewett Water System**  
 331.30 Blow Off Valves

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 01, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	1,900.35	3.15	40.00	0.92114	1,750
<b>Total</b>	1,900.35				1,750.49

**Aqua-Pennsylvania, Inc.**  
**Mount Jewett Water System**  
 333.00 Services

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 01, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	64,532.70	8.01	50.00	0.83986	54,198
1990	9,313.20	26.97	50.00	0.46070	4,291
<b>Total</b>	<b>73,845.90</b>				<b>58,488.97</b>

***Aqua-Pennsylvania, Inc.***  
***Mount Jewett Water System***  
***334.00 Meters***

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of May 01, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0% Average Service Life: 20 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	4,619.25	0.00	0.00	1.00000	4,619
1980	13,112.30	0.00	0.00	1.00000	13,112
1990	1,765.36	2.27	20.00	0.88666	1,565
2000	30,654.40	7.01	20.00	0.64951	19,910
2010	49,064.40	15.26	20.00	0.23694	11,625
<b><i>Total</i></b>	99,215.71				50,832.57

***Aqua-Pennsylvania, Inc.***  
***Mount Jewett Water System***  
***335.00 Hydrants***

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of May 01, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0% Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	943.85	18.58	65.00	0.71409	674
1970	5,194.50	25.29	65.00	0.61091	3,173
1980	13,440.75	32.98	65.00	0.49260	6,621
1990	7,856.70	41.47	65.00	0.36206	2,845
2005	13,007.95	55.34	65.00	0.14857	1,933
<b><i>Total</i></b>	<b>40,443.75</b>				<b>15,245.39</b>

**Aqua-Pennsylvania, Inc.**  
**Mount Jewett Water System**  
**341.00 Transportation Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 01, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 5 Survivor Curve: R4*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2007	16,141.07	0.00	0.00	1.00000	16,141
<b>Total</b>	16,141.07				16,141.07

## **SECTION 4**

AQUA – PENNSYLVANIA  
Mount Jewett, PA



100,000 Tank (1987)



200,000 Tank (1962)



Both Tanks



Filter Plant



**AQUA – PENNSYLVANIA**  
**Mount Jewett, PA**



Wash Water Building (32' x 28')



Inside Wash Water Building



Well 8 (30-35 gpm)



Old Bridge

AQUA – PENNSYLVANIA  
Mount Jewett, PA



Filter Building (32' x 30' Block)



Portable Generator



Water Lines from Wells



Access Road

AQUA – PENNSYLVANIA  
Mount Jewett, PA



Inside Filter Building



Membrane Filter



Misc. Tools



Control Panel

**AQUA – PENNSYLVANIA**  
**Mount Jewett, PA**



Chemical Tanks and Pumps



Membrane Filter and Pumps



Membrane Filter and Pumps



Electric Panels

AQUA – PENNSYLVANIA  
Mount Jewett, PA



Cast Iron Compressor Manufacture Plate



Air Compressor



Well # 4



Garage Building

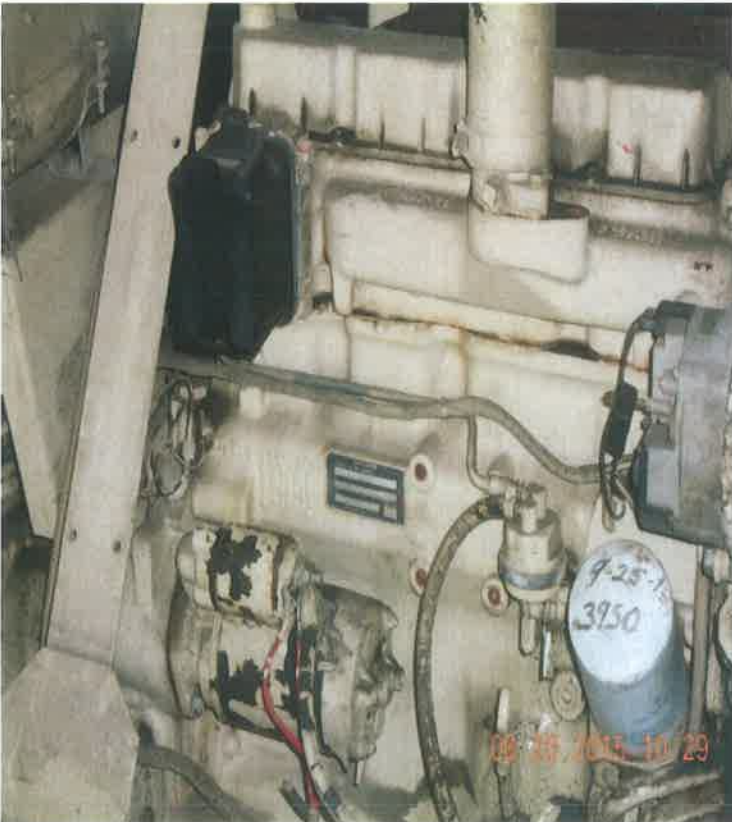
AQUA – PENNSYLVANIA  
Mount Jewett, PA



Garage Building



Portable Air Compressor



Portable Air Compressor



Lines from Wells and Spring

**AQUA – PENNSYLVANIA**  
**Mount Jewett, PA**



Lines from Wells and Spring



Spring A



Raw Water Reservoir



Raw Water Reservoir

**AQUA – PENNSYLVANIA  
Mount Jewett, PA**



Distribution Pumps



Air Compressor and Tank



**Aqua Pennsylvania, Inc.**  
**Factoryville Bunker Hill Water Company, Inc. Costs**  
**M92740**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	300000	PPE-Utility Plant in Service	161,592.33	
9	104000	Utility Plant Purchased/Sold		75,399.84
9	108000	AD-General		68,938.43
9	114000	U Plant Acq Adj		17,254.06
<b>Total</b>			<b>161,592.33</b>	<b>161,592.33</b>



**Aqua Pennsylvania, Inc.**

***Acquisition of the Water System Assets  
of Bunker Hill Water System***

**Original Cost of the Water Utility Plant  
and Depreciation Reserve Calculations  
at August 11, 2015**

By

**Selby P. Jones, CRR, Principal  
David A. Sheffer, Principal**

**AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011**



January 2016



DAVID A SHEFFER  
Principal

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dsheffer@ausconsultants.com

January 4, 2016

Mr. Chad Nardelli  
Manager, Property Accounting  
Aqua Pennsylvania, Inc.  
762 West Lancaster Ave.  
Bryn Mawr, PA 19010

RE: Acquisition of the Water System Assets  
of Bunker Hill Water System

Dear Mr. Nardelli:

In accordance with your request, we have prepared an inventory of the water system assets of Bunker Hill Water System ("Bunker Hill") as of August 11, 2015.

The inventory was prepared to conform to the Uniform System of Accounts for Water/Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of Bunker Hill was determined from a detailed analysis of the books and records of Bunker Hill and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service	\$121,193	\$68,938

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2 and the depreciation calculations in Section 3.

Respectfully submitted,  
AUS Consultants

BY: David A. Sheffer

**Aqua Pennsylvania, Inc.**

**Acquisition of the Water System Assets  
of Bunker Hill Water System**

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of Bunker Hill's Facilities	1-1
Overview of the Study Techniques	1-2
Explanation of the Study	1-3
Original Cost Analysis	1-5
Summary of Original Cost	1-5
Depreciation Reserve	1-5
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service As of August 11, 2015	2-1
<b><u>Account 101 - Utility Plant in Service</u></b>	
303.1 Land & Land Rights – Source of Supply	2-2
304.0 Pumping Structures	2-3
307.0 Wells & Springs	2-4
311.0 Electric Pumping Equipment	2-5
330.0 Distribution Reservoirs & Standpipes	2-6
331.0 Mains & Accessories	2-7
333.0 Services	2-8
334.0 Meters	2-9
<b><u>SECTION 3</u></b>	
<b><u>Depreciated Original Cost</u></b>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of August 11, 2015	3-1

**Aqua Pennsylvania, Inc.**

**Acquisition of the Water System Assets  
of Bunker Hill Water System**

Table of Contents

Page No.

**SECTION 4**

Photographs of Plant Assets (site visit)

4-1

# **SECTION 1**

## **AQUA PENNSYLVANIA, INC.**

### **Acquisition of the Water System Assets of Bunker Hill Water System**

#### **BACKGROUND**

The Bunker Hill Water System ("Bunker Hill") provides water service to a portion of Wyoming County, Pennsylvania, servicing approximately 68 customers located in Factoryville, Pennsylvania. The Company began providing water service to customers in the early 1970's. The Company does not provide fire protection service to its service area.

On August 11, 2015, Aqua and Bunker Hill finalized an agreement to sell the water assets of the system to Aqua. The sale included all assets of the system including production facilities and the various components of the water distribution system. Easements were also exchanged and are currently maintained.

#### **OVERVIEW OF BUNKER HILL'S FACILITIES**

The system assets acquired, for the production and distribution of water, consists of one well, one pump house, one storage tank (67,426 gallon capacity) and one pump with various related equipment, as well as various pipe, valves and services. The system ends at a blow-off valve that is next to the Bunker Hill sewer treatment plant.

There are approximately 68 customers connected to the system, all of which are residential customers. All customers are serviced by 5/8" meters. Aqua is in the process of replacing the old meters at the time of this report.

### Pumping Facilities

The pump house is of cinder block construction, believed to have been constructed in the 1970's. The condition of this structure is fair. The facility is built into the ground and the well is on an easement due to the property line of a home that is connected within the system. There is a connected pipe from the well to the pump house. The pump house contains the pump and various mechanisms and treatment equipment that aids in providing water to the system.

### Distribution System

The water mains are accounted for, with all mains being documented as 2½" PVC plastic pipe. The footage of the distribution mains was verified by the scaling of system maps, along with the aid of Aqua personnel providing knowledge of the possible location of the main.

Each customer has their own service line running from the main to the meter. The number of customers was verified via conversations with Aqua personnel. The same goes for services.

Through additional conversations with Aqua personnel and due diligence of the personnel, AUS Consultants has garnered appropriate information as to the quality of the system. Photos of the above ground assets are contained in section 4 of this report.

### **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the system's assets was conducted in three (3) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the type and quality of the property owned and operated system.



Second, the original cost of the inventoried property was determined based on a review of construction records and other sources of comparable systems. After several conversations with Aqua personnel, AUS Consultants received adequate data and maps in order to appropriately develop an accurate cost and inventory. The age of the plant was determined using information obtained from annual reports and Aqua personnel's knowledge of the system. Construction costs were developed utilizing Aqua's installed costs and/or installed costs from comparable water systems.

Third, Aqua requested theoretical accrued depreciation calculations performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at August 11, 2015.

A complete discussion of the methodologies employed in the original cost study is set forth in the following sections of this report.

## **EXPLANATION OF THE STUDY**

### **Utility Plant Inventory**

A comprehensive inventory of the system's assets as of August 11, 2015 was performed, based upon a review of system maps and physical inventory taken at the site on October 13, 2015. At this time a count of the customers and valves was conducted. Also, the footage of the mains was verified by using system maps and walking the system, including reviewing components of the pump house. Aqua personnel provided any additional knowledge of the system to aid in the inventory process.

### Mass Property

For the purpose of this study, “mass” property consists of utility Plant recorded on Account 331 (Mains and Accessories), Account 333 (Services), and Account 334 (Meters).

For Account 331, footage of pipe was determined by reviewing maps as well as speaking with Aqua personnel. This same procedure was utilized for valves and services. As previously noted, all customers are metered (Account 334), being serviced through a 5/8” meter.

### Non-Mass Property

A physical inventory of the water system’s well house was completed. Detail results of the plant inventory are set forth in Section 2 of this report by fixed capital accounts prescribed by the National Company of Regulatory Utility Commissioners. The original cost of all inventory property units is properly recorded in the following accounts:

#### Non-Depreciable Plant:

303.1 Land & Land Rights – Source of Supply & Pumping

#### Depreciable Plant:

- 304 Pumping Structures
- 307 Wells & Springs
- 311 Electric Pumping Equipment
- 330 Distribution Reservoirs & Standpipes
- 331 Mains & Accessories
- 333 Services
- 334 Meters

### ORIGINAL COST ANALYSIS

The goal of the original cost study was to ascertain the original cost of the system’s plant in service by fixed capital accounts and, within each account, to determine the original cost by

retirement unit (for non-mass) or size and type (for mass property) and by vintage year. Reliable data exists to establish the age and original cost of the system's assets by account. The original cost determinations for Account 331 (Mains and Accessories), Account 333 (Services), and Account 334 (Meters) are explained as follows:

Account 331, Account 333 and Account 334

The original cost and footage of mains and accessories was determinable from available records and through conversations with Aqua personnel. As previously explained, the physical inventory provided the total number of valves and meters. Unit costs were developed utilizing Aqua installed costs and cost information from other available sources. The original cost values at August 11, 2015 for the system's mains, services and meters as established by the original cost total \$70,262; \$16,578; \$8,375, respectively.

**SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the system's utility plant in service is not less than \$121,193, as summarized by plant account in Section 2 (Pg. 2-1).

**DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at August 11, 2015. The calculated accrued depreciation reserve amounts to \$68,938 at August 11 2015. The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and details supporting documentation are included in Section 3 of this report.

## **SECTION 2**

**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost at August 11, 2015

Acct. No.	Account Title	Original Cost
<b>NON-DEPRECIABLE</b>		
303.10	Land/Land Rights - Source of Supply	\$ 5.00
	Total Non-Depreciable	\$ 5.00
<b>DEPRECIABLE</b>		
304.00	Pumping Structures	\$ 1,955.03
307.00	Wells and Springs	4,446.28
311.00	Electric Pumping Equipment	5,988.94
330.00	Distribution Reservoirs & Standpipes	13,582.61
<u>Mains &amp; Accessories</u>		
331.10	Mains & Accessories-Plastic Pipe 4" & Under	54,645.70
331.20	Mains & Accessories-Valves 4" & Under	15,518.60
331.30	Mains & Accessories-Pressure Release Valve	97.50
	Total Account 331.00	70,261.80
333.00	Services	16,578.31
334.00	Meters	8,374.52
	Total Depreciable Original Cost	\$ 121,187.49
	Total Original Cost	\$ 121,192.49

**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost at August 11, 2015  
Account 303.10 - Land/Land Rights - Source of Supply

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<u>Land</u>				
Source of Supply Land - Easements	1970	Lot		\$ 1.00
Source of Supply Land - Easements	1975	Lot		1.00
Source of Supply Land - Easements	1975	Lot		1.00
Source of Supply Land - Easements	1988	Lot		1.00
Source of Supply Land - Easements	1988	Lot		1.00
Total Account 303.10				\$ 5.00

**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost at August 11, 2015  
Account 304 - Pumping Structures

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
Pump House Cinder block construction w/ shingle roof and steel cellar door	1970		Lot	\$ 1,955.03
Total Account 304.00				\$ 1,955.03 =====



**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost at August 11, 2015  
Account 307 - Wells & Springs

Item	Year Installed	----- Quantity ----- Unit No.	Original Cost
Well w/ easement on homeowner's property	1970	Lot	\$ 4,446.28
Total Account 307.00			\$ 4,446.28

**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost at August 11, 2015  
Account 311 - Electric Pumping Equipment

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Electric Pumping Equipment	1990	Ea.	1	\$ 5,988.94
Total Account 311.00				\$ 5,988.94 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost at August 11, 2015  
Account 330 - Distribution Reservoirs & Standpipes

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Storage Tank - 67,426 gallon	1970		Lot	\$ 13,582.61
Total Account 330.00				\$ 13,582.61 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost at August 11, 2015  
Account 331 - Mains & Accessories

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<u>Pipe</u>				
4" & Under Plastic Pipe	1970	Ft.	2,933	\$ 10,324.16
4" & Under Plastic Pipe	1975	Ft.	3,768	16,993.68
4" & Under Plastic Pipe	1988	Ft.	3,074	27,327.86
Total Pipe				\$ 54,645.70
<u>Valves</u>				
4" & Under Valves	1970	Ea.	15	\$ 1,462.50
4" & Under Valves	1975	Ea.	35	5,931.10
4" & Under Valves	1988	Ea.	25	8,125.00
Pressure Release Valve	1970	Ea.	1	97.50
Total Valves				\$ 15,616.10
Total Account 331.00				\$ 70,261.80

**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost at August 11, 2015  
Account 333 - Services

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
3/4" Services	1970	Ea.	21	\$ 2,717.19
3/4" Services	1975	Ea.	26	5,280.44
3/4" Services	1988	Ea.	21	8,580.68
Total Account 333.00				\$ <u>16,578.31</u>

**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost at August 11, 2015  
Account 334 - Meters

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
5/8" x 3/4" Meters	1970	Ea.	21	\$ 2,490.60
5/8" x 3/4" Meters	1975	Ea.	26	2,655.38
5/8" x 3/4" Meters	1988	Ea.	21	3,228.54
Total Account 334.00				\$ 8,374.52

## **SECTION 3**

**Aqua Pennsylvania, Inc.**

*Acquisition of Bunker Hill Water System*

Original Cost, Calculated Depreciation Reserve and  
Depreciated Original Cost and as of August 11, 2015

Acct. No.	Description	Original Cost at 8/11/2015	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 8/11/2015
<b>NON-DEPRECIABLE</b>					
303.10	Land/Land Rights - Source of Supply	\$ 5.00		\$ -	\$ 5.00
	Total Non-Depreciable Plant	\$ 5.00		\$ -	\$ 5.00
<b>DEPRECIABLE</b>					
304.00	Pumping Structures	\$ 1,955.03	40-R3	\$ 1,663.74	\$ 291.29
307.00	Wells & Springs	4,446.28	60-R2	2,613.47	1,832.81
311.00	Electric Pumping Equipment	5,988.94	25-R3	4,797.75	1,191.19
330.00	Distribution Reservoirs & Standpipes	13,582.61	65-R3	8,335.40	5,247.21
<u>Mains &amp; Accessories</u>					
331.10	Mains & Accessories-Plastic Pipe 4" & Under	54,645.70	65-R3	26,513.99	28,131.71
331.20	Mains & Accessories-Valves 4" & Under	15,518.60	70-R3	6,915.73	8,602.87
331.30	Mains & Accessories-Pressure Release Valve	97.50	65-R3	59.83	37.67
	Total Account 331.00	70,261.80		33,489.55	36,772.25
333.00	Services	\$ 16,578.31	50-R3	\$ 9,935.26	\$ 6,643.05
334.00	Meters	8,374.52	20-R3	8,103.26	271.26
	Total Depreciable Plant	\$ 121,187.49		\$ 68,938.43	\$ 52,249.06
	Total Plant in Service	\$ 121,192.49		\$ 68,938.43	\$ 52,254.06



**Aqua-Pennsylvania, Inc.**  
**Bunker Hill Water System**  
 304.00 Pumping Structures

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	1,955.03	5.96	40.00	0.85101	1,664
<b>Total</b>	1,955.03				1,663.74

***Aqua-Pennsylvania, Inc.***  
***Bunker Hill Water System***  
***307.00 Wells & Springs***

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of August 11, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R2***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1970	4,446.28	24.73	60.00	0.58779	2,613
<b><i>Total</i></b>	4,446.28				2,613.47

**Aqua-Pennsylvania, Inc.**  
**Bunker Hill Water System**  
**311.00 Electric Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1990	5,988.94	4.97	25.00	0.80110	4,798
<b>Total</b>	5,988.94				4,797.75

***Aqua-Pennsylvania, Inc.***  
***Bunker Hill Water System***  
***330.00 Dist. Reservoirs & Standpipes***

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of August 11, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	13,582.61	25.11	65.00	0.61368	8,335
<b><i>Total</i></b>	13,582.61				8,335.40

**Aqua-Pennsylvania, Inc.**  
**Bunker Hill Water System**  
**331.10 Mains & Accessories - Plastic 4" & Under**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	10,324.16	25.11	65.00	0.61368	6,336
1975	16,993.68	28.84	65.00	0.55638	9,455
1988	27,327.86	39.49	65.00	0.39239	10,723
<b>Total</b>	54,645.70				26,513.99

**Aqua-Pennsylvania, Inc.**  
**Bunker Hill Water System**  
**331.20 Mains & Accessories - Valves 4" & Under**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 70 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	1,462.50	29.60	70.00	0.57714	844
1975	5,931.10	33.46	70.00	0.52194	3,096
1988	8,125.00	44.36	70.00	0.36627	2,976
<b>Total</b>	15,518.60				6,915.73

***Aqua-Pennsylvania, Inc.***  
***Bunker Hill Water System***  
***331.30 Mains & Accessories - Pressure Release Valve***  
***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of August 11, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1970	97.50	25.11	65.00	0.61368	60
<b><i>Total</i></b>	97.50				59.83

**Aqua-Pennsylvania, Inc.**  
**Bunker Hill Water System**  
 333.00 Services

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	2,717.19	12.58	50.00	0.74833	2,033
1975	5,280.44	15.60	50.00	0.68794	3,633
1988	8,580.68	25.12	50.00	0.49755	4,269
<b>Total</b>	16,578.31				9,935.26



***Aqua-Pennsylvania, Inc.***  
***Bunker Hill Water System***  
 334.00 Meters

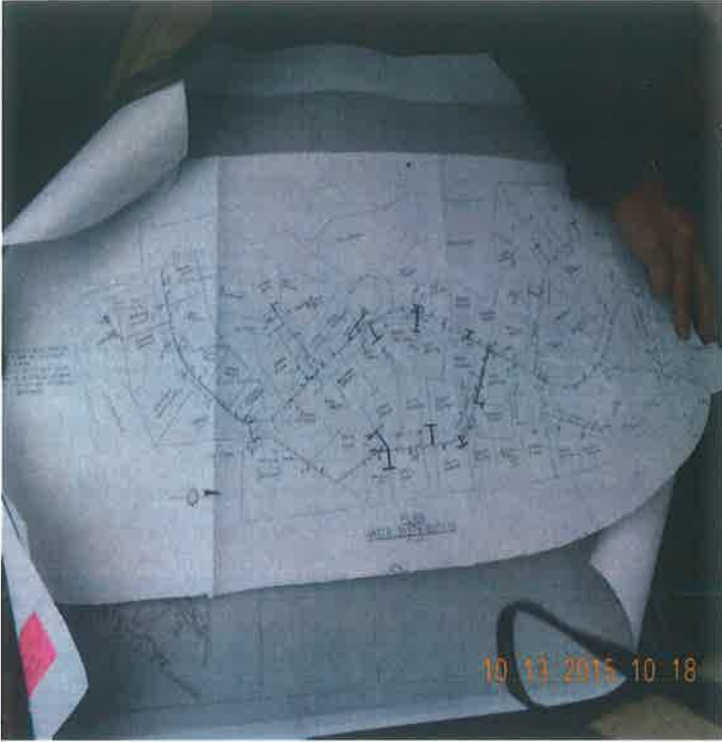
***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of August 11, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0 % Average Service Life: 20 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	2,490.60	0.00	0.00	1.00000	2,491
1975	2,655.38	0.00	0.00	1.00000	2,655
1988	3,228.54	1.68	20.00	0.91598	2,957
<b><i>Total</i></b>	8,374.52				8,103.26

# **SECTION 4**

**Bunker Hill Water Site Inspection 10-13-15**  
**Dave Hoogstad (Field Supervisor)**



**Storage Tank**



**Well House (Interior) Chemical Feeder**



**Well House (Exterior)**

**Bunker Hill Water Site Inspection 10-13-15**  
**Dave Hoogstad (Field Supervisor)**



**Well House (Exterior) Tank (Back Ground)**



**Well**



**Water Manhole (Contains Pressure Reducing Valve)**

**Aqua Pennsylvania, Inc.**  
**Robin Hood Lakes Water Company, Inc. Costs**  
**M92647**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	300000	PPE-Utility Plant in Service	711,448.57	
9	104000	Utility Plant Purchased/Sold		296,125.74
9	108000	AD-General		328,089.00
9	114000	U Plant Acq Adj		87,233.83
<b>Total</b>			<b>711,448.57</b>	<b>711,448.57</b>



**Aqua Pennsylvania, Inc.**

***Acquisition of the Water Utility Plant  
of Robin Hood Lakes Water Company, Inc.***

**Original Cost of the Water Utility Plant  
and Depreciation Reserve Calculations  
at October 14, 2015**

**By**

**Gary D. Shambaugh, Principal  
David A. Sheffer, Principal  
Selby P. Jones, CRRA, Principal**

**AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
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**January 2016**



**DAVID A SHEFFER**  
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January 14, 2016

Mr. Chad Nardelli  
Manager, Property Accounting  
Aqua Pennsylvania, Inc.  
762 West Lancaster Ave.  
Bryn Mawr, PA 19010

RE: Acquisition of the Water Utility Plant of  
the Robin Hood Lakes Water Co., Inc.

Dear Mr. Nardelli:

In accordance with your request, we have prepared an inventory of the water utility plant of the Robin Hood Lakes Water Co., Inc. ("Robin Hood") as of October 14, 2015.

The inventory was prepared to conform to the Uniform System of Accounts for Water/Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of Robin Hood was determined from a detailed analysis of the books and records of Robin Hood and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service	\$660,755	\$328,089

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2 and the depreciation calculations in Section 3.

Respectfully submitted,  
AUS Consultants

By: David A. Sheffer

**Aqua Pennsylvania, Inc.**

**Acquisition of the Water Utility Plant  
of Robin Hood Lakes Water Company, Inc.**

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of Robin Hood's Facilities	1-1
Overview of the Study Techniques	1-3
Explanation of the Study	1-4
Original Cost Analysis	1-5
Summary of Original Cost	1-6
Depreciation Reserve	1-6
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at October 14, 2015	2-1
<b><u>Account 101 - Utility Plant in Service</u></b>	
303.1 Land & Land Rights – Source of Supply	2-2
304.0 Pumping Structures	2-3
307.0 Wells & Springs	2-4
310.0 Power Generation Equipment	2-5
311.0 Electric Pumping Equipment	2-6
320.0 Water Treatment Equipment	2-7
330.0 Distribution Reservoirs & Standpipes	2-8
331.0 Mains & Accessories	2-9
333.0 Services	2-10
334.0 Meters	2-11



**Aqua Pennsylvania, Inc.**

**Acquisition of the Water Utility Plant  
of Robin Hood Lakes Water Company, Inc.**

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 3</u></b>	
<u>Depreciated Original Cost</u>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of October 14, 2015	3-1
<b><u>SECTION 4</u></b>	
Photographs of Plant Assets (site visit)	4-1

# **SECTION 1**

**AQUA PENNSYLVANIA, INC.**

**Acquisition of the Water Utility Plant  
of Robin Hood Lakes Water Company, Inc.**

**BACKGROUND**

The Robin Hood Lakes Company, Inc. (“Robin Hood Lakes”) provides water service to approximately 210 customers located in Monroe County, Pennsylvania. The Company began providing water service to the town in the 1980’s.

On October 14, 2015, Aqua and Robin Hood Lakes finalized the agreement to sell the water utility plant of Robin Hood Lakes to Aqua. The sale included all assets of the system including production facilities and the various components of the water distribution system. Easements were also exchanged and are currently maintained.

**OVERVIEW OF ROBIN HOOD LAKES FACILITIES**

The system assets acquired, for the production and distribution of water, consists of three (3) wells, three (3) generators with control panels, chemical vats, various pumping mains, services and related equipment.

All customers are metered. Aqua is in the process of replacing meters at the time of this report. All meters at 5/8”. There are approximately 210 customers connected to the system, all of which are residential customers.

**Treatment Facilities**

There are three (3) well houses on the system. They are listed as well house 101, 103 and 105; respectively. All well houses are of cinder block construction with a shingled roof and all

have a cement floor with drain and heater. All well houses are believed to be put built in the 1990's.

Well house 101 is of cinder block construction with shingle roof, measuring 21' x 15'. Housed in the building are two (2) chemical feed tanks, each with a Chemtech 100 feeder. Also housed in the building are three (3) 120 gallon pumping tanks, one (1) Well-X tank and a 300 gallon storage tank. The well itself is an 8" well with head cap and is 100 feet deep. A Wheelhouse 5550 portable generator was located at the facility and is connected to the electrical panel as backup power.

Well house 103 is of cinder block construction with shingle roof and measures at 24' x 15'. The well is a 6" well located in the subfloor of the well house and is 125 feet deep. Additional items located in the well house are five (5) 120 gallon pump tanks and two (2) chemical vats, each with a Chemtech Series 100 chemical feeder. Backup power generation is provided by a Generac Guardian Series generator, located outside of the well house, and a Generac RTS control panel.

Well house 105 is built in similar fashion to well houses 101 and 103 and measures 16' x 12', making it the smallest of the three well houses. Located in the first room of the building are three (3) 120 gallon pump tanks and an Omtrol RT Series Tank. Additionally, similarly to the other buildings, two (2) chemical feed tanks with Chemtech chemical feeders are located in the building. The well has a casing and is approximately 100 feet deep. The second room of the building housed a portable backup generator.

### Distribution System

The water mains are accounted for, with all mains being documented as plastic pipe. The mains in the system are of various sizes, all being 4" and under PVC pipe which runs from each well house to the street where it ties into the distribution mains within the system. 1.25" and 2" PVC pipe is located throughout the remainder of the system. The footage of the distribution mains were verified by the scaling of system maps, along with the aid of Aqua and Robin Hood Lakes personnel, which provided the knowledge of the possible location of the mains.

Each customer has their own service line running from the main to the meter. The number of customers and services were verified with information gathered at the time of sale.

Through site visits and due diligence of the personnel, AUS Consultants has garnered appropriate information as to the quality of the system. Photos of the above ground assets are contained in section 4 of this report.

### **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the system's assets was conducted in three (3) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the type and quality of the property owned and operated system.

Second, the original cost of the inventoried property was determined based on a review of the system's annual reports, construction records and other sources. After several conversations with system personnel, AUS Consultants received adequate data and maps in order to appropriately develop an accurate cost. The age of the plant was determined using information obtained from annual reports and during the site visit of the water system.

Construction costs were developed utilizing Aqua's installed costs and or installed costs from comparable water systems.

Third, Aqua requested that a theoretical accrued depreciation calculations be performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at October 14, 2015.

A complete discussion of the methodologies employed in the original cost study is set forth in the following sections of this report.

### **EXPLANATION OF THE STUDY**

#### **Utility Plant Inventory**

A comprehensive inventory of the system's assets as of October 14, 2015 was performed, based upon a complete physical inventory taken at the site on November 19, 2015. At this time a count of the customers, valves and services was conducted. Also, the footage of the mains were verified by using system maps and walking the system, including reviewing components of the pump house. During site visits and conversations additional knowledge of the system was gathered to aid in the inventory process.

#### **Mass Property**

For the purpose of this study, "mass" property consists of utility Plant recorded on Account 331 (Mains and Accessories), Account 333 (Services) and Account 334 (Meters).

For Account 331, footage of pipe was determined by reviewing maps as well as gathering information provided by the previous owner and was verified by a physical check of the

distribution system in place. This same procedure was utilized for valves and services. As previously noted, all customers are metered (Account 334), being serviced through a 5/8" meter.

Non-Mass Property

A physical inventory of the water system's well houses was completed. Detail results of the plant inventory are set forth in Section 2 of this report by fixed capital accounts prescribed by the National Company of Regulatory Utility Commissioners. The original cost of all inventory property units is properly recorded in the following accounts:

Non-Depreciable Plant:

303.1 Land & Land Rights – Source of Supply & Pumping

Depreciable Plant:

- 304 Pumping Structures
- 307 Wells & Springs
- 310 Power Generation Equipment
- 311 Electric Pumping Equipment
- 320 Water Treatment Equipment
- 330 Distribution Reservoirs & Standpipes
- 331 Mains & Accessories
- 333 Services
- 334 Meters

**ORIGINAL COST ANALYSIS**

The goal of the original cost study was to ascertain the original cost of the system's plant in service by fixed capital accounts and, within each account, to determine the original cost by retirement unit (for non-mass) or size and type (for mass property) and by vintage year. Reliable data exists to establish the age and original cost of the system's assets by account. It is our

experience, that smaller water systems may not properly record fixed capital improvements to plant accounts. Also, detailed cost records of the fixed assets of the water system do not exist. Therefore, we utilized unit cost of a comparable water systems in order to develop the original cost. The original cost determinations for Account 331 (Mains and Accessories), Account 333 (Services) and Account 334 (Meters) are explained as follows:

Account 331, Account 333 and Account 334

The original cost and footage of mains and accessories was determinable from available PAPUC Annual Reports and other source documents. A conversation with the system's personnel revealed that the footage of pipe are believed to be accurate. As previously explained, the physical inventory provided the total number of valves and meters. Unit costs were developed utilizing Aqua installed costs and cost information from other available sources. The original cost values at October 14, 2015 for the system's mains, services and meters as established by the original cost total \$408,783; \$24,967; \$48,820; respectively.

**SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the system's utility plant in service is not less than \$660,755, as summarized by plant account in Section 2 (Pg. 2-1).

**DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at October 14, 2015. The calculated accrued depreciation reserve amounts to \$328,089 at October 14, 2015. The calculations were based upon the Straight Line-



Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and details supporting documentation are included in Section 3 of this report.

## **SECTION 2**

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015

Acct. No.	Account Title	Original Cost
<b>NON-DEPRECIABLE</b>		
303.10	Land/Land Rights - Source of Supply	\$ 3.00
	Total Non-Depreciable	\$ 3.00
<b>DEPRECIABLE</b>		
304.00	Pumping Structures	\$ 50,241.57
307.00	Wells and Springs	7,255.69
310.00	Power Generation Equipment	14,929.67
311.00	Electric Pumping Equipment	62,254.56
320.00	Water Treatment Equipment	39,500.00
330.00	Distribution Reservoirs & Standpipes	4,000.00
<b>Mains &amp; Accessories</b>		
331.10	Mains & Accessories-Plastic Pipe 4" & Under	\$ 384,970.40
331.20	Mains & Accessories-Valves 4" & Under	23,812.95
	Total Account 331.00	\$ 408,783.35
333.00	Services	24,966.90
334.00	Meters	48,820.27
	Total Depreciable Original Cost	\$ 660,752.01
	Total Plant in Service	\$ 660,755.01

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 303.10 - Land/Land Rights - Source of Supply

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
Well 101: Deed	1987	Lot		\$ 1.00
Well 103: Easement	2015	Lot		1.00
105: Deed	1975	Lot		1.00
Total Account 303.10				\$ <u>3.00</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 304 - Pumping Structures

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
Wellhouse #1 21'x15' building of cinder block construction with shingle roof, cement floor, drain and heater	1993	Lot		\$16,747.19
Well house #3 24' X 15' building of cinder block construction with shingle roof, cement floor, drain and heater	1993	Lot		16,747.19
Wellhouse # 5 16'x12' building of cinder block construction with shingle roof, cement floor, drain and heater	1993	Lot		16,747.19
Total Account 304.00				<u>-----</u> \$50,241.57 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 307 - Wells & Springs

Item	Year Installed	----- Quantity ----- Unit No.	Original Cost
Well #101 8" well casing - 100 feet deep	1960	Lot	\$ 1,007.34
Well #103 6" well casing - 125 feet deep	1965	Lot	1,401.72
Well #105 well casing - 100 feet deep	1989	Lot	4,846.63
Total Account 307.00			\$ <u>7,255.69</u>

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 310 - Power Generation Equipment

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit No.</u>	<u>Original Cost</u>
Well 101: Generac RTS Series 20 kw Generator	1985	Lot	\$ 5,529.51
Well 103: Generac Guardian Series 17 kw Generator	1985	Lot	4,700.08
Well 105: Wheelhouse 5550 portable generator	2000	Lot	4,700.08
Total Account 310.00			<u>----- \$ 14,929.67 =====</u>

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 311 - Electric Pumping Equipment

Item	Year Installed	----- Quantity ----- Unit                      No.	Original Cost
Well house #3 120 gallon pump tank - 75 psi	2013	Lot	\$ 20,751.52
Well house #5 120 gallon pump tank - 75 psi	2013	Lot	20,751.52
Well house #1 120 gallon pump tank - 75 psi	2013	Lot	20,751.52
Total Account 311.0			\$ <u>62,254.56</u> =====



**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 320 - Water Treatment Equipment

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Chemtech Series 100 Chemical Feeder with 2 chemical containers Well house #3	2014	Ea.	2	\$13,008.06
Chemtech Chemical Feeder with 2 chemical containers Well house #5	2014	Ea.	2	13,008.06
Chemtech Series 100 Chemical Feeder with 2 chemical containers Well House #1	2015	Ea.	2	13,483.88
Total Account 320.0				<u>\$39,500.00</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 330 - Distribution Reservoirs & Standpipes

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
Amtrol RT Series Tank	1985	Ea.	1	\$ 500.00
Well-X Tank	1985	Ea.	1	500.00
300 Gallon storage tank	1985	Ea.	1	3,000.00
Total Account 330.0				\$ <u>4,000.00</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 331 - Mains & Accessories

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<b>Mains</b>				
4" & Under Plastic Pipe	1985	Ft.	52,030	\$ 339,235.60
4" & Under Plastic Pipe	1992	Ft.	400	\$ 3,160.00
4" & Under Plastic Pipe	1994	Ft.	600	\$ 4,944.00
4" & Under Plastic Pipe	2003	Ft.	700	\$ 7,672.00
4" & Under Plastic Pipe	2005	Ft.	940	\$ 11,721.80
4" & Under Plastic Pipe	2006	Ft.	200	\$ 2,864.00
4" & Under Plastic Pipe	2007	Ft.	300	\$ 4,725.00
4" & Under Plastic Pipe	2008	Ft.	500	\$ 8,305.00
4" & Under Plastic Pipe	2010	Ft.	150	\$ 2,343.00
<b>Total Mains</b>				<u>\$ 384,970.40</u>
4" & Under Valves	1985	Ea.	105	23,812.95
<b>Total Account 331.0</b>				<u>\$ 408,783.35</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 333 - Services

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Services	1985	Ea.	210	\$ 24,966.90
Total Account 333.0				\$ 24,966.90 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost at October 14, 2015  
Account 334 - Meters

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
5/8" x 3/4" meters	1990	Ea.	38	\$ 5,646.80
5/8" x 3/4" meters	2005	Ea.	100	\$ 20,000.00
5/8" x 3/4" meters	2006	Ea.	15	\$ 3,476.55
5/8" x 3/4" meters	2007	Ea.	8	\$ 2,160.72
5/8" x 3/4" meters	2008	Ea.	2	\$ 697.18
5/8" x 3/4" meters	2009	Ea.	7	\$ 2,440.13
5/8" x 3/4" meters	2010	Ea.	4	\$ 1,401.84
5/8" x 3/4" meters	2011	Ea.	3	\$ 1,062.60
5/8" x 3/4" meters	2012	Ea.	6	\$ 2,125.20
5/8" x 3/4" meters	2013	Ea.	6	\$ 2,136.42
5/8" x 3/4" meters	2014	Ea.	10	\$ 3,560.70
5/8" x 3/4" meters	2015	Ea.	11	\$ 4,112.13
Total Account 334.0				<u>\$ 48,820.27</u>

## **SECTION 3**

**Aqua Pennsylvania, Inc.**

*Acquisition of Robin Hood Lakes Water System*

Original Cost and Depreciation Reserve  
as of October 14, 2015  
Based Upon Whole Life Depreciation

Acct. No.	Description	Original Cost at 10/14/2015	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 10/14/2015
DEPRECIABLE					
303.10	Land/Land Rights - Source of Supply	\$ 3.00			\$ 3.00
Total Non-Depreciable Plant		\$ 3.00			\$ 3.00
DEPRECIABLE					
304.00	Pumping Structures	\$ 50,241.57	40-R3	\$ 33,066.25	\$ 17,175.32
307.00	Wells & Springs	7,255.69	60-R2	3,044.52	4,211.17
310.00	Power Generation Equipment	14,929.67	25-R3	11,576.25	3,353.42
311.00	Electric Pumping Equipment	62,254.56	25-R3	54,639.45	7,615.11
320.00	Water Treatment Equipment	39,500.00	40-R3	25,996.74	13,503.26
330.00	Distribution Reservoirs & Standpipes	4,000.00	65-R3	1,827.35	2,172.65
Mains & Accessories					
331.10	Mains & Accessories-Plastic Pipe 4" & Under	\$ 384,970.40	65-R3	\$ 155,227.47	\$ 229,742.93
331.20	Mains & Accessories-Valves 4" & Under	23,812.95	70-R3	9,660.52	14,152.43
Total Account 331.00		\$ 408,783.35		\$ 164,887.99	\$ 243,895.36
333.00	Services	24,966.90	50-R3	\$ 13,674.28	11,292.62
334.00	Meters	48,820.27	20-R3	19,376.17	29,444.10
Total Depreciable Plant		\$ 660,752.01		\$ 328,089.00	\$ 332,663.01
Total Plant in Service		\$ 660,755.01		\$ 328,089.00	\$ 332,666.01

**Aqua-Pennsylvania, Inc.**  
**Robin Hood Lakes Water System**  
**304.00 Pumping Structures**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 14, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1985	50,241.57	13.67	40.00	0.65815	33,066
<b>Total</b>	50,241.57				33,066.25



**Aqua-Pennsylvania, Inc.**  
**Robin Hood Lakes Water System**  
 307.00 Wells & Springs

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 14, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 60 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1985	7,255.69	34.82	60.00	0.41960	3,045
<b>Total</b>	7,255.69				3,044.52

**Aqua-Pennsylvania, Inc.**  
**Robin Hood Lakes Water System**  
**310.00 Power Generation Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 14, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1985	10,229.59	3.06	25.00	0.87768	8,978
2000	4,700.08	11.18	25.00	0.55275	2,598
<b>Total</b>	14,929.67				11,576.25

**Aqua-Pennsylvania, Inc.**  
**Robin Hood Lakes Water System**  
**311.00 Electric Pumping Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 14, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1985	62,254.56	3.06	25.00	0.87768	54,639
<b>Total</b>	62,254.56				54,639.45

**Aqua-Pennsylvania, Inc.**  
**Robin Hood Lakes Water System**  
**320.00 Water Treatment Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 14, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1985	39,500.00	13.67	40.00	0.65815	25,997
<b>Total</b>	39,500.00				25,996.74

**Aqua-Pennsylvania, Inc.**  
**Robin Hood Lakes Water System**  
**330.00 Dist. Reservoirs & Standpipes**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 14, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	500.00	24.99	65.00	0.61556	308
1985	3,500.00	36.78	65.00	0.43416	1,520
<b>Total</b>	4,000.00				1,827.35

***Aqua-Pennsylvania, Inc.***  
***Robin Hood Lakes Water System***  
***331.10 Mains & Accessories-4" & Under Plastic***  
***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of October 14, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0% Average Service Life: 65 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1985	339,235.60	36.78	65.00	0.43416	147,283
1992	3,160.00	42.87	65.00	0.34043	1,076
1994	4,944.00	44.67	65.00	0.31275	1,546
2003	7,672.00	53.04	65.00	0.18408	1,412
2005	11,721.80	54.94	65.00	0.15472	1,814
2006	2,864.00	55.90	65.00	0.13995	401
2007	4,725.00	56.87	65.00	0.12514	591
2008	8,305.00	57.83	65.00	0.11026	916
2010	2,343.00	59.77	65.00	0.08039	188
<b><i>Total</i></b>	<b>384,970.40</b>				<b>155,227.47</b>

**Aqua-Pennsylvania, Inc.**  
**Robin Hood Lakes Water System**  
**331.20 Mains & Accessories-4" & Under Valves**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 14, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 70 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1985	23,812.95	41.60	70.00	0.40568	9,661
<b>Total</b>	23,812.95				9,660.52

***Aqua-Pennsylvania, Inc.***  
***Robin Hood Lakes Water System***  
 333.00 Services

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of October 14, 2015***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1985	24,966.90	22.62	50.00	0.54770	13,674
<b><i>Total</i></b>	24,966.90				13,674.28



**Aqua-Pennsylvania, Inc.**  
**Robin Hood Lakes Water System**  
**334.00 Meters**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 14, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 20 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1990	5,646.80	2.15	20.00	0.89232	5,039
2005	20,000.00	10.48	20.00	0.47580	9,516
2006	3,476.55	11.32	20.00	0.43412	1,509
2007	2,160.72	12.18	20.00	0.39125	845
2008	697.18	13.05	20.00	0.34727	242
2009	2,440.13	13.95	20.00	0.30227	738
2010	1,401.84	14.87	20.00	0.25633	359
2011	1,062.60	15.81	20.00	0.20956	223
2012	2,125.20	16.76	20.00	0.16208	344
2013	2,136.42	17.72	20.00	0.11399	244
2014	3,560.70	18.69	20.00	0.06540	233
2015	4,112.13	19.59	20.00	0.02050	84
<b>Total</b>	48,820.27				19,376.17

# **SECTION 4**

Robin Hood Lakes Site Inspection (11-19-15)  
 Dave Hoogstad (Field Supervisor)  
 Well 103



Chemtech



Chemtech



Electric Panel



Generator Panel

Robin Hood Lakes Site Inspection (11-19-15)  
Dave Hoogstad (Field Supervisor)  
Well 103



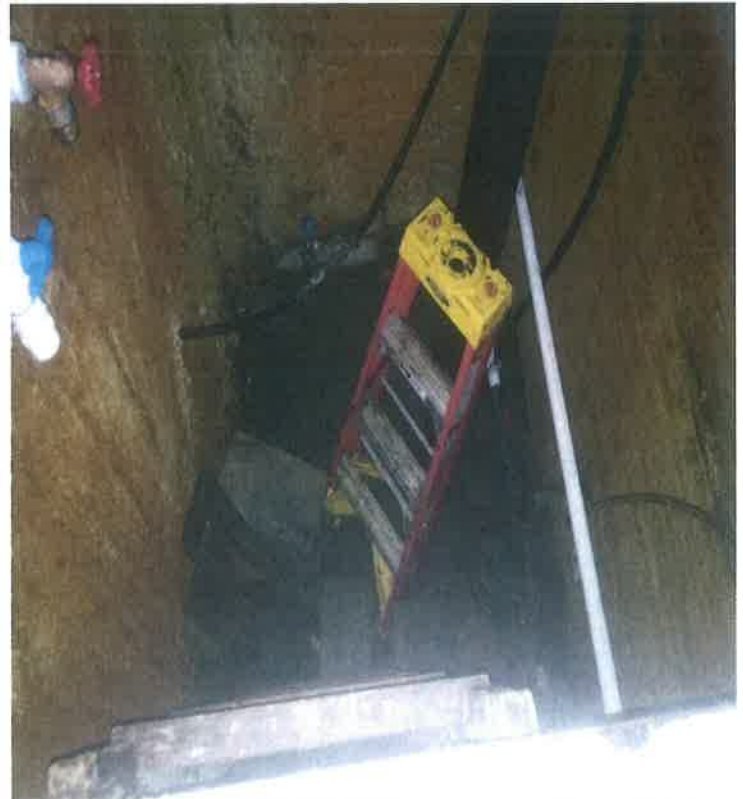
Generator



Pipe to Street



Pipe to Street



Pipe to Street

Robin Hood Lakes Site Inspection (11-19-15)  
Dave Hoogstad (Field Supervisor)  
Well 103



Pump House



Pump House



Pump Tank



Pump Tank

Robin Hood Lakes Site Inspection (11-19-15)  
Dave Hoogstad (Field Supervisor)  
Well 103



Pump Tank



Pump Tank

Robin Hood Lakes Site Inspection (11-19-15)  
 Dave Hoogstad (Field Supervisor)  
 Well 101



Amtol Tank



Basement for Pump Tanks



Chemical Containers



ChemTech

Robin Hood Lakes Site Inspection (11-19-15)  
Dave Hoogstad (Field Supervisor)  
Well 101



Extra Storage Area



Generator



Pipe to Street



Portable Generator 2



Robin Hood Lakes Site Inspection (11-19-15)  
Dave Hoogstad (Field Supervisor)  
Well 101



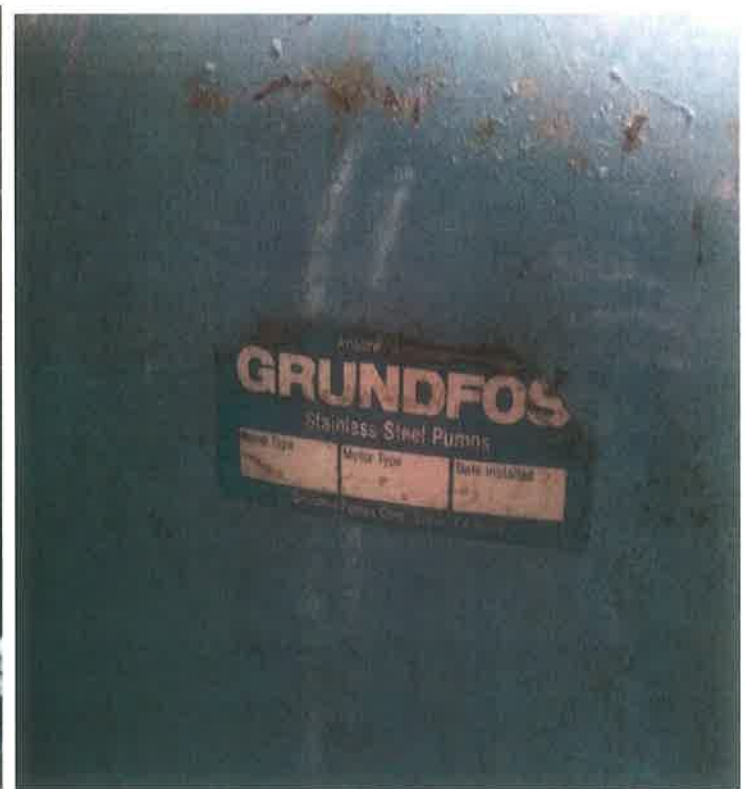
Portable Generator



Pump House



Pump Tank



Pump Tank

Robin Hood Lakes Site Inspection (11-19-15)  
 Dave Hoogstad (Field Supervisor)  
 Well 101



Pump Tank



Pump Tank



Pump Tank



Retention Tank

Robin Hood Lakes Site Inspection (11-19-15)  
Dave Hoogstad (Field Supervisor)  
Well 101



Well Cap

Robin Hood Lakes Site Inspection (11-19-15)  
 Dave Hoogstad (Field Supervisor)  
 Well 105



Amtrol Tank



Chemtech



Chemtech

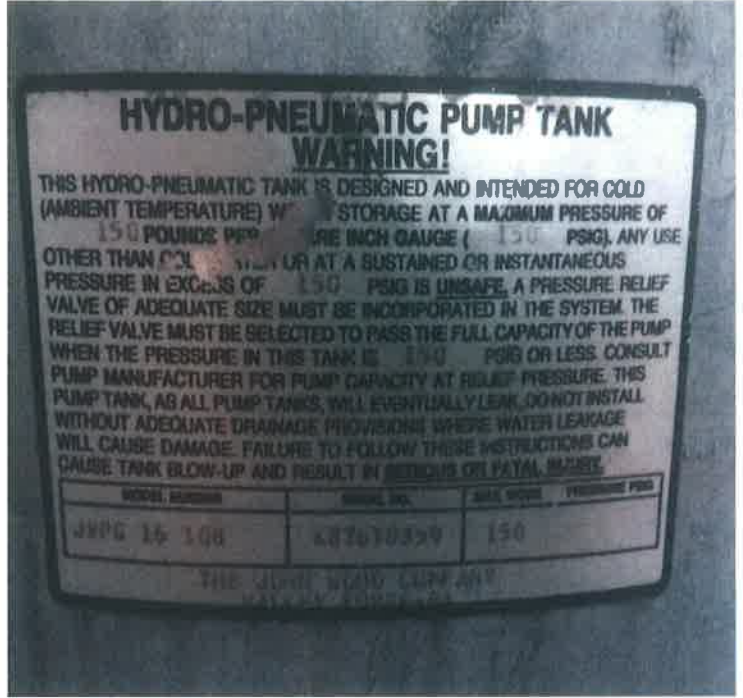


Electric Panel

Robin Hood Lakes Site Inspection (11-19-15)  
 Dave Hoogstad (Field Supervisor)  
 Well 105



Heater



Hydro-Pneumatic Tank



Pipe to Street



Portable Generator

Robin Hood Lakes Site Inspection (11-19-15)  
Dave Hoogstad (Field Supervisor)  
Well 105



Pump Tank



Well Cap



Pump House



Pump House

Aqua Pennsylvania, Inc.  
 East Cameron Township Municipal Authority Costs  
 M92785  
 Journal Entry

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	300000	PPE-Utility Plant in Service	383,945.73	
9	104000	Utility Plant Purchased/Sold		165,537.83
9	108000	AD-General		148,549.00
9	114000	U Plant Acq Adj		69,858.90
<b>Total</b>			<b>383,945.73</b>	<b>383,945.73</b>



**Aqua Pennsylvania, Inc.**

***Acquisition of the Water System Assets  
of East Cameron Township Municipal Authority***

Original Cost of the Water Utility Plant  
and Depreciation Reserve Calculations  
at December 19, 2016

By

David A. Sheffer, Principal

AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011



February 2017





DAVID A SHEFFER  
Principal

275 Grandview Avenue, Suite 100  
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February 27, 2017

Mr. Chad Nardelli  
Manager, Property Accounting  
Aqua Pennsylvania, Inc.  
762 West Lancaster Ave.  
Bryn Mawr, PA 19010

RE: Acquisition of the Water System Assets  
of East Cameron Township Municipal  
Authority

Dear Mr. Nardelli:

In accordance with your request, we have prepared an inventory of the water system assets of East Cameron Township Municipal Authority (“ECTMA”) as of December 19, 2016.

The inventory was prepared to conform to the Uniform System of Accounts for Water/Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of ECTMA was determined from a detailed analysis of the books and records of ECTMA and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service	\$330,712	\$148,549

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2 and the depreciation calculations in Section 3.

Respectfully submitted,  
AUS Consultants

BY: David A. Sheffer

# Aqua Pennsylvania, Inc.

## Acquisition of the Water System Assets of East Cameron Township Municipal Authority

### Table of Contents

	<u>Page No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of ECTMA's Facilities	1-1
Overview of the Study Techniques	1-3
Explanation of the Study	1-4
Original Cost Analysis	1-5
Summary of Original Cost	1-6
Depreciation Reserve	1-6
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service as of December 19, 2016	2-1
<b><u>Account 101 - Utility Plant in Service</u></b>	
303.10 Source of Supply Land	2-2
304.10 Source of Supply Structures	2-3
307.00 Wells & Springs	2-4
311.00 Electric Pumping Equipment	2-5
320.00 Water Treatment Equipment	2-6
330.00 Distribution Reservoirs & Standpipes	2-7
331.00 Mains & Accessories	2-8
333.00 Services	2-9
334.00 Meters	2-10
335.00 Hydrants	2-11

**Aqua Pennsylvania, Inc.**

**Acquisition of the Water System Assets  
of East Cameron Township Municipal Authority**

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 3</u></b>	
<u>Depreciated Original Cost</u>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of December 19, 2016	3-1
<b><u>SECTION 4</u></b>	
Photographs of Plant Assets (site visit)	4-1

# **SECTION 1**

## **AQUA PENNSYLVANIA, INC.**

### **Acquisition of the Water System Assets of East Cameron Township Municipal Authority**

#### **BACKGROUND**

The East Cameron Township Municipal Authority (“ECTMA”) provides water service to The Village of Gowen City, servicing approximately 56 customers located in East Cameron Township, a portion of Northumberland County, Pennsylvania. ECTMA began providing water service to customers in the mid 1980’s. ECTMA does provide fire protection service to its service area.

By application filed on October 29, 2015 by Aqua Pennsylvania, Inc. (“Aqua”), to seek the Public Utility Commission approval of the acquisition of the ECTMA water system in a portion of East Cameron Township, Northumberland County, Pennsylvania. The sale included all assets of the system including production facilities, the distribution system and associated real estate totaling about 25 acres of land and easement, excluding assets listed in Section 1.3 of the Agreement including a 15,399 square foot parcel of real property that is undeveloped and does not contain any water system assets. The system was purchased by Aqua-PA from ECTMA on December 19, 2016.

#### **OVERVIEW OF EAST CAMERON TOWNSHIP MUNICIPAL AUTHORITY’S FACILITIES**

The system assets acquired, for the production and distribution of water, consists of two fully permitted and operational wells, two underground storage tanks, and two pump houses, 4 hydrants and approximately 4,600 feet of distribution piping and valves. Well #1 has an estimated capacity of approximately 40 gallons per minute (“gpm”). This well does not have

chemical treatment of the water supply. The depth of Well #1 is approximately 300 feet. Well #2 has a depth of approximately 228 feet and is connected to two 50,000 gallon underground storage tanks located at Well #1. ECTMA's water distribution facilities include 4,200 feet of 10-inch diameter ductile iron pipe, 400 feet of 4-inch diameter PVC plastic pipe, 4 public fire hydrants, 56 service lines and 56 meters. .

There are approximately 54 residential customers and 2 institutional customers connected to the system. All customers are metered. Aqua intends within the first three years to replace these meters along with replacing or upgrading well buildings and upgrading controls and treatment systems.

Source of Supply Facilities:

The Well House #1 is constructed of poured concrete with a flat poured concrete roof. This structure is believed to have been constructed around 1986. The condition of this structure is good and it appears the door has been recently replaced with a steel door. The building measures approximately 12' x 7' with a chain-link fence surrounding the building and 2 underground steel water storage tanks of 50,000 gallon capacity each. The well house consists of a heater, exhaust fan, and a Pumptec-Plus protection system.

The Well House #2 is of wood frame construction and has a pitched composite shingled roof with T1-11 siding. It is believed that this building was constructed in approximately 1986. The condition of this structure is also good. The building measures approximately 10' x 10", there is no fencing surrounding this structure. This well house contains a submersible pump. At the time of the inspection this well was producing approximately 6 gpm. This well pumps up to Well #1 and the 2 underground storage tanks. Minor components are contained in this

building including a Square D electric panel, an electrical heater, sodium hypochlorite treatment system and pump control system.

### Distribution System

The water distribution mains are accounted for, with most mains being documented as 10" diameter ductile iron pipe. The footage of the distribution mains was verified by the scaling of system maps, along with the aid of Aqua personnel providing knowledge of the possible location of the main and by walking the line with a measuring wheel.

Each customer has their own service line running from the main to the curb. The number of customers was verified via conversations with Aqua personnel. The same goes for services.

Through additional conversations with Aqua personnel and due diligence, AUS Consultants has garnered appropriate information as to the quality of the system. Photos of the above ground assets are contained in section 4 of this report.

### **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the system's assets was conducted in three (3) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the type and quality of the property owned and operated system.

Second, the original cost of the inventoried property was determined based on a review of construction records and other available sources. After several conversations with Aqua personnel, AUS Consultants received adequate data and maps in order to appropriately develop an accurate cost and inventory. The age of the plant was determined using information obtained from casting dates off the hydrants and Aqua personnel's knowledge of

the system. Construction costs were developed utilizing Aqua's installed costs and/or installed costs from comparable water systems.

Third, Aqua requested theoretical accrued depreciation calculations performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at December 19, 2016.

A complete discussion of the methodologies employed in the original cost study is set forth in the following sections of this report.

## **EXPLANATION OF THE STUDY**

### **Utility Plant Inventory**

A comprehensive inventory of the system's assets was performed, based upon a review of system maps and physical inventory taken at the site on January 24, 2017. At this time a count of the customers, hydrants and valves was conducted. Also, the footage of the mains was verified by using system maps and walking the system with a measuring, including reviewing components of the well houses. Aqua personnel provided any additional knowledge of the system to aid in the inventory process.

### **Mass Property**

For the purpose of this study, "mass" property consists of utility Plant recorded on Account 331 (Mains and Accessories), Account 333 (Services), Account 334 (Meters) and Account 335 (Hydrants).

For Account 331, footage of pipe was determined by reviewing maps as well as speaking with Aqua personnel. This same procedure was utilized for valves, services and hydrants.



As previously noted, all customers are metered (Account 334), being serviced through a 5/8" meter.

Non-Mass Property

A physical inventory of the water system's well house was completed. Detail results of the plant inventory are set forth in Section 2 of this report by fixed capital accounts prescribed by the National Company of Regulatory Utility Commissioners. The original cost of all inventory property units is properly recorded in the following accounts:

Non-Depreciable Plant:

303.10 Source of Supply Land

Depreciable Plant:

- 304.10 Source of Supply Structures
- 307.00 Wells & Springs
- 311.00 Pumping Equipment
- 320.00 Water Treatment Equipment
- 330.00 Distribution Reservoirs & Standpipes
- 331.00 Mains & Accessories
- 333.00 Services
- 334.00 Meters
- 335.00 Hydrants

**ORIGINAL COST ANALYSIS**

The goal of the original cost study was to ascertain the original cost of the system's plant in service by fixed capital accounts and, within each account, to determine the original cost by retirement unit (for non-mass) or size and type (for mass property) and by vintage year. Reasonably reliable data exists to establish the age and original cost of the system's assets by

account. The original cost determinations for Account 331 (Mains and Accessories), Account 333 (Services), and Account 334 (Meters) are explained as follows:

Account 331, Account 333 and Account 334

The original cost and footage of mains and accessories was determinable from available records and through conversations with Aqua personnel. As previously explained, the physical inventory provided the total number of valves and meters. Unit costs were developed utilizing Aqua installed costs and cost information from other available sources. The original cost values at December 19, 2016 for the system's mains, services and meters as established by the original cost total \$179,083; \$20,269; \$7,066, respectively.

**SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the system's utility plant in service is not less than \$330,712, as summarized by plant account in Section 2 (Pg. 2-1). In review of all provided records, AUS Consultants did not identify any Contributions in Aid-of-Construction.

**DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at December 19, 2016. The calculated accrued depreciation reserve amounts to \$148,549 at December 19, 2016. The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and details supporting documentation are included in Section 3 of this report.

## **SECTION 2**

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016

Acct. No.	Account Title	Original Cost at 12/19/2016
<u>DEPRECIABLE PLANT</u>		
304.10	Source of Supply Structures	\$ 36,552.00
307.00	Wells and Springs	15,395.00
311.00	Pumping Equipment	3,840.00
320.00	Water Treatment Equipment	3,402.00
330.00	Distribution Reservoirs and Standpipe	59,977.00
331.00	Mains & Accessories	
	10" Cast Iron Pipe	174,258.00
	4" Plastic Pipe	2,708.00
	10" Valves	2,117.00
	TOTAL Mains & Accessories	179,083.00
333.00	Services	20,269.00
334.00	Meters	7,066.00
335.00	Hydrants	5,125.00
	TOTAL DEPRECIABLE PLANT	<u>\$ 330,709.00</u>
<u>NON-DEPRECIABLE</u>		
303.10	Source of Supply Land	\$3.00
	TOTAL NON-DEPRECIABLE	\$3.00
	TOTAL PLANT	<u><u>330,712.00</u></u>

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016  
Account 303. 10 - Source of Supply Land

Item	Year Installed	-----Quantity----- Unit	No.	Original Cost
10 Acres partly in the Township of East Cameron and partly in the Township of Coal	1985	Lot		\$1.00
2,225 Square Feet of Land in the Township of East Cameron	1985	Lot		1.00
Easements	1985	Various		1.00
<b>Total Account 303.10 Source of Supply Land</b>				<u><u>\$3.00</u></u>

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016  
Account 304. 10 - Source of Supply Structures

Item	Year Installed	-----Quantity-----		Original Cost
		Unit	No.	
Well #1 - Poured concrete Structure 12' x 7', with flat roof, concrete slab flooring, florescent lighting, and metal door. Containing a heater, exhaust fan and pump protection. Surround by a chain link fence.	1986	Lot		\$ 28,774.00
Well #2 - Block Structure 10' x 10' with asphalt pitched roof and T1-11 siding, concrete flooring, Square D electric panel	1986	Lot		7,778.00
<b>Total Account 304.10 Source of Supply Structures</b>				<u>\$ 36,552.00</u>

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016  
Account 307.00 - Wells and Springs

Item	Year Installed	-----Quantity-----		Original Cost
		Unit	No.	
Well #1 -With Submersible Pump Depth 300	1986	Lot		\$ 7,035.00
Well #2 -With Submersible Pump Depth 228	1986	Lot		8,360.00
<b>Total Account 307.00 - Wells and Springs</b>				<u>\$ 15,395.00</u>



**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016  
Account 311.00 - Pumping Equipment

Item	Year Installed	-----Quantity----- Unit	No.	Original Cost
Well #1 - Depth 300' - with submersible pump, subtrol control panel	1986	Lot		\$ 1,920.00
Well #2 - Depth 228' - with submersible pump, subtrol control panel	1986	Lot		\$ 1,920.00
<b>Total Account 311.00 - Pumping Equipment</b>				<u><u>\$ 3,840.00</u></u>

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016  
Account 320.00 - Water Treatment Equipment

Item	Year Installed	-----Quantity-----		Original Cost
		Unit	No.	
Well #2 Chlorine Feed System	1986	Lot		\$ 3,402.00
<b>Total Account 320.00 - Water Treatment Equipment</b>				<u>\$ 3,402.00</u>

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016  
Account 330.00 - Distribution Reservoirs and Standpipes

Item	Year Installed	-----Quantity-----		Original Cost
		Unit	No.	
50,000 Gallon Buried Storage Tanks	1986	Lot	2	\$ 59,977.00
<b>Total Account 330.00 - Distribution Reservoirs and Standpipe</b>				<u><u>\$ 59,977.00</u></u>

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016  
Account 331.00 - Mains and Accessories

Item	Year Installed	-----Quantity-----		Original Cost
		Unit	No.	
10" Cast Iron Pipe	1986	Ft.	4,200	\$ 174,258.00
<b>Total 10" Cast Iron Pipe</b>				<u>\$ 174,258.00</u>
4" Plastic Pipe	1986	Ft.	400	2,708.00
<b>Total 4" Plastic Pipe</b>			<u>4,600</u>	<u>\$ 176,966.00</u>
10" Valves	1986	Ea.	3	\$ 2,117.00
<b>Total Valves</b>			<u>3</u>	<u>\$ 2,117.00</u>
<b>Total Account - 331.00 Mains and Accessories</b>				<u>\$ 179,083.00</u>

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016  
Account 333.00 - Services

Item	Year Installed	-----Quantity-----		Original Cost
		Unit	No.	
Services	1985	Ea.	56	\$ 20,269.00
<b>Total Account 333.00- Services</b>			<u>56</u>	<u>\$ 20,269.00</u>

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016

Account 334.00 - Meters

Item	Year Installed	-----Quantity-----		Original Cost
		Unit	No.	
Meters 5/8"	1986	Ea.	56	\$ 7,066.00
<b>Total Account 334.00- Meters</b>			<u>56</u>	<u>\$ 7,066.00</u>

**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016

Account 335.00 - Hydrants

Item	Year Installed	-----Quantity-----		Original Cost
		Unit	No.	
Hydrants	1986	Ea.	4	\$ 5,125.00
<b>Total Account 335.00- Hydrants</b>			<u>4</u>	<u>\$ 5,125.00</u>

# **SECTION 3**



**Aqua Pennsylvania, Inc.**

Acquisition of East Cameron Township Water System

Original Cost at December 19, 2016  
and Depreciated Original Cost as of December 19, 2016

Acct. No.	Account Title	Original Cost at 12/19/2016	ASL/lowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 12/19/2016
<u>Depreciable Plant:</u>					
304.10	Source of Supply Structures	\$ 36,552.00	40-R3	\$ 24,159.00	\$ 12,393.00
307.00	Wells and Springs	15,395.00	80-R2	4,999.00	10,396.00
311.00	Pumping Equipment	3,840.00	25-R3	3,378.00	462.00
320.00	Water Treatment Equipment	3,402.00	45-R3	2,046.00	1,356.00
330.00	Distribution Reservoirs and Standpipe	59,977.00	65-R3	26,169.00	33,808.00
<u>Mains &amp; Accessories:</u>					
331.10	10" Cast Iron Pipe	174,258.00	75-R3	66,667.00	107,591.00
331.20	4" Plastic Pipe	2,708.00	65-R3	1,182.00	1,526.00
331.30	10" Valves	2,117.00	75-R3	810.00	1,307.00
	Total Account 331	<u>\$ 179,083.00</u>		<u>\$ 68,659.00</u>	<u>\$ 110,424.00</u>
333.00	Services	\$20,269.00	50-R3	\$11,153.00	\$9,116.00
334.00	Meters	7,066.00	25-R2	5,750.00	1,316.00
335.00	Hydrants	5,125.00	65-R3	2,236.00	2,889.00
	TOTAL DEPRECIABLE Plant	<u>\$ 330,709.00</u>		<u>\$ 148,549.00</u>	<u>\$ 182,160.00</u>
<u>Non-Depreciable Plant:</u>					
303.10	Source of Supply Land	\$ 3.00			
	TOTAL NON-DEPRECIABLE	<u>\$ 3.00</u>			
	TOTAL PLANT	<u><u>\$ 330,712.00</u></u>			

**Aqua-Pennsylvania, Inc.**  
**East Cameron Township**  
 304.10 Source of Supply Structures

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of December 19, 2016**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	36,552.00	13.56	40.00	0.66095	24,159
<b>Total</b>	36,552.00				24,159.08



**Aqua-Pennsylvania, Inc.**  
**East Cameron Township**  
 307.00 Wells & Springs

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of December 19, 2016**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	15,395.00	54.02	80.00	0.32470	4,999
<b>Total</b>	15,395.00				4,998.68



**Aqua-Pennsylvania, Inc.**  
**East Cameron Township**  
**311.00 Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of December 19, 2016**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	3,840.00	3.01	25.00	0.87967	3,378
<b>Total</b>	3,840.00				3,377.94



**Aqua-Pennsylvania, Inc.**  
**East Cameron Township**  
 320.00 Water Treatment Eq

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of December 19, 2016**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 45 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	3,402.00	17.94	45.00	0.60126	2,046
<b>Total</b>	3,402.00				2,045.50



***Aqua-Pennsylvania, Inc.***

***East Cameron Township***

***330.00 Distribution Reservoirs & Standpipe***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of December 19, 2016***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1986	59,977.00	36.64	65.00	0.43632	26,169
<b><i>Total</i></b>	59,977.00				26,169.01

**Aqua-Pennsylvania, Inc.**  
**East Cameron Township**  
**331.10 Mains - 10" Cast Iron Pipe**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of December 19, 2016**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 75 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	174,258.00	46.31	75.00	0.38257	66,667
<b>Total</b>	174,258.00				66,666.70



**Aqua-Pennsylvania, Inc.**  
**East Cameron Township**  
 331.20 Mains - 4" Plastic

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of December 19, 2016**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	2,708.00	36.64	65.00	0.43632	1,182
<b>Total</b>	2,708.00				1,181.55





**Aqua-Pennsylvania, Inc.**  
**East Cameron Township**  
 331.30 Mains - 10" Valves

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of December 19, 2016**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 75 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	2,117.00	46.31	75.00	0.38257	810
<b>Total</b>	2,117.00				809.91



***Aqua-Pennsylvania, Inc.***  
***East Cameron Township***  
*333.00 Services*

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of December 19, 2016***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	20,269.00	22.49	50.00	0.55024	11,153
<b><i>Total</i></b>	20,269.00				11,152.88



***Aqua-Pennsylvania, Inc.***  
***East Cameron Township***  
 334.00 Meters

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of December 19, 2016***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R2*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	7,066.00	4.66	25.00	0.81375	5,750
<b><i>Total</i></b>	7,066.00				5,749.99



**Aqua-Pennsylvania, Inc.**  
**East Cameron Township**  
 335.00 Hydrants

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of December 19, 2016**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	5,125.00	36.64	65.00	0.43632	2,236
<b>Total</b>	5,125.00				2,236.13



# **SECTION 4**

East Cameron Township – Gowen City  
Site Inspection 1-25-2017, with Rick Kotwica



Well House # 1



Well House # 1



Fence Surrounding Well # 1



Fence Surrounding Well # 1

East Cameron Township – Gowen City  
Site Inspection 1-25-2017, with Rick Kotwica



(2) Underground 50,000 gal. Tanks and Well



Interior Well House # 1



Interior Well House # 1



Interior Well House # 1

East Cameron Township – Gowen City  
Site Inspection 1-25-2017, with Rick Kotwica



Interior Well House # 1



Well House # 2



Well House # 2



Well # 2



East Cameron Township – Gowen City  
Site Inspection 1-25-2017, with Rick Kotwica



Well # 2 Control Panel



Well # 2 Control Panel



Interior Well # 2



Fire Hydrant # 1

East Cameron Township – Gowen City  
Site Inspection 1-25-2017, with Rick Kotwica



Fire Hydrant # 1



Fire Hydrant # 2



Fire Hydrant # 2



Fire Hydrant # 3

East Cameron Township – Gowen City  
Site Inspection 1-25-2017, with Rick Kotwica



Fire Hydrant # 3



Fire Hydrant # 4



Fire Hydrant # 4

**Aqua Pennsylvania, Inc.**  
**Sun Valley Lake Village Water System Costs**  
**M93268**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	300000	PPE-Utility Plant in Service	67,937.98	
9	104000	Utility Plant Purchased/Sold		40,946.94
9	108000	AD-General		30,873.86
9	114000	U Plant Acq Adj	3,882.82	
<b>Total</b>			<b>71,820.80</b>	<b>71,820.80</b>

**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Sun Valley Water Company**

<b>Section 1327(a) Criteria</b>	<b>Satisfied (Y/N)</b>	<b>Explanation</b>
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	Yes	<p>On January 30, 2018, Aqua Pennsylvania, Inc. (“Aqua”) acquired the Water System Assets (“Assets”) of Sun Valley Water Company (“Seller”). The Seller’s Assets were used and useful in providing water service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	Yes	<p>Prior to Aqua’s acquisition of Seller’s Assets, Sun Valley Water Company was providing water service to approximately 70 residential customers in a portion of Chestnuthill Township, Monroe County, Pennsylvania.</p> <p>Reference: Commission Order Docket Nos. A-2017-2626577</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p> <p style="text-align: center;">(i)</p> <p>violation of statutory or regulatory requirements</p>	Yes	

<p>of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and reasonable service;</p>	<p>Yes</p>	

<p>(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;</p>	<p>Yes</p>	<p>On September 26, 2017, Aqua filed an <i>Application</i> with the PUC requesting for appointment of Aqua as the receiver for the Sun Valley Water Company's assets. By <i>Order</i> entered January 18, 2018, at Docket No. A-2017-2626577, the PUC granted the approvals requested in the <i>Application</i>.</p>
<p>(6) the actual purchase price is reasonable;</p>	<p>Yes</p>	<p>The total purchase price for Seller's Assets was \$501. The Commission approved the company's application to acquire Sun Valley Water Company's assets and an original cost study was prepared to support the utility plant purchase.</p> <p>Reference: Commission Order Docket No. A-2017-2626577</p>
<p>(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;</p>	<p>Yes</p>	<p>The Seller is not an affiliated interest of Aqua.</p>
<p>(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b></p>	<p>Yes</p>	<p><b>The Asset Purchase Agreement and the PUC Order stipulated that Aqua adopt the Seller's existing rate structure.</b></p>
<p>(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.</p>	<p>Yes</p>	<p>The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.</p>



March 23, 2018

**VIA FEDERAL EXPRESS**

Rosemary Chiavetta, Secretary  
Commonwealth of Pennsylvania  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Application of Aqua Pennsylvania, Inc. (Aqua), for approval of: (1) the right to begin to offer, render, furnish and supply water service to the public in a portion of Chestnuthill Township, Monroe County, Pennsylvania, and (2) the acquisition by Aqua of a well parcel and well assets in Chestnuthill Township, Monroe County, Pennsylvania.

Docket No: A-2017-2626577

Dear Secretary Chiavetta:

Pursuant to the Commission's Statement Policy relating to water and wastewater system acquisitions at 52 Pa. Code § 69.721(f) and as directed in Paragraph 8 of the Commission's Order entered January 18, 2018, enclosed is a copy of the original plant-in-service valuation of the water system assets acquired from Sun Valley Water System on January 30, 2018. As noted in that Order, Aqua Pennsylvania, Inc. is also serving these documents to the Bureau of Technical Utility Services, the Bureau of Audits, the Bureau of Investigation and Enforcement, the Office of Consumer Advocate, and the Office of Small Business Advocate.

Should you have any questions regarding this filing, please contact me at (610) 645-1021.

Sincerely,

A handwritten signature in blue ink, appearing to read "Renee T. Marquis".

Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.

Enclosures  
cc: Certificate of Service



**BEFORE THE**  
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Aqua Pennsylvania, Inc.

Docket No. A-2017-2626577

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of the following document, the original cost plant-in-service valuation, in accordance with the requirements of 52 Pa. Code § 1.54 upon the person(s) and in the manner indicated below:

**VIA FEDERAL EXPRESS**

Christine Hoover, Esq.  
Office of Consumer Advocate  
555 Walnut Avenue  
Fifth Floor, Forum Place  
Harrisburg, PA 17101-1923

John R. Evans  
Office of Small Business Advocate  
Suite 202, Commerce Bldg.  
300 North Second Street  
Harrisburg, PA 17101

Richard Kanaskie, Director  
Bureau of Investigation and Enforcement  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Paul Diskin, Director  
Bureau of Technical Utility Services  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Larry Treaster  
Bureau of Audits  
Pennsylvania Public Utility Commission  
Three East Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Dated: March 23, 2018



Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.  
762 W. Lancaster Ave.  
Bryn Mawr, PA 19010  
610-645-1021  
[RTMarquis@AquaAmerica.com](mailto:RTMarquis@AquaAmerica.com)

Aqua Pennsylvania, Inc.

Acquisition of the Water System Assets of  
Sun Valley Water System

Original Cost of Water Utility Plant and  
Related Accrued Depreciation  
As of March 31, 2018

762 W. Lancaster Avenue, Bryn Mawr, PA 19010

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Aqua Pennsylvania, Inc.

Original Cost and Related Accrued Depreciation of  
Sun Valley Water System  
As of March 31, 2018

The Sun Valley water system provides water service to approximately 70 existing residential single-family dwelling units within a portion of a private community known as the Sun Valley Lake Village located in a portion of Chestnuthill Township, Monroe County. The water system consists of a 3.2 acre well parcel, which includes a well, well house and two water storage tanks. The well providing service to the Sun Valley water system was constructed between 1950 and 1959. There is one pump station serving the Sun Valley water system that was constructed between 1990 and 1999 and there are two storage tanks that were installed between 1960 and 1969. The Sun Valley water system utilizes 2-inch and 4-inch diameter water distribution mains with a design capacity of 57,600 gallons per day, however Aqua did not purchase the Sun Valley water system's distribution facilities but intends to use the existing mains and service lines of the Sun Valley water system's distribution facilities on an interim basis to distribute water until new distribution facilities are put into service.

On September 26, 2017 Aqua Pennsylvania, Inc. filed an Application for approval to begin to offer, render, furnish, or supply water service to the public. An Order was entered on January 18, 2018 closing Docket No. A-2017-2626577 and a Certificate of Public Convenience was issued with an effective date of January 18, 2018. On January 30, 2018, Aqua Pennsylvania, Inc. took ownership of the water system. The original cost of the assets of the water system and accrued depreciation are based on the Company's estimate of the assets including the land.

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Aqua Pennsylvania, Inc.  
Acquisition of Sun Valley Water System  
Depreciated Original Cost

Account	Account Title	Description	In Service Date	Quantity	Original Cost	Accumulated Depreciation	Depreciated Original Cost
<b>NON-DEPRECIABLE PLANT</b>							
303.20	Land and Land Rights	Land and Land Rights	1950		\$ 1.00	\$ -	\$ 1.00
	<b>TOTAL ACCOUNT 303.2</b>				<u>\$ 1.00</u>	<u>\$ -</u>	<u>\$ 1.00</u>
					<b>TOTAL NON-DEPRECIABLE PLANT</b>	<u>\$ -</u>	<u>\$ 1.00</u>
<b>DEPRECIABLE PLANT</b>							
304.20	Structures and Improvements	Well House	1990	1	\$ 24,737.04	\$ 24,242.30	\$ 494.74
	<b>TOTAL ACCOUNT 304.2</b>				<u>\$ 24,737.04</u>	<u>\$ 24,242.30</u>	<u>\$ 494.74</u>
307.20	Wells and Springs	Well	1950	1	3,363.72	3,296.45	67.27
	<b>TOTAL ACCOUNT 307.2</b>				<u>\$ 3,363.72</u>	<u>\$ 3,296.45</u>	<u>\$ 67.27</u>
311.00	Pumping Equipment	Electric Pumping Equipment	1990	1	\$ 403.17	\$ 395.11	\$ 8.06
	<b>TOTAL ACCOUNT 311</b>				<u>\$ 403.17</u>	<u>\$ 395.11</u>	<u>\$ 8.06</u>
330.40	Distribution Reservoirs and Standpipes	Tank	1960	2	\$ 3,000.00	\$ 2,940.00	\$ 60.00
	<b>TOTAL ACCOUNT 330.4</b>				<u>\$ 3,000.00</u>	<u>\$ 2,940.00</u>	<u>\$ 60.00</u>
					<b>TOTAL DEPRECIABLE PLANT</b>	<u>\$ 30,873.86</u>	<u>\$ 630.07</u>
					<b>TOTAL UTILITY PLANT IN SERVICE</b>	<u>\$ 30,873.86</u>	<u>\$ 631.07</u>

**Aqua Pennsylvania Wastewater, Inc.**  
**Index to Exhibit 3B**

	<u>Section</u>
W.P. Sanitary Company, Inc. (Washington Park) Original Cost Study and Journal Entry	1
Cove Village Association and Cove Village Community Trust Original Cost Study and Journal Entry	2
Realen Valley Forge Greenes Associates (Village at Valley Forge - Town Center) Original Cost Study and Journal Entry	3
Total Environmental Solutions, Inc. (TESI) - Beech Mountain Lakes Resort Community Wastewater System Original Cost Study and Journal Entry	4
Kidder Township Wastewater System Original Cost Study and Journal Entry	5
Sage Hill Development, L.P. Wastewater System Original Cost Study and Journal Entry	6
Total Environmental Solutions, Inc. (TESI) - Treasure Lake Community Sewer System Original Cost Study and Journal Entry	7
Penn Township Wastewater System Original Cost Study and Journal Entry	8
Bunker Hill Sewer Company, Inc. Original Cost Study and Journal Entry	9
Honeycroft Village, L.P. Original Cost Study and Journal Entry	10
Emlenton Area Municipal Authority Original Cost Study and Journal Entry	11
Township of Tobyhanna Original Cost Study and Journal Entry	12
Avon Grove School District Original Cost Study and Journal Entry	13

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**Aqua Pennsylvania Wastewater, Inc.**  
**W.P. Sanitary Company, Inc. (Washington Park) Costs**  
**M91749**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
620	104000	Utility Plant Purchased/Sold		111,470.19
620	108000	AD-General		83,468.85
620	114000	U Plant Acq Adj		21,719.43
620	300000	PPE-Utility Plant in Service	216,658.47	
<b>Total</b>			<b>216,658.47</b>	<b>216,658.47</b>

September 4, 2009

Mr. William C. Packer, Manager of Rates  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010

RE: Acquisition of W.P. Sanitary Company, Inc.

Dear Mr. Packer:

In accordance with your request, we have prepared an inventory of the wastewater utility plant of the W.P. Sanitary Company, Inc. (the "Company") as of March 31, 2009.

The inventory was prepared to conform to the Uniform System of Accounts for Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of the Company was determined from a detailed analysis of the books and records of the Company and has been segregated as follows:

	Original <u>Cost</u>	Calculated <u>Reserve</u>
Account 101 - Utility Plant in Service	\$211,366	\$83,469

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2 and the depreciation calculations in Section 3.

Respectfully submitted,  
AUS Consultants

By: Scott D. Fogelsanger

**LITTLE WASHINGTON WASTEWATER COMPANY**  
**Acquisition of the**  
**W.P. Sanitary Company, Inc.**

Table of Contents

	Page No.
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Company's Facilities	1-1
Overview of the Study Techniques	1-2
Explanation of the Study	1-2
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Contributions In Aid of Construction	1-5
Customer Advances for Construction	1-5
Depreciation Reserve	1-6
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at March 31, 2009	2-1
<u>Account 101 - Utility Plant in Service</u>	
353.2 Land & Land Rights - Collection Plant	2-2
303.4 Land & Land Rights - Treatment & Disposal Plant	2-3
354.4 Structures & Improvements – Treatment & Disposal Plant	2-4
361 Collection Sewers - Gravity	2-5
311 Pumping Equipment	2-6
363 Services	2-7
380 Treatment & Disposal Equipment	2-8



**LITTLE WASHINGTON WASTEWATER COMPANY**

**Acquisition of the  
W.P. Sanitary Company, Inc.**

Table of Contents

Page  
No.

---

**SECTION 3**

Depreciated Original Cost

Summary of Original Cost, Calculated Depreciation Reserve and  
Depreciated Original Cost as of March 31, 2009

3-1

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# Section 1

## **LITTLE WASHINGTON WASTEWATER COMPANY**

### **Acquisition of the W.P. Sanitary Company, Inc.**

#### Executive Summary

#### **BACKGROUND**

---

W.P. Sanitary Company, Inc. (the "Company") makes wastewater service available to approximately 137 customers located in a portion Washington Township, Wyoming County, Pennsylvania. The Company began providing wastewater service in the early 1970s. The Company has continued to grow and expand over the years.

Little Washington Wastewater Company ("LWWC") and the Company filed a joint application requesting the Commission to approve the sale of the wastewater system, grant LWWC the right to furnish service in the Company's service territory and authorize the Company to abandon service.

LWWC has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of March 31, 2009. The results of this study are set forth herein.

#### **OVERVIEW OF THE COMPANY'S FACILITIES**

The Company's assets to be acquired consist of facilities for the collection and treatment of wastewater from its customers. The wastewater is treated at the Company's treatment plant. The Company's collection system consists of approximately 9,740 linear feet of plastic pipe.

## **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the Company's assets was conducted in two (2) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by the Company.

Second, the original cost of the inventoried property was determined based on a review of the Company's books of account, construction records, and other sources. For the most part, the Company's records provided reasonable data as to the original cost of its plant in service. In addition, LWWC requested theoretical accrued depreciation calculations be performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at March 31, 2009.

A complete discussion of the methodologies employed in the original cost study is set forth in the sections of this report that follows.

## **EXPLANATION OF THE STUDY**

### **Utility Plant Inventory**

A comprehensive inventory of the Company's plant in service as of March 31, 2009 was performed. One of the principal source documents for the inventory was the "as built" maps of the Company's system. The maps were particularly helpful in locating and documenting the sizes, types, and lengths of the pipelines and the sizes, types, and locations of accessories, such as valves, cleanouts, and manholes. Significant components of the inventory are discussed below.

### **Mass Property**

For purposes of this study, "mass" property consists of utility plant recorded in Account 361 (Collection Sewers - Gravity) and Account 363 (Services to Customers).

For Account 361, footages of pipe, by size and type, were determined by reviewing the "as-built" maps and were verified by a physical check of the collection system in place.

This same procedure was utilized for valves, blowoffs, and manholes. Some minor discrepancies were found and adjusted when the inventory for Account 361 was compared with the Company's construction records and cost records obtained from Company files.

Based upon data obtained from Company records, it appears that customer service lines (Account 363) were installed with the collection lines. The study includes the original cost of the initial construction for all customer service lines.

### **Non-Mass Property**

A physical inventory of the wastewater treatment plant and lift station locations was completed. A comparison of those inventories was made to construction records of those facilities, records of the Company, and information contained from the Company's personnel in order to verify that all existing utility plant in service was included in the plant inventory.

Detailed results of the plant inventory are set forth in Section 2 of this report by the fixed capital accounts prescribed by the National Association of Regulatory Utility Commissioners. The original cost of all inventoried property units is properly recorded in the following accounts:

Acct.  
No. Account Title

Non-Depreciable Plant:

353.2 Land & Land Rights - Collection Plant  
353.4 Land & Land Rights - Treatment & Disposal Plant

Depreciable Plant

354.4 Structures & Improvements - Treatment & Disposal Plant  
361 Collection Sewers - Gravity  
363 Services to Customers  
380 Treatment & Disposal Equipment

**ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the original cost of the Company's plant in service by fixed capital account and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of the Company's property by account. In large measure, these data consisted of records and information compiled by the Company as to the construction cost and approximate dates of installation. These records were augmented by information obtained from the field inventory.

The original cost determinations for Account 361 (Collection Sewers - Gravity) and Account 363 (Services to Customers) are explained as follows:

**Account 361 and Account 363**

The total original cost of collection sewers was determinable from available records for the Company's collection system and other source documents. However, the cost data

was not maintained by unit of property. In these instances, the original costs were allocated to the units of property utilizing the physical plant inventory.

As previously explained, the physical inventory established the total footage of pipe by size and type and the total number of units of accessories. Summaries of construction projects maintained by the Company contained some detail as to the footage of pipe and numbers of accessories. The information contained in the construction summaries was used to develop the footage of pipe, units of accessories, and the resultant unit price for the respective fixed capital asset.

The original cost values at March 31, 2009 for the Company's collection sewers and customer services, as established by the original cost study, total \$91,075 and \$39,720, respectively.

#### **SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the Company's utility plant in service is not less than \$211,366, as summarized by plant account in Section 2 (p. 2-1).

#### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all documents that were available. Based on this record research, the Company has not collected any CIAC.

#### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all

documents that were available. Based on this record research, the Company has not collected any CAC.

### **DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at March 31, 2009. The calculated accrued depreciation reserve amounts to \$83,469 at March 31, 2009.

The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and detailed supporting documentation are included in Section 3, pages 3-1 through 3-6, of this report.



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## **Section 2**

**Little Washington Wastewater Company**

Valuation of the W.P. Sanitary Company, Inc.

Original Cost at March 31, 2009

Acct. No.	Account Title	Original Cost
353.2	Land & Land Rights - Collection Plant	\$2.00
353.4	Land & Land Rights - Treatment & Disposal Plant	505.00
354.4	Structures & Impr. - Treatment & Disposal Plant	8,956.85
361	Collection Sewers - Gravity	91,074.95
363	Services to Customers	39,719.62
380	Treatment & Disposal Equipment	71,107.80
	Total Original Cost	----- \$211,366.22 =====

**Little Washington Wastewater Company**

*Valuation of the W.P. Sanitary Comapny, Inc.*

Original Cost at March 31, 2009  
Account 353.2 - Collection Plant - Land & Land Rights

<u>Item</u>	<u>Year</u> <u>Installed</u>	<u>----- Quantity -----</u> <u>Unit</u>	<u>-----</u> <u>No.</u>	<u>Original</u> <u>Cost</u>
Land Rights - Lots 6, 7 and 9	1992		Lot	\$1.00
Land Rights - Collection System	2009		Lot	1.00
				-----
Total Account 353.2				\$2.00
				=====

**Little Washington Wastewater Company**

*Valuation of the W.P. Sanitary Company, Inc.*

Original Cost at March 31, 2009

Account 353.4 - Treatment & Disposal Plant - Land & Land Rights

---

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
Land - Sewer Treatment Plant	1985		Lot	\$505.00
Total Account 353.4				<u>\$505.00</u> =====

**Little Washington Wastewater Company**

*Valuation of the W.P. Sanitary Company, Inc.*

Original Cost at March 31, 2009  
Account 353.4 - Treatment & Disposal Plant - Land & Land Rights

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
Land - Sewer Treatment Plant	1985		Lot	\$1.00
Total Account 353.4				----- \$1.00 =====

**Little Washington Wastewater Company**

*Valuation of the W.P. Sanitary Company, Inc.*

Original Cost at March 31, 2009

Account 354.40 - Structures & Improvements - Treatment & Disposal Plant

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<u>Sewage Treatment Building:</u>				
Concrete block, aluminum trim, asphalt shingle roof, 15' x 10' control panels, double stainless steel sink, electric panels, etc.	1972		Lot	\$6,314.85
Fencing	1972		Lot	2,642.00
				-----
Total Account 354.40				\$8,956.85 =====

**Little Washington Wastewater Company**

*Valuation of the W.P. Sanitary Company, Inc.*

Original Cost at March 31, 2009  
Account 361.00 - Collection Sewers - Gravity

Item	Year	Quantity		Original Cost
	Installed	Unit	No.	
8" Plastic Mains	1972	LF	4,600	\$25,746.62
8" Plastic Mains	1992	LF	2,815	30,570.90
8" Plastic Mains	1996	LF	2,325	29,109.00
Total Mains				<u>\$85,426.52</u>
Manholes / Cleanouts	1972	Ea.	15	\$1,377.36
Manholes / Cleanouts	1992	Ea.	4	1,237.08
Manholes / Cleanouts	1996	Ea.	9	3,033.99
Total Manholes / Cleanouts				<u>\$5,648.43</u>
Total Account 360.00				<u><u>\$91,074.95</u></u>

**Little Washington Wastewater Company**

*Valuation of the W.P. Sanitary Company, Inc.*

Original Cost at March 31, 2009  
Account 363.00 - Services to Customers

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>	<u>----- Unit      No.</u>	<u>Original Cost</u>
Services, 3/4"	1972	Ea.	53	\$6,266.02
Services, 3/4"	1992	Ea.	36	13,315.68
Services, 3/4"	1996	Ea.	48	20,137.92
Total Account 363.00				----- \$39,719.62 =====



**Little Washington Wastewater Company**

*Valuation of the W.P. Sanitary Company, Inc.*

Original Cost at March 31, 2009  
Account 380.00 - Treatment & Disposal Equipment

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
Equilization tank #1	1972	Ea.	1	\$11,531.62
Blower #1	1972	Ea.	1	3,694.86
Blower Pumps & Motors	1972	Ea.	2	2,455.67
Equilization tank #2	1990	Ea.	1	37,442.12
Blower #2	1990	Ea.	1	11,996.88
Blower Pump & Motor	1990	Ea.	1	3,986.65
Total Account 380.00				----- \$71,107.80 =====

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## **Section 3**

**Little Washington Wastewater Company**

*Valuation of the W.P. Sanitary Co., Inc.*

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of March 31, 2009  
Based Upon Whole Life Depreciation

Acct No.	Description	Original Cost at 3/31/09	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 3/31/09
<u>Non-Depreciable Plant:</u>					
353.20	Land & Land Rights - Collection Plant	\$2.00		\$0.00	\$2.00
353.40	Land & Land Rights - Treat. & Disposal Plant	505.00		0.00	505.00
	<b>Total Non-Depreciable Plant</b>	<b>\$507.00</b>		<b>\$0.00</b>	<b>\$507.00</b>
<u>Depreciable Plant:</u>					
354.40	Structures & Impr. - Treat. & Disposal Plant	\$8,956.85	50-R3	\$5,751.22	\$3,205.63
361	Collection Sewers - Gravity:				
361.31	Plastic Pipe, 6" - 8"	\$85,426.52	80-R3	\$21,729.79	\$63,696.73
361.70	Manholes / Cleanouts	5,648.43	80-R3	1,310.78	4,337.65
	<b>Total Account 360</b>	<b>\$91,074.95</b>		<b>\$23,040.57</b>	<b>\$68,034.38</b>
363.00	Services to Customers	\$39,719.62	35-R3	\$18,005.61	\$21,714.01
380.00	Treatment & Disposal Equipment	71,107.80	40-R3	36,671.45	34,436.35
	<b>Total Depreciable Plant</b>	<b>\$210,859.22</b>		<b>\$83,468.85</b>	<b>\$127,390.37</b>
	<b>Total Plant in Service</b>	<b>\$211,366.22</b>		<b>\$83,468.85</b>	<b>\$127,897.37</b>

**Little Washington Wastewater Company**

**W.P. Sanitary Company, Inc.**

354.40 Structures & Impr. - Treatment & Disposal Plant

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of March 31, 2009**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

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Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	8,956.85	17.89	50.00	0.64210	5,751
<b>Total</b>	8,956.85				5,751.22

*Little Washington Wastewater Company*

*W.P. Sanitary Company, Inc.*

*361.31 Plastic Pipe, 6 - 8 Inch*

*Original Cost Of Utility Plant In Service*

*And Development Of Calculated Depr Reserve as of March 31, 2009*

*Based Upon Broad Group/Remaining Life Procedure and Technique*

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	25,746.62	45.76	80.00	0.42797	11,019
1992	30,570.90	63.79	80.00	0.20268	6,196
1996	29,109.00	67.59	80.00	0.15510	4,515
<i>Total</i>	85,426.52				21,729.79

*Little Washington Wastewater Company*

*W.P. Sanitary Company, Inc.*

*361.70 Manholes / Cleanouts*

*Original Cost Of Utility Plant In Service*

*And Development Of Calculated Depr Reserve as of March 31, 2009*

*Based Upon Broad Group/Remaining Life Procedure and Technique*

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	1,377.36	45.76	80.00	0.42797	589
1992	1,237.08	63.79	80.00	0.20268	251
1996	3,033.99	67.59	80.00	0.15510	471
<i>Total</i>	5,648.43				1,310.78

**Little Washington Wastewater Company**

**W.P. Sanitary Company, Inc.**

363.00 Services to Customers

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of March 31, 2009  
Based Upon Broad Group/Remaining Life Procedure and Technique**

Salvage Value: 0 % Average Service Life: 35 Survivor Curve: R3

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	6,266.02	6.29	35.00	0.82037	5,140
1992	13,315.68	19.45	35.00	0.44418	5,915
1996	20,137.92	22.92	35.00	0.34515	6,951
<b>Total</b>	39,719.62				18,005.61

**Little Washington Wastewater Company**

**W.P. Sanitary Company, Inc.**

**380.00 Treatment & Disposal Equipment**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of March 31, 2009**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	17,682.15	9.73	40.00	0.75687	13,383
1990	53,425.65	22.56	40.00	0.43590	23,288
<b>Total</b>	71,107.80				36,671.45



**Aqua Pennsylvania Wastewater, Inc.**  
**Cove Village Association and Cove Village Community Trust Costs**  
**M91432**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
9	104000	Utility Plant Purchased/Sold	15,138.88	
900	104000	Utility Plant Purchased/Sold		6,515.78
630	104000	Utility Plant Purchased/Sold		34,240.58
630	104000	Utility Plant Purchased/Sold	12,808.74	
630	108000	AD-General		182,991.00
630	114000	U Plant Acq Adj		148,671.27
630	300000	PPE-Utility Plant in Service	359,609.89	
9	300000	PPE-Utility Plant in Service		15,138.88
<b>Total</b>			<b>387,557.51</b>	<b>387,557.51</b>



March 28, 2018

**VIA FEDERAL EXPRESS**

Rosemary Chiavetta, Secretary  
Commonwealth of Pennsylvania  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Application of Little Washington Wastewater Company, d/b/a Suburban Wastewater Company (LWWC) for approval of: 1) the acquisition by LWWC of the wastewater system assets of Cove Village Association and Cove Village Community Trust; and 2) the right of LWWC to begin to offer, render, furnish or provide wastewater service to the public in an additional portion of North Union and East Union Townships, Schuylkill County, Pennsylvania.

Docket No: A-2008-2081532

Dear Secretary Chiavetta:

Pursuant to the Commission's Statement Policy relating to water and wastewater system acquisitions at 52 Pa. Code § 69.721(f) and as directed in Paragraph 4 of the Commission's Order entered April 30, 2009, enclosed is a copy of the original plant-in-service valuation of the wastewater system assets acquired from the Cove Village Association and the Cove Village Community Trust on August 8, 2009. As noted in that Order, Aqua Pennsylvania, Inc. is also serving these documents to the Office of Consumer Advocate, Bureau of Technical Utility Services, and Bureau of Investigation and Enforcement.

Should you have any questions regarding this filing, please contact me at (610) 645-1021.

Sincerely,

A handwritten signature in blue ink, appearing to read "Renee T. Marquis". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.

Enclosures  
cc: Certificate of Service

**BEFORE THE**  
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Aqua Pennsylvania Wastewater, Inc.

Docket Nos. A-2008-2081532

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of the following document, the original cost plant-in-service valuation, in accordance with the requirements of 52 Pa. Code § 1.54 upon the person(s) and in the manner indicated below:

**VIA FEDERAL EXPRESS**

Christine Hoover, Esq.  
Office of Consumer Advocate  
555 Walnut Avenue  
Fifth Floor, Forum Place  
Harrisburg, PA 17101-1923

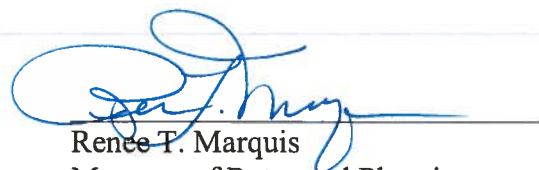
Richard Kanaskie, Director  
Bureau of Investigation and Enforcement  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Larry Treaster  
Bureau of Audits  
Pennsylvania Public Utility Commission  
Three East Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

John R. Evans  
Office of Small Business Advocate  
Suite 202, Commerce Bldg.  
300 North Second Street  
Harrisburg, PA 17101

Paul Diskin, Director  
Bureau of Technical Utility Services  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Dated: March 28, 2018



Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.  
762 W. Lancaster Ave.  
Bryn Mawr, PA 19010  
610-645-1021  
[RTMarquis@AquaAmerica.com](mailto:RTMarquis@AquaAmerica.com)

Aqua Pennsylvania Wastewater, Inc.

Acquisition of the Wastewater System Assets of  
Cove Village Association and Cove Village Community Trust

Original Cost of Wastewater Utility Plant and  
Related Accrued Depreciation  
As of September 30, 2009

762 W. Lancaster Avenue, Bryn Mawr, PA 19010

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Aqua Pennsylvania Wastewater, Inc.

Original Cost and Related Accrued Depreciation of  
Cove Village Association and Cove Village Community Trust  
As of September 30, 2009

The Cove Village Development's Wastewater System was built to provide wastewater service to 148 unmetered customers in a portion of North Union and East Union Townships, Schuylkill County. The wastewater system includes a 50,000 gpd extended aeration plant, a chlorine contact tank, a discharge pump station, a control building containing related equipment, collection and force-mains, fee parcels as well as easements and/or rights-of-way, and miscellaneous equipment.

On December 19, 2008, Aqua Pennsylvania Wastewater, Inc., formerly Little Washington Wastewater Company, filed an Application for approval to begin to offer, render, furnish, or supply wastewater service to the public. An Order was entered on April 30, 2009 approving Docket No. A-2008-2081532. The original cost of the assets of the water system are based on construction records and other information and data provided by the developer.

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Aqua Pennsylvania Wastewater, Inc.  
Acquisition of Cove Village Association and Cove Village Community Trust  
Depreciated Original Cost

Account	Account Title	Description	In Service Date	Quantity	Original Cost	ASL/Iowa Curve	Accumulated Depreciation	Depreciated Original Cost
<b>NON-DEPRECIABLE PLANT</b>								
353.30	Land and Land Rights	Land and Land Rights - Aspen Drive	7/1/1973	1	\$ 500.00		\$ -	\$ 500.00
353.30	Land and Land Rights	Land and Land Rights - Davos Circle	7/1/1973	1	750.00		-	750.00
353.30	Land and Land Rights	Land and Land Rights - Alpine Drive	7/1/1973	1	1,000.00		-	1,000.00
<b>TOTAL ACCOUNT 354</b>					<b>\$ 2,250.00</b>		<b>\$ -</b>	<b>\$ 2,250.00</b>
<b>TOTAL NON-DEPRECIABLE PLANT</b>					<b>\$ 2,250.00</b>		<b>\$ -</b>	<b>\$ 2,250.00</b>
<b>DEPRECIABLE PLANT</b>								
354.30	Structures and Improvements	Building - Vail Lane	7/1/1973	1	\$ 1,692.91	90-S1.5	\$ 1,452.20	\$ 240.71
354.30	Structures and Improvements	Pump Station - South Side Road	7/1/1973	1	1,791.34	90-S1.5	1,536.64	254.70
354.30	Structures and Improvements	Pump Station - Alpine Drive	7/1/1973	1	1,492.13	90-S1.5	1,279.97	212.16
354.30	Structures and Improvements	Pump Station - Alpine Drive	7/1/1973	1	1,582.68	90-S1.5	1,357.65	225.03
354.30	Structures and Improvements	Pump Station - Stratton Drive	7/1/1973	1	1,783.46	90-S1.5	1,529.88	253.58
354.30	Structures and Improvements	Pump Station - Haystack Drive	7/1/1973	1	1,820.47	90-S1.5	1,561.62	258.85
354.30	Structures and Improvements	Shed - St. Moritz Drive	7/1/2005	1	2,751.50	90-S1.5	2,360.28	391.22
354.40	Structures and Improvements	Treatment Plant - Vail Lane	7/1/1973	1	14,401.57	90-S1.5	7,561.77	6,839.80
<b>TOTAL ACCOUNT 354</b>					<b>\$ 27,316.06</b>		<b>\$ 18,640.00</b>	<b>\$ 8,676.06</b>
360.20	Collection Sewers - Force	Force Main - PVC : 2"	7/1/1973	340	\$ 809.47	70-R3	\$ 422.88	\$ 386.59
360.20	Collection Sewers - Force	Force Main - PVC : 2"	7/1/1975	90	223.20	70-R3	116.60	106.60
360.20	Collection Sewers - Force	Force Main - PVC : 2.5"	7/1/1973	730	2,074.37	70-R3	1,083.69	990.68
360.20	Collection Sewers - Force	Force Main - PVC : 2.5"	7/1/1975	250	740.00	70-R3	386.59	353.41
360.20	Collection Sewers - Force	Force Main - PVC : 3"	7/1/1973	793	2,466.55	70-R3	1,288.57	1,177.98
360.20	Collection Sewers - Force	Force Main - PVC : 3"	7/1/1974	520	1,651.10	70-R3	862.57	788.53
360.20	Collection Sewers - Force	Force Main - CIP : 4"	7/1/1973	2475	5,325.95	70-R3	2,782.38	2,543.57
360.20	Collection Sewers - Force	Force Main - ACP : 6"	7/1/1973	1275	3,549.32	70-R3	1,854.23	1,695.09
360.20	Collection Sewers - Force	Force Main - CIP : 6"	7/1/1973	1755	5,952.65	70-R3	3,109.78	2,842.87
360.20	Collection Sewers - Force	Force Main - CIP : 6"	7/1/1974	470	2,280.03	70-R3	1,191.13	1,088.90
360.20	Collection Sewers - Force	Force Main - ACP : 8"	7/1/1974	1504	6,607.84	70-R3	3,452.06	3,155.78
360.20	Collection Sewers - Force	Force Main - ACP : 8"	7/1/1973	3244	11,223.78	70-R3	5,863.52	5,360.26
<b>TOTAL ACCOUNT 360.2</b>					<b>\$ 42,904.26</b>		<b>\$ 22,414.00</b>	<b>\$ 20,490.26</b>
361.20	Collection Sewers - Gravity	Air Relief Valve - Wooded Area	7/1/1974	1	\$ 108.49	65-R2.5	\$ 58.69	\$ 49.80
361.20	Collection Sewers - Gravity	Air Relief Valve - Wooded Area	7/1/1973	1	98.63	65-R2.5	53.36	45.27
361.20	Collection Sewers - Gravity	Flush Valves	7/1/1973	18	1,380.78	65-R2.5	746.96	633.82
361.20	Collection Sewers - Gravity	Flush Valves	7/1/1975	1	112.00	65-R2.5	60.59	51.41
361.20	Collection Sewers - Gravity	Valves - 3"	7/1/1976	1	118.14	65-R2.5	63.91	54.23
361.20	Collection Sewers - Gravity	Valves - 4"	7/1/1973	3	287.67	65-R2.5	155.62	132.05
361.20	Collection Sewers - Gravity	Gravity Main - PVC : 2"	7/1/1973	1181	2,809.35	65-R2.5	1,519.78	1,289.57
361.20	Collection Sewers - Gravity	Gravity Main - PVC : 2"	7/1/1976	6313	16,281.20	65-R2.5	8,807.66	7,473.54
361.20	Collection Sewers - Gravity	Gravity Main - PVC : 2.5"	7/1/1973	963	2,735.04	65-R2.5	1,479.58	1,255.46
361.20	Collection Sewers - Gravity	Gravity Main - PVC : 3"	7/1/1973	3500	10,886.40	65-R2.5	5,889.23	4,997.17
361.20	Collection Sewers - Gravity	Gravity Main - PVC : 4"	7/1/1973	1651	5,702.40	65-R2.5	3,084.83	2,617.57
361.20	Collection Sewers - Gravity	Gravity Main - PVC : 6"	7/1/1973	2888	11,088.00	65-R2.5	5,998.29	5,089.71
361.20	Collection Sewers - Gravity	Gravity Main - PVC : 6"	7/1/1974	9621	37,730.00	65-R2.5	20,410.84	17,319.16
361.20	Collection Sewers - Gravity	Gravity Main - PVC : 6"	7/1/1976	1250	5,200.00	65-R2.5	2,813.05	2,386.95
361.20	Collection Sewers - Gravity	Gravity Main - ACP : 8"	7/1/1973	11891	41,136.36	65-R2.5	22,253.58	18,882.78
361.20	Collection Sewers - Gravity	Gravity Main - ACP : 8"	7/1/1974	2528	11,107.53	65-R2.5	6,008.85	5,098.68
361.20	Collection Sewers - Gravity	Gravity Main - ACP : 8"	7/1/1976	2575	14,163.89	65-R2.5	7,662.25	6,501.64
361.20	Collection Sewers - Gravity	Gravity Main - ACP : 10"	7/1/1973	5385	23,430.11	65-R2.5	12,675.01	10,755.10
361.20	Collection Sewers - Gravity	Gravity Main - ACP : 10"	7/1/1974	2674	14,775.58	65-R2.5	7,993.16	6,782.42
361.20	Collection Sewers - Gravity	Gravity Main - ACP : 10"	7/1/1975	1308	8,426.09	65-R2.5	4,558.27	3,867.82
361.20	Collection Sewers - Gravity	Gravity Main - ACP : 12"	7/1/1973	1257	6,420.88	65-R2.5	3,473.51	2,947.37
361.20	Collection Sewers - Gravity	Gravity Main - ACP : 15"	7/1/1973	1124	7,351.56	65-R2.5	3,976.98	3,374.58
361.20	Collection Sewers - Gravity	Manholes	7/1/1973	71	8,048.56	65-R3	4,453.22	3,595.34
361.20	Collection Sewers - Gravity	Manholes	7/1/1974	22	2,743.18	65-R3	1,517.79	1,225.39
361.20	Collection Sewers - Gravity	Manholes	7/1/1975	7	1,158.50	65-R3	640.99	517.51
<b>TOTAL ACCOUNT 361.2</b>					<b>\$ 233,300.34</b>		<b>\$ 126,356.00</b>	<b>\$ 106,944.34</b>
371.30	Pumping Equipment	Generator	7/1/1973	2	\$ 7,548.38	35-S1.5	\$ 2,999.84	\$ 4,548.54
371.30	Pumping Equipment	Generator	7/1/1974	1	4,604.52	35-S1.5	1,829.90	2,774.62
371.30	Pumping Equipment	Generator	7/1/2005	1	23,098.06	35-S1.5	9,179.51	13,918.55
371.30	Pumping Equipment	Grinder Pump	7/1/1973	26	1,467.70	35-S1.5	583.29	884.41
371.30	Pumping Equipment	Grinder Pump	7/1/1974	5	344.35	35-S1.5	136.85	207.50
371.30	Pumping Equipment	Grinder Pump	7/1/1975	4	350.00	35-S1.5	139.10	210.90
371.30	Pumping Equipment	Valve Box	7/1/1973	2	79.32	35-S1.5	31.52	47.80
<b>TOTAL ACCOUNT 371.3</b>					<b>\$ 37,492.33</b>		<b>\$ 14,900.00</b>	<b>\$ 22,592.33</b>
380.40	Treatment and Disposal Equipment	Tank - Vail Lane	7/1/1973	1	\$ 899.28	40-R2	\$ 681.00	\$ 218.28
<b>TOTAL ACCOUNT 380.4</b>					<b>\$ 899.28</b>		<b>\$ 681.00</b>	<b>\$ 218.28</b>
<b>TOTAL DEPRECIABLE PLANT</b>					<b>\$ 341,912.27</b>		<b>\$ 182,991.00</b>	<b>\$ 158,921.27</b>
<b>TOTAL UTILITY PLANT IN SERVICE</b>					<b>\$ 344,162.27</b>		<b>\$ 182,991.00</b>	<b>\$ 161,171.27</b>

**Aqua Pennsylvania Wastewater, Inc.**  
**Realen Valley Forge Greenes Associates (Village at Valley Forge - Town Center) Costs**  
**M91750**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
650	114000	U Plant Acq Adj		1,181,238.00
650	300000	PPE-Utility Plant in Service	1,233,016.71	
900	104000	Utility Plant Purchased/Sold		51,778.71
<b>Total</b>			<b>1,233,016.71</b>	<b>1,233,016.71</b>



March 23, 2018

**VIA FEDERAL EXPRESS**

Rosemary Chiavetta, Secretary  
Commonwealth of Pennsylvania  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Application of Little Washington Wastewater Company, d/b/a Suburban Wastewater Company, for approval of the right to offer, render, furnish and provide wastewater service to the public in a portion of Upper Merion Township, Montgomery County, Pennsylvania.

Docket No: A-2011-2269086

Dear Secretary Chiavetta:

Pursuant to the Commission's Statement Policy relating to water and wastewater system acquisitions at 52 Pa. Code § 69.721(f), enclosed is a copy of the original plant-in-service valuation of the wastewater system assets acquired from Realen Valley Forge Greener Associates for the Village at Valley Forge – Town Center assets on March 31, 2012.

Should you have any questions regarding this filing, please contact me at (610) 645-1021.

Sincerely,

A handwritten signature in blue ink, appearing to read "Renee T. Marquis".

Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.

Enclosures  
cc: Certificate of Service



**BEFORE THE**  
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Aqua Pennsylvania Wastewater, Inc.

Docket No. A-2011-2269086

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of the following document, the original cost plant-in-service valuation, in accordance with the requirements of 52 Pa. Code § 1.54 upon the person(s) and in the manner indicated below:

**VIA FEDERAL EXPRESS**

Christine Hoover, Esq.  
Office of Consumer Advocate  
555 Walnut Avenue  
Fifth Floor, Forum Place  
Harrisburg, PA 17101-1923

John R. Evans  
Office of Small Business Advocate  
Suite 202, Commerce Bldg.  
300 North Second Street  
Harrisburg, PA 17101

Richard Kanaskie, Director  
Bureau of Investigation and Enforcement  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Paul Diskin, Director  
Bureau of Technical Utility Services  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Larry Treaster  
Bureau of Audits  
Pennsylvania Public Utility Commission  
Three East Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Dated: March 23, 2018



Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.  
762 W. Lancaster Ave.  
Bryn Mawr, PA 19010  
610-645-1021  
[RTMarquis@AquaAmerica.com](mailto:RTMarquis@AquaAmerica.com)

Aqua Pennsylvania Wastewater, Inc.

Acquisition of the Wastewater System Assets of  
Realen Valley Forge Greenes Associates  
(Village at Valley Forge - Town Center)

Original Cost of Wastewater Utility Plant and  
Related Accrued Depreciation  
As of June 1, 2013

762 W. Lancaster Avenue, Bryn Mawr, PA 19010

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Aqua Pennsylvania Wastewater, Inc.

Original Cost and Related Accrued Depreciation of  
Realen Valley Forge Greenes Associates  
(Village at Valley Forge - Town Center)  
As of June 1, 2013

The Village of Valley Forge - Town Center Wastewater System was built to provide wastewater service to a mixed-use community situated on 125 acres that will include a mix of retail, office, residential, hotel and entertainment uses in a portion of Upper Merion Township, Montgomery County. The wastewater system consists of a pump station and a collection system including collection mains and manholes.

On October 24, 2011, Aqua Pennsylvania Wastewater, Inc., formerly Little Washington Wastewater Company, filed an Application for approval to begin to offer, render, furnish, or supply wastewater service to the public. An Order was entered on February 17, 2012 approving Docket No. A-2011-2269086 and a Certificate of Public Convenience was issued with an effective date of February 16, 2012. The original cost of the assets of the water system and accrued depreciation are based on construction records and other information and data provided by the developer.

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Aqua Pennsylvania Wastewater, Inc.  
 Acquisition of Realen Valley Forge Greenes Associates (Village at Valley Forge - Town Center)  
 Depreciated Original Cost

Account	Account Title	Description	In Service Date	Quantity	Original Cost	Depreciation Rate	Accumulated Depreciation	Depreciated Original Cost
<b>DEPRECIABLE PLANT</b>								
354.00	Structures and Improvements	Pump Station	6/1/2013	1	\$ 876,787.00	2.7400%	\$ -	\$ 876,787.00
	<b>TOTAL ACCOUNT 354</b>				<u>\$ 876,787.00</u>		<u>\$ -</u>	<u>\$ 876,787.00</u>
361.20	Collection Sewers - Gravity	Gravity Sewer System	6/1/2013	1	\$ 304,451.00	1.1700%	\$ -	\$ 304,451.00
	<b>TOTAL ACCOUNT 361.2</b>				<u>\$ 304,451.00</u>		<u>\$ -</u>	<u>\$ 304,451.00</u>
		<b>TOTAL DEPRECIABLE PLANT</b>			<u>\$ 1,181,238.00</u>		<u>\$ -</u>	<u>\$ 1,181,238.00</u>
		<b>TOTAL UTILITY PLANT IN SERVICE</b>			<u>\$ 1,181,238.00</u>		<u>\$ -</u>	<u>\$ 1,181,238.00</u>

**Aqua Pennsylvania Wastewater, Inc.**  
**Total Environmental Solutions, Inc. (TESI) - Beech Mountain Lakes Resort Community Wastewater System Costs**  
**M92462**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
891	104000	Utility Plant Purchased/Sold		440,123.32
891	108000	AD-General		405,800.06
891	114000	U Plant Acq Adj		17,653.47
891	300000	PPE-Utility Plant in Service	863,576.85	
<b>Total</b>			<b>863,576.85</b>	<b>863,576.85</b>

**AQUA PENNSYLVANIA INC.**

**LITTLE WASHINGTON WASTEWATER COMPANY**

*Acquisition of the Wastewater System Assets  
of Beech Mountain Lakes*

**Original Cost of Sewer Utility Plant and  
Depreciation Reserve Calculations**

at

**May 4, 2012**

**Gary D. Shambaugh, Principal & Director  
David A. Sheffer, Senior Associate**

**AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011  
[www.ausinc.com](http://www.ausinc.com)**

**May 2013**





GARY D. SHAMBAUGH  
Principal & Director

**AUS CONSULTANTS**

275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011  
717.763.9890 - Tel  
717.763.9931 • Fax  
gshambaugh@ausinc.com

May 8, 2013

Ms. Meghan Kreszwick  
Manager of Rates, PA & NJ  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010

RE: Acquisition of the Wastewater System  
Assets of Beech Mountain Lakes

Dear Ms. Kreszwick:

In accordance with your request, we have prepared an inventory of the wastewater utility plant of the Beech Mountain Lakes community ("Beech Mountain") as of May 4, 2012.

The inventory was prepared to conform with the Uniform System of Accounts for Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of Beech Mountain Lakes was determined from a detailed analysis of the books and records of the sewer system and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service (Net)	\$831,349	\$405,800

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2, and the depreciation calculations are contained in Section 3.

Respectfully submitted,

AUS Consultants

By: Gary D. Shambaugh



**AQUA PENNSYLVANIA INC.**  
**Little Washington Sewer Company**  
**Acquisition of Beech Mountain Lakes Sewer System**

Table of Contents

	<u>Page</u> <u>No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Borough's Facilities	1-1
Overview of the Study Techniques	1-2
Explanation of the Study	1-2
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Contributions in Aid of Construction	1-5
Customer Advances for Construction	1-5
Depreciation Reserve	1-5
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at May 4, 2012	2-1
<b><u>Account 361 - Mains &amp; Accessories:</u></b>	
361.11 Pipe - Plastic, 2"	2-2
361.12 Pipe - Plastic, 2-1/2"	2-3
361.13 Pipe - Plastic, 3"	2-4
361.14 Pipe - Plastic, 4"	2-5
361.15 Pipe - Plastic, 6"	2-6
361.16 Valves, 2"	2-7
361.17 Valves, 2 ½"	2-8
361.18 Valves, 3"	2-9
361.19 Valves, 4"	2-10

**AQUA PENNSYLVANIA INC.**  
**Little Washington Sewer Company**  
**Acquisition of Beech Mountain Lakes Sewer System**

Table of Contents

	<u>Page</u> <u>No.</u>
<b><u>SECTION 2 (continued)</u></b>	
361.20 Valves, 6"	2-11
361.21 Air Release Valves	2-12
361.22 Cleanouts	2-13
361.23 Manholes	2-14
<b><u>Account 363 - Total Mains &amp; Accessories</u></b>	
363.00 Services to Customers	2-15
390.20 Office Equipment	2-16
393.00 Tools, Shop & Garage Equipment	2-17
395.00 Power Operated Equipment	2-18
<b><u>SECTION 3</u></b>	
<b><u>Depreciated Original Cost</u></b>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of May 4, 2012	3-1

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# **SECTION 1**

---

**AQUA PENNSYLVANIA, INC.**

**LITTLE WASHINGTON WASTEWATER COMPANY**

**Acquisition of the Wastewater Assets  
of Beech Mountain Lakes**

Executive Summary

**BACKGROUND**

The Beech Mountain Lakes (the "Beech Mountain") wastewater system provides service to the Beech Mountain Lakes community serving approximately 955 customers located in portions of Butler, Foster and Dennison Townships, Luzerne County, Pennsylvania. Total Environmental Solutions, Inc. of Baton Rouge, Louisiana was the latest entity to own the sewer facilities prior to the acquisition by the Little Washington Wastewater Company.

Little Washington Wastewater Company ("LWWC") and Beech Mountain filed a joint application requesting the Commission to approve the sale of the wastewater system, grant LWWC the right to furnish service in the Beech Mountain community and authorize Beech Mountain to abandon service.

LWWC has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of May 4, 2012. The results of this study are set forth herein.

**OVERVIEW OF BEECH MOUNTAIN'S FACILITIES**

The Beech Mountain's assets to be acquired consist of fixed capital plant for the pressurized sewage collection lines, other sewer facilities and fixed capital assets. The collection lines are installed in front or adjacent to all lots. The collection system is connected to the Butler Township Authority's sewer treatment plant. The Authority is

responsible for the treatment of all wastewater flows, in turn invoicing Beech Mountain for the cost of treatment. Beech Mountain's collection system consists of approximately 64,263 linear feet of plastic pipe, manholes, cleanouts and service laterals.

### **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of Beech Mountain's assets was conducted in two (2) phases. First, thoroughly researching the prior owners' files to obtain all necessary purchase orders and invoices available as related to the a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by Beech Mountain.

Second, the original cost of the inventoried property was determined based on a review of Beech Mountain's books of account, construction records, prior completed original cost studies and other sources. For the most part, Beech Mountain's records provided reasonable data as to the original cost of its plant in service. In addition, AUS Consultants calculated the theoretical accrued depreciation calculations based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at May 4, 2012.

A complete discussion of the methodologies employed in the original cost study is set forth in the sections of this report that follows.

### **EXPLANATION OF THE STUDY**

#### **Utility Plant Inventory**

A comprehensive inventory of Beech Mountain's plant in service as of May 4, 2012 was performed. One of the principal source documents for the inventory was the "as built" maps of Beech Mountain's sewer system. The maps were particularly helpful in

locating and documenting the sizes, types, and lengths of the pipelines and the sizes, types, and locations of accessories, such as manholes and cleanouts. Significant components of the inventory are discussed below. A few discrepancies were found in some accounts and were adjusted when the inventory was completed and cost records were obtained from Beech Mountain files.

**Mass Property**

For purposes of this study, "mass" property consists of utility plant recorded in Account 361 (Collection Sewers), and Account 363 (Services to Customers).

For Account 361, footages of pipe, by size and type, were determined by reviewing the "as-built" maps and were verified by a physical check of the collection system in place. This same procedure was utilized for manholes and cleanouts.

**Non-Mass Property**

Detailed results of the plant inventory are set forth in Section 2 of this report by the fixed capital accounts prescribed by the National Association of Regulatory Utility Commissioners. The original cost of all inventoried property units is properly recorded in the following accounts:

<u>Acct. No.</u>	<u>Account Title</u>
<b><u>Depreciable Plant</u></b>	
<i>Mains &amp; Accessories</i>	
361.11	Pipe – Plastic, 2"
361.12	Pipe – Plastic, 2-1/2"
361.13	Pipe – Plastic, 3"
361.14	Pipe – Plastic, 4"
361.15	Pipe – Plastic, 6"
361.16	Valves, 2"
361.17	Valves, 2-1/2"
361.18	Valves, 3"
361.19	Valves, 4"

361.20	Valves, 6"
361.21	Air Release Valves
361.22	Cleanouts
361.23	Manholes

*Total Mains & Accessories*

363.00	Services to Customers
390.20	Office Equipment
393.00	Tools, Shop & Garage Equipment
395.00	Power Operated Equipment

**ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the original cost of Beech Mountain's plant in service by fixed capital account and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of Beech Mountain's property by account. In large measure, these data consisted of records and information compiled by Beech Mountain as to the construction cost and approximate dates of installation. These records were augmented by information obtained from the field inventory.

The original cost determination for Account 361 (Collection Sewers) was determinable from available records for Beech Mountain's collection system and other source documents. Beech Mountain has had limited additions and retirements to the collection system since 1993, under previous owners.

As previously explained, the physical inventory established the total footage of pipe by size and type and the total number of units of accessories. Summaries of construction projects maintained by Beech Mountain contained some detail as to the footage of pipe and numbers of accessories. The information contained in the

construction summaries was used to develop the footage of pipe, units of accessories, and the resultant unit price for the respective fixed capital asset.

The original cost values at May 4, 2012 for Beech Mountain's collection sewers as established by the original cost study, total \$820,316.

### **SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of Beech Mountain's utility plant in service is not less than \$831,349, as summarized by plant account in Section 2 (p. 2-1).

### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all documents that were available. Based on this record research, the sewer system never received or collected any CIAC.

### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all documents that were available. Based on this record research, the sewer system fixed capital construction was not funded by CAC.

### **DEPRECIATION RESERVE**

AUS Consultants prepared a theoretical calculated depreciation reserve of the utility plant in service at May 4, 2012. The calculated accrued depreciation reserve amounts to \$405,800 at May 4, 2012.



The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and detailed supporting documentation are included in Section 3 of this report.

# **SECTION 2**

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**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Summary of Original Cost at May 4, 2012**

<u>Acct.</u> <u>No.</u>	<u>Account Title</u>	<u>Original</u> <u>Cost</u>
<b><u>Mains &amp; Accessories</u></b>		
361.11	Pipe - Plastic, 2"	\$197,392.32
361.12	Pipe - Plastic, 2-1/2"	92,957.82
361.13	Pipe - Plastic, 3"	220,162.31
361.14	Pipe - Plastic, 4"	169,899.08
361.15	Pipe - Plastic, 6"	78,869.62
361.16	Valves, 2"	4,874.24
361.17	Valves, 2 1/2"	4,776.94
361.18	Valves, 3"	7,903.18
361.19	Valves, 4"	5,377.89
361.20	Valves, 6"	2,529.56
361.21	Air Release Valves	28,949.40
361.22	Cleanouts	5,933.36
361.23	Manholes	690.00
	<b>Total Mains &amp; Accessories</b>	<b>820,315.72</b>
363.00	Services to Customers	2,656.00
390.20	Office Equipment	937.95
393.00	Tools, Shop & Garage Equipment	1,592.08
395.00	Power Operated Equipment	5,847.28
	<b>Total Deprecable Plant</b>	<b>\$831,349.03</b>

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Original Cost at May 4, 2012**  
**Account 361.11 - Plastic, 2"**

<u>Item</u>	<u>Year</u> <u>Installed</u>	<u>Quantity</u>		<u>Original</u> <u>Cost</u>
		<u>Unit</u>	<u>No.</u>	
Plastic Pipe, 2"	1971	Ft.	14,454	\$126,038.88
	1982	Ft.	5,976	\$71,353.44

---

**Total Account 361.11**

**\$197,392.32**

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

Original Cost at May 4, 2012  
Account 361.12 - Plastic, 2-1/2"

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Plastic Pipe, 2-1/2"	1971	Ft.	1,238	\$10,795.36
	1982	Ft.	625	\$7,462.50
	1989	Ft.	1,000	\$19,350.00
	1991	Ft.	825	\$14,808.75
	1993	Ft.	2,501	\$40,541.21

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Total Account 361.12

\$92,957.82

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

Original Cost at May 4, 2012  
Account 361.13 - Plastic, 3"

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Plastic Pipe, 3"	1971	Ft.	7,363	\$67,994.60
	1982	Ft.	5,550	\$66,785.00
	1989	Ft.	3,113	\$63,567.46
	1993	Ft.	1,275	\$21,815.25

---

Total Account 361.13

\$220,162.31

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

Original Cost at May 4, 2012  
Account 361.14 - Plastic, 4"

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Plastic Pipe, 4"	1971	Ft.	10,678	\$105,657.88
	1982	Ft.	3,939	\$52,388.70
	1989	Ft.	550	\$11,852.50

---

Total Account 361.14

\$169,899.08

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

Original Cost at May 4, 2012  
Account 361.15 - Plastic, 6"

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Plastic Pipe, 6"	1971	Ft.	1,050	\$12,358.50
	1982	Ft.	4,126	\$66,511.12

---

**Total Account 361.15**

**\$78,869.62**



**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

Original Cost at May 4, 2012  
Account 361.16 - Valves, 2"

<u>Item</u>	<u>Year Installed</u>	<u>Quantity Unit</u>	<u>No.</u>	<u>Original Cost</u>
Valves, 2"	1971	Ea.	28	\$3,019.24
	1982	Ea.	7	\$1,855.00

---

**Total; Account 361.16**

**\$4,874.24**

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

Original Cost at May 4, 2012  
Account 361.17 - Valves, 2 1/2"

<u>Item</u>	<u>Year Installed</u>	<u>Quantity Unit</u>	<u>No.</u>	<u>Original Cost</u>
Valves, 2 1/2"	1971	Ea.	2	\$215.66
	1982	Ea.	1	\$296.00
	1989	Ea.	2	\$667.64
	1991	Ea.	2	\$697.48
	1993	Ea.	8	\$2,900.16

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Total Account 361.17

\$4,776.94

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

Original Cost at May 4, 2012  
Account 361.18 - Valves, 3"

<u>Item</u>	<u>Year Installed</u>	<u>Quantity Unit</u>	<u>No.</u>	<u>Original Cost</u>
Valves, 3"	1971	Ea.	9	\$1,197.54
	1982	Ea.	6	\$1,962.00
	1989	Ea.	5	\$2,059.60
	1993	Ea.	6	\$2,684.04

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Total Account 361.18

\$7,903.18

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

Original Cost at May 4, 2012  
Account 361.19 - Valves, 4"

<u>Item</u>	<u>Year Installed</u>	<u>Quantity Unit</u>	<u>No.</u>	<u>Original Cost</u>
Valves, 4"	1971	Ea.	12	\$2,431.56
	1982	Ea.	5	\$2,319.00
	1989	Ea.	1	\$627.33

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Total Account 361.19

\$5,377.89

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

Original Cost at May 4, 2012  
Account 361.20 - Valves, 6"

<u>Item</u>	<u>Year Installed</u>	<u>Quantity Unit</u>	<u>No.</u>	<u>Original Cost</u>
Valves, 6"	1971	Ea.	1	\$233.56
	1982	Ea.	4	\$2,296.00

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Total Account 361.20

\$2,529.56

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Original Cost at May 4, 2012**  
**Account 361.21 - Air Release Valves**

<u>Item</u>	<u>Year Installed</u>	<u>Quantity Unit</u>	<u>No.</u>	<u>Original Cost</u>
Air Release Valves	1982	Ea.	27	\$28,949.40

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**Total Account 361.21**

**\$28,949.40**

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Original Cost at May 4, 2012**  
**Account 361.22 - Cleanouts**

<u>Item</u>	<u>Year</u> <u>Installed</u>	<u>Quantity</u> <u>Unit</u>	<u>No.</u>	<u>Original</u> <u>Cost</u>
Cleanouts	1971	Ea.	90	\$1,838.40
	1982	Ea.	43	\$2,285.04
	1989	Ea.	9	\$744.16
	1991	Ea.	2	\$143.60
	1993	Ea.	14	\$922.16

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**Total Account 361.22**

**\$5,933.36**

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Original Cost at May 4, 2012**  
**Account 361.23 - Manholes**

<u>Item</u>	<u>Year</u> <u>Installed</u>	<u>Quantity</u> <u>Unit</u>	<u>No.</u>	<u>Original</u> <u>Cost</u>
Manholes	1982	Ea.	1	\$690.00

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**Total Account 361.23**

**\$690.00**



**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Original Cost at May 4, 2012**  
**Account 363 - Services to Customers**

<u>Item</u>	<u>Year</u> <u>Installed</u>	<u>Quantity</u> <u>Unit</u>	<u>No.</u>	<u>Original</u> <u>Cost</u>
Plastic Services	2005	Ea.	2	\$ 2,656.00

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**Total Account 363**

**\$ 2,656.00**

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Original Cost at May 4, 2012**  
**Account 390.2 - Office Equipment**

Item	Year Installed	Quantity Unit	No.	Original Cost
50% Cost of Kyocera Printer and Fax	2006	Ea.	1	\$ 246.00
50% COST OF Dell Desk Top Computer	2008	Ea.	1	\$ 691.95

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**Total Account 390.2**

**937.95**

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Original Cost at May 4, 2012**  
**Account 393 - Tools, Shop & Garage Equipment**

Item	Year Installed	Quantity Unit	No.	Original Cost
Hand Tools	2002	Lot	1	\$69.48
	2005	Lot	1	\$382.00
50 % Cost Quick Krimp Shut Off	2007	Ea.	1	\$211.39
50% Cost of Quick Krimp Shut Off 3/4"	2007	Ea.	1	\$102.78
Hand Tools	2008	Lot	1	\$826.43

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**Total Account 393**

**\$1,592.08**

**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Original Cost at May 4, 2012**  
**Account 395 - Power Operated Equipment**

Item	Year Installed	Quantity Unit	No.	Original Cost
Miscellaneous Equipment	2006	Lot	1	\$ 3,444.00
50% Cost of Wet/Dry Hand & Walk Behind Saw	2007	Ea.	1	\$ 323.28
Miscellaneous Equipment	2008	Lot	1	\$ 2,080.00

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**Total Account 395**

**\$ 5,847.28**

# **SECTION 3**

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**AQUA PENNSYLVANIA INC.**  
**Little Washington Wastewater Company**

**Valuation of the Beech Mountain Lakes Sewer System**

**Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of May 4, 2012  
Based Upon Whole Life Depreciation**

<u>Acct. No.</u>	<u>Account Title</u>	<u>Original Cost</u>	<u>ASL/Iowa Curve</u>	<u>Deprecation Reserve</u>	<u>Depreciated Original Cost</u>
<b><u>Mains &amp; Accessories</u></b>					
361.11	Pipe - Plastic, 2"	197,392.32	60-R3	109,055.28	88,337.04
361.12	Pipe - Plastic, 2-1/2"	92,957.82	60-R3	34,053.50	58,904.32
361.13	Pipe - Plastic, 3"	220,162.31	60-R3	101,377.29	118,785.02
361.14	Pipe - Plastic, 4"	169,899.08	60-R3	92,274.24	77,624.84
361.15	Pipe - Plastic, 6"	78,869.62	70-R3	33,196.92	45,672.70
361.16	Valves, 2"	4,874.24	50-R3	3,110.09	1,764.15
361.17	Valves, 2 1/2"	4,776.94	50-R3	1,906.93	2,870.01
361.18	Valves, 3"	7,903.18	50-R3	3,736.80	4,166.38
361.19	Valves, 4"	5,377.89	50-R3	3,219.19	2,158.70
361.20	Valves, 6"	2,529.56	65-R3	1,116.33	1,413.23
361.21	Air Release Valves	28,949.40	65-R3	12,411.00	16,538.40
361.22	Cleanouts	5,933.36	50-R3	3,223.13	2,710.23
361.23	Manholes	690.00	50-R3	373.43	316.57
	<b>Total Mains &amp; Accessories</b>	<b>820,315.72</b>		<b>399,054.13</b>	<b>421,261.59</b>
363.00	Services to Customers	2,656.00	35-R3	508.77	2,147.23
390.20	Office Equipment	937.95	5-R3	674.17	263.78
393.00	Tools, Shop & Garage Equipment	1,592.08	7-R3	980.18	611.90
395.00	Power Operated Equipment	5,847.28	7-R3	4,582.81	1,264.47
	<b>Total Deprecable Plant</b>	<b>831,349.03</b>		<b>405,800.06</b>	<b>425,548.97</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.11 Pipe - Plastic, 2"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	126,038.88	23.74	60.00	0.60431	76,166
1982	71,353.44	32.34	60.00	0.46093	32,889
<b>Total</b>	197,392.32				109,055.28

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.12 Pipe - Plastic, 2 1/2"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0% Average Service Life: 60 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	10,795.36	23.74	60.00	0.60431	6,524
1982	7,462.50	32.34	60.00	0.46093	3,440
1989	19,350.00	38.35	60.00	0.36083	6,982
1991	14,808.75	40.13	60.00	0.33115	4,904
1993	40,541.21	41.94	60.00	0.30103	12,204
<b>Total</b>	<b>92,957.82</b>				<b>34,053.50</b>



**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.13 Pipe - Plastic, 3"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	67,994.60	23.74	60.00	0.60431	41,090
1982	66,785.00	32.34	60.00	0.46093	30,783
1989	63,567.46	38.35	60.00	0.36083	22,937
1993	21,815.25	41.94	60.00	0.30103	6,667
<b>Total</b>	<b>220,162.31</b>				<b>101,377.29</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.14 Pipe - Plastic, 4"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	105,657.88	23.74	60.00	0.80431	63,850
1982	52,388.70	32.34	60.00	0.46093	24,148
1989	11,852.50	38.35	60.00	0.36083	4,277
<b>Total</b>	169,899.08				92,274.24

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.15 Pipe - Plastic, 6"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 70 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	12,358.50	32.87	70.00	0.53039	6,555
1982	66,511.12	41.96	70.00	0.40057	26,842
<b>Total</b>	<b>78,869.62</b>				<b>33,196.92</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.16 Valves, 2"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	3,019.24	15.12	50.00	0.89758	2,106
1982	1,855.00	22.94	50.00	0.54121	1,004
<b>Total</b>	4,874.24				3,110.09

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.17 Valves, 2 1/2"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	215.66	15.12	50.00	0.89758	150
1982	296.00	22.94	50.00	0.54121	160
1989	667.64	28.65	50.00	0.42709	285
1991	697.48	30.36	50.00	0.39272	274
1993	2,900.16	32.12	50.00	0.35766	1,037
<b>Total</b>	<b>4,776.94</b>				<b>1,906.93</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.18 Valves, 3"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	1,197.54	15.12	50.00	0.69758	835
1982	1,962.00	22.94	50.00	0.54121	1,062
1989	2,059.60	28.65	50.00	0.42709	880
1993	2,684.04	32.12	50.00	0.35765	960
<b>Total</b>	<b>7,903.18</b>				<b>3,736.80</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.19 Valves, 4"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1971	2,431.56	15.12	50.00	0.69758	1,696
1982	2,319.00	22.94	50.00	0.54121	1,255
1989	627.33	28.65	50.00	0.42709	268
<b>Total</b>	<b>5,377.89</b>				<b>3,219.19</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.20 Valves, 6"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	233.56	28.26	65.00	0.56519	132
1982	2,296.00	37.13	65.00	0.42871	984
<b>Total</b>	<b>2,529.56</b>				<b>1,116.33</b>



**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.21 Air Release Valves**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	28,949.40	37.13	65.00	0.42871	12,411
<b>Total</b>	28,949.40				12,411.00

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.22 Cleanouts**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	1,838.40	15.12	50.00	0.69758	1,282
1982	2,285.04	22.94	50.00	0.54121	1,237
1989	744.16	28.85	50.00	0.42709	318
1991	143.60	30.36	50.00	0.39272	56
1993	922.16	32.12	50.00	0.35765	330
<b>Total</b>	<b>5,933.36</b>				<b>3,223.13</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**361.23 Manholes**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1982	690.00	22.94	50.00	0.54121	373
<b>Total</b>	690.00				373.43

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
 363.00 Services

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 35 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2005	2,656.00	28.30	35.00	0.19155	509
<b>Total</b>	2,656.00				508.77

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**390.20 Office Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 5 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2006	246.00	0.74	5.00	0.85169	210
2008	691.95	1.64	5.00	0.87152	485
<b>Total</b>	937.95				674.17

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**393.00 Tools, Shop & Garage Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 7 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2002	69.48	0.60	7.00	0.91415	64
2005	382.00	1.48	7.00	0.78837	301
2007	314.17	2.68	7.00	0.61785	194
2008	826.43	3.43	7.00	0.50991	421
<b>Total</b>	<b>1,592.08</b>				<b>980.18</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington Wastewater - Beech Mt.**  
**395.00 Power Operated Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of May 04, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 5 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2006	3,444.00	0.74	5.00	0.85169	2,933
2007	323.28	1.09	5.00	0.78212	253
2008	2,080.00	1.64	5.00	0.87152	1,397
<b>Total</b>	<b>5,847.28</b>				<b>4,582.81</b>

**Aqua Pennsylvania Wastewater, Inc.**  
**Kidder Township Wastewater System Costs**  
**M92427**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
892	103000	Property Held for Future Use	5,775.00	
892	104000	Utility Plant Purchased/Sold		11,481,809.25
892	104000	Utility Plant Purchased/Sold	25,000.00	
892	108000	AD-General		2,718,906.42
892	114000	U Plant Acq Adj		139,709.93
892	300000	PPE-Utility Plant in Service	14,309,650.60	
<b>Total</b>			<b>14,340,425.60</b>	<b>14,340,425.60</b>



**LITTLE WASHINGTON WASTEWATER COMPANY**

***Acquisition of the Wastewater System Assets  
of the Township of Kidder***

**Original Cost of the Wastewater Utility Plant  
and Depreciation Reserve Calculations  
at October 1, 2012**

**By**

**Gary D. Shambaugh  
Principal**

**AUS CONSULTANTS  
Utility Services Group  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011**

---

**April 2013**





GARY D. SHAMBAUGH  
Principal & Director

**AUS CONSULTANTS**

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April 8, 2013

Ms. Meghan Kreszwick, Manager of Rates, PA & NJ  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010-3489

**RE: Acquisition of the Wastewater System  
Assets of the Township of Kidder**

Dear Ms. Kreszwick:

In accordance with your request, we have prepared an inventory of the wastewater utility plant of the Township of Kidder (the "Township") as of October 1, 2012.

The inventory was prepared to conform to the Uniform System of Accounts for Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of the Township was determined from a detailed analysis of the books and records of the Township and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service	\$14,243,921	\$2,718,906
Account 151 - Plant Material & Supplies	\$ 5,775	

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2 and the depreciation calculations in Section 3.

Respectfully submitted,  
AUS Consultants

By: Gary D. Shambaugh

**LITTLE WASHINGTON WASTEWATER COMPANY**

**Acquisition of the Wastewater Utility Plant  
Of the Township of Kidder**

Table of Contents

	Page
	<u>No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Township's Facilities	1-1
Overview of the Study Techniques	1-2
Explanation of the Study	1-2
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Contributions In Aid of Construction	1-6
Customer Advances for Construction	1-6
Depreciation Reserve	1-6
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at October 1, 2012	2-1
<b><u>Account 101 - Utility Plant in Service</u></b>	
353.2 Land & Land Rights - Collection Plant	2-2
353.4 Land & Land Rights - Treatment & Disposal Plant	2-3
354.4 Structures & Improvements - Treatment & Disposal Plant	2-4
355 Power Generation Equipment	2-5
360 Collection Sewers - Force	2-6
361 Collection Sewers - Gravity	2-7

**LITTLE WASHINGTON WASTEWATER COMPANY**

**Acquisition of the Wastewater Utility Plant  
Of the Township of Kidder**

Table of Contents

	<b>Page</b>
	<u>No.</u>
<u>Account 101 - Utility Plant in Service (continued)</u>	
363 Services to Customers	2-8
371 Pumping Equipment	2-9
380 Treatment & Disposal Equipment	2-10
393 Tools, Shop & Garage Equipment	2-11
394 Laboratory Equipment	2-12
<u>Account 151 - Materials &amp; Supplies</u>	2-13

**SECTION 3**

<u>Depreciated Original Cost</u>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of October 1, 2012	3-1

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# **SECTION 1**

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# **LITTLE WASHINGTON WASTEWATER COMPANY**

## **Acquisition of the Wastewater Assets of the Township of Kidder**

### **Executive Summary**

#### **BACKGROUND**

The Township of Kidder (the "Township") makes wastewater service available to approximately 995 customers located in a portion Kidder Township, Carbon County, Pennsylvania. The Township began providing wastewater service in the early 1970s. The Township has continued to grow and expand over the years.

Little Washington Wastewater Company ("LWWC") and the Township filed a joint application requesting the Commission to approve the sale of the wastewater system, grant LWWC the right to furnish service in the Township's service territory and authorize the Township to abandon service.

LWWC has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of October 1, 2012. The results of this study are set forth herein.

#### **OVERVIEW OF THE TOWNSHIP'S FACILITIES**

The Township's assets to be acquired consist of facilities for the collection and treatment of wastewater from its customers. The wastewater is treated at the Township's treatment plant. The Township's collection system consists of approximately 84,392 linear feet of plastic pipe, manholes, cleanouts and service laterals.

## **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the Township's assets was conducted in two (2) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by the Township.

Second, the original cost of the inventoried property was determined based on a review of the Township's books of account, construction records, and other sources. For the most part, the Townships's records provided reasonable data as to the original cost of its plant in service. In addition, LWWC requested theoretical accrued depreciation calculations be performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at October 1, 2012.

A complete discussion of the methodologies employed in the original cost study is set forth in the sections of this report that follows.

## **EXPLANATION OF THE STUDY**

### **Utility Plant Inventory**

A comprehensive inventory of the Township's plant in service as of October 1, 2012 was performed. One of the principal source documents for the inventory was the "as built" maps of the Township's system. The maps were particularly helpful in locating and documenting the sizes, types, and lengths of the pipelines and the sizes, types, and locations of accessories, such as manholes and cleanouts. Significant components of the inventory are discussed below.



### **Mass Property**

For purposes of this study, "mass" property consists of utility plant recorded in Account 360 (Collection Sewers - Force), Account 361 (Collection Sewers - Gravity), and Account 363 (Services to Customers).

For Account 360 and Account 361, footages of pipe, by size and type, were determined by reviewing the "as-built" maps and were verified by a physical check of the collection system in place. This same procedure was utilized for manholes and cleanouts. Some minor discrepancies were found and adjusted when the inventory for Account 360 and Account 361 was compared with the Township's construction records and cost records obtained from Township files.

Based upon data obtained from Township records, it appears that customer service lines (Account 363) were installed when a customer requested service. The study includes the original cost of the initial construction for all customer service lines.

### **Non-Mass Property**

A physical inventory of the wastewater treatment plant and three (3) odor control buildings locations was completed. A comparison of those inventories was made to construction records of those facilities, records of the Township, and information contained from the Township's personnel in order to verify that all existing utility plant in service was included in the plant inventory.

Detailed results of the plant inventory are set forth in Section 2 of this report by the fixed capital accounts prescribed by the National Association of Regulatory Utility Commissioners. The original cost of all inventoried property units is properly recorded in the following accounts:

Acct.  
No.   Account Title

Non-Depreciable Plant:

353.2 Land & Land Rights - Collection Plant  
353.4 Land & Land Rights - Treatment & Disposal Plant

Depreciable Plant

354.4 Structures & Improvements - Treatment & Disposal Plant  
355 Power Generation Equipment  
360 Collection Sewers - Force  
361 Collection Sewers - Gravity  
363 Services to Customers  
371 Pumping Equipment  
380 Treatment & Disposal Equipment  
393 Tools, Shop & Garage Equipment  
394 Laboratory Equipment

**ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the original cost of the Township's plant in service by fixed capital account and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of the Township's property by account. In large measure, these data consisted of records and information compiled by the Township as to the construction cost and approximate dates of installation. These records were augmented by information obtained from the field inventory.

The original cost determinations for Account 361 (Collection Sewers - Force), Account 361 (Collection Sewers - Gravity), and Account 363 (Services to Customers) are explained as follows:

**Account 360, 361 and Account 363**

The total original cost of collection sewers was determinable from available records for the Township's collection system and other source documents. However, the cost data was not maintained by unit of property. In these instances, the original costs were allocated to the units of property utilizing the physical plant inventory.

As previously explained, the physical inventory established the total footage of pipe by size and type and the total number of units of accessories. Summaries of construction projects maintained by the Township contained some detail as to the footage of pipe and numbers of accessories. The information contained in the construction summaries was used to develop the footage of pipe, units of accessories, and the resultant unit price for the respective fixed capital asset.

The original cost values at October 1, 2012 for the Township's collection sewers - force, collection sewers - gravity, and customer services, as established by the original cost study, total \$4,416,782; \$1,306,012; and \$2,612,252, respectively.

**SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the Township's utility plant in service is not less than \$14,243,921, as summarized by plant account in Section 2 (p. 2-1).

### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all documents that were available. Based on this record research, the Township has not collected any CIAC.

### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all documents that were available. Based on this record research, the Township has not collected any CAC.

### **DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at October 1, 2012. The calculated accrued depreciation reserve amounts to \$2,718,906 at October 1, 2012.

The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and detailed supporting documentation are included in Section 3 of this report.

# **SECTION 2**

---

**Little Washington Wastewater Company**

**Acquisition of the Wastewater System Assets  
of the Township of Kidder**

Original Cost at October 1, 2012

<b>Acct. No.</b>	<b>Account Title</b>	<b>Original Cost</b>
353.2	Land & Land Rights - Collection Plant	\$70.00
353.4	Land & Land Rights - Treatment & Disposal Plant	26,545.70
354.4	Structures & Impr. - Treatment & Disposal Plant	757,891.11
355	Power Generation Equipment	13,608.39
360	Collection Sewers - Force	4,416,781.61
361	Collection Sewers - Gravity	1,306,012.20
363	Services to Customers	2,612,251.87
371	Pumping Equipment	2,581,432.07
380	Treatment & Disposal Equipment	2,509,327.74
393	Tools, Shop & Garage Equipment	14,000.00
394	Laboratory Equipment	6,000.00
	<b>Total Original Cost</b>	<b>\$14,243,920.69</b>

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 353.2 - Collection Plant - Land & Land Rights

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<u>Land Rights:</u>				
Mains - Vacation Charters				
Deed Book 681, pages 481-496	1996	Lot		\$43.50
Mains - Split Rock Country Club				
Deed Book 681, pages 986-948	2001	Lot		25.50
Mains - Summit, Vacation Charters & Blue Ridge Real Estate				
Deed Book 1019, page 443-453	2002	Lot		1.00
 Total Account 353.2				 ----- \$70.00 =====

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 353.4 - Treatment & Disposal Plant - Land & Land Rights

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u> <u>Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Land:</u>				
Treatment Plant Book 1019, page 439	2002	Lot		\$5,545.70
Odor Control Buildings: Book 1084, page 824	2005	Lot		21,000.00
Total Account 353.4				<u>\$26,545.70</u> =====



**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012

Account 354.4 - Structures & Improvements - Treatment & Disposal Plant

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<u>Sewage Treatment Building:</u> Concrete block, metal sided, metal roof, 100' x 75', control panels, exhaust fans, electric panels, etc.	1972		Lot	\$394,125.00
Modifications	2005		Lot	248,637.86
Fencing	2005		Lot	10,945.10
<b>Total Sewage Treatment Building</b>				<u>\$653,707.96</u>
Odor Control Buildings - Prefab.	2005	Ea.	3	\$104,183.15
<b>Total Account 354.4</b>				<u><u>\$757,891.11</u></u>

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 355 - Power Generation Equipment

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u> <u>Unit</u>	<u>No.</u>	<u>Original Cost</u>
Diesel Generator, Kohler 200KW	1972	Ea.	1	\$13,608.39
Total Account 355				<u>\$13,608.39</u> =====

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 360 - Collection Sewers - Force

Item	Year Installed	Quantity Unit	No.	Original Cost
Plastic Mains, 1.5"	2005	LF	7,002.0	\$409,934.15
Plastic Mains, 2"	2005	LF	13,472.0	736,179.22
Plastic Mains, 2.5"	2005	LF	11,480.0	600,874.95
Plastic Mains, 3"	2005	LF	10,051.5	628,405.27
Plastic Mains, 4"	2005	LF	20,762.0	1,308,287.89
Plastic Mains, 6"	2005	LF	4,230.0	265,902.52
<b>Total Mains</b>				<b>\$3,949,584.00</b>
Manholes, 1.5"	2005	Ea.	13	\$62,093.15
Manholes, 2"	2005	Ea.	17	72,711.02
Manholes, 2.5"	2005	Ea.	6	29,541.36
Manholes, 3"	2005	Ea.	19	66,661.84
Manholes, 4"	2005	Ea.	33	142,387.34
Manholes, 6"	2005	Ea.	4	19,837.87
<b>Total Manholes</b>				<b>\$393,232.58</b>
Cleanout, 1.5"	2005	Ea.	48	\$24,361.76
Cleanout, 2"	2005	Ea.	38	23,865.69
Cleanout, 2.5"	2005	Ea.	3	2,689.94
Cleanout, 3"	2005	Ea.	5	3,717.30
Cleanout, 4"	2005	Ea.	10	10,901.58
Cleanout, 6"	2005	Ea.	7	8,428.76
<b>Total Cleanouts</b>				<b>\$73,965.03</b>
<b>Total Account 360</b>				<b>\$4,416,781.61</b>

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 361 - Collection Sewers - Gravity

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>----- No.</u>	<u>Original Cost</u>
8" Plastic Mains	1972	LF	7,010.0	\$94,074.20
8" Plastic Mains	2005	LF	10,209.5	1,036,030.17
8" Plastic Mains	2006	LF	175.0	23,900.00
<b>Total Mains</b>				<u>\$1,154,004.37</u>
Manholes	1972	Ea.	29	\$20,074.96
Manholes	2005	Ea.	52	131,932.87
<b>Total Manholes</b>				<u>\$152,007.83</u>
<b>Total Account 361</b>				<u><u>\$1,306,012.20</u></u>

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 363 - Services to Customers

Item	Year Installed	Quantity Unit	No.	Original Cost
Services Laterals, 1.5"	1972	Ea.	7	\$688.17
Services Laterals, 1.5"	1973	Ea.	4	409.60
Services Laterals, 1.5"	1974	Ea.	4	471.04
Services Laterals, 1.5"	1975	Ea.	4	503.84
Services Laterals, 1.5"	1976	Ea.	4	532.48
Services Laterals, 1.5"	1977	Ea.	4	569.36
Services Laterals, 1.5"	1978	Ea.	4	593.96
Services Laterals, 1.5"	1979	Ea.	4	655.40
Services Laterals, 1.5"	1980	Ea.	4	716.84
Services Laterals, 1.5"	1981	Ea.	5	942.10
Services Laterals, 1.5"	1982	Ea.	5	1,013.80
Services Laterals, 1.5"	1983	Ea.	5	1,059.90
Services Laterals, 1.5"	1984	Ea.	5	1,100.85
Services Laterals, 1.5"	1985	Ea.	5	1,131.55
Services Laterals, 1.5"	1986	Ea.	5	1,157.15
Services Laterals, 1.5"	1987	Ea.	5	1,177.65
Services Laterals, 1.5"	1988	Ea.	5	1,254.45
Services Laterals, 1.5"	1989	Ea.	5	1,321.00
Services Laterals, 1.5"	1990	Ea.	5	1,341.50
Services Laterals, 1.5"	1991	Ea.	5	1,392.70
Services Laterals, 1.5"	1992	Ea.	5	1,449.00
Services Laterals, 1.5"	1993	Ea.	5	1,495.10
Services Laterals, 1.5"	1994	Ea.	5	1,536.05
Services Laterals, 1.5"	1995	Ea.	5	1,571.90
Services Laterals, 1.5"	1996	Ea.	5	1,643.60
Services Laterals, 1.5"	1997	Ea.	5	1,653.80
Services Laterals, 1.5"	1998	Ea.	5	1,689.65
Services Laterals, 1.5"	1999	Ea.	5	1,710.15
Services Laterals, 1.5"	2000	Ea.	5	1,781.80
Services Laterals, 1.5"	2001	Ea.	5	1,812.55
Services Laterals, 1.5"	2002	Ea.	5	1,843.25
Services Laterals, 1.5"	2003	Ea.	5	1,884.25
Services Laterals, 1.5"	2004	Ea.	5	1,986.65
Services Laterals, 1.5"	2005	Ea.	791	2,548,362.17
Services Laterals, 1.5"	2006	Ea.	8	3,719.28
Services Laterals, 1.5"	2007	Ea.	8	3,973.28
Services Laterals, 1.5"	2008	Ea.	8	4,210.80
Services Laterals, 1.5"	2009	Ea.	8	4,399.28
Services Laterals, 1.5"	2010	Ea.	8	4,546.72
Services Laterals, 1.5"	2011	Ea.	5	2,949.25
<b>Total Account 363</b>			<b>995</b>	<b>\$2,612,251.87</b>

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 371 - Pumping Equipment

<u>Item</u>	<u>Year Installed</u>	<u>Quantity</u>	<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>
Grinder Pumps, 70 Gallon Tank	2005	Ea.	772
Grinder Pumps, 500 Gallon Tank	2005	Ea.	5
Total Account 371			
			\$2,490,142.28
			91,289.79
			<u>\$2,581,432.07</u>
			=====

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 380 - Treatment & Disposal Equipment

Item	Year Installed	Quantity		Original Cost
		Unit	No.	
Retention Tank	1972	Ea.	1	\$27,173.21
Tertiary Filter	1972	Ea.	1	6,304.41
Treatment Chemical Tank	1972	Ea.	1	15,580.22
SBR System	2005	Lot		883,425.66
Pos. Displacement Blowers	2005	Lot		98,505.87
UV Disinfection Equipment	2005	Lot		96,942.29
Soda Ash System	2005	Lot		85,997.19
Chemical Feed Equipment	2005	Lot		40,653.22
SBR Decant Tank	2005	Lot		696,857.49
Post Aeration Tank ET-6	2005	Lot		120,216.26
Infl. Retention Tank ET-1	2005	Lot		47,859.39
Influent Grinder Vault	2005	Lot		57,947.64
Yard Piping	2005	Lot		156,514.89
Sludge Holding Tank	2009	Ea.	1	88,928.65
Sludge Holding Tank - Diffuser	2009	Ea.	1	46,411.47
Sludge Holding Tank - Pumps & Controls	2009	Lot		26,139.79
Sludge Holding Tank - Slide Gate	2009	Ea.	1	10,669.30
Sludge Holding Tank - Davit Crane	2009	Ea.	1	3,200.79
<b>Total Account 380</b>				<b>\$2,509,327.74</b> =====

**Little Washington Wastewater Company**

*Acquisition of the Wastewater system Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 393 - Tools, Shop & Garage Equipment

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Pallet Lift Truck	2005	Ea.	1	\$14,000.00
Total Account 393				<u>----- \$14,000.00 =====</u>



**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 394 - Laboratory Equipment

<u>Item</u>	<u>Year Installed</u>	<u>----- Quantity ----- Unit</u>	<u>No.</u>	<u>Original Cost</u>
Portable Samplers	2005	Ea.		\$6,000.00
Total Account 394				<u>\$6,000.00</u> =====



**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Original Cost at October 1, 2012  
Account 151 - Material & Supplies

<u>Item</u>	<u>----- Quantity -----</u> <u>Unit</u>	<u>No.</u>	<u>Original</u> <u>Cost</u>
Spare Grinder Pumps	Ea.	7	\$5,775.00
Total Account 151			<u>-----</u> \$5,775.00 <u>=====</u>

# **SECTION 3**

---

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of the Township of Kidder*

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of October 1, 2012  
Based Upon Whole Life Depreciation

Acct. No.	Description	Original Cost at 10/1/12	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 10/1/12
<b>Non-Depreciable Plant:</b>					
353.20	Land & Land Rights - Collection Plant	\$70.00		\$0.00	\$70.00
353.40	Land & Land Rights - Treat. & Disposal Plant	26,545.70		0.00	26,545.70
	<b>Total Non-Depreciable Plant</b>	<b>\$26,615.70</b>		<b>\$0.00</b>	<b>\$26,615.70</b>
<b>Depreciable Plant:</b>					
354.40	Structures & Impr. - Treat. & Disposal Plant	\$757,891.11	65-R3	\$260,164.52	\$497,726.59
355.00	Power Generation Equipment	13,608.39	25-R3	13,283.26	325.13
360	Collection Sewers - Force:				
360.30	Plastic Pipe, 4" & Under	\$3,683,681.48	50-R3	\$526,451.04	\$3,157,230.44
360.31	Plastic Pipe, 6" - 8"	265,902.52	80-R3	23,863.43	242,039.09
360.60	Manholes, 4" & Under	373,394.71	50-R3	53,363.47	320,031.24
360.61	Manholes, 6" - 8"	19,837.87	80-R3	1,780.35	18,057.52
360.70	Cleanouts, 4" & Under	65,536.27	50-R3	9,366.08	56,170.19
360.71	Cleanouts, 6" - 8"	8,428.76	90-R3	756.44	7,672.32
	<b>Total Account 360</b>	<b>\$4,416,781.61</b>		<b>\$615,580.81</b>	<b>\$3,801,200.80</b>
361	Collection Sewers - Gravity:				
361.31	Plastic Pipe, 6" - 8"	\$1,154,004.37	80-R3	\$138,626.55	\$1,015,377.82
361.61	Manholes, 6" - 8"	152,007.83	80-R3	21,185.68	130,822.15
	<b>Total Account 361</b>	<b>\$1,306,012.20</b>		<b>\$159,812.23</b>	<b>\$1,146,199.97</b>
363.00	Services to Customers	\$2,612,251.87	40-R3	\$474,376.02	\$2,137,875.85
371.00	Pumping Equipment	2,581,432.07	25-R3	725,191.72	1,856,240.35
380.00	Treatment & Disposal Equipment	2,509,327.74	40-R3	460,318.00	2,049,009.74
393.00	Tools, Shop & Garage Equipment	14,000.00	15-R3	6,338.23	7,661.77
394.00	Laboratory Equipment	6,000.00	10-R3	3,841.63	2,158.37
	<b>Total Depreciable Plant</b>	<b>\$14,217,304.99</b>		<b>\$2,718,906.42</b>	<b>\$11,498,398.57</b>
	<b>Total Plant in Service</b>	<b>\$14,243,920.69</b>		<b>\$2,718,906.42</b>	<b>\$11,525,014.27</b>

**Little Washington Wastewater Company**  
**Clarion Area Authority - Sewer**  
**354.40 Structures & Impr. - Treatment & Disposal Plant**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 01, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	394,125.00	28.71	65.00	0.55834	220,055
2005	363,766.11	57.83	65.00	0.11026	40,110
<b>Total</b>	<b>757,891.11</b>				<b>260,164.52</b>

**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**355.00 Power Generation Equipment**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	13,608.39	0.60	25.00	0.97611	13,283
<b>Total</b>	<b>13,608.39</b>				<b>13,283.28</b>

**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**360.30 Collection Sewers Force - Plastic Mains, 4" & Under**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2005	3,683,681.48	42.85	50.00	0.14291	526,451
<b>Total</b>	<b>3,683,681.48</b>				<b>526,451.04</b>



**Little Washington Wastewater Company  
Clarion Area Authority - Sewer  
360.31 Collection Sewers Force - Plastic Mains, 6" - 8"**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 01, 2012  
Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2005	265,902.52	72.82	80.00	0.08975	23,863
<b>Total</b>	265,902.52				23,863.43

**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**360.60 Collection Sewers Force - Manholes, 4" & Under**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2005	373,394.71	42.85	50.00	0.14291	53,363
<b>Total</b>	<b>373,394.71</b>				<b>53,363.47</b>

**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**360.61 Collection Sewers Force - Manholes, 6" - 8"**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2005	19,837.87	72.82	80.00	0.08975	1,780
<b>Total</b>	19,837.87				1,780.35

**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**360.70 Collection Sewers Force - Cleanouts, 4" & Under**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2005	65,536.27	42.85	50.00	0.14291	9,366
<b>Total</b>	65,536.27				9,366.08

**Little Washington Wastewater Company  
Clarion Area Authority - Sewer  
360.71 Collection Sewers Force - Cleanouts, 6" - 8"**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 01, 2012  
Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2005	8,428.76	72.82	80.00	0.08975	756
<b>Total</b>	8,428.76				756.44

**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**361.31 Collection Sewers Gravity - Plastic, 6" - 8"**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	94,074.20	42.76	80.00	0.46552	43,794
2005	1,036,030.17	72.82	80.00	0.08975	92,979
2006	23,900.00	73.79	80.00	0.07758	1,854
<b>Total</b>	<b>1,154,004.37</b>				<b>138,626.55</b>

**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**361.61 Collection Sewers Gravity - Manholes, 6" - 8"**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0% Average Service Life: 80 Survivor Curve: r3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	20,074.96	42.76	80.00	0.46552	9,345
2005	131,932.87	72.82	80.00	0.08975	11,840
<b>Total</b>	<b>152,007.83</b>				<b>21,185.68</b>

**Little Washington Wastewater Company**  
**Clarion Area Authority - Sewer**  
**363.00 Services to Customers**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of October 01, 2012**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	688.17	7.92	40.00	0.80202	552
1973	409.60	8.39	40.00	0.79017	324
1974	471.04	8.89	40.00	0.77776	366
1975	503.84	9.41	40.00	0.76472	385
1976	532.48	9.95	40.00	0.75113	400
1977	569.36	10.52	40.00	0.73693	420
1978	593.96	11.11	40.00	0.72222	429
1979	655.40	11.72	40.00	0.70693	463
1980	716.84	12.35	40.00	0.69117	495
1981	942.10	13.01	40.00	0.67487	636
1982	1,013.80	13.67	40.00	0.65815	667
1983	1,059.90	14.36	40.00	0.64093	679
1984	1,100.85	15.07	40.00	0.62333	686
1985	1,131.55	15.79	40.00	0.60529	685
1986	1,157.15	16.52	40.00	0.58689	679
1987	1,177.65	17.28	40.00	0.56809	669
1988	1,254.45	18.04	40.00	0.54895	689
1989	1,321.00	18.82	40.00	0.52944	699
1990	1,341.50	19.62	40.00	0.50962	684
1991	1,392.70	20.42	40.00	0.48944	682
1992	1,449.00	21.24	40.00	0.46897	680
1993	1,495.10	22.07	40.00	0.44816	670
1994	1,536.05	22.92	40.00	0.42708	656
1995	1,571.90	23.77	40.00	0.40568	638
1996	1,643.60	24.64	40.00	0.38401	631
1997	1,653.80	25.52	40.00	0.36205	599
1998	1,689.65	26.41	40.00	0.33985	574
1999	1,710.15	27.30	40.00	0.31738	543



**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**363.00 Services to Customers**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2000	1,781.80	28.21	40.00	0.29468	525
2001	1,812.55	29.13	40.00	0.27173	493
2002	1,843.25	30.06	40.00	0.24859	458
2003	1,884.25	30.99	40.00	0.22523	424
2004	1,986.65	31.93	40.00	0.20170	401
2005	2,548,362.17	32.88	40.00	0.17797	453,543
2006	3,719.28	33.84	40.00	0.15410	573
2007	3,973.28	34.80	40.00	0.13007	517
2008	4,210.80	35.76	40.00	0.10592	446
2009	4,399.28	36.73	40.00	0.08164	359
2010	4,546.72	37.71	40.00	0.05726	260
2011	2,949.25	38.69	40.00	0.03277	97
<b>Total</b>	<b>2,612,251.87</b>				<b>474,376.02</b>

**Little Washington Wastewater Company  
Clarion Area Authority - Sewer  
371.00 Pumping Equipment**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 01, 2012  
Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2005	2,581,432.07	17.98	25.00	0.28093	725,192
<b>Total</b>	2,581,432.07				725,191.72

**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**380.00 Treatment & Disposal Equipment**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	49,057.84	7.92	40.00	0.80202	39,345
2005	2,284,919.90	32.88	40.00	0.17797	406,657
2009	175,350.00	36.73	40.00	0.08164	14,315
<b>Total</b>	<b>2,509,327.74</b>				<b>460,318.00</b>

**Little Washington Wastewater Company**

**Clarion Area Authority - Sewer**

**393.00 Tools, Shop & Garage Equipment**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of October 01, 2012**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 15 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2005	14,000.00	8.21	15.00	0.45273	6,338
<b>Total</b>	14,000.00				6,338.23

**Little Washington Wastewater Company  
Clarion Area Authority - Sewer  
394.00 Laboratory Equipment**

**Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of October 01, 2012  
Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 10 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2005	6,000.00	3.60	10.00	0.64027	3,842
<b>Total</b>	6,000.00				3,841.63

**Aqua Pennsylvania Wastewater, Inc.**  
**Sage Hill Development, L.P. Wastewater System Costs**  
**M92328**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
660	300000	PPE-Utility Plant in Service	1,117,353.63	
660	108000	AD-General		309,478.56
660	114000	U Plant Acq Adj		775,662.44
660	104000	Utility Plant Purchased/Sold		32,212.63
<b>Total</b>			<b>1,117,353.63</b>	<b>1,117,353.63</b>



March 23, 2018

**VIA FEDERAL EXPRESS**

Rosemary Chiavetta, Secretary  
Commonwealth of Pennsylvania  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Application of Little Washington Wastewater Company for approval to begin to offer, render, furnish, or supply wastewater service to the public in an additional portion of Thornbury Township, Chester County, Pennsylvania.

Docket No: A-230240F0034

Dear Secretary Chiavetta:

Pursuant to the Commission's Statement Policy relating to water and wastewater system acquisitions at 52 Pa. Code § 69.721(f), enclosed is a copy of the original plant-in-service valuation of the wastewater system assets acquired from Sage Hill Development, L.P. on May 1, 2010.

Should you have any questions regarding this filing, please contact me at (610) 645-1021.

Sincerely,

A handwritten signature in blue ink, appearing to read "Renee T. Marquis". The signature is fluid and cursive, with a large initial "R" and "M".

Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.

Enclosures  
cc: Certificate of Service

**BEFORE THE**  
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Aqua Pennsylvania Wastewater, Inc.

Docket No. A-230240F0034

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of the following document, the original cost plant-in-service valuation, in accordance with the requirements of 52 Pa. Code § 1.54 upon the person(s) and in the manner indicated below:

**VIA FEDERAL EXPRESS**

Christine Hoover, Esq.  
Office of Consumer Advocate  
555 Walnut Avenue  
Fifth Floor, Forum Place  
Harrisburg, PA 17101-1923

John R. Evans  
Office of Small Business Advocate  
Suite 202, Commerce Bldg.  
300 North Second Street  
Harrisburg, PA 17101

Richard Kanaskie, Director  
Bureau of Investigation and Enforcement  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Paul Diskin, Director  
Bureau of Technical Utility Services  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Larry Treaster  
Bureau of Audits  
Pennsylvania Public Utility Commission  
Three East Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Dated: March 23, 2018



Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.  
762 W. Lancaster Ave.  
Bryn Mawr, PA 19010  
610-645-1021  
[RTMarquis@AquaAmerica.com](mailto:RTMarquis@AquaAmerica.com)



Aqua Pennsylvania Wastewater, Inc.

Acquisition of the Wastewater System Assets of  
Sage Hill Development, L.P.

Original Cost of Wastewater Utility Plant and  
Related Accrued Depreciation  
As of May 31, 2016

762 W. Lancaster Avenue, Bryn Mawr, PA 19010

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Aqua Pennsylvania Wastewater, Inc.

Original Cost and Related Accrued Depreciation of  
Sage Hill Development, L.P.  
As of May 31, 2016

The Sage Hill Wastewater System was built to provide wastewater service to 22 proposed residential dwelling units in a portion of Thornbury Township, Chester County. The wastewater system consists of pump stations, collection mains, manholes, and miscellaneous equipment.

On March 29, 2007, Aqua Pennsylvania Wastewater, Inc., formerly Little Washington Wastewater Company, filed an Application for approval to begin to offer, render, furnish, or supply wastewater service to the public. An Order was entered on July 11, 2007 closing Docket No. A-230240F0034 and a Certificate of Public Convenience was issued with an effective date of July 11, 2007. The original cost of the assets of the water system are based on construction records and other information and data provided by the developer.

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Aqua Pennsylvania Wastewater, Inc.  
Acquisition of Sage Hill Development, L.P.  
Depreciated Original Cost

Account	Account Title	Description	In Service Date	Quantity	Original Cost	Depreciation Rate	Accumulated Depreciation	Depreciated Original Cost
<b>NON-DEPRECIABLE PLANT</b>								
353.40	Land and Land Rights	Land	7/31/2008	1	\$ 1.00		\$ -	\$ 1.00
	<b>TOTAL ACCOUNT 353.4</b>				<u>\$ 1.00</u>		<u>\$ -</u>	<u>\$ 1.00</u>
<b>TOTAL NON-DEPRECIABLE PLANT</b>					<u>\$ 1.00</u>		<u>\$ -</u>	<u>\$ 1.00</u>
<b>DEPRECIABLE PLANT</b>								
354.30	Structures and Improvements	Pump Station	7/31/2008	1	\$ 57,400.00	2.7400%	\$ 12,188.89	\$ 45,211.11
354.40	Structures and Improvements	Control Building	7/31/2008	1	191,680.00	2.7400%	40,703.25	150,976.75
	<b>TOTAL ACCOUNT 354</b>				<u>\$ 249,080.00</u>		<u>\$ 52,892.14</u>	<u>\$ 196,187.86</u>
355.00	Power Generation Equipment	Generator	7/31/2008	1	\$ 36,000.00	2.7400%	\$ 7,644.60	\$ 28,355.40
	<b>TOTAL ACCOUNT 355</b>				<u>\$ 36,000.00</u>		<u>\$ 7,644.60</u>	<u>\$ 28,355.40</u>
360.20	Collection Sewers - Force	Mains - 8" PVC	7/31/2008	2141	\$ 214,100.00	1.1700%	\$ 19,413.52	\$ 194,686.48
360.20	Collection Sewers - Force	Mains - 2" PVC	7/31/2008	431	21,550.00	1.1700%	1,954.05	19,595.95
360.20	Collection Sewers - Force	Manholes	7/31/2008	17	64,600.00	1.1700%	5,857.61	58,742.40
	<b>TOTAL ACCOUNT 360.2</b>				<u>\$ 300,250.00</u>		<u>\$ 27,225.17</u>	<u>\$ 273,024.83</u>
364.20	Flow Measuring Devices	Meters/Recorders	7/31/2008	1	\$ 6,000.00	6.9100%	\$ 3,213.15	\$ 2,786.85
	<b>TOTAL ACCOUNT 364.2</b>				<u>\$ 6,000.00</u>		<u>\$ 3,213.15</u>	<u>\$ 2,786.85</u>
380.40	Treatment and Disposal Equipment	Mobilization Treatment Plant	7/31/2008	1	\$ 10,000.00	5.5500%	\$ 4,301.25	\$ 5,698.75
380.40	Treatment and Disposal Equipment	Drip System	7/31/2008	1	157,000.00	5.5500%	67,529.63	89,470.38
380.40	Treatment and Disposal Equipment	Filters/Treatment Plant	7/31/2008	1	242,000.00	5.5500%	104,090.25	137,909.75
380.40	Treatment and Disposal Equipment	Storage Tanks	7/31/2008	1	59,000.00	5.5500%	25,377.38	33,622.63
380.40	Treatment and Disposal Equipment	Chemical Feed	7/31/2008	1	5,000.00	5.5500%	2,150.63	2,849.38
380.40	Treatment and Disposal Equipment	Yard Piping	7/31/2008	1	35,000.00	5.5500%	15,054.38	19,945.63
	<b>TOTAL ACCOUNT 380.4</b>				<u>\$ 508,000.00</u>		<u>\$ 218,503.50</u>	<u>\$ 289,496.50</u>
<b>TOTAL DEPRECIABLE PLANT</b>					<u>\$ 1,099,330.00</u>		<u>\$ 309,478.56</u>	<u>\$ 789,851.44</u>
<b>TOTAL UTILITY PLANT IN SERVICE</b>					<u>\$ 1,099,331.00</u>		<u>\$ 309,478.56</u>	<u>\$ 789,852.44</u>

**Aqua Pennsylvania Wastewater, Inc.**  
**Total Environmental Solutions, Inc. (TESI) - Treasure Lake Community Sewer System Costs**  
**M92575**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
893	104000	Utility Plant Purchased/Sold	1,635,528.80	
893	104000	Utility Plant Purchased/Sold		6,840,400.67
893	224020	Long-Term Debt-PENNVEST		1,635,528.80
893	108000	AD-General		5,013,795.77
893	114000	U Plant Acq Adj	1,328,026.69	
893	114000	U Plant Acq Adj		15,000.00
893	271308	CIAC-CASH NON REFUNDABLE BUILDER OR DEVELOPER DEPOSITS		2,368,245.24
893	272000	Accum Amort of CIAC	1,199,410.74	
900	104000	Utility Plant Purchased/Sold		853.87
893	300000	PPE-Utility Plant in Service	11,710,858.12	
<b>Total</b>			<b>15,873,824.35</b>	<b>15,873,824.35</b>

**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Total Environmental Solutions, Inc. (TESI) - Treasure Lake Community Sewer System**

Section 1327(a) Criteria	Satisfied (Y/N)	Explanation
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	Yes	<p>On March 1, 2013, Aqua Pennsylvania Wastewater, Inc. (“Aqua”) acquired the Wastewater System Assets (“Assets”) of the Total Environmental Solutions, Inc. (“Seller”). The Seller’s Assets were used and useful in providing wastewater service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	Yes	<p>Prior to Aqua’s acquisition of Seller’s Assets, Total Environmental Solutions, Inc. was providing wastewater service to 2,175 customers in the Treasure Lake Community in a portion of Sandy Township, Clearfield County, Pennsylvania.</p> <p>Reference: Commission Order Docket Nos. A-2012-2322416, A-2012-2322501, A-2012-2322448, and A-2012-2322509</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p> <p style="text-align: center;">(i)</p>	Yes	

<p>violation of statutory or regulatory requirements of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and</p>	<p>Yes</p>	

reasonable service;		
(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;	Yes	Aqua and the Seller entered into an <i>Asset Purchase Agreement</i> , which was negotiated at arm's length. On August 31, 2012, the parties filed a <i>Joint Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered December 20, 2012, at Docket Nos. A-2012-2322416, A-2012-2322501, A-2012-2322448, and A-2012-2322509, the PUC granted the approvals requested in the <i>Joint Application</i> .
(6) the actual purchase price is reasonable;	Yes	The total purchase price for Seller's Assets was \$11,800,000 for the combined water and wastewater system and was negotiated at arm's length. The Commission approved the company's application to acquire Total Environmental Solutions, Inc. (TESI) - Treasure Lake Community Sewer System and an original cost study was prepared to support the utility plant purchase.  Reference: Commission Order Docket Nos. A-2012-2322416, A-2012-2322501, A-2012-2322448, and A-2012-2322509
(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;	Yes	The Seller is not an affiliated interest of Aqua.
(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b>	Yes	The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.
(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.	Yes	The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.

# **AQUA PENNSYLVANIA INC.**

## ***Acquisition of the Wastewater System Assets of Little Washington Wastewater Company-Treasure Lake Sewer System***

**Original Cost of Sewer Utility Plant and  
Depreciation Reserve Calculations**

**at**

**February 28, 2013**

**Gary D. Shambaugh, Principal & Director  
David A. Sheffer, Senior Associate  
Selby P. Jones, Associate**

**AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011  
[www.ausinc.com](http://www.ausinc.com)**

**September 2013**







GARY D. SHAMBAUGH  
Principal & Director

AUS CONSULTANTS

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September 17, 2013

Ms. Meghan Kreszwick  
Manager of Rates, PA & NJ  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010

RE: Acquisition of the Wastewater System  
Assets of Little Washington Wastewater  
Co.-Treasure Lake Sewer System

Dear Ms. Kreszwick:

In accordance with your request, we have prepared an inventory of the wastewater utility plant of the Little Washington Wastewater Company-Treasure Lake Sewer System as of February 28, 2013.

The inventory was prepared to conform with the Uniform System of Accounts for Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of Treasure Lake Sewer System was determined from a detailed analysis of the books and records of the sewer system and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service (NET)	\$9,302,100	\$3,814,385

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2, and the depreciation calculations are contained in Section 3.

Respectfully submitted,  
AUS Consultants

By: Gary D. Shambaugh

# AQUA PENNSYLVANIA INC.

## Acquisition of Little Washington-Treasure Lake Wastewater System

### Table of Contents

	<u>Page</u> <u>No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Borough's Facilities	1-1
Overview of the Study Techniques	1-2
Explanation of the Study	1-2
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Contributions in Aid of Construction	1-5
Customer Advances for Construction	1-5
Depreciation Reserve	1-5
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service at February 28, 2013	2-1
<b><u>Non-Depreciable Plant</u></b>	
353.30 Land & Land Rights – System Pumping Plant	2-3
393.40 Land – Treatments & Disposal	2-4
<b><u>Depreciable Plant</u></b>	
354.30 S&I - System Pumping Plant	2-5
354.40 S&I – Treatment & Disposal Plant	2-6
354.70 S&I – General Plant	2-7
360.00 Collection Sewers – Force	2-8
361.00 Collection Sewers – Gravity	2-10

# AQUA PENNSYLVANIA INC.

## Acquisition of Little Washington-Treasure Lake Wastewater System

### Table of Contents

	<u>Page</u> <u>No.</u>
<b><u>SECTION 2 (continued)</u></b>	
363.00 Services	2-11
364.00 Flow Measuring Devices	2-12
371.00 Pumping Equipment	2-13
380.40 Treatment & Disposal Equipment	2-14
381.00 Plant Sewers	2-15
382.00 Outfall Sewer Lines	2-16
389.00 Other Plant & Miscellaneous Equipment	2-17
390.00 Office Equipment & Furniture	2-18
391.00 Transportation Equipment	2-19
393.00 Tools, Shop & Garage Equipment	2-20
394.00 Laboratory Equipment	2-21
395.00 Power Operated Equipment	2-22
 <b><u>Contribution in Aid of Construction</u></b>	
354.30 Structures & Improvements – System Pumping Plant	2-23
354.40 Structures & Improvements – Treatment & Disposal Plant	2-24
354.70 Structures & Improvements – General Plant	2-25
360.00 Collection Sewers – Force	2-26
361.00 Collection Sewers – Gravity	2-28
363.00 Services to Customers	2-29
380.40 Treatment & Disposal Equipment	2-30
381.00 Plant Sewers	2-31
382.00 Outfall Sewer Lines	2-32
390.00 Office Furniture & Equipment	2-33
393.00 Tools, Shop & Garage Equipment	2-34
394.00 Laboratory Equipment	2-35

**AQUA PENNSYLVANIA INC.**

**Acquisition of Little Washington-Treasure Lake Wastewater System**

Table of Contents

	Page <u>No.</u>
<b><u>SECTION 3</u></b>	
<u>Depreciated Original Cost</u>	
<hr/>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of May 4, 2012	3-1
Plant in Service	3-3
Contributions in Aid of Construction	3-38

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# **SECTION 1**

## **AQUA PENNSYLVANIA, INC.**

### **Acquisition of the Wastewater Assets of Little Washington Wastewater Co.-Treasure Lake Sewer System**

#### **Executive Summary**

#### **BACKGROUND**

The Little Washington Wastewater Co.-Treasure Lake Sewer System ("Treasure Lake") provides service to the Treasure Lake community serving approximately 2,152 customers located in Dubois, Pennsylvania. Total Environmental Solutions, Inc. ("TESI") of Baton Rouge, Louisiana was the latest entity to own the sewer facilities prior to the acquisition by the Aqua Pennsylvania.

Aqua Pennsylvania and Treasure Lake filed a joint application requesting the Commission to approve the sale of the wastewater system, grant Aqua Pennsylvania the right to furnish service in the Treasure Lake community and authorize TESI to abandon service.

Aqua Pennsylvania has retained AUS Consultants to prepare a study of the original cost of the fixed capital assets acquired and theoretical depreciation calculations as of February 28, 2013. The results of this study are set forth herein.

#### **OVERVIEW OF TREASURE LAKE FACILITIES**

The Treasure Lake assets to be acquired consist of fixed capital plant for the pressurized sewage collection lines, other sewer facilities and fixed capital assets. The collection lines are installed in front or adjacent to all lots. Treasure Lake is responsible for the treatment of all wastewater flows, at its two treatment plants. Treasure Lake's collection system consists of approximately 353,587 linear feet of pipe, manholes, cleanouts and service laterals.

## **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of Treasure Lake assets was conducted in two (2) phases. First, thoroughly researching the prior owners' files to obtain all necessary purchase orders and invoices available as related to the a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by Treasure Lake.

Second, the original cost of the inventoried property was determined based on a review of Treasure Lake books of account, construction records, prior completed original cost studies and other sources. For the most part, Treasure Lake records provided reasonable data as to the original cost of its plant in service. In addition, AUS Consultants calculated the theoretical accrued depreciation calculations based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at February 28, 2013.

A complete discussion of the methodologies employed in the original cost study is set forth in the sections of this report that follows.

## **EXPLANATION OF THE STUDY**

### **Utility Plant Inventory**

A comprehensive inventory of Treasure Lake plant in service as of February 28, 2013 was performed. One of the principal source documents for the inventory was the as built maps of Treasure Lake's sewer system. The maps were particularly helpful in locating and documenting the sizes, types, and lengths of the pipelines and the sizes, types, and locations of accessories, such as manholes and cleanouts. Significant components of the inventory are discussed below. A few discrepancies were found in



some accounts and were adjusted when the inventory was completed and cost records were obtained from Treasure Lake files.

### **Mass Property**

For purposes of this study, mass property consists of utility plant recorded in Account 360 & 361 (Collection Sewers), Account 363 (Services), Account 381 (Plant Sewers) and Account 382 (Outfall Sewer Lines).

For Account 360 & 361, footages of pipe, by size and type, were determined by reviewing the as-built maps and were verified by a physical check of the collection system in place. This same procedure was utilized for manholes and cleanouts.

### **Non-Mass Property**

Detailed results of the plant inventory are set forth in Section 2 of this report by the fixed capital accounts prescribed by the National Association of Regulatory Utility Commissioners.

### **Utility Plant In Service**

The original cost of all inventoried property units is properly recorded in the following accounts:

Acct.  
No.

Account Title

#### **Non-Depreciable Plant**

353.30 Land & Land rights – System Pumping Plant  
353.40 Land – Treatment & Disposal

#### **Depreciable Plant**

354.30 Structures & Improvements – System Pumping Plant  
354.40 Structures & Improvements – Treatment & Disposal Plant  
354.70 Structures & Improvements – General Plant  
360.00 Collection Sewers - Force  
361.00 Collection Sewers - Gravity

363.00	Services
364.00	Flow Measuring Devices
371.00	Pumping Equipment
380.40	Treatment & Disposal Equipment
381.00	Plant Sewers
382.00	Outfall Sewer Lines
389.00	Other Plant & Miscellaneous Equipment
390.00	Office Equipment
391.00	Transportation Equipment
393.00	Tools, Shop & Garage Equipment
394.00	Laboratory Equipment
395.00	Power Operated Equipment

### **ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the original cost of Treasure Lake plant in service by fixed capital account and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of Treasure Lake's property by account. In large measure, these data consisted of records and information compiled by Treasure Lake as to the construction cost and approximate dates of installation. These records were augmented by information obtained from the field inventory.

The original cost determination for Account 361 (Collection Sewers) was determinable from available records for Treasure Lake collection system and other source documents. Treasure Lake has had the addition of the West Side Wastewater Plant to the collection system since 1996, under previous owners.

As previously explained, the physical inventory established the total footage of pipe by size and type and the total number of units of accessories. Summaries of construction projects maintained by Treasure Lake contained some detail as to the footage of pipe and numbers of accessories. The information contained in the

construction summaries was used to develop the footage of pipe, units of accessories, and the resultant unit price for the respective fixed capital asset.

The original cost values at February 28, 2013 for Treasure Lake collection sewers as established by the original cost study, total \$4,828,369.

### **SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of Treasure Lake's sewer utility plant in service is not less than \$11,670,345, as summarized by plant account in Section 2 (p. 2-1).

### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all documents that were available. Based on this record research, the sewer system did receive CIAC. The calculated CIAC amounts to \$2,368,245. The results of those calculations and detailed supporting schedules are included in Section 3 of this report.

### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all documents that were available. Based on this record research, the sewer system fixed capital construction was not funded by CAC.

### **DEPRECIATION RESERVE**

AUS Consultants prepared a theoretical calculated depreciation reserve of the utility plant in service at February 28, 2013. The calculated accrued depreciation reserve amounts to \$3,710,443 at February 28, 2013.

The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and detailed supporting documentation are included in Section 3 of this report.

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## **SECTION 2**

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

Original Cost at February 28, 2013

<u>Account No.</u>	<u>Account Description</u>	<u>Totals</u>
<b><u>Non-Depreciable Plant</u></b>		
353.30	Land & Land Rights - System Pumping Plant	\$ 15,991.00
353.40	Land - Treatments & Disposal	37,416.00
	<b>Total Non-Depreciable Plant</b>	<b>\$ 53,407.00</b>
<b><u>Depreciable Plant</u></b>		
354.30	Structures & Improvements - System Pumping Plant	\$ 520,236.56
354.40	Structures & Improvements - Treatment & Disposal Plant	437,622.00
354.70	Structures & Improvements - General Plant	18,500.00
360.00	Collection Sewers - Force	4,675,386.93
361.00	Collection Sewers - Gravity	152,981.90
363.00	Services	2,047,186.29
364.00	Flow Measuring Devices	4,063.00
371.00	Pumping Equipment	132,722.00
380.40	Treatment & Disposal Equipment	3,324,681.00
381.00	Plant Sewers	5,163.10
382.00	Outfall Sewer Lines	20,759.10
389.00	Other Plant & Miscellaneous Equipment	3,878.00
390.00	Office Furniture & Equipment	3,111.00
391.00	Transportation Equipment	113,758.00
393.00	Tools & Work Equipment	8,758.00
394.00	Laboratory Equipment	5,061.00
395.00	Power Operated Equipment	143,070.00
	<b>Total Depreciable Plant</b>	<b>\$ 11,616,937.88</b>
	<b>Total Plant in Service</b>	<b>\$ 11,670,344.88</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

Original Cost at February 28, 2013

<u>Account No.</u>	<u>Account Description</u>	<u>Totals</u>
<b><u>Deduct: Contributions in Aid of Construction (CIAC):</u></b>		
354.30	Structures & Improvements - System Pumping Plant	\$111,164.22
354.40	Structures & Improvements - Treatment & Disposal Plant	56,826.47
354.70	Structures & Improvements - General Plant	14,636.81
360.00	Collection Sewer - Force	\$1,790,121.20
361.00	Collection Sewer - Gravity	82,048.22
363.00	Services	\$74,643.02
380.40	Treatment & Disposal Equipment	229,645.26
381.00	Plant Sewers	1,536.55
382.00	Outfall Sewer Lines	1,536.55
390.00	Office Furniture & Equipment	274.98
393.00	Tools & Work Equipment	4,449.14
394.00	Laboratory Equipment	1,362.82
	<b>Total Contributions in Aid of Construction (CIAC)</b>	<b>\$2,368,245.24</b>
	<b>Total Plant in Service (Net)</b>	<b>\$9,302,099.64</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013**

**Account 353.30 - Land & Land Rights - System Pumping Plant**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<u>Land:</u>				
Pump Station Land - Lot #15, Section 7	1983	Lot		\$ 8,495.00
<u>Land Rights:</u>				
Land Rights	1972	Lot		\$ 1.00
Land Rights - Access to Lift Station #2500	1983	Ea.	1	7495.00
Total Account 353.30				<u>\$ 15,991.00</u>



**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 353.40 - Land - Treatments & Disposal**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Treatment Land	1972	Acres	5.12	\$ 12,000.00
Treatment Land	1990	Acres	5	25,000.00
Treatment Land	2008	Lot		416.00
<b>Total Account 353.40</b>				<b><u><u>\$ 37,416.00</u></u></b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

Original Cost at February 28, 2013

Account 354.30 - Structures & Improvements - System Pumping Plant

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Harris Cove Lift Service #2100	1972	Lot		\$ 28,000.00
Mayard Cove Lift Station #2200	1972	Lot		11,195.96
Mayard Cove Lift Station #2200	1973	Lot		16,804.04
Bilowich Lift Station #2300	1973	Lot		28,750.00
Lift Station #2700	1973	Lot		22,477.56
Red Sail Road Lift Station #2500	1980	Lot		40,000.00
Shroud Cay Lift Station #2400	1981	Lot		35,744.00
Carribean Lift Station #2600	1981	Lot		45,000.00
Pumping Addition	2004	Lot		11,712.00
Pumping Addition	2005	Lot		20,757.00
Pumping Addition	2006	Lot		43,470.00
Pumping Addition	2009	Lot		10,110.00
<b><u>West Plant:</u></b>				
Pump Station	2003	Lot		206,216.00
<b>Total Account 354.30</b>				<b>\$ 520,236.56</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

Original Cost at February 28, 2013

Account 354.40 - Structures & Improvements - Treatment & Disposal Plant

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b>Building:</b>				
Concrete block, 42.5' x 44' on slab, asphalt roof	1972	Lot		\$ 42,000.00
Chain link fence Addition	1973	Lot		4,320.00
	1980	Lot		<u>13,000.00</u>
<b>Total Filter Building</b>				<b>\$ 59,320.00</b>
<b>Clarifier Building:</b>				
Building on slab	1973	Lot		\$ 22,500.00
<b>Sludge Vacuum Building:</b>				
Building	1980	Lot		\$ 10,000.00
Treatment Addition	2004	Lot		\$ 35,562.00
Treatment Addition	2006	Lot		25,026.00
Treatment Addition	2007	Lot		5,732.00
Treatment Addition	2008	Lot		3,516.00
Treatment Addition	2010	Lot		2,761.00
<b><u>West Plant:</u></b>				
Rotomat Building	2003	Lot		\$ 99,631.00
Control Building	2003	Lot		173,574.00
<b>Total Account 354.40</b>				<b><u>\$ 437,622.00</u></b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 354.70 - Structures & Improvements - General Plant**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b>Office Building:</b> Concrete block, 12.16' x 20.16' on slab, asphalt roof	1982	Lot		\$ 5,500.00
<b>Storage Building:</b> Wood construction, 24' x 24' on slab, asphalt roof	1983	Lot		13,000.00
<b>Total Account 354.70</b>				<u>\$ 18,500.00</u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

Original Cost at February 28, 2013  
Account 360.00 - Collection Sewers - Force

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Cast Iron &amp; Ductile Iron, 6" - 8"</u></b>				
Cast Iron Pipe, 6"	1972	Ft.	1212	\$ 11,408.56
Cast Iron Pipe, 8"	1973	Ft.	1740	22,078.86
Ductile Iron Pipe, 8"	1977	Ft.	80	5,600.00
Ductile Iron Pipe, 8"	1982	Ft.	181	1,578.86
<b>Total Cast Iron &amp; Ductile Iron, 6" - 8"</b>				<b>\$ 40,666.28</b>
<b><u>Cast Iron &amp; Ductile, 16" &amp; Over</u></b>				
Cast Iron Pipe, 16"	1972	Ft.	41	\$ 1,130.91
<b>Total Cast Iron &amp; Ductile Iron Pipe</b>				<b>\$ 41,797.19</b>
<b><u>Asbestos Cement Pipe</u></b>				
Asbestos Cement Pipe, 18"	1973	Ft.	15952	\$242,296.60
<b>Total Asbestos Cement Pipe</b>				<b>\$ 242,296.60</b>
<b><u>ABS, 6" - 8"</u></b>				
ABS Pipe, 8"	1972	Ft.	22487	\$ 185,086.38
ABS Pipe, 6"	1973	Ft.	45	413.51
ABS Pipe, 8"	1973	Ft.	5970	54,853.74
ABS Pipe, 8"	1977	Ft.	2680	37,563.91
ABS Pipe, 6"	1982	Ft.	290	775.17
<b>Total ABS, 6" - 8"</b>				<b>\$ 278,692.71</b>
<b><u>ABS, 10" - 15"</u></b>				
ABS Pipe, 15"	1970	Ft.	400	\$ 6,480.00
ABS Pipe, 10"	1972	Ft.	10769	102,725.49
ABS Pipe, 12"	1972	Ft.	6894	70,415.32
ABS Pipe, 15"	1972	Ft.	23501	269,794.92
ABS Pipe, 10"	1973	Ft.	1639	16,304.77
ABS Pipe, 12"	1973	Ft.	6717	71,798.01
ABS Pipe, 15"	1973	Ft.	4922	67,377.26
<b>Total ABS, 10" - 15"</b>				<b>\$ 604,895.77</b>
<b>Total ABS, Pipe</b>				<b>\$ 883,588.48</b>
<b><u>Plastic, 4" &amp; Under</u></b>				
PVC, Low Pressure Pipe, 4"	1980	Ft.	428	\$ 3,867.84
PVC, Low Pressure Pipe, 4"	1981	Ft.	3624	23,845.92
PVC, Low Pressure Pipe, 2"	1982	Ft.	850	467.50
PVC, Low Pressure Pipe, 2 1/2"	1982	Ft.	2125	1,402.50
PVC, Low Pressure Pipe, 3"	1982	Ft.	3170	2,536.00
PVC, Low Pressure Pipe, 4"	1982	Ft.	2470	2,667.60
Plastic, 4" & Under	1984	Ft.	26813	190,104.17
Plastic, 4" & Under	1985	Ft.	10164	73,282.44
Plastic, 4" & Under	1987	Ft.	6663	50,705.43
<b>Total Plastic, 4" &amp; Under</b>				<b>\$ 348,879.40</b>
<b><u>Plastic, 6" - 8"</u></b>				
PVC Pipe, 8"	1970	Ft.	830	\$ 7,420.20
PVC Pipe, 8"	1980	Ft.	62072	638,782.95
PVC Pipe, 8"	1981	Ft.	88612	1,069,724.06
PVC Pipe, 8"	1982	Ft.	22360	281,805.00
PVC Pipe, 8"	1984	Ft.	5813	51,561.31
Plastic Pipe, 6" - 8"	2004	Lot		580.00
Plastic Pipe, 6" - 8"	2006	Lot		247.00
<b>Total Plastic, 6" - 8"</b>				<b>\$ 2,050,120.52</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

Original Cost at February 28, 2013  
Account 360.00 - Collection Sewers - Force

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Plastic, 10" - 14"</u></b>				
PVC Pipe, 10"	1981	Ft.	6015	\$ 74,778.00
Plastic Pipe 10" - 14"	2008			1,760.00
Plastic Pipe 10" - 14"	2009			610.00
<b>Total Plastic Pipe, 10"-14"</b>				<b>\$ 77,148.00</b>
<b>Total Plastic Pipe</b>				<b>\$ 2,476,147.92</b>
<b><u>Force Main Piping</u></b>				
<b><u>West Plant</u></b>				
Force Main Piping	2003	Lot		\$ 113,895.00
<b>Total West Plant Force Mains, Pipe</b>				<b>\$ 113,895.00</b>
<b><u>Valves, 4" &amp; Under</u></b>				
Gate Valves, 2"	1982	Ea.	4	\$ 344.80
Gate Valves, 2"	1982	Ea.	4	423.04
Gate Valves, 2"	1982	Ea.	12	1,479.60
Gate Valves, 2"	1982	Ea.	13	2,504.45
Valves, 4" & Under	1984	Ea.	62	9,460.58
Valves, 4" & Under	1985	Ea.	32	5,067.84
Valves, 4" & Under	1987	Ea.	27	4,432.05
<b>Total Valves 4" &amp; Under</b>				<b>\$ 23,712.36</b>
<b><u>Valves, 6" - 8"</u></b>				
Valves, 6" - 8"	1984	Ea.	12	\$ 2,288.88
<b>Total Valves</b>				<b>\$ 26,001.24</b>
<b><u>Air Release Valves</u></b>				
Air Release Valves	1981	Ea.	4	\$ 4,000.00
<b>Total Air Release Valves</b>				<b>\$ 4,000.00</b>
<b><u>Manholes</u></b>				
Manholes	1970	Ea.	10	\$ 5,217.60
Manholes	1972	Ea.	264	99,026.40
Manholes	1973	Ea.	153	57,846.24
Manholes	1977	Ea.	39	18,070.26
Manholes	1980	Ea.	297	198,152.46
Manholes	1981	Ea.	454	390,539.88
Manholes	1982	Ea.	111	93,171.88
Manholes	2008	Lot		618.00
<b>Total Manholes</b>				<b>\$ 862,642.72</b>
<b><u>Cleanouts</u></b>				
Cleanouts	1982	Ea.	37	\$ 3,035.85
Cleanouts	1984	Ea.	138	11,997.72
Cleanouts	1985	Ea.	64	5,775.36
Cleanouts	1987	Ea.	45	4,208.85
<b>Total Cleanouts</b>				<b>\$ 25,017.78</b>
<b>Total Account 360.00</b>				<b>\$ 4,675,386.93</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

Original Cost at February 28, 2013  
Account 361.00 - Collection Sewers - Gravity

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Cast Iron Pipe, 16"	1972	Ft.	16	\$ 731.14
<b>Total Cast Iron Pipe, 16"</b>				<b>\$ 731.14</b>
<b><u>ABS Pipe 6" - 8"</u></b>				
ABS Pipe, 6" - 8"	2010	Lot		\$ 443.00
ABS Pipe, 8"	1972	Ft.	20	526.88
ABS Pipe, 8"	1973	Ft.	82	1,479.31
ABS Pipe, 8"	1977	Ft.	20	392.88
<b>Total ABS Pipe, 6" - 8"</b>				<b>\$ 2,842.07</b>
<b><u>ABS Pipe, 12" - 15"</u></b>				
ABS Pipe, 12"	1973	Ft.	673	\$ 13,225.12
ABS Pipe, 15"	1972	Ft.	1270	37,583.11
ABS Pipe, 15"	1973	Ft.	2253	51,032.70
<b>Total ABS Pipe 12" - 15"</b>				<b>\$ 101,840.93</b>
<b><u>ABS Pipe, 18"</u></b>				
ABS Pipe, 18"	1973	Ft.	1224	\$ 29,563.00
<b>Total ABS Pipe, 18"</b>				<b>\$ 29,563.00</b>
<b><u>Plastic Pipe 10"-14"</u></b>				
Plastic Pipe 10"-14"	2008	Lot		\$ 1,760.00
Plastic Pipe 10"-14"	2009	Lot		610.00
<b>Total Plastic Pipe 10"-14"</b>				<b>\$ 2,370.00</b>
<b><u>Reinforced Concrete Pipe, 21"</u></b>				
Reinforced Concrete Pipe, 21"	1970	Ft.	500	\$ 13,338.75
<b>Total Reinforced Concrete Pipe, 21"</b>				<b>\$ 13,338.75</b>
<b><u>Stubs &amp; Caps, 8" - 10"</u></b>				
Stubs & Caps, 8"	1972	Ea.	29	\$ 961.93
Stubs & Caps, 8"	1973	Ea.	22	1,290.08
Stubs & Caps, 10"	1972	Ea.	1	44.00
<b>Total Stubs &amp; Caps, 8" - 10"</b>				<b>\$ 2,296.01</b>
<b>Total Account 361.00</b>				<b>\$ 152,981.90</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 363.00 - Services to Customers**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Services, 4"	1972	Ea.	1	\$ 50.00
Services, 4"	1974	Ea.	7	2,574.74
Services, 4"	1975	Ea.	5	1,979.65
Services, 4"	1976	Ea.	4	1,664.04
Services, 4"	1977	Ea.	4	1,786.08
Services, 4"	1978	Ea.	4	1,856.76
Services, 4"	1979	Ea.	5	2,561.90
Services, 4"	1980	Ea.	7	3,923.92
Services, 4"	1981	Ea.	3	1,773.24
Services, 4"	1982	Ea.	2	1,270.50
Services, 4"	1983	Ea.	7	4,660.39
Services, 4"	1984	Ea.	12	8,403.60
Services, 4"	1985	Ea.	20	14,182.80
Services, 4"	1987	Ea.	6	4,428.30
<b>Total Services, 4"</b>				<b>\$ 51,115.92</b>
Services, 6"	1974	Ea.	2	\$ 771.14
Services, 6"	1975	Ea.	2	830.08
Services, 6"	1976	Ea.	1	436.08
Services, 6"	1977	Ea.	1	468.07
Services, 6"	1978	Ea.	1	486.60
Services, 6"	1979	Ea.	1	537.11
Services, 6"	1980	Ea.	1	587.62
Services, 6"	1981	Ea.	1	619.61
Services, 6"	1982	Ea.	1	665.91
Services, 6"	1983	Ea.	2	1,395.80
<b>Total Services, 6"</b>				<b>\$ 6,798.02</b>
Double Services, 6"	1973	Ea.	4	\$ 1,533.04
Double Services, 6"	1974	Ea.	253	111,023.99
Double Services, 6"	1975	Ea.	236	111,476.96
Double Services, 6"	1976	Ea.	153	75,936.96
Double Services, 6"	1977	Ea.	131	69,787.63
Double Services, 6"	1978	Ea.	149	82,516.20
Double Services, 6"	1979	Ea.	157	95,972.53
Double Services, 6"	1980	Ea.	223	149,137.94
Double Services, 6"	1981	Ea.	140	98,726.60
Double Services, 6"	1982	Ea.	114	86,399.46
Double Services, 6"	1983	Ea.	267	212,078.10
Double Services, 6"	1984	Ea.	681	568,975.50
Double Services, 6"	1985	Ea.	184	155,671.36
Double Services, 6"	1987	Ea.	136	119,752.08
<b>Total Double Services</b>				<b>\$ 1,938,988.35</b>
Additions	2004	Lot		\$ 24,682.00
Additions	2005	Lot		4,649.00
Additions	2006	Lot		9,678.00
Additions	2007	Lot		1,412.00
Additions	2008	Lot		9,623.00
Additions	2009	Lot		240.00
<b>Total Additions</b>				<b>\$ 50,284.00</b>
<b>Total Account 363.00</b>				<b>\$ 2,047,186.29</b>



**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

Original Cost at February 28, 2013  
Account 364.00 - Flow Measuring Devices

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Flow Measuring Devices	2007	Lot		\$ 326.00
Flow Measuring Devices	2008	Lot		1,803.00
Flow Measuring Devices	2009	Lot		1,087.00
Flow Measuring Devices	2010	Lot		847.00
Total Account 364.00				<u>\$ 4,063.00</u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 371.00 - Pumping Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Pumping Equipment	2007	Lot		\$ 11,968.00
Pumping Equipment	2008	Lot		30,311.00
Pumping Equipment	2009	Lot		45,657.00
Pumping Equipment	2010	Lot		44,786.00
Total Account 371.00				<u>\$ 132,722.00</u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

Original Cost at February 28, 2013  
Account 380.40 - Treatment & Disposal Equipment

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Wet Well - Grinder	1973	Ea.	1	\$ 4,500.00
Aerators - Blowers & Motors	1973	Ea.	4	6,000.00
Aerators - Basins Steel ( 10x10x28) w/Slab Foundations(12x30x1)	1973	Ea.	6	97,452.00
Sludge Holding Tanks (6x10x15)w/Slab Foundations (8x17x1)	1973	Ea.	2	10,670.00
Clarifier - Pumps & Motors	1973	Ea.	2	4,000.00
Clarifier - Basins & Sweeps (12x20 dia.)	1973	Ea.	2	40,505.00
Dosings Tanks - Basins (10x10x28) x/Slab Foundations (12x30x1)	1973	Ea.	2	32,484.00
<b><u>Backwash &amp; Chlorine Contact:</u></b>				
Chlorine Equipment	1973	Lot		\$ 2,500.00
Basins (0x10x28) w/Slab Foundations (12x30x1)	1973	Ea.	2	32,484.00
<b><u>Filters:</u></b>				
Filters	1973	Ea.	2	\$ 38,233.00
Pumps & Motors	1973	Ea.	4	6,000.00
Electric Controls	1973	Ea.	2	4,000.00
Electric Generator, Catalog #3160, S/N 93M946	1973	Ea.	1	18,000.00
Wet Well - Communicator	1980	Ea.	1	\$ 5,500.00
Aerators - Blowers & Motors 20hp	1980	Ea.	3	18,000.00
Aerators - Basins (30x75x12)	1980	Ea.	3	269,571.00
Clarifier - Cover & Basin	1980	Lot		66,475.00
Sludge Holding Tank- Basin (30x12x12)	1980	Ea.	1	33,186.00
Sludge Vacuum - Basin (12x12x4)	1980	Ea.	1	38,311.00
Vacuum Equipment - Pump	1980	Ea.	2	7,000.00
Filter	1980	Ea.	1	35,780.00
Air Compressor	1980	Ea.	1	1,000.00
Equipment Addition	2004	Lot		\$ 12,460.00
Equipment Addition	2005	Lot		1,516.00
Equipment Addition	2007	Lot		13,958.00
Equipment Addition	2008	Lot		12,134.00
Equipment Addition	2009	Lot		2,976.00
Equipment Addition	2010	Lot		3,641.00
<b><u>West Plant:</u></b>				
Wastewater Treatment Tanks	2003	Lot		\$ 510,211.00
Final Clarifier	2003	Lot		182,648.00
Post-Aeration Tank	2003	Lot		67,863.00
Mechanical Piping	2003	Lot		388,179.00
Mechanical Equipment Installation	2003	Lot		69,836.00
Electrical Installation	2003	Lot		290,998.00
Instrumentation Installation	2003	Lot		73,108.00
Blowers	2003	Lot		46,929.00
Final Clarifier	2003	Lot		156,332.00
Rotamat	2003	Lot		85,976.00
UV	2003	Lot		72,936.00
Venturi	2003	Lot		11,750.00
Aeration Diffusers	2003	Lot		45,567.00
Miscellaneous	2003	Lot		113,653.00
Electrical	2003	Lot		128,591.00
Field Instruments	2003	Lot		175,892.00
Control Panel	2003	Lot		72,836.00
Control Panel Startup	2003	Lot		13,040.00
<b>Total Account 380.40</b>				<b>\$ 3,324,681.00</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013**

**Account 381.00 - Plant Sewers**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Influent Pipe	1973	Lot		\$ 5,163.10
Total Account 381.00				<u><u>\$ 5,163.10</u></u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 382.00 - Outfall Sewer Lines**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Effluent Pipe	1973	Lot		\$ 5,163.10
<hr/>				
<b><u>West Plant:</u></b>				
Effluent Pipe	2003	Lot		\$ 15,596.00
Total Account 382.00				<u><u>\$ 20,759.10</u></u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013**

**Account 389.00 - Other Plant & Miscellaneous Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Treatment & Distribution Equipment	2007	Lot		\$ 1,631.00
Treatment & Distribution Equipment	2008	Lot		1,019.00
Treatment & Distribution Equipment	2009	Lot		822.00
Treatment & Distribution Equipment	2010	Lot		406.00
<b>Total Account 389.00</b>				<b><u><u>\$ 3,878.00</u></u></b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 390.00 - Office Furniture& Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Office Furniture	2006	Lot		\$ 57.00
Office Furniture	2007	Lot		364.00
Office Furniture	2010	Lot		40.00
Office Equipment	2007	Lot		\$ 2,650.00
Total Account 390.00				<u>\$ 3,111.00</u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 391.00 - Transportation Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Ford F250 4x4	2005	Ea.	1	\$ 28,723.00
Dodge 1500 4x4	2006	Ea.	1	25,745.00
Ford Ranger	2006	Ea.	1	9,574.00
Sterling Dump Truck	2008	Ea.	1	49,716.00
<b>Total Account 391.00</b>				<b><u><u>\$ 113,758.00</u></u></b>



**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 393.00 - Tools, Shop, & Garage Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Addition	2004	Lot		\$ 828.00
Addition	2005	Lot		2,697.00
Addition	2006	Lot		934.00
Addition	2007	Lot		3,097.00
Addition	2008	Lot		923.00
Addition	2009	Lot		279.00
<b>Total Account 393.00</b>				<b>\$ 8,758.00</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 394.00 - Laboratory Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Laboratory Equipment	2004	Lot		\$ 714.00
Laboratory Equipment	2006	Lot		1,904.00
Laboratory Equipment	2007	Lot		898.00
Laboratory Equipment	2008	Lot		290.00
Laboratory Equipment	2009	Lot		1,080.00
Laboratory Equipment	2010	Lot		175.00
<b>Total Account 394.00</b>				<b><u>\$ 5,061.00</u></b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Original Cost at February 28, 2013  
Account 395.00 - Power Operated Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Power Operated Equipment	2000	Lot		\$ 30,076.00
Power Operated Equipment	2004	Lot		2,984.00
50% John Deer 310SG T0310SG954805	2005	Lot		30,737.00
Power Operated Equipment	2007	Lot		64,613.00
Power Operated Equipment	2008	Lot		4,550.00
Power Operated Equipment	2009	Lot		6,343.00
Power Operated Equipment	2010	Lot		3,767.00
<b>Total Account 395.00</b>				<b>\$ 143,070.00</b>



**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction**

**Original Cost at February 28, 2013**

**Account 354.30 - Structures & Improvements - System Pumping Plant**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Pumping Plant - Harris Cove Lift Station #2100	1972	Lot		\$ 28,000.00
Pumping Plant - Mayard Cove Lift Station #2200	1972	Lot		11,195.96
Pumping Plant - Mayard Cove Lift Station #2200	1973	Lot		5,000.92
Pumping Plant - Bilowich Lift Station #2300	1973	Lot		8,556.07
Pumping Plant - Red Sail Road Lift Station #2500	1980	Lot		11,904.10
Pumping Plant - Shroud Cay Lift Station #2400	1981	Lot		10,637.50
Pumping Plant - Lift #2700	1981	Lot		22,477.56
Pumping Plant - Carribean Lift Station #2600	1981	Lot		<u>13,392.11</u>
<b>Total Account 354.30</b>				<b><u><u>\$ 111,164.22</u></u></b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction**

Original Cost at February 28, 2013

Account 354.40 - Structures & Improvements - Treatment & Disposal Plant

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Treatment & Disposal Plant - Filter Building	1972	Lot		\$ 42,000.00
Treatment & Disposal Plant - Filter Building	1973	Lot		1,285.64
Treatment & Disposal Plant - Filter Building	1980	Lot		3,868.83
Treatment & Disposal Plant - Clarifier Building	1973	Lot		6,696.00
Treatment & Disposal Plant - Sludge Vacuum Building	1980	Lot		<u>2,976.00</u>
Total Account 354.40				<u>\$ 56,826.47</u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction**

**Original Cost at February 28, 2013**

**Account 354.70 - Structures & Improvements - General Plant**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
General Plant - Office Building	1982	Lot		\$ 1,636.81
General Plant - Storage Building	1983	Lot		<u>13,000.00</u>
<b>Total Account 354.70</b>				<u><u>\$ 14,636.81</u></u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 360.00 - Collection Sewers - Force**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>C.I. &amp; D.I., 6"-8"</u></b>				
C.I. & D.I., 6"-8"	1972	Lot		\$ 11,408.56
C.I. & D.I., 6"-8"	1973	Lot		6,570.72
C.I. & D.I., 6"-8"	1977	Lot		1,666.57
C.I. & D.I., 6"-8"	1982	Lot		<u>1,578.86</u>
<b>Total C.I. &amp; D.I., 6"-8"</b>				<b>\$ 21,224.71</b>
<b><u>C.I. &amp; D.I., 16" &amp; Over:</u></b>				
C.I. & D.I., 16" & Over	1972	Lot		\$ 1,130.91
<b>Total Cast Iron &amp; Ductile Iron Pipe</b>				<b>\$ 22,355.62</b>
<b><u>Asbestos Cement Pipe</u></b>				
Asbestos Cement, 16" & Over	1973	Lot		\$ <u>72,108.07</u>
<b>Total Asbestos Cement Pipe</b>				<b>\$ 72,108.07</b>
<b><u>ABS, 6"-8"</u></b>				
ABS, 6"-8"	1972	Lot		\$ 185,086.38
ABS, 6"-8"	1973	Lot		16,447.67
ABS, 6"-8"	1977	Lot		11,179.11
ABS, 6"-8"	1982	Lot		<u>775.17</u>
<b>Total ABS, 6" - 8"</b>				<b>\$ 213,488.33</b>
<b><u>ABS, 10"-15"</u></b>				
ABS, 10"-15"	1970	Lot		\$ 6,480.00
ABS, 10"-15"	1972	Lot		442,935.73
ABS, 10"-15"	1973	Lot		<u>46,271.25</u>
<b>Total ABS, 10"-15"</b>				<b>\$ 495,686.98</b>
<b>Total ABS, Pipe</b>				
				<b>\$ 709,175.31</b>
<b><u>Plastic, 4" &amp; Under</u></b>				
Plastic, 4" & Under	1980	Lot		\$ 1,151.08
Plastic, 4" & Under	1981	Lot		7,096.61
Plastic, 4" & Under	1982	Lot		<u>7,073.60</u>
<b>Total Plastic, 4" &amp; Under</b>				<b>\$ 15,321.29</b>
<b><u>Plastic, 6"-8"</u></b>				
Plastic, 6"-8"	1970	Lot		\$ 7,420.20
Plastic, 6"-8"	1980	Lot		190,103.40
Plastic, 6"-8"	1981	Lot		318,352.55
Plastic, 6"-8"	1982	Lot		<u>89,079.32</u>
<b>Total Plastic, 6"-8"</b>				<b>\$ 604,955.47</b>



**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 360.00 - Collection Sewers - Force**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<b><u>Plastic, 10"-14"</u></b>				
Plastic, 10"-14"	1981	Lot		\$ 22,254.26
<b>Total Plastic, 10"-14"</b>				\$ 22,254.26
<b>Total Plastic Pipe</b>				<b>\$ 642,531.02</b>
<b><u>Valves</u></b>				
Valves, 4" & Under	1982	Lot		\$ 4,751.89
Air Release Valves	1981	Lot		1,190.41
<b>Total Valves</b>				<b>\$ 5,942.30</b>
<b><u>Manholes</u></b>				
Manholes	1970	Lot		\$ 5,217.60
Manholes	1972	Lot		99,026.40
Manholes	1973	Lot		17,215.19
Manholes	1977	Lot		5,377.75
Manholes	1980	Lot		58,970.67
Manholes	1981	Lot		116,225.64
Manholes	1982	Lot		32,939.78
<b>Total Manholes</b>				<b>\$ 334,973.03</b>
<b><u>Cleanouts</u></b>				
Cleanouts	1982	Lot		\$ 3,035.85
<b>Total Cleanouts</b>				<b>\$ 3,035.85</b>
<b>Total Account 360.00</b>				<b>\$ 1,790,121.20</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 361.00 - Collection Sewers - Gravity**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
C.I., 16" & Over	1972	Lot		\$ 731.14
<b>Total C.I., 16" &amp; Over</b>				<b>\$ 731.14</b>
<b><u>ABS, 6"-8"</u></b>				
ABS, 6"-8"	1972	Lot		\$ 526.88
ABS, 6"-8"	1973	Lot		440.25
<b>Total ASB, 6-8"</b>				<b>\$ 967.13</b>
<b><u>ABS, 10"-15"</u></b>				
ABS, 10"-15"	1972	Lot		\$ 37,583.11
ABS, 10"-15"	1973	Lot		19,123.29
ABS, 10"-15"	1977	Lot		116.92
<b>Total ABS, 10"-15"</b>				<b>\$ 56,823.32</b>
<b><u>ABS, 16" &amp; Over</u></b>				
ABS, 16" & Over	1973	Lot		\$ 8,798.02
<b>Total ABS, 16" &amp; Over</b>				<b>\$ 8,798.02</b>
<b><u>Reinforced Concrete, 16" &amp; Over</u></b>				
Reinforced Concrete, 16" & Over	1970	Lot		\$ 13,338.75
<b>Total Concrete, 16" &amp; Over</b>				<b>\$ 13,338.75</b>
<b><u>Stubs &amp; Caps</u></b>				
Stubs & Caps	1972	Lot		\$ 1,005.93
Stubs & Caps	1973	Lot		383.93
<b>Total Stubs &amp; Caps</b>				<b>\$ 1,389.86</b>
<b>Total Account 361.00</b>				<b>\$ 82,048.22</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 363.00 - Services to Customers**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Services	1972	Lot		\$ 50.00
Services	1977	Lot		2,359.54
Services	1980	Lot		12,216.58
Services	1981	Lot		5,935.68
Services	1982	Lot		1,028.22
Services	1984	Lot		53,053.00
<b>Total Account 363.00</b>				<b>\$ 74,643.02</b>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction**

**Original Cost at February 28, 2013**

**Account 380.40 - Treatment & Disposal Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Treatment & Disposal Equipment	1973	Lot		\$ 88,336.75
Treatment & Disposal Equipment	1980	Lot		141,308.51
Total Account 380.40				<u>\$ 229,645.26</u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction**

Original Cost at February 28, 2013

Account 381.00 Plant Sewers

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Plant Sewers	1973	Lot		\$ 1,536.55
Total Account 381.00				<u>\$ 1,536.55</u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction**  
**Original Cost at February 28, 2013**  
**Account 382.00 - Outfall Sewer Lines**

<u>Item:</u>	<u>Year</u> <u>Installed</u>	<u>Quantity</u>		<u>Original</u> <u>Cost</u>
		<u>Unit</u>	<u>No.</u>	
Outfall Sewer Lines	1973	Lot		\$ 1,536.55
Total Account 382.00				<u>\$ 1,536.55</u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 390.00 - Office Furniture & Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Office Furniture & Equipment	1973	Lot		\$ 72.91
Office Furniture & Equipment	1977	Lot		89.28
Office Furniture & Equipment	1979	Lot		20.53
Office Furniture & Equipment	1982	Lot		92.26
Total Account 390.00				<u>\$ 274.98</u>

**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 393.00 - Tools, Shop & Garage Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Tools, Shop & Garage Equipment	1969	Lot		\$ 60.00
Tools, Shop & Garage Equipment	1970	Lot		200.00
Tools, Shop & Garage Equipment	1972	Lot		1,400.00
Tools, Shop & Garage Equipment	1974	Lot		141.36
Tools, Shop & Garage Equipment	1975	Lot		774.96
Tools, Shop & Garage Equipment	1976	Lot		177.97
Tools, Shop & Garage Equipment	1978	Lot		119.04
Tools, Shop & Garage Equipment	1979	Lot		602.65
Tools, Shop & Garage Equipment	1980	Lot		757.40
Tools, Shop & Garage Equipment	1981	Lot		215.76
Total Account 393.00				<u>\$ 4,449.14</u>



**Aqua-PA Little Washington Wastewater Co.-Treasure Lake Sewer System**

**Contributions in Aid of Construction  
Original Cost at February 28, 2013  
Account 394.00 - Laboratory Equipment**

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Laboratory Equipment	1972	Lot		\$ 1,267.00
Laboratory Equipment	1977	Lot		35.71
Laboratory Equipment	1981	Lot		19.34
Laboratory Equipment	1982	Lot		7.44
Laboratory Equipment	1983	Lot		33.33
Total Account 394.00				<u>\$ 1,362.82</u>

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# **SECTION 3**

**Aqua Pennsylvania, Inc.**

*Acquisition of Little Washington Wastewater Co.-Treasure Lake Sewer System*

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of February 28, 2013  
Based Upon Whole Life Depreciation

Acct. No.	Account Description	Original Cost at 2/28/13	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 2/28/13
<u>Non-Depreciable Plant:</u>					
353.30	Land & Water Rights - System Pumping Plant	\$15,991.00			\$15,991.00
353.40	Land - Treatments & Disposal	37,416.00			37,416.00
	Total Non-Depreciable Plant	\$53,407.00			\$53,407.00
<u>Depreciable Plant:</u>					
354.30	Structures & Improvements - System Pumping Plant	\$520,236.56	60-R3	\$164,621.38	\$355,615.18
354.40	Structures & Improvements - Treatment & Disposal Pl	437,622.00	60-R3	103,941.84	333,680.16
354.70	Structures & Improvements - General Plant	18,500.00	60-R3	8,538.76	9,961.24
	Total Structure & Improvement	\$976,358.56		\$277,101.98	\$699,256.58
360	<u>Collection Sewer - Force</u>				
360.12	Cast Iron & Ductile Iron, 6" - 8"	\$40,666.28	80-R3	\$18,380.40	\$22,285.88
360.14	Cast Iron & Ductile Iron, 16" & Over	1,130.91	100-R3	432.66	698.25
360.31	ABS Pipe, 6" - 8"	278,692.71	80-R3	128,074.39	150,618.32
360.32	ABS Pipe, 10" - 15"	604,895.77	90-R3	253,645.40	351,250.37
360.34	Asbestos Cement Pipe, 18"	242,296.60	100-R3	90,576.38	151,720.22
360.50	Plastic Pipe, 4" & Under	348,879.40	50-R3	179,900.16	168,979.24
360.51	Plastic Pipe, 6" - 8"	2,050,120.52	65-R3	928,673.86	1,121,446.66
360.52	Plastic Pipe, 10" - 14"	77,148.00	80-R3	28,027.40	49,120.60
360.53	West Plant	113,895.00	80-R3	13,441.16	100,453.84
360.60	Valves, 4" & Under	23,712.36	50-R3	12,220.00	11,492.36
360.61	Valves, 6" - 8"	6,288.88	65-R3	2,749.35	3,539.53
360.80	Manholes	862,642.72	50-R3	512,234.88	350,407.84
360.90	Cleanouts	25,017.78	50-R3	12,846.74	12,171.04
	Total Account 360	\$4,675,386.93		\$2,181,202.78	\$2,494,184.15
361	<u>Collection Sewer - Gravity</u>				
361.13	Cast Iron & Ductile Iron 16" - 18"	\$731.14	100-R3	\$279.72	\$451.42
361.24	Concrete 20" & Over	13,338.75	100-R3	5,334.94	8,003.81
361.31	ABS, 6" & 8"	2,842.07	80-R3	1,103.70	1,738.37
361.32	ABS, 10" & 15"	101,840.93	90-R3	42,321.62	59,519.31
361.33	ABS, 16" - 18"	29,563.00	100-R3	11,051.37	18,511.63
361.52	Plastic, 10" - 14"	2,370.00	65-R3	157.68	2,212.32
361.75	Stubs & Caps	2,296.01	50-R3	1,577.58	718.43
	Total Account 361	\$152,981.90		\$61,826.61	\$91,155.29
363.00	Services	\$2,047,186.29	50-R3	\$1,124,730.59	\$922,455.70
364.00	Flow Measuring Devices	4,063.00	25-R3	641.70	3,421.30
371.00	Pumping Equipment	132,722.00	25-R3	19,308.16	113,413.84
380.40	Treatment & Disposal Equipment	3,324,681.00	40-R3	1,157,247.94	2,167,433.06
381.00	Plant Sewers	5,163.10	50-R3	3,518.36	1,644.74
382.00	Outfall Sewer Lines	20,759.10	50-R3	6,442.32	14,316.78
389.00	Other Plant & Misc. Equipment	3,878.00	40-R3	441.72	3,436.28
390.00	Office Furniture & Equipment	3,111.00	25-L1	597.49	2,513.51
391.00	Transportation	113,758.00	6-R3	88,042.91	25,715.09
393.00	Tools & Work Equipment	8,758.00	15-R3	3,539.05	5,218.95
394.00	Laboratory Equipment	5,061.00	20-R3	1,418.15	3,642.85
395.00	Power Operated Equipment	143,070.00	10-R3	87,736.01	55,333.99
	Total Depreciable Plant	\$11,616,937.88		\$5,013,795.77	\$6,603,142.11
	Total Plant in Service	\$11,670,344.88		\$5,013,795.77	\$6,656,549.11

**Aqua Pennsylvania, Inc.**

*Acquisition of Little Washington Wastewater Co.-Treasure Lake Sewer System*

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of February 28, 2013  
Based Upon Whole Life Depreciation

Acct. No.	Account Description	Original Cost at 2/28/13	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 2/28/13
<b>Deduct: Contributions in Aid of Construction (CIAC):</b>					
354.30	Structures & Improvements - System Pumping Plant	\$111,164.22	60-R3	\$60,038.91	\$51,125.31
354.40	Structures & Improvements - Treatment & Disposal Pl	56,826.47	60-R3	33,366.13	23,460.34
354.70	Structures & Improvements - General Plant	<u>14,636.81</u>	60-R3	<u>6,718.20</u>	<u>7,918.61</u>
	Total Structure & Improvement	\$182,627.50		\$100,123.24	\$82,504.26
360	<u>Collection Sewer - Force</u>				
360.12	Cast Iron & Ductile Iron, 6" - 8"	\$21,224.71	80-R3	\$9,629.71	\$11,595.00
360.14	Cast Iron & Ductile Iron, 16" & Over	1,130.91	100-R3	432.66	698.25
360.31	ABS Pipe, 6" - 8"	213,488.33	80-R3	99,282.44	114,205.89
360.32	ABS Pipe, 10" - 15"	495,686.98	90-R3	208,644.91	287,042.07
360.34	Asbestos Cement Pipe, 18"	72,108.07	100-R3	26,955.75	45,152.32
360.50	Plastic Pipe, 4" & Under	15,321.29	50-R3	8,613.05	6,708.24
360.51	Plastic Pipe, 6" - 8"	604,955.47	65-R3	275,356.71	329,598.76
360.52	Plastic Pipe, 10" - 14"	22,254.26	80-R3	8,302.91	13,951.35
360.60	Valves, 4" & Under	4,751.89	50-R3	2,626.84	2,125.05
360.70	Air Release Valves	1,190.41	65-R3	537.36	653.05
360.80	Manholes	334,973.03	50-R3	206,238.37	128,734.66
360.90	Cleanouts	<u>3,035.85</u>	50-R3	<u>1,678.21</u>	<u>1,357.64</u>
	Total Account 360	\$1,790,121.20		\$848,298.92	\$941,822.28
361	<u>Collection Sewer - Gravity</u>				
361.13	Cast Iron & Ductile Iron 16" - 18"	\$731.14	100-R3	\$279.72	\$451.42
361.24	Concrete 20" & Over	13,338.75	100-R3	5,334.94	8,003.81
361.31	ABS, 6" & 8"	967.13	80-R3	449.01	518.12
361.32	ABS, 10" & 15"	56,823.32	90-R3	23,767.19	33,056.13
361.33	ABS, 16" - 18"	8,798.02	100-R3	3,288.91	5,509.11
361.75	Stubs & Caps	<u>1,389.86</u>	50-R3	<u>960.09</u>	<u>429.77</u>
	Total Account 361	\$82,048.22		\$34,079.86	\$47,968.36
363.00	Services	\$74,643.02	50-R3	\$40,248.06	\$34,394.96
380.40	Treatment & Disposal Equipment	229,645.26	40-R3	168,580.18	61,065.08
381.00	Plant Sewers	1,536.55	50-R3	1,047.07	489.48
382.00	Outfall Sewer Lines	1,536.55	50-R3	1,047.07	489.48
390.00	Office Furniture & Equipment	274.98	25-L1	177.07	97.91
393.00	Tools & Work Equipment	4,449.14	15-R3	4,449.14	0.00
394.00	Laboratory Equipment	<u>1,362.82</u>	20-R3	<u>1,360.13</u>	<u>2.69</u>
	Total Contributions in Aid of Construction (CIAC)	<u>\$2,368,245.24</u>		<u>\$1,199,410.74</u>	<u>\$1,168,834.50</u>
	Total Plant in Service (Net)	<u>\$9,302,099.64</u>		<u>\$3,814,385.03</u>	<u>\$5,487,714.61</u>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**354.30 Structures & Improvements-System Pumping Plant**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	39,195.96	23.92	60.00	0.60127	23,567
1973	68,031.60	24.66	60.00	0.58896	40,068
1980	40,000.00	30.09	60.00	0.49845	19,938
1981	80,744.00	30.90	60.00	0.48494	39,156
2003	206,216.00	50.59	60.00	0.15676	32,327
2004	11,712.00	51.55	60.00	0.14077	1,649
2005	20,757.00	52.52	60.00	0.12472	2,589
2006	43,470.00	53.48	60.00	0.10861	4,721
2009	10,110.00	56.40	60.00	0.05997	606
<b>Total</b>	<b>520,236.56</b>				<b>164,621.38</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**354.40 Structures & Improve.-Treatment & Disposal Plant**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	42,000.00	23.92	60.00	0.60127	25,253
1973	26,820.00	24.66	60.00	0.58896	15,796
1980	23,000.00	30.09	60.00	0.49845	11,464
2003	272,935.00	50.59	60.00	0.15876	42,786
2004	35,562.00	51.55	60.00	0.14077	5,006
2006	25,026.00	53.48	60.00	0.10861	2,718
2007	5,732.00	54.45	60.00	0.09244	530
2008	3,516.00	55.43	60.00	0.07623	268
2010	2,761.00	57.38	60.00	0.04366	121
<b>Total</b>	<b>437,352.00</b>				<b>103,941.84</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**354.70 Structures & Improvements - General Plant**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	5,500.00	31.72	60.00	0.47126	2,592
1983	13,000.00	32.55	60.00	0.45745	5,947
<b>Total</b>	<b>18,500.00</b>				<b>8,538.76</b>

**Aqua - Pennsylvania, Inc.**

**Little Washington-Treasure Lake**

**360.12 Collection Sewer-Force, CI & DI 6"-8"**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

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**Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	11,408.56	42.48	80.00	0.46899	5,360
1973	22,078.86	43.31	80.00	0.45864	10,128
1977	5,600.00	46.68	80.00	0.41644	2,332
1982	1,578.86	51.04	80.00	0.36206	572
<b>Total</b>	<b>40,666.28</b>				<b>18,380.40</b>

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**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**360.14 Collection Sewer-Force, CI & DI 16" & Over**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	1,130.91	61.74	100.00	0.38258	433
<b>Total</b>	1,130.91				432.66

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**360.31 Collection Sewer-Force, ABS, 6" - 8"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	185,086.38	42.48	80.00	0.46899	86,803
1973	55,267.25	43.31	80.00	0.45864	25,348
1977	37,563.91	48.68	80.00	0.41644	15,643
1982	775.17	51.04	80.00	0.36206	281
<b>Total</b>	<b>278,692.71</b>				<b>128,074.39</b>

**Aqua - Pennsylvania, Inc.**

**Little Washington-Treasure Lake**

**360.32 Collection Sewer-Force, ABS, 10"- 15"**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1970	6,480.00	50.36	90.00	0.44039	2,854
1972	442,935.73	52.06	90.00	0.42156	186,725
1973	155,480.04	52.91	90.00	0.41206	64,067
<b>Total</b>	<b>604,895.77</b>				<b>253,645.40</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**360.44 Collection Sewer-Force, Cement 16" & Over**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	242,296.60	62.62	100.00	0.37382	90,576
<b>Total</b>	242,296.60				90,576.38

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**360.50 Collection Sewer-Force, Plastic 4" & Under**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1980	3,887.84	20.84	50.00	0.58315	2,256
1981	23,845.92	21.60	50.00	0.56809	13,547
1982	7,073.60	22.36	50.00	0.55280	3,910
1984	190,104.17	23.92	50.00	0.52155	99,148
1985	73,282.44	24.72	50.00	0.50560	37,052
1987	50,705.43	26.35	50.00	0.47308	23,988
<b>Total</b>	<b>348,879.40</b>				<b>179,900.16</b>

**Aqua - Pennsylvania, Inc.**

**Little Washington-Treasure Lake**

**360.51 Collection Sewer-Force, Plastic 6" - 8"**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

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*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	7,420.20	26.94	65.00	0.58550	4,345
1980	638,782.95	34.83	65.00	0.46420	296,521
1981	1,069,724.06	35.66	65.00	0.45141	482,885
1982	281,805.00	36.50	65.00	0.43847	123,564
1984	51,561.31	38.20	65.00	0.41230	21,259
2004	580.00	56.55	65.00	0.13007	75
2008	247.00	58.48	65.00	0.10032	25
<b>Total</b>	<b>2,050,120.52</b>				<b>928,673.86</b>

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**Aqua - Pennsylvania, Inc.**

**Little Washington-Treasure Lake**

**360.52 Collection Sewer-Force, Plastic 10" - 14"**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

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**Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1981	74,778.00	50.15	80.00	0.37309	27,899
2008	1,760.00	75.42	80.00	0.05726	101
2009	610.00	76.40	80.00	0.04503	27
<b>Total</b>	<b>77,148.00</b>				<b>28,027.40</b>

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**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**360.53 Collection Sewer-Force, West Plant**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2003	113,895.00	70.56	80.00	0.11801	13,441
<b>Total</b>	113,895.00				13,441.16



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**360.60 Collection Sewer-Force, Valves 4" & Under**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	4,751.89	22.36	50.00	0.55280	2,627
1984	9,480.58	23.92	50.00	0.52155	4,934
1985	5,087.84	24.72	50.00	0.50560	2,562
1987	4,432.05	28.35	50.00	0.47308	2,097
<b>Total</b>	23,712.36				12,220.00

**Aqua - Pennsylvania, Inc.**

**Little Washington-Treasure Lake**

**360.61 Collection Sewer-Force, Valves 6" - 8"**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1981	4,000.00	35.66	65.00	0.45141	1,806
1984	2,288.88	38.20	65.00	0.41230	944
<b>Total</b>	<b>6,288.88</b>				<b>2,749.35</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**360.80 Collection Sewer-Force, Manholes**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	5,217.60	14.04	50.00	0.71920	3,752
1972	99,026.40	15.28	50.00	0.69435	68,759
1973	57,846.24	15.93	50.00	0.68144	39,419
1977	18,070.26	18.66	50.00	0.62688	11,328
1980	198,152.48	20.84	50.00	0.58315	115,553
1981	390,539.88	21.60	50.00	0.58809	221,882
1982	93,171.88	22.36	50.00	0.55280	51,505
2008	618.00	45.43	50.00	0.09136	56
<b>Total</b>	<b>862,842.72</b>				<b>512,234.88</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**360.90 Collection Sewer-Force, Cleanouts**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	3,035.85	22.36	50.00	0.55280	1,678
1984	11,997.72	23.92	50.00	0.52155	6,257
1985	5,775.36	24.72	50.00	0.50560	2,920
1987	4,208.85	26.35	50.00	0.47308	1,991
<b>Total</b>	<b>25,017.78</b>				<b>12,846.74</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**361.13 Collection Sewer-Gravity, CI & DI 16" - 18"**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	731.14	61.74	100.00	0.38258	280
<b>Total</b>	731.14				279.72

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**361.24 Collection Sewer-Gravity, Concrete 20" & Over**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	13,338.75	60.00	100.00	0.39996	5,335
<b>Total</b>	13,338.75				5,334.94

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**361.31 Collection Sewer-Gravity, ABS, 6" - 8"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	528.88	42.48	80.00	0.46899	247
1973	1,479.31	43.31	80.00	0.45864	878
1977	392.88	46.68	80.00	0.41644	164
2010	443.00	77.38	80.00	0.03277	15
<b>Total</b>	2,842.07				1,103.70

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**361.32 Collection Sewer-Gravity, ABS, 10" - 15"**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	37,583.11	52.06	90.00	0.42156	15,844
1973	64,257.82	52.91	90.00	0.41206	26,478
<b>Total</b>	<b>101,840.93</b>				<b>42,321.82</b>



**Aqua - Pennsylvania, Inc.**

**Little Washington-Treasure Lake**

**361.33 Collection Sewer-Gravity, ABS, 16" - 18"**

**Original Cost Of Utility Plant In Service**

**And Development Of Calculated Depr Reserve as of February 28, 2013**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

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**Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3**

<b>Year</b>	<b>Original Cost</b>	<b>Expectancy</b>	<b>Avg. Service Life</b>	<b>Reserve Ratio</b>	<b>Calculated Reserve</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1973	29,563.00	62.62	100.00	0.37382	11,051
<b>Total</b>	<b>29,563.00</b>				<b>11,051.37</b>

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**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**361.52 Collection Sewer-Gravity, Plastic 10"- 14"**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2008	1,780.00	60.42	65.00	0.07040	124
2009	610.00	61.40	65.00	0.05538	34
<b>Total</b>	<b>2,370.00</b>				<b>157.68</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**361.75 Collection Sewer-Gravity, Stubs & Caps**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	1,005.93	15.28	50.00	0.69435	698
1973	1,290.08	15.93	50.00	0.68144	879
<b>Total</b>	2,296.01				1,577.58

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**363.00 Services**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	50.00	15.28	50.00	0.69435	35
1973	1,533.04	15.93	50.00	0.68144	1,045
1974	114,369.87	16.59	50.00	0.66823	76,428
1975	114,286.69	17.26	50.00	0.65473	74,827
1976	78,037.08	17.95	50.00	0.64094	50,017
1977	72,041.78	18.66	50.00	0.62688	45,161
1978	84,859.56	19.37	50.00	0.61255	51,981
1979	99,071.54	20.10	50.00	0.59797	59,242
1980	153,649.48	20.84	50.00	0.58315	89,601
1981	101,119.45	21.60	50.00	0.56809	57,445
1982	88,335.87	22.36	50.00	0.55280	48,832
1983	218,134.29	23.14	50.00	0.53728	117,200
1984	577,379.10	23.92	50.00	0.52155	301,131
1985	169,854.16	24.72	50.00	0.50560	85,878
1987	124,180.38	26.35	50.00	0.47308	58,747
2004	24,682.00	41.58	50.00	0.16844	4,157
2005	4,649.00	42.53	50.00	0.14930	894
2006	9,878.00	43.50	50.00	0.13007	1,259
2007	1,412.00	44.46	50.00	0.11076	156
2008	9,623.00	45.43	50.00	0.09136	879
2009	240.00	46.41	50.00	0.07190	17
<b>Total</b>	<b>2,047,186.29</b>				<b>1,124,730.59</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**364.00 Flow Measuring Devices**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2007	326.00	19.53	25.00	0.21898	71
2008	1,803.00	20.47	25.00	0.18115	327
2009	1,087.00	21.43	25.00	0.14291	155
2010	847.00	22.39	25.00	0.10431	88
<b>Total</b>	<b>4,063.00</b>				<b>641.70</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**371.00 Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2007	11,968.00	19.53	25.00	0.21898	2,621
2008	30,311.00	20.47	25.00	0.18115	5,491
2009	45,657.00	21.43	25.00	0.14291	6,525
2010	44,786.00	22.39	25.00	0.10431	4,672
<b>Total</b>	<b>132,722.00</b>				<b>19,308.16</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**380.40 Treatment & Disposal Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	296,828.00	8.23	40.00	0.79421	235,743
1980	474,823.00	12.14	40.00	0.69651	330,718
2003	2,506,345.00	30.68	40.00	0.23304	584,078
2004	12,460.00	31.62	40.00	0.20957	2,811
2005	1,516.00	32.56	40.00	0.18590	282
2007	13,958.00	34.48	40.00	0.13810	1,928
2008	12,134.00	35.44	40.00	0.11389	1,383
2009	2,976.00	36.41	40.00	0.08974	267
2010	3,641.00	37.38	40.00	0.06540	238
<b>Total</b>	<b>3,324,681.00</b>				<b>1,157,247.94</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**381.00 Plant Sewers**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	5,163.10	15.93	50.00	0.68144	3,518
<b>Total</b>	5,163.10				3,518.38



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**382.00 Outfall Sewer Lines**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	5,163.10	15.93	50.00	0.68144	3,518
2003	15,596.00	40.63	50.00	0.18748	2,924
<b>Total</b>	<b>20,759.10</b>				<b>6,442.32</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**389.00 Other Plant & Miscellaneous Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2007	1,631.00	34.48	40.00	0.13810	225
2008	1,019.00	35.44	40.00	0.11399	116
2009	822.00	36.41	40.00	0.08974	74
2010	406.00	37.38	40.00	0.06540	27
<b>Total</b>	<b>3,878.00</b>				<b>441.72</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**390.00 Office Furniture & Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 25 Survivor Curve: L1</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2006	57.00	19.47	25.00	0.22112	13
2007	3,014.00	20.18	25.00	0.19277	581
2010	40.00	22.58	25.00	0.09878	4
<b>Total</b>	<b>3,111.00</b>				<b>597.49</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**391.00 Transportation Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

Salvage Value: 0% Average Service Life: 6 Survivor Curve: R3					
Year	Original Cost	Expectancy	Avg. Service Life	Reserve Ratio	Calculated Reserve
(1)	(2)	(3)	(4)	(5)	(6)
2005	28,723.00	0.72	6.00	0.88029	25,285
2006	35,319.00	0.99	6.00	0.83527	29,501
2008	49,716.00	1.99	6.00	0.66895	33,258
<b>Total</b>	<b>113,758.00</b>				<b>88,042.91</b>

2005 Ford F250 28,723 - 25,283.91  
 2006 Dodge 1500 25,745 - 21,504.10  
 2006 Ford Range 9,574 - 7,996.90  
 2008 Dump 49,716 - 33,258.00

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**393.00 Tools & Work Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 15 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2004	828.00	7.13	15.00	0.52494	435
2005	2,697.00	7.93	15.00	0.47115	1,271
2006	934.00	8.77	15.00	0.41514	388
2007	3,097.00	9.64	15.00	0.35710	1,106
2008	923.00	10.54	15.00	0.29717	274
2009	279.00	11.47	15.00	0.23581	66
<b>Total</b>	<b>8,758.00</b>				<b>3,539.05</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**394.00 Laboratory Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 20 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2004	714.00	11.89	20.00	0.40584	290
2006	1,904.00	13.65	20.00	0.31735	604
2007	898.00	14.57	20.00	0.27172	244
2008	290.00	15.50	20.00	0.22522	65
2009	1,080.00	16.44	20.00	0.17797	182
2010	175.00	17.40	20.00	0.13007	23
<b>Total</b>	<b>5,081.00</b>				<b>1,418.15</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake**  
**395.00 Power Operated Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 10 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2000	30,076.00	1.12	10.00	0.88804	26,709
2004	2,984.00	2.74	10.00	0.72608	2,167
2005	30,737.00	3.37	10.00	0.66306	20,380
2007	64,613.00	4.84	10.00	0.51597	33,338
2008	4,550.00	5.66	10.00	0.43396	1,974
2009	6,343.00	6.53	10.00	0.34718	2,202
2010	3,767.00	7.44	10.00	0.25628	965
<b>Total</b>	<b>143,070.00</b>				<b>87,736.01</b>





**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**354.30 Structures & Improvements-System Pumping Plant**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	39,195.96	23.92	60.00	0.60127	23,567
1973	13,558.99	24.66	60.00	0.58896	7,985
1980	11,904.10	30.09	60.00	0.49845	5,934
1981	46,507.17	30.90	60.00	0.48494	22,553
<b>Total</b>	111,164.22				60,038.91

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CLAC**  
**354.40 Structures & Improve.-Treatment & Disposal Plant**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

**Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3**

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1972	42,000.00	23.92	60.00	0.60127	25,253
1973	7,981.64	24.66	60.00	0.58896	4,701
1980	6,844.83	30.09	60.00	0.49845	3,412
<b>Total</b>	<b>56,826.47</b>				<b>33,366.13</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**354.70 Structures & Improvements - General Plant**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	1,636.81	31.72	60.00	0.47126	771
1983	13,000.00	32.55	60.00	0.45745	5,947
<b>Total</b>	<b>14,636.81</b>				<b>6,718.20</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.12 Collection Sewer-Force, CI & DI 6"-8"**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	11,408.56	42.48	80.00	0.46899	5,350
1973	6,570.72	43.31	80.00	0.45864	3,014
1977	1,666.57	46.68	80.00	0.41644	694
1982	1,578.86	51.04	80.00	0.36206	572
<b>Total</b>	<b>21,224.71</b>				<b>9,629.71</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.14 Collection Sewer-Force, CI & DI 16" & Over**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	1,130.91	61.74	100.00	0.38258	433
<b>Total</b>	1,130.91				432.66

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.31 Collection Sewer-Force, ABS, 6" - 8"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	185,086.38	42.48	80.00	0.46899	86,803
1973	16,447.67	43.31	80.00	0.45864	7,544
1977	11,179.11	46.68	80.00	0.41644	4,655
1982	775.17	51.04	80.00	0.38208	281
<b>Total</b>	<b>213,488.33</b>				<b>99,282.44</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.32 Collection Sewer-Force, ABS, 10"- 15"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	6,480.00	50.38	90.00	0.44039	2,854
1972	442,935.73	52.06	90.00	0.42156	186,725
1973	46,271.25	52.91	90.00	0.41206	19,066
<b>Total</b>	<b>495,686.98</b>				<b>208,644.91</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.44 Collection Sewer-Force, Cement 16" & Over**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	72,108.07	62.62	100.00	0.37382	26,956
<b>Total</b>	72,108.07				26,955.75



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.50 Collection Sewer-Force, Plastic 4" & Under**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1980	1,151.08	20.84	50.00	0.58315	671
1981	7,096.61	21.60	50.00	0.56809	4,032
1982	7,073.60	22.36	50.00	0.55280	3,910
<b>Total</b>	<b>15,321.29</b>				<b>8,613.05</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.51 Collection Sewer-Force, Plastic 6" - 8"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	7,420.20	26.94	65.00	0.58560	4,345
1980	190,103.40	34.83	65.00	0.48420	88,245
1981	318,352.55	35.88	65.00	0.45141	143,708
1982	89,079.32	36.50	65.00	0.43847	39,059
<b>Total</b>	<b>604,955.47</b>				<b>275,356.71</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.52 Collection Sewer-Force, Plastic 10" - 14"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1981	22,254.26	50.15	80.00	0.37309	8,303
<b>Total</b>	22,254.26				8,302.91

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.70 Collection Sewer-Force, Air Release Valves**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 65 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1981	1,190.41	35.66	65.00	0.45141	537
<b>Total</b>	1,190.41				537.36

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**360.80 Collection Sewer-Force, Manholes**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	5,217.60	14.04	50.00	0.71920	3,752
1972	99,026.40	15.28	50.00	0.69435	68,759
1973	17,215.19	15.93	50.00	0.68144	11,731
1977	5,377.75	18.66	50.00	0.62688	3,371
1980	58,970.67	20.84	50.00	0.58315	34,389
1981	116,225.64	21.60	50.00	0.56809	66,027
1982	32,939.78	22.36	50.00	0.55280	18,209
<b>Total</b>	<b>334,973.03</b>				<b>206,238.37</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
 360.90 Collection Sewer-Force, Cleanouts

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1982	3,035.85	22.36	50.00	0.55280	1,678
<b>Total</b>	3,035.85				1,678.21

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**361.13 Collection Sewer-Gravity, CI & DI 16" - 18"**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	731.14	61.74	100.00	0.38258	280
<b>Total</b>	731.14				279.72

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**361.24 Collection Sewer-Gravity, Concrete 20" & Over**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	13,338.75	60.00	100.00	0.39986	5,335
<b>Total</b>	13,338.75				5,334.94



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
 361.31 Collection Sewer-Gravity, ABS, 6" - 8"

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 80 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	526.88	42.48	80.00	0.46899	247
1973	440.25	43.31	80.00	0.45864	202
<b>Total</b>	967.13				449.01

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**361.32 Collection Sewer-Gravity, ABS, 10" - 15"**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 90 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	37,583.11	52.06	90.00	0.42156	15,844
1973	19,123.29	52.91	90.00	0.41206	7,880
1977	116.92	56.39	90.00	0.37350	44
<b>Total</b>	<b>56,823.32</b>				<b>23,767.19</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CLAC**  
**361.33 Collection Sewer-Gravity, ABS, 16" - 18"**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 100 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	8,798.02	62.62	100.00	0.37382	3,289
<b>Total</b>	8,798.02				3,288.91

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**361.75 Collection Sewer-Gravity, Stubs & Caps**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	1,005.93	15.28	50.00	0.69435	698
1973	383.93	15.93	50.00	0.68144	262
<b>Total</b>	<b>1,389.86</b>				<b>960.09</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**363.00 Services**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	50.00	15.28	50.00	0.69435	35
1977	2,359.54	18.66	50.00	0.62888	1,479
1980	12,216.58	20.84	50.00	0.58315	7,124
1981	5,935.68	21.60	50.00	0.56809	3,372
1982	1,028.22	22.36	50.00	0.55280	568
1984	53,053.00	23.92	50.00	0.52155	27,670
<b>Total</b>	<b>74,643.02</b>				<b>40,248.06</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**380.40 Treatment & Disposal Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	88,336.75	8.23	40.00	0.79421	70,158
1980	141,308.51	12.14	40.00	0.69651	98,422
<b>Total</b>	<b>229,645.26</b>				<b>168,580.18</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**381.00 Plant Sewers**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

<i>Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3</i>					
<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	1,536.55	15.93	50.00	0.68144	1,047
<b>Total</b>	1,536.55				1,047.07

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**382.00 Outfall Sewer Lines**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	1,536.55	15.93	50.00	0.68144	1,047
<b>Total</b>	1,536.55				1,047.07



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**390.00 Office Furniture & Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: L1*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1973	72.91	7.68	25.00	0.69284	51
1977	89.28	8.68	25.00	0.65301	58
1979	20.53	9.20	25.00	0.63203	13
1982	92.26	10.02	25.00	0.59911	55
<b>Total</b>	<b>274.98</b>				<b>177.07</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**393.00 Tools & Work Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 15 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1969	60.00	0.00	0.00	1.00000	60
1970	200.00	0.00	0.00	1.00000	200
1972	1,400.00	0.00	0.00	1.00000	1,400
1974	141.36	0.00	0.00	1.00000	141
1975	774.98	0.00	0.00	1.00000	775
1976	177.97	0.00	0.00	1.00000	178
1978	119.04	0.00	0.00	1.00000	119
1979	602.65	0.00	0.00	1.00000	603
1980	757.40	0.00	0.00	1.00000	757
1981	215.76	0.00	0.00	1.00000	216
<b>Total</b>	<b>4,449.14</b>				<b>4,449.14</b>

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Treasure Lake-CIAC**  
**394.00 Laboratory Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of February 28, 2013**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 20 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	1,267.00	0.00	0.00	1.00000	1,267
1977	35.71	0.00	0.00	1.00000	36
1981	19.34	0.63	20.00	0.96840	19
1982	7.44	0.83	20.00	0.95831	7
1983	33.33	1.06	20.00	0.94680	32
<b>Total</b>	<b>1,362.82</b>				<b>1,360.13</b>

**Aqua Pennsylvania Wastewater, Inc.**  
**Penn Township Wastewater System Costs**  
**M92646**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
894	300000	PPE-Utility Plant in Service	10,552,373.42	
894	104000	Utility Plant Purchased/Sold		3,865,473.79
894	108000	AD-General		2,496,593.61
894	114000	U Plant Acq Adj		4,194,411.68
894	114000	U Plant Acq Adj	4,105.66	
<b>Total</b>			<b>10,556,479.08</b>	<b>10,556,479.08</b>

**LITTLE WASHINGTON WASTEWATER COMPANY**

***Acquisition of the Wastewater System Assets  
of Penn Township***

Original Cost of the Wastewater Utility Plant  
and Depreciation Reserve Calculations  
at March 29, 2014

By

Gary D. Shambaugh, Principal  
David A. Sheffer, Principal

AUS CONSULTANTS  
Utility Services Group  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011



October 2014



DAVID A SHEFFER  
Principal

275 Grandview Avenue, Suite 100  
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dsheffer@ausconsultants.com

March 31, 2015

Mr. Chad A. Nardelli, Manager, Property Accounting  
Aqua Pennsylvania, Inc.  
762 West Lancaster Avenue  
Bryn Mawr, PA 19010-3489

RE: Acquisition of the Wastewater  
System Assets of Penn Township

Dear Ms. Kreszwick:

In accordance with your request, we have prepared an inventory of the wastewater utility plant of Penn Township (the "Township") as of March 29, 2014.

The inventory was prepared to conform to the Uniform System of Accounts for Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of the Township was determined from a detailed analysis of the books and records of the Township and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service	\$10,466,726	\$2,496,594

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2 and the depreciation calculations in Section 3.

Respectfully submitted,  
AUS Consultants

David A. Sheffer

LITTLE WASHINGTON WASTEWATER COMPANY

Acquisition of the Wastewater Utility Plant  
of Penn Township

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 1</u></b>	
<b><u>EXECUTIVE SUMMARY</u></b>	
Background	1-1
Overview of the Township's Facilities	1-1
Overview of the Study Techniques	1-3
Explanation of the Study	1-3
Original Cost Analysis	1-5
Summary of Original Cost	1-6
Depreciation Reserve	1-6
<b><u>SECTION 2</u></b>	
<b><u>ORIGINAL COST</u></b>	
Summary of the Original Costs of Plant in Service At March 29, 2014	2-1
<b><u>Account 101 - Utility Plant in Service</u></b>	
354 Structures & Improvements	2-2
355 Power Generation Equipment	2-3
360 Collection Sewers - Force	2-4
361 Collection Sewers - Gravity	2-5
363 Services to Customers	2-6
371 Pumping Equipment	2-7
380 Treatment & Disposal Equipment	2-8

LITTLE WASHINGTON WASTEWATER COMPANY

Acquisition of the Wastewater Utility Plant  
of Penn Township

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 3</u></b>	
<u>Depreciated Original Cost</u>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of March 29, 2014	3-1
<b><u>SECTION 4</u></b>	
Photographs of Plant Assets (site visit)	4-1



# **SECTION 1**

# **LITTLE WASHINGTON WASTEWATER COMPANY**

## **Acquisition of the Wastewater Assets of Penn Township**

### Executive Summary

#### **BACKGROUND**

Penn Township (the “Township”) provides wastewater service available to approximately 776 residential and 25 commercial customers located in a portion of Penn Township, Chester County. The Township purchased a wastewater treatment facility from Southern Chester County Medical Center and began to provide wastewater service in 1999. It is estimated that the original treatment facility was constructed in 1990. Once the Township purchased the system from the hospital, the Township upgraded the treatment system; thereafter the collection system was expanded to meet development into early to mid-2000’s.

On September 9, 2013, Little Washington Wastewater Company (“LWWC”) filed an application for approval with the Pennsylvania Public Utility Commission for the acquisition of the wastewater system assets of Penn Township, and to grant LWWC the right to furnish service in the Township’s service territory and authorize the Township to abandon service.

LWWC has retained AUS Consultants to prepare a study of the original cost of the fixed assets acquired and theoretical depreciation calculations as of March 29, 2014. The results of the study are contained in this report.

#### **OVERVIEW OF THE TOWNSHIP’S FACILITIES**

The Township’s assets acquired consist of facilities for the treatment and collection of wastewater from its customers. The wastewater is treated at the treatment

plant located behind a regional hospital located on Baltimore Pike, in the Township. The Township Wastewater Treatment System started as a wastewater treatment plant for the regional hospital. The Township purchased the treatment plant from the hospital in 1999. The Township improved the treatment system, and the collection system was developed in the early to mid-2000's to meet growing development demands in the Township. The Township's collection system consists of approximately 94,700 linear feet of pipe, manholes, and lift stations.

The collection system is comprised of both gravity and pressure system with seven lift stations. Six of the life stations are in the four largest developments. The farthest lift stations are located in the Penn Ridge development. Penn Ridge Station 2 lifts from the lower section of the development to the higher section. This station is comprised of an underground pit lift station. Station 1 in the development, located on Penn Ridge Way, is comprised of an underground pit lift station and emergency diesel backup power generator. This station pumps to a 4" forced main which flow to the Jenner Ridge development.

The Elk Creek Farms Station in located in the Elk Creek Farms development. This is the largest lift station in the system and comprised of an underground station with diesel generator for emergency backup power. The lift station pumps approximately 70,000 GPD.

The Estates at London Brook is the second largest life station that consists of an underground pit and a Cummins diesel power backup unit used for emergency backup power. This station pumps to a 6" forced line.

Two lift stations (stations 2 and 3) are located in the Jenner's Pond development. Jenner's Pond lift station 3 pumps to station 2 which is located at the treatment facilities.

Both stations consist of three underground pits.

There are also a number for grinder pump stations located on the pressure lines. These grinder pump stations are owned and maintained by the customer.

This information was comprised by conducting interviews with both Penn Township and Aqua Pa personnel, site visits and the review of supplied data. Photos from the site visit are located in Section 4 of this report.

## **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of the Township's assets was conducted in two (2) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by the Township.

Second, the original cost of the inventoried property was determined based on a review of the Township's books of account, construction records, system maps and other sources. The Township's records provided very limited data as to the original cost of its plant in service. In addition, LWWC requested that theoretical accrued depreciation calculations be performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at March 29, 2014.

A complete discussion of the methodologies employed in the original cost study is set forth in the sections of this report as follows.

## **EXPLANATION OF THE STUDY**

### **Utility Plant Inventory**

A comprehensive inventory of the Township's plant in service as of March 29, 2014 was performed. One of the principal source documents for the inventory was the "as built" maps of the Township's system. The maps were particularly helpful in

locating and documenting the sizes and lengths of the pipelines and the types, and locations of accessories, such as manholes and cleanouts. Significant components of the inventory are discussed below.

### Mass Property

For the purpose of this study, “mass” property consists of utility plant recorded in account 360 (Collection Sewers – Force), Account 361 (Collection Sewers – Gravity), and Account 363 (Services to Customers).

For Account 360 and Account 361, footages of pipe were determined by reviewing the “as-built” maps and were verified by a physical check of the collection system in place. This same procedure was utilized for manholes and cleanouts.

Based upon data obtained from interviews with Township personnel, it appears that customer service lines (Account 363) were installed when a customer requested service. The study includes the original cost of the initial construction for all customer service lines.

### Non-Mass Property

A physical inventory of the wastewater treatment plant and buildings was completed.

Detailed results of the plant inventory are set forth in Section 2 of this report by the fixed capital accounts prescribed by the National Association of Regulatory Utility Commissioners. The original cost of all inventoried property units is properly recorded in the following accounts:

Acct.  
No.    Account Title

Non-Depreciable Plant:

353.10        Land & Land Rights - Treatment  
353.20        Land & Land Rights - Transmission & Distribution

Depreciable Plant

354.00        Structures & Improvements  
355.00        Power Generation Equipment  
360.00        Collection Sewers - Force  
361.00        Collection Sewers - Gravity  
363.00        Services to Customers  
371.00        Pumping Equipment  
380.00        Treatment & Disposal Equipment

**ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the original cost of the Township's plant in service by fixed capital account and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of the Township's property by account. In large measure, this data consisted of system maps and interviews with Township personnel. These records were augmented by information obtained from the field inventory.

The original cost determinations for Account 360 (Collection Sewers - Force), Account 361 (Collection Sewers - Gravity), and Account 363 (Services to Customers) are explained as follows:

Account 360, 361 and Account 363

The total original cost of collection sewers was determinable from available system maps of the collection system. However, the cost data was not maintained by unit of property. In these instances, the original costs was developed using footage that was developed from system maps and using installed costs of collection system from a sister LWWC division.

As previously explained, the physical inventory established the total footage of pipe and the total number of units of accessories.

The original cost values at March 29, 2014 for the Township's collection sewers - force, collection sewers - gravity, and customer services, as established by the original cost study, total \$1,363,145; \$4,469,287; and \$310,151, respectively.

**SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of the Township's utility plant in service is not less than \$10,466,725, as summarized by plant account in Section 2 (p. 2-1).

**DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at March 29, 2014. The calculated accrued depreciation reserve amounts to \$2,492,488 at March 29, 2014.

The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and detailed supporting documentation are included in Section 3 of this report.



## **SECTION 2**

**Aqua Pennsylvania, Inc.**

*Acquisition of Penn Twp. Wastewater System*

Original Cost at March 29, 2014

Acct. No.	Account Title	Original Cost
NON-DEPRECIABLE		
353.10	Land/Land Rights - Treatment	\$ 1.00
353.20	Land/Land Rights - Transmission & Distribution	1.00
	Total Non-Depreciable	\$ 2.00
DEPRECIABLE		
354.00	Structures and Improvements	\$ 702,026.00
355.00	Power Generation Equipment	172,116.61
360.00	Collection Sewers - Force	1,363,145.00
361.00	Collection Sewers - Gravity	4,469,287.00
363.00	Services to Customers	310,151.00
371.00	Pumping Equipment	1,000,000.00
380.00	Treatment and Disposal Equipment	2,450,000.00
	Total Depreciable Original Cost	\$ 10,466,725.61
	Total Plant in Service	\$ 10,466,727.61

**Little Washington Wastewater Company**

Acquisition of the Wastewater System Assets  
of Penn Township

Original Cost at March 29, 2014  
Account 354 - Structures and Improvements

Item	Year Installed	-----Quantity----- Unit	No.	Original Cost
Chain Link Fencing - Wastewater Treatment Building	1995	Lot		\$ 17,026.00
Chain Link Fencing - Rapid Infiltration Basins	1995	Lot		35,000.00
Frame & block construction w/vinyl siding Maint.- Garage Bldg., Blowers, controls, and ect.. 52' x 126', Gable roof, sheeting asphalt shingles, concrete floor, fluorescent lighting, electrical controls, Interior walls and doors, overhead garage doors. Main blower room contains 6 blowers and measures 34' X 24'. Small blow rooms contain 4 blowers and is 34'X22' Garage area is broken into a garage bay area measures 67'.5 X 50' with various work benches., two bathrooms, small storage area, office area with three offices.	1995	Lot		650,000.00
Total Account 354				----- \$ 702,026.00 =====

**Little Washington Wastewater Company**

Acquisition of the Wastewater System Assets  
of Penn Township

Original Cost at March 29, 2014  
Account 355 - Power Generation Equipment

Item	Year Installed	-----Quantity----- Unit	No.	Original Cost
Detroit Diesel Generator 600 - Filter Plant	1999	Ea.	1	\$ 120,000.00
Penn Ridge Diesel Generator Model # DS00040D68JAK0574	2003	Ea.	1	8,231.52
Cummins Diesel Generator - London Brook Model # DGDG-5674278	2010	Ea.	1	11,004.83
Cummins Diesel Generator - Elk Creek Model #DGDA-5564046	2010	Ea.	1	24,715.76
Portable Cummins Onan Genset on trailer Model # DKAF*3282587	2000	Ea.	1	8,164.51
Total Account 355				----- \$ 172,116.61 =====

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of Penn Township*

Original Cost at March 29, 2014  
Account 360 - Collection Sewers - Force

Item	Year Installed	----- Quantity ----- Unit	----- No.		Original Cost
Mains - Force	1998	LF	15,570	\$	741,146.00
Mains - Force	2000	LF	3,487		176,268.00
Mains - Force	2004	LF	7,689		445,731.00
Total Mains			26,746	\$	1,363,145.00
Total Account 360				\$	1,363,145.00

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of Penn Township*

Original Cost at March 29, 2014  
Account 361 - Collection Sewers - Gravity

Item	Year Installed	----- Quantity ----- Unit	No.	Original Cost
<b><u>Pipe</u></b>				
Mains - Gravity	1998	LF	19,148	\$ 930,784.00
Mains - Gravity	2003	LF	10,236	570,452.00
Mains - Gravity	2004	LF	38,657	2,288,494.00
Total Mains			----- 68,041	----- \$ 3,789,730.00
Manholes	1998	EA	101	\$ 253,268.00
Manholes	2003	EA	41	117,872.00
Manholes	2004	EA	101	308,417.00
			----- 243	----- \$ 679,557.00
Total Account 361 - Collection Sewers				----- \$4,469,287.00 =====

**Little Washington Wastewater Company**

*Acquisition of the Wastewater System Assets  
of Penn Township*

Original Cost at March 29, 2014  
Account 363 - Services to Customers

Item	Year Installed	----- Quantity ----- Unit	----- No.	Original Cost
<b><u>Service Laterals</u></b>				
Service Laterals	1998	EA.	225	76,034
Service Laterals	2003	EA.	121	46,879
Service Laterals	2004	EA.	455	187,238
Total Account 363			----- 801 -----	----- 310,151 -----

**Little Washington Wastewater Company**

Acquisition of the Wastewater System Assets  
of Penn Township

Original Cost at March 29, 2014  
Account 371 - Pumping Equipment

Item	Year Installed	-----Quantity----- Unit	No.	Original Cost
<b><u>Pumping Station and Equipment</u></b>				
Pumping Station and Equipment	1999	Ea.	2	\$ 300,000.00
Pump Station #1 - Village at Penn Ridge	2003	Ea.	1	100,000.00
Pump Station #2 - Village at Penn Ridge	2003	Ea.	1	125,000.00
Pump Station #1 - Jenner's Pond Retirement Home	1998	Ea.	1	75,000.00
Pump Station #2 - Jenner's Pond Retirement Home	1998	Ea.	1	150,000.00
Pump Station - Elk Creek	2004	Ea.	1	100,000.00
Pump Station - London Brook	2004	Ea.	1	150,000.00
 Total Account 371				<hr/> \$ 1,000,000.00 =====



**Little Washington Wastewater Company**

Acquisition of the Wastewater System Assets  
of Penn Township

Original Cost at March 29, 2014  
Account 380 - Treatment & Disposal Equipment

Item	Year Installed	-----Quantity----- Unit      No.	Original Cost
<b><u>Treatment Plant and Equipment</u></b>			
Concrete Rotomat and Equipment	1995	Lot	\$ 150,000.00
Two SBR (sewer batch reactors) 125,000 gal 95 X 42'	1995	2	700,000.00
350,000 gal Besst system equipment with UV system (Underground pit)	2002	Lot	1,200,000.00
Sludge Equalization Tanks 69' X 22.5'	1995	2	400,000.00
Total Account 380			----- \$ 2,450,000.00 =====

# **SECTION 3**

**Aqua Pennsylvania, Inc.**

*Acquisition of Penn Twp. Wastewater System*

Summary of Original Cost, Calculated Depreciation Reserve  
and Depreciated Original Cost as of March 29, 2014  
Based Upon Whole Life Depreciation

Acct. No.	Description	Original Cost at 03/29/2014	ASL/lowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost at 3/29/2014
<b>NON-DEPRECIABLE</b>					
353.10	Land/Land Rights - Treatment	\$ 1.00			\$1.00
353.20	Land/Land Rights - Transmission & Distribution	1.00			1.00
	Total Non-Depreciable	\$ 1.00			\$ 1.00
<b>DEPRECIABLE</b>					
354.00	Structures and Improvements	\$ 702,026.00	45-R3	\$ 274,689.09	\$ 427,336.91
355.00	Power Generation Equipment	172,116.61	25-R3	76,797.73	95,318.88
	Collection Sewers: Force				
360.00	Collection Sewers - Force Mains	1,363,145.00	85-R3	211,003.11	1,152,141.89
	Total Account 360	1,363,145.00		211,003.11	1,152,141.89
	Collection Sewers: Gravity				
361.00	Collection Sewers - Gravity Mains	3,789,730.00	85-R3	494,348.27	3,295,381.73
361.01	Collection Sewers - Gravity Manholes	679,557.00	85-R3	94,674.50	584,882.50
	Total Account 361	4,469,287.00		589,022.77	3,880,264.23
363.00	Services to Customers	310,151.00	40-R3	84,331.42	225,819.58
371.00	Pumping Equipment	1,000,000.00	25-R3	470,244.04	529,755.96
380.00	Treatment and Disposal Equipment	2,450,000.00	45-R3	790,505.45	1,659,494.55
	Total Original Cost	\$10,466,725.61		\$2,496,593.61	\$7,970,132.00

*Little Washington Wastewater Company*

*Penn Township- Sewer*

*354.00 Structures & Improvements*

*Original Cost Of Utility Plant In Service*

*And Development Of Calculated Depr Reserve as of March 29, 2014*

*Based Upon Broad Group/Remaining Life Procedure and Technique*

*Salvage Value: 0 % Average Service Life: 45 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1995	702,026.00	27.39	45.00	0.39128	274,689
<b>Total</b>	702,026.00				274,689.09

*Little Washington Wastewater Company*

*Penn Township- Sewer*

*355.00 Power Generation Equipment*

*Original Cost Of Utility Plant In Service*

*And Development Of Calculated Depr Reserve as of March 29, 2014*

*Based Upon Broad Group/Remaining Life Procedure and Technique*

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	120,000.00	11.63	25.00	0.53464	64,157
2000	8,164.51	12.43	25.00	0.50290	4,106
2003	8,231.52	14.93	25.00	0.40279	3,316
2010	35,720.59	21.35	25.00	0.14611	5,219
<i>Total</i>	172,116.62				76,797.73

*Little Washington Wastewater Company*

*Penn Township- Sewer*

*360.00 Collection Sewers Force - Mains*

*Original Cost Of Utility Plant In Service*

*And Development Of Calculated Depr Reserve as of March 29, 2014*

*Based Upon Broad Group/Remaining Life Procedure and Technique*

*Salvage Value: 0 % Average Service Life: 85 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	741,146.00	69.71	85.00	0.17986	133,300
2000	176,268.00	71.62	85.00	0.15739	27,742
2004	445,731.00	75.47	85.00	0.11209	49,960
<i>Total</i>	1,363,145.00				211,003.11

***Little Washington Wastewater Company***

***Penn Township- Sewer***

*361.00 Collection Sewers Gravity - Mains*

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of March 29, 2014***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0 % Average Service Life: 85 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	930,784.00	69.71	85.00	0.17986	167,408
2003	570,452.00	74.51	85.00	0.12346	70,431
2004	2,288,494.00	75.47	85.00	0.11209	256,509
<b><i>Total</i></b>	<b>3,789,730.00</b>				<b>494,348.27</b>

***Little Washington Wastewater Company***

***Penn Township- Sewer***

***361.01 Collection Sewers - Manholes***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of March 29, 2014***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 85 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1998	253,268.00	69.71	85.00	0.17986	45,552
2003	117,872.00	74.51	85.00	0.12346	14,553
2004	308,417.00	75.47	85.00	0.11209	34,569
<b><i>Total</i></b>	<b>679,557.00</b>				<b>94,674.50</b>



*Little Washington Wastewater Company*

*Penn Township- Sewer*

*363.00 Services to Customers*

*Original Cost Of Utility Plant In Service*

*And Development Of Calculated Depr Reserve as of March 29, 2014*

*Based Upon Broad Group/Remaining Life Procedure and Technique*

*Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	76,034.00	25.15	40.00	0.37123	28,226
2003	46,879.00	29.67	40.00	0.25826	12,107
2004	187,238.00	30.60	40.00	0.23499	43,998
<i>Total</i>	310,151.00				84,331.42

**Little Washington Wastewater Company**  
**Penn Township- Sewer**  
**371.00 Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of March 29, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	225,000.00	10.86	25.00	0.56552	127,242
1999	300,000.00	11.63	25.00	0.53464	160,393
2003	225,000.00	14.93	25.00	0.40279	90,628
2004	250,000.00	15.80	25.00	0.36792	91,981
<b>Total</b>	1,000,000.00				470,244.04

***Little Washington Wastewater Company***

***Penn Township- Sewer***

***380.00 Treatment & Disposal Equipment***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of March 29, 2014***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 45 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1995	1,250,000.00	27.39	45.00	0.39128	489,101
2002	1,200,000.00	33.70	45.00	0.25117	301,405
<b><i>Total</i></b>	<b><i>2,450,000.00</i></b>				<b><i>790,505.45</i></b>

**Aqua Pennsylvania Wastewater, Inc.**  
**Bunker Hill Sewer Company, Inc. Costs**  
**M92741**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
895	300000	PPE-Utility Plant in Service	267,054.00	
895	104000	Utility Plant Purchased/Sold		146,360.95
895	108000	AD-General		156,291.04
895	114000	U Plant Acq Adj	35,597.99	
<b>Total</b>			<b>302,651.99</b>	<b>302,651.99</b>

**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Bunker Hill Sewer Company, Inc.**

<b>Section 1327(a) Criteria</b>	<b>Satisfied (Y/N)</b>	<b>Explanation</b>
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	Yes	<p>On August 12, 2015, Aqua Pennsylvania Wastewater, Inc. (“Aqua”) acquired the Wastewater System Assets (“Assets”) of the Bunker Hill Sewer Company, Inc. (“Seller”). The Seller’s Assets were used and useful in providing wastewater service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	Yes	<p>Prior to Aqua’s acquisition of Seller’s Assets, Bunker Hill Sewer Company, Inc. was providing wastewater service to 68 residential customers in a portion of Clinton Township, Wyoming County, Pennsylvania.</p> <p>Reference: Commission Order Docket Nos. A-2014-2439909 and A-2014-2439910</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p>	Yes	

<p>(i) violation of statutory or regulatory requirements of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the</p>	<p>Yes</p>	

property will receive adequate, efficient, safe and reasonable service;		
(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;	Yes	Aqua and the Seller entered into an <i>Asset Purchase Agreement</i> , which was negotiated at arm's length. On August 12, 2014, the parties filed a <i>Joint Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered July 8, 2015, at Docket Nos. A-2014-2439909 and A-2014-2439910, the PUC granted the approvals requested in the <i>Joint Application</i> .
(6) the actual purchase price is reasonable;	Yes	The total purchase price for Seller's Assets was \$100,000 and was negotiated at arm's length. The Commission approved the company's application to acquire Bunker Hill Sewer Company, Inc. and an original cost study was prepared to support the utility plant purchase.  Reference: Commission Order Docket Nos. A-2014-2439909 and A-2014-2439910
(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;	Yes	The Seller is not an affiliated interest of Aqua.
(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b>	Yes	The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.
(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.	Yes	The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.



**Aqua Pennsylvania, Inc.**

***Acquisition of the Wastewater System Assets  
of Bunker Hill Wastewater System***

**Original Cost of the Wastewater Utility Plant  
and Depreciation Reserve Calculations  
at August 11, 2015**

By

**Selby P. Jones, CRRA, Principal  
David A. Sheffer, Principal**

**AUS CONSULTANTS  
275 Grandview Avenue, Suite 100  
Camp Hill, PA 17011**



January 2016





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January 4, 2016

Mr. Chad Nardelli  
Manager, Property Accounting  
Aqua Pennsylvania, Inc.  
762 West Lancaster Ave.  
Bryn Mawr, PA 19010

RE: Acquisition of the Wastewater System  
Assets of Bunker Hill Wastewater  
System

Dear Mr. Nardelli:

In accordance with your request, we have prepared an inventory of the wastewater system of Bunker Hill Wastewater System ("Bunker Hill") as of August 11, 2015.

The inventory was prepared to conform to the Uniform System of Accounts for Water/Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of Bunker Hill was determined from a detailed analysis of the books and records of Bunker Hill and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service	\$235,693	\$156,291

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2 and the depreciation calculations in Section 3.

Respectfully submitted,  
AUS Consultants

BY: David A. Sheffer

**Aqua Pennsylvania, Inc.**

**Acquisition of the Wastewater System Assets  
of Bunker Hill Wastewater System**

Table of Contents

Page No.

**SECTION 1**

EXECUTIVE SUMMARY

Background	1-1
Overview of the Bunker Hill's Facilities	1-1
Overview of the Study Techniques	1-2
Explanation of the Study	1-3
Original Cost Analysis	1-4
Summary of Original Cost	1-5
Depreciation Reserve	1-6

**SECTION 2**

ORIGINAL COST

Summary of the Original Costs of Plant in Service as of August 11, 2015	2-1
<u>Account 101 - Utility Plant in Service</u>	
353.1 Pump Station Land/Land Rights	2-2
354.1 Structure – Pump Station	2-3
361.0 Collection Sewers - Gravity	2-4
363.0 Services Laterals	2-5
371.0 Pumping Equipment	2-6
380.0 Treatment Equipment & Structures	2-7

**SECTION 3**

Depreciated Original Cost

Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of August 11, 2015	3-1
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**Aqua Pennsylvania, Inc.**

**Acquisition of the Wastewater System Assets  
of Bunker Hill Wastewater System**

Table of Contents

Page No.

**SECTION 4**

Photographs of Plant Assets (site visit)

4-1

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# **SECTION 1**

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**AQUA PENNSYLVANIA, INC.**

**Acquisition of the Wastewater System Assets  
of Bunker Hill Wastewater System**

Executive Summary

**BACKGROUND**

Bunker Hill Wastewater System ("Bunker Hill") provides wastewater service to a portion of Wyoming County, Pennsylvania, servicing approximately 68 customers located in Factoryville, PA. The Company began providing service to customers in the early 1970's.

On August 11, 2015, Aqua and Bunker Hill finalized an agreement to sell the wastewater system assets to Aqua. Aqua has retained AUS Consultants to prepare a study of the original cost of the fixed assets acquired and theoretical depreciation calculations as of August 11, 2015. The results of the study are contained in this report.

**OVERVIEW OF BUNKER HILL'S FACILITIES**

Bunker Hill's assets acquired consist of facilities for the treatment and collection of wastewater from its customers.

**Treatment Facilities**

The wastewater is treated at the treatment plant facility. The building is a wood structure built on a cinder block base with a pitched asphalt roof. Housed in the building are the four (4) blowers, two (2) sand filters and a lab sink. Along with the building, the treatment plant property holds two (2) aeration tanks, a chlorine contact tank, two (2) grinder pump (not in use), an 8 foot circular backwash tank and three (3) manholes.

The aeration tanks are enclosed by a 43.5' x 46' chain link fence. Tank #1 is 12.5' x 25.5' and tank #2 is 11' x 30'. The blowers are each 5 HP Roots 33 URAI blowers and are controlled through the control panel inside the treatment plant. The chlorine contact tank is 8' x 10' and is enclosed in the same fence as the building and aeration tanks. The two (2) sand filters are located within the building, and the grinder pumps are enclosed within the fence, but one grinder pump is non-operational and the sand filters have been offline for 20 years.

This information was comprised through interviews with Aqua personnel, a site visit and the review of supplied data. Photos from the site visit are located in Section 4 of this report.

#### Collection System

The wastewater collection system is a gravity system comprised of 4" and under plastic pipe. The footage of the collection system was verified by scaling of the system maps and were confirmed by physically walking the system using a measuring wheel. Along with Aqua personnel providing knowledge of the possible location of the mains.

#### OVERVIEW OF THE STUDY TECHNIQUES

The study of the original cost of Bunker Hill's assets was conducted in three (3) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by Bunker Hill.

Second, the original cost of the inventoried property was determined based on a review of Bunker Hill's books of account, construction records, system maps and other

available sources. Bunker Hill's records provided data in order to appropriately develop an accurate cost and inventory.

Third, Aqua requested that theoretical accrued depreciation calculations be performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at August 11, 2015.

A complete discussion of the methodologies employed in the original cost study is set forth in the sections of this report as follows.

## **EXPLANATION OF THE STUDY**

### **Utility Plant Inventory**

A comprehensive inventory of the system's assets as of August 11, 2015 was performed, based upon a complete physical inventory taken at the site on October 13, 2015. At this time the footage of the mains was verified by using system maps and walking the system, including review of the components of the treatment facility. Aqua personnel provided any additional knowledge of the system to aid in the inventory process. Significant components of the inventory are discussed below.

### **Mass Property**

For the purpose of this study, "mass" property consists of utility plant recorded in account 361 (Collection Sewers – Gravity), and Account 363 (Service Laterals).

For Account 361, footages of pipe were determined by reviewing the as-built maps and were verified by a physical check of the collection system in place. This same procedure was utilized for manholes.

Non-Mass Property

A physical inventory of the wastewater treatment plant was completed. Detailed results of the plant inventory are set forth in Section 2 of this report by the fixed capital accounts prescribed by the National Association of Regulatory Utility Commissioners. The original cost of all inventoried property units is properly recorded in the following accounts:

<u>Acct.</u> <u>No.</u>	<u>Account Title</u>
<u>Non-Depreciable Plant:</u>	
353.10	Pump Station Land & Land Rights
<u>Depreciable Plant</u>	
354.10	Structure – Pump Station
361.00	Collection Sewers - Gravity
363.00	Service Laterals
371.00	Pumping Equipment
380.00	Treatment Equipment & Structures

**ORIGINAL COST ANALYSIS**

The goal of the original cost analysis was to ascertain the original cost of Bunker Hills' plant in service by fixed capital accounts and, within each account, to determine the original costs by retirement unit (for non-mass property) or size and type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of Bunker Hill's property by account. In large measure, this data consisted of system maps and interviews with Aqua personnel. These records were augmented by information obtained from the field inventory.



The original cost determinations for Account 361 (Collection Sewers - Gravity) and Account 363 (Service Laterals) are explained as follows:

Account 361 and 363

The total original cost of collection sewers was determinable from available system maps of the collection system. However, the cost data was not maintained by unit of property. In these instances, the original costs was developed using footage that was developed from system maps and using installed costs of a comparable collection system and unit costs, which were developed utilizing Aqua installed costs and cost information from other available sources.

As previously explained, the physical inventory established the total footage of pipe and the total number of units of accessories.

The original cost values at August 11, 2015 for Bunker Hill's collection sewers – gravity and service laterals, as established by the original cost study, total \$122,368; and \$16,381, respectively.

**SUMMARY OF ORIGINAL COST**

The results of the original cost study established that the original cost of Bunker Hill's utility plant in service is not less than \$235,693, as summarized by plant account in Section 2 (p. 2-1).

### **DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at August 11, 2015. The calculated accrued depreciation reserve amounts to \$156,291 at August 11, 2015.

The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and detailed supporting documentation are included in Section 3 of this report.

## **SECTION 2**

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**Aqua Pennsylvania, Inc.**

*Acquisition of the Bunker Hill Wastewater System*

Original Cost at of August 11, 2015

Acct. No.	Description	Original Cost
<b>NON-DEPRECIABLE</b>		
353.10	Pump Station Land/Land Rights	\$ 5.00
	Total Non-Depreciable Plant	\$ 5.00
<b>DEPRECIABLE</b>		
354.10	Structure - Pump Station	15,914.39
361.00	Collection Mains & Accessories	
	Mains & Accessories	\$ 120,014.14
	Manholes	2,354.27
	Total Account 361	\$ 122,368.41
363.00	Service Laterals	16,381.35
371.00	Pumping Equipment	6,660.00
380.00	Treatment Equipment & Structures	74,363.90
	Total Depreciable Plant	\$ 235,688.05
	Total Plant	\$ 235,693.05

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bunker Hill Wastewater System*

Original Cost at of August 11, 2015  
Account 353.10 - Pump Station Land/Land Rights

<u>Item</u>	<u>Year Installed</u>	<u>Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Land</u>				
Source of Supply Land - Easements	1970	Lot		\$ 1.00
Source of Supply Land - Easements	1975	Lot		1.00
Source of Supply Land - Easements	1975	Lot		1.00
Source of Supply Land - Easements	1988	Lot		1.00
Source of Supply Land - Easements	1988	Lot		1.00
Total Account 353.10				----- \$ 5.00 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bunker Hill Wastewater System*

Original Cost at of August 11, 2015  
Account 354.10 - Structure - Pump Station

Item	Year Installed	Unit	No.	Original Cost
Pump Station - 24' x 34' Cinder block, wood and sheet rock construction with shingle roof, 0.022 MGD	1970	Lot		\$ 15,914.39
Total Account 354.10				<u>\$ 15,914.39</u> =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bunker Hill Wastewater System*

Original Cost at of August 11, 2015  
Account 361 - Mains & Accessories

<u>Item</u>	<u>Year Installed</u>	<u>Unit</u>	<u>No.</u>	<u>Original Cost</u>
<u>Mains &amp; Accessories</u>				
<u>Mains Gravity</u>				
Mains - Plastic-4" & Under Pipe	1970	Ft.	2,933	\$ 22,669.42
Mains - Plastic-4" & Under Pipe	1975		3,768	37,337.45
Mains - Plastic-4" & Under Pipe	1988	Ft.	3,074	60,007.27
Total Pipe				\$ 120,014.14
Manholes	1970	Ea.	3	2,354.27
Total Account 361				\$ 122,368.41 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bunker Hill Wastewater System*

Original Cost at of August 11, 2015  
Account 363.00 - Service Laterals

<u>Item</u>	<u>Year Installed</u>	<u>Unit</u>	<u>No.</u>	<u>Original Cost</u>
3/4" Services	1970	Ea.	21	\$ 2,717.19
3/4" Services	1975	Ea.	26	5,237.70
3/4" Services	1988	Ea.	21	8,426.46
Total Account 363.00				<u>\$ 16,381.35</u> =====



**Aqua Pennsylvania, Inc.**

*Acquisition of the Bunker Hill Wastewater System*

Original Cost at of August 11, 2015  
Account 371.00 - Pumping Equipment

Item	Year Installed	Unit	No.	Original Cost
Grinder Pump	1970	Ea.	2	\$ 6,660.00
Total Account 371.00				----- \$ 6,660.00 =====

**Aqua Pennsylvania, Inc.**

*Acquisition of the Bunker Hill Wastewater System*

Original Cost at of August 11, 2015  
Account 380.00 - Treatment Equipment & Structures

Item	Year Installed	Unit	No.	Original Cost
<u>Aeration Tanks</u>				
Aeration Tank #1 - 12.5' x 25.5'	1970	Ea.	1	\$ 12,994.93
Aeration Tank #2 - 11' x 30'	1970	Ea.	1	12,994.93
Fence surrounding tanks - 43.5' x 46'	1970			662.55
Total Aeration Tanks				\$ 26,652.41
Chlorine Contact Tank - 8' x 10'	1970	Lot		12,994.93
Blower - Roots 33's URAI, 5 HP includes electrical panel	1970	Ea.	4	9,621.64
Backwash Tank - 8 foot Circular tank	1970	Lot		11,062.00
Sand Filters	1970	Ea.	2	14,032.92
Total Account 380.00				\$ 74,363.90

# **SECTION 3**

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**Aqua Pennsylvania, Inc.**

*Acquisition of the Bunker Hill Wastewater System*

Original Cost, Calculated Depreciation Reserve and  
Depreciated Original Cost and as of August 11, 2015

Acct. No.	Description	Original Cost	Curve /Life	Calculated Depreciation Reserve	Depreciated Original Cost at 8/11/2015
NON-DEPRECIABLE					
353.10	Pump Station Land/Land Rights	\$ 5.00			\$ 5.00
	Total Non-Depreciable Plant	\$ 5.00			\$ 5.00
DEPRECIABLE					
354.10	Structure - Pump Station	\$ 15,914.39	45-R4	\$ 13,610.27	\$ 2,304.12
Collection Mains & Accessories					
361.11	Mains & Accessories	\$ 120,014.14	60-R3	\$ 62,399.26	\$ 57,614.88
361.13	Manholes	2,354.27	45-R3	1,883.17	2,354.27
	Total Account 361	\$ 122,368.41		\$ 64,282.43	\$ 59,969.15
363.00	Service Laterals	16,381.35	60-R3	8,454.12	7,927.23
371.00	Pumping Equipment	6,660.00	25-R3	6,660.00	-
380.00	Treatment Equipment & Structures	74,363.90	40-R3	63,284.22	11,079.68
	Total Depreciable Plant	\$ 235,688.05		\$ 156,291.04	\$ 81,280.18
	Total Plant	\$ 235,693.05 =====		\$ 156,291.04 =====	\$ 81,285.18 =====

**Aqua Pennsylvania, Inc.**  
**Bunker Hill Wastewater System**  
**354.10 Structures - Pump Station**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 45 Survivor Curve: R4*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	15,914.39	6.52	45.00	0.85522	13,610
<b>Total</b>	15,914.39				13,610.27

**Aqua Pennsylvania, Inc.**  
**Bunker Hill Wastewater System**  
**361.11 Mains-Plastic-4" & Under**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	22,669.42	20.74	60.00	0.65438	14,834
1975	37,337.45	24.29	60.00	0.59514	22,221
1988	60,007.27	34.66	60.00	0.42235	25,344
<b>Total</b>	120,014.14				62,399.26

**Aqua Pennsylvania, Inc.**  
**Bunker Hill Wastewater System**  
 361.13 Manholes

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 45 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	2,354.27	9.00	45.00	0.79989	1,883
<b>Total</b>	2,354.27				1,883.17

**Aqua Pennsylvania, Inc.**  
**Bunker Hill Wastewater System**  
 363.00 Service Laterals

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	2,717.19	20.74	60.00	0.65438	1,778
1975	5,237.70	24.29	60.00	0.59514	3,117
1988	8,426.46	34.66	60.00	0.42235	3,559
<b>Total</b>	16,381.35				8,454.12



**Aqua Pennsylvania, Inc.**  
**Bunker Hill Wastewater System**  
 371.00 Pumping Equipment

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1970	6,660.00	0.00	0.00	1.00000	6,660
<b>Total</b>	6,660.00				6,660.00

**Aqua Pennsylvania, Inc.**  
**Bunker Hill Wastewater System**  
**380.00 Treatment Equipment & Structures**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of August 11, 2015**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1970	74,363.90	5.96	40.00	0.85101	63,284
<b>Total</b>	74,363.90				63,284.22

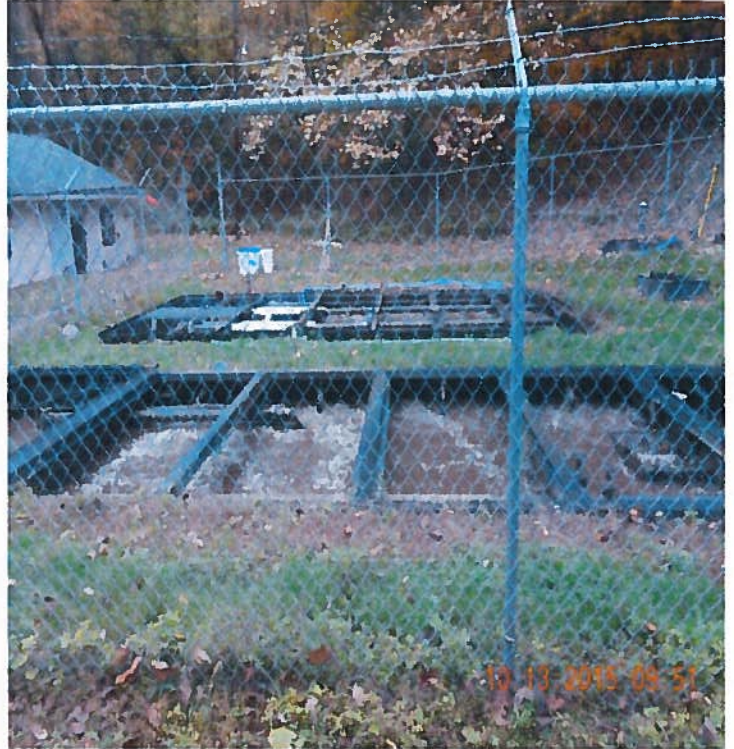
# **SECTION 4**

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Bunker Hill Sewer Site Inspection 10-13-2015  
Dave Hoogstad (Field Supervisor)



Sewer Treatment Bldg. & Aeration Tanks



Aeration Tanks



Grinder Pump (not in use)



Aeration Tank

Bunker Hill Sewer Site Inspection 10-13-2015  
Dave Hoogstad (Field Supervisor)



Chlorine Contact Tank



Blowers



Sand Filters (Not used)



Lab Sink

Bunker Hill Sewer Site Inspection 10-13-2015  
Dave Hoogstad (Field Supervisor)



Sewer Manhole



Sewer Manhole



Sewer Manhole

**Aqua Pennsylvania Wastewater, Inc.**  
**Honeycroft Village, L.P. Costs**  
**M92273**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
670	300000	PPE-Utility Plant in Service	2,741,804.71	
900	104000	Utility Plant Purchased/Sold		232,065.53
670	108000	AD-General		55,383.64
670	114000	U Plant Acq Adj		2,463,624.45
670	104000	Utility Plant Purchased/Sold	9,268.91	
<b>Total</b>			<b>2,751,073.62</b>	<b>2,751,073.62</b>



March 23, 2018

**VIA FEDERAL EXPRESS**

Rosemary Chiavetta, Secretary  
Commonwealth of Pennsylvania  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Application of Little Washington Wastewater Company for approval to begin to offer, render, furnish, or supply wastewater service to the public in a portion of Londonderry Township, Chester County, Pennsylvania.

Docket No: A-230240F0031

Dear Secretary Chiavetta:

Pursuant to the Commission's Statement Policy relating to water and wastewater system acquisitions at 52 Pa. Code § 69.721(f), enclosed is a copy of the original plant-in-service valuation of the wastewater system assets acquired from Honeycroft Village, L.P. on November 1, 2016.

Should you have any questions regarding this filing, please contact me at (610) 645-1021.

Sincerely,

A handwritten signature in blue ink, appearing to read "Renee T. Marquis". The signature is fluid and cursive, with a large loop at the end.

Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.

Enclosures  
cc: Certificate of Service



**BEFORE THE**  
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Aqua Pennsylvania Wastewater, Inc.

Docket No. A-230240F0031

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of the following document, the original cost plant-in-service valuation, in accordance with the requirements of 52 Pa. Code § 1.54 upon the person(s) and in the manner indicated below:

**VIA FEDERAL EXPRESS**

Christine Hoover, Esq.  
Office of Consumer Advocate  
555 Walnut Avenue  
Fifth Floor, Forum Place  
Harrisburg, PA 17101-1923

John R. Evans  
Office of Small Business Advocate  
Suite 202, Commerce Bldg.  
300 North Second Street  
Harrisburg, PA 17101

Richard Kanaskie, Director  
Bureau of Investigation and Enforcement  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Paul Diskin, Director  
Bureau of Technical Utility Services  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Larry Treaster  
Bureau of Audits  
Pennsylvania Public Utility Commission  
Three East Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Dated: March 23, 2018



Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.  
762 W. Lancaster Ave.  
Bryn Mawr, PA 19010  
610-645-1021  
[RTMarquis@AquaAmerica.com](mailto:RTMarquis@AquaAmerica.com)

Aqua Pennsylvania Wastewater, Inc.

Acquisition of the Wastewater System Assets of  
Honeycroft Village, L.P.

Original Cost of Wastewater Utility Plant and  
Related Accrued Depreciation  
As of December 31, 2016

762 W. Lancaster Avenue, Bryn Mawr, PA 19010

---

Aqua Pennsylvania Wastewater, Inc.

Original Cost and Related Accrued Depreciation of  
Honeycroft Village, L.P.  
As of December 31, 2016

The Honeycroft Village Wastewater System was built to provide wastewater service to 264 proposed residential dwelling units and 1 clubhouse in a portion of Londonderry Township, Chester County. The wastewater system consists of a treatment plant, collection mains, manholes, service laterals and miscellaneous equipment.

On August 8, 2006, Aqua Pennsylvania Wastewater, Inc., formerly Little Washington Wastewater Company, filed an Application for approval to begin to offer, render, furnish, or supply wastewater service to the public. An Order was entered on November 13, 2006 closing Docket No. A-230240F0031 and a Certificate of Public Convenience was issued with an effective date of November 9, 2006. The original cost of the assets of the water system are based on construction records and other information and data provided by the developer.

---

Aqua Pennsylvania Wastewater, Inc.  
Acquisition of Honeycroft Village, L.P.  
Depreciated Original Cost

Account	Account Title	Description	In Service Date	Quantity	Original Cost	Depreciation Rate	Accumulated Depreciation	Depreciated Original Cost
<b>DEPRECIABLE PLANT</b>								
354.30	Structures and Improvements	Honeycroft Control Building	5/31/2016	1	\$ 225,868.66	2.7400%	\$ 3,094.40	\$ 222,774.26
354.40	Structures and Improvements	Honeycroft Wastewater Treatment Plant	5/31/2016	1	\$ 475,854.57	2.7400%	6,519.21	469,335.36
	<b>TOTAL ACCOUNT 354</b>				<u>\$ 701,723.23</u>		<u>\$ 9,613.61</u>	<u>\$ 692,109.62</u>
355.00	Power Generation Equipment	Generator	5/31/2016	1	50,705.21	2.7400%	\$ 694.66	50,010.55
	<b>TOTAL ACCOUNT 355</b>				<u>\$ 50,705.21</u>		<u>\$ 694.66</u>	<u>\$ 50,010.55</u>
361.20	Collection Sewers - Gravity	Mains - 8" PVC	5/31/2016	7259	\$ 236,417.00	1.1700%	\$ 1,383.04	\$ 235,033.96
361.20	Collection Sewers - Gravity	Manholes	5/31/2016	40	96,720.00	1.1700%	565.81	96,154.19
	<b>TOTAL ACCOUNT 361.2</b>				<u>\$ 333,137.00</u>		<u>\$ 1,948.85</u>	<u>\$ 331,188.15</u>
363.20	Service to Customers	Service Laterals	5/31/2016	186	\$ 116,150.00	1.7400%	\$ 1,010.51	\$ 115,139.50
	<b>TOTAL ACCOUNT 363.2</b>				<u>\$ 116,150.00</u>		<u>\$ 1,010.51</u>	<u>\$ 115,139.50</u>
371.00	Pumping Equipment	Pump Station and Equipment	5/31/2016	1	267,354.75	6.9100%	\$ 9,237.11	\$ 258,117.64
	<b>TOTAL ACCOUNT 371</b>				<u>\$ 267,354.75</u>		<u>\$ 9,237.11</u>	<u>\$ 258,117.64</u>
380.40	Treatment and Disposal Equipment	Influent Screen	5/31/2016	1	\$ 31,345.04	5.5500%	\$ 869.82	\$ 30,475.22
380.40	Treatment and Disposal Equipment	Drip Storage Tank	5/31/2016	1	258,135.62	5.5500%	7,163.26	250,972.36
380.40	Treatment and Disposal Equipment	Process Piping	5/31/2016	1	87,581.73	5.5500%	2,430.39	85,151.34
380.40	Treatment and Disposal Equipment	Drip Fields	5/31/2016	1	428,689.51	5.5500%	11,896.13	416,793.38
380.40	Treatment and Disposal Equipment	Controls	5/31/2016	1	41,486.08	5.5500%	1,151.24	40,334.84
380.40	Treatment and Disposal Equipment	Chemical Feed	5/31/2016	1	55,314.77	5.5500%	1,534.98	53,779.79
380.40	Treatment and Disposal Equipment	Design/Install Monitor Well	5/31/2016	1	267,894.50	5.5500%	7,434.07	260,460.43
380.40	Treatment and Disposal Equipment	Monitor Well Sampling	5/31/2016	1	8,579.32	5.5500%	238.08	8,341.24
380.40	Treatment and Disposal Equipment	Mixers	5/31/2016	1	5,798.83	5.5500%	160.92	5,637.91
	<b>TOTAL ACCOUNT 380.4</b>				<u>\$ 1,184,825.40</u>		<u>\$ 32,878.90</u>	<u>\$ 1,151,946.50</u>
	<b>TOTAL DEPRECIABLE PLANT</b>				<u>\$ 2,653,895.59</u>		<u>\$ 55,383.64</u>	<u>\$ 2,598,511.95</u>
	<b>TOTAL UTILITY PLANT IN SERVICE</b>				<u>\$ 2,653,895.59</u>		<u>\$ 55,383.64</u>	<u>\$ 2,598,511.95</u>

**Aqua Pennsylvania Wastewater, Inc.**  
**Emlenton Area Municipal Authority Costs**  
**M92786**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
896	300000	PPE-Utility Plant in Service	4,606,392.11	
896	271308	CIAC-CASH NON REFUNDABLE BUILDER OR DEVELOPER DEPOSITS		1,212,830.00
900	104000	Utility Plant Purchased/Sold		483,867.35
896	108000	AD-General		1,677,813.00
896	272000	Accum Amort of CIAC	450,046.00	
896	114000	U Plant Acq Adj		1,681,927.76
<b>Total</b>			<b>5,056,438.11</b>	<b>5,056,438.11</b>

AQUA PENNSYLVANIA WASTEWATER, INC.  
BRYN MAWR, PENNSYLVANIA

ORIGINAL COST AND  
RELATED ACCRUED DEPRECIATION OF  
THE BOROUGH OF EMLENTON  
WASTEWATER SYSTEM  
AS OF DECEMBER 31, 2016

*Prepared by:*



***Gannett Fleming***

*Excellence Delivered **As Promised***

AQUA PENNSYLVANIA WASTEWATER, INC.  
Bryn Mawr, Pennsylvania

ORIGINAL COST AND  
RELATED ACCRUED DEPRECIATION OF  
THE BOROUGH OF EMLENTON  
WASTEWATER SYSTEM  
AS OF DECEMBER 31, 2016

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC  
Camp Hill, Pennsylvania



Excellence Delivered *As Promised*

May 4, 2017

Aqua Pennsylvania Wastewater, Inc.  
762 Lancaster Avenue  
Bryn Mawr, PA 19010

Attention Mr. William C. Packer, Jr.  
Regional Controller – PA/NJ

Gentlemen:

Pursuant to your request, we have determined the original cost and related accrued depreciation as of December 31, 2016, of the wastewater assets of the Borough of Emlenton Wastewater System.

The attached report includes a brief description of the system, a description of the methods used in the determination of original cost and accrued depreciation, the itemized original cost of wastewater system facilities by account and installation year, and the detailed calculations of accrued depreciation.

Respectfully submitted,

GANNETT FLEMING VALUATION  
AND RATE CONSULTANTS, LLC

A handwritten signature in blue ink that reads "John J. Spanos".

JOHN J. SPANOS  
Sr. Vice President

JJS/mlw

062360.000

Gannett Fleming Valuation and Rate Consultants, LLC

P.O. Box 67100 • Harrisburg, PA 17106-7100 | 207 Senate Avenue • Camp Hill, PA 17011  
t: 717.763.7211 • f: 717.763.4590

[www.gfvrc.com](http://www.gfvrc.com)





# CONTENTS

## PART I. INTRODUCTION

Plan of Report .....	I-2
Description of System .....	I-2
Determination of Original Cost .....	I-3
Calculation of Accrued Depreciation .....	I-3
Results of Study .....	I-4
Summary of Original Cost and Accrued Depreciation of Wastewater System as of December 31, 2016 .....	I-5

## PART II. ORIGINAL COST

Summary of Analysis of Original Cost of Wastewater System as of December 31, 2016.....	II-2
Detailed Original Cost as of December 31, 2016 .....	II-3

## PART III. CALCULATION OF ACCRUED DEPRECIATION

Summary of Survivor Curves and Calculated Accrued Depreciation of Wastewater System as of December 31, 2016 .....	III-2
Detailed Depreciation Calculations.....	III-3
Utility Plant in Service .....	III-4
Contributions In Aid of Construction .....	III-13

PART I. INTRODUCTION

AQUA PENNSYLVANIA WASTEWATER, INC.

ORIGINAL COST AND RELATED ACCRUED DEPRECIATION OF  
THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
AS OF DECEMBER 31, 2016

PART I. INTRODUCTION

PLAN OF REPORT

The purpose of the study was to determine the original cost and related accrued depreciation as of December 31, 2016, of the wastewater assets of the Borough of Emlenton Wastewater System (Emlenton). The system is to be acquired by Aqua Pennsylvania Wastewater, Inc. from Emlenton by end of December 2016.

The study is presented in three parts. Part I, Introduction, contains statements with respect to the plan of the report, the system facilities, the procedures employed, and a summary of the results of the study. Part II, Original Cost, presents the detailed analysis of the original cost of the Emlenton wastewater system by account and vintage year. Part III, Calculation of Accrued Depreciation, develops the accrued depreciation related to the original cost as of December 31, 2016.

DESCRIPTION OF SYSTEM

The Borough of Emlenton wastewater system provides service to 448 wastewater customers in the Emlenton Borough and portions of Richland Township and Salem Township, Venango County and Clarion County, Pennsylvania. The wastewater system assets include 3 treatment plants, collection mains, manholes, service laterals, land and miscellaneous equipment. There are collection sewer mains prior to the 1980s, however, the majority of the system was built since 1986 and consists of plastic mains of various sizes, grinder pumps and service laterals. The Emlenton treatment plant was

upgraded in 1986. The Mariasville and Lamartine systems were constructed in 1986 and included sand mound filtration systems.

#### DETERMINATION OF ORIGINAL COST

The cost of system facilities was determined from Emlenton records, project contracts and unit costs typical of other wastewater utilities in the region. The costs associated with wastewater treatment plant were determined by standard construction costs of others and Handy-Whitman indexes. For mains and manholes, borough documents of the footage of mains by type material and the number of manholes were utilized for the distribution system. Each customer has a service lateral and the asset was assigned the same installation year as the related main. The inventory was priced using unit costs for each vintage year. The unit costs were developed from typical unit costs experienced by other Pennsylvania wastewater companies, published unit costs or experienced costs trended to the year of installation using Handy-Whitman indexes.

#### CALCULATION OF ACCRUED DEPRECIATION

The accrued depreciation calculation in Part III of the report was based on recognized methods using estimated survivor characteristics and the straight line depreciation method. The estimated survivor curves are similar to those used by other Pennsylvania wastewater companies. The average service life procedure was used to apply the methods of depreciation to group properties for which a survivor curve was used to recognize the existence of life dispersion.

A summary table of accrued depreciation applicable to original cost is set forth in Part III of the report. The detailed calculations by account and vintage follow the summary table.

## RESULTS OF STUDY

The tables on pages 5 through 13 summarize the original cost and related accrued depreciation by account for the Borough of Emlenton Wastewater System as of December 31, 2016. The original cost was brought forward from Part II of the report and the accrued depreciation from Part III of the report.

**AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM**

**SUMMARY OF ORIGINAL COST AND ACCRUED DEPRECIATION  
OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2016**

ACCOUNT (1)	DESCRIPTION (2)	ORIGINAL COST (3)	ACCRUED DEPRECIATION (4)
353.00	LAND	34,425.00	0
354.30	STRUCTURES AND IMPROVEMENTS - TREATMENT	3,000,891.64	1,027,149
354.50	STRUCTURES AND IMPROVEMENTS - GARAGE	119,215.71	64,123
361.00	COLLECTION MAINS	957,699.14	356,011
361.10	MANHOLES	39,273.10	24,895
363.00	SERVICE LATERALS	42,457.91	25,674
371.00	PUMPING EQUIPMENT	143,690.98	85,043
380.00	TREATMENT AND DISPOSAL EQUIPMENT	142,205.53	87,447
390.00	OFFICE EQUIPMENT	<u>7,663.00</u>	<u>7,471</u>
	<b>TOTAL PLANT IN SERVICE</b>	<b>4,487,522.01</b>	<b>1,677,813</b>
	<b>CONTRIBUTIONS IN AID OF CONSTRUCTION</b>		
354.30	STRUCTURES AND IMPROVEMENTS - TREATMENT	1,031,375.40	365,883
361.00	COLLECTION MAINS	100,473.00	34,485
371.00	PUMPING EQUIPMENT	43,530.60	25,737
380.00	TREATMENT AND DISPOSAL EQUIPMENT	<u>37,451.00</u>	<u>23,941</u>
	<b>TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION</b>	<b>1,212,830.00</b>	<b>450,046</b>
	<b>TOTAL WASTEWATER PLANT</b>	<b><u>3,274,692.01</u></b>	<b><u>1,227,767</u></b>

PART II. ORIGINAL COST

**AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM**

**SUMMARY OF ANALYSIS OF ORIGINAL COST OF WASTEWATER  
SYSTEM AS OF DECEMBER 31, 2016**

<u>ACCOUNT</u> (1)	<u>DESCRIPTION</u> (2)	<u>ORIGINAL COST</u> (3)
353.00	LAND	34,425.00
354.30	STRUCTURES AND IMPROVEMENTS - TREATMENT	3,000,891.64
354.50	STRUCTURES AND IMPROVEMENTS - GARAGE	119,215.71
361.00	COLLECTION MAINS	957,699.14
361.10	MANHOLES	39,273.10
363.00	SERVICE LATERALS	42,457.91
371.00	PUMPING EQUIPMENT	143,690.98
380.00	TREATMENT AND DISPOSAL EQUIPMENT	142,205.53
390.00	OFFICE EQUIPMENT	<u>7,663.00</u>
	<b>TOTAL PLANT IN SERVICE</b>	<b>4,487,522.01</b>
	<b>CONTRIBUTIONS IN AID OF CONSTRUCTION</b>	
354.30	STRUCTURES AND IMPROVEMENTS - TREATMENT	1,031,375.40
361.00	COLLECTION MAINS	100,473.00
371.00	PUMPING EQUIPMENT	43,530.60
380.00	TREATMENT AND DISPOSAL EQUIPMENT	<u>37,451.00</u>
	<b>TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION</b>	<b>1,212,830.00</b>
	<b>TOTAL WASTEWATER PLANT</b>	<b><u><u>3,274,692.01</u></u></b>



DETAILED ORIGINAL COST AS OF DECEMBER 31, 2016

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
DETAILED ORIGINAL COST AS OF DECEMBER 31, 2016

ACCOUNT	LOCATION	QUANTITY	YEAR	UNIT COST	TOTAL COST
353.00	LAND				
	LAND		1986		25,251.00
	<b>TOTAL 1986</b>				<b>25,251.00</b>
	LAND		2008		9,174.00
	<b>TOTAL 2008</b>				<b>9,174.00</b>
	<b>TOTAL LAND</b>				<b>34,425.00</b>
354.30	<b>STRUCTURES AND IMPROVEMENTS - TREATMENT</b>				
	EMLENTON - BLOWER BUILDING	1	1986	173,297.73	173,297.73
	EMLENTON - DIGESTERS	2	1986	346,609.79	693,219.57
	EMLENTON - DRYING BEDS	1	1986	32,702.31	32,702.31
	EMLENTON - EQUALIZATION TANK	1	1986	404,804.07	404,804.07
	EMLENTON - RBC	2	1986	90,718.11	181,436.22
	EMLENTON - SETTLING TANKS	2	1986	317,364.36	634,728.72
	<b>TOTAL 1986</b>	<b>9</b>			<b>2,120,188.62</b>
	LAMARTINE - SEPTIC TANKS	1	1987	67,705.84	67,705.84
	LAMARTINE - SAND MOUND INFILTRATION SYSTEM	1	1987	197,082.13	197,082.13
	MARIASVILLE - CHLORINE AND DECHLORINATED TANK	1	1987	117,182.74	117,182.74
	MARIASVILLE - WET WELL/ DOSING TANK	1	1987	103,071.35	103,071.35
	MARIASVILLE - SAND MOUND INFILTRATION	1	1987	189,198.63	189,198.63
	<b>TOTAL 1987</b>	<b>5</b>			<b>674,240.69</b>
	EMLENTON - ROOF FOR DRYING BEDS	1	1995	16,034.67	16,034.67
	<b>TOTAL 1995</b>	<b>1</b>			<b>16,034.67</b>
	EMLENTON - SLUDGE PRESS BUILDING	1	2002	35,890.00	35,890.00
	<b>TOTAL 2002</b>	<b>1</b>			<b>35,890.00</b>

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
DETAILED ORIGINAL COST AS OF DECEMBER 31, 2016

ACCOUNT	LOCATION	QUANTITY	YEAR	UNIT COST	TOTAL COST	
354.30, cont.	EMLENTON	1	2007	1,804.00	1,804.00	
	EMLENTON	1	2007	2,591.00	2,591.00	
	<b>TOTAL 2007</b>	<b>2</b>			<b>4,395.00</b>	
	LAMARTINE - DOSING TANK	1	2008	150,142.66	150,142.66	
	<b>TOTAL 2008</b>	<b>1</b>			<b>150,142.66</b>	
	<b>TOTAL STRUCTURES AND IMPROVEMENTS</b>				<b>3,000,891.64</b>	
	354.50	<b>STRUCTURES AND IMPROVEMENTS - GARAGE</b>				
		EMLENTON - GARAGE 3 BAYS	1	1988	78,197.28	78,197.28
		<b>TOTAL 1988</b>	<b>1</b>			<b>78,197.28</b>
		EMLENTON - GARAGE 4TH BAY	1	1993	41,018.43	41,018.43
<b>TOTAL 1993</b>		<b>1</b>			<b>41,018.43</b>	
<b>TOTAL STRUCTURES AND IMPROVEMENTS - GARAGE</b>				<b>119,215.71</b>		
361.00	<b>COLLECTION MAINS</b>					
	1ST STREET	3,500	1945	1.49	5,208.06	
	CENTER STREET	2,930	1945	1.49	4,359.89	
	MAIN STREET	3,920	1945	1.49	5,833.02	
	<b>TOTAL 1945</b>	<b>10,350</b>			<b>15,400.97</b>	
	3RD STREET	3,500	1955	3.03	10,616.43	
	5TH STREET	3,500	1955	3.03	10,616.43	
	CHESTNUT STREET	2,930	1955	3.03	8,887.46	
	OAK ALLEY	2,930	1955	3.03	8,887.46	
	<b>TOTAL 1955</b>	<b>12,860</b>			<b>39,007.78</b>	
	WALNUT STREET	2,930	1960	5.03	14,737.17	
	<b>TOTAL 1960</b>	<b>2,930</b>			<b>14,737.17</b>	

AQUA PENNSYLVANIA WASTEWATER, INC  
 ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
 DETAILED ORIGINAL COST AS OF DECEMBER 31, 2016

ACCOUNT	LOCATION	QUANTITY	YEAR	UNIT COST	TOTAL COST
361.00, cont.					
	8TH STREET	3,500	1965	5.47	19,157.44
	9TH STREET	3,500	1965	5.47	19,157.44
	HILL STREET	2,930	1965	5.47	16,037.51
	MYRTLE STREET	2,930	1965	5.47	16,037.51
	<b>TOTAL 1965</b>	<b>12,860</b>			<b>70,389.90</b>
	GARDEN STREET	2,930	1970	6.21	18,204.74
	HICKORY STREET	2,930	1970	6.21	18,204.74
	<b>TOTAL 1970</b>	<b>5,860</b>			<b>36,409.48</b>
	HIGHLAND AVENUE	2,930	1975	10.80	31,641.58
	KERR AVENUE	1,200	1975	10.80	12,959.01
	<b>TOTAL 1975</b>	<b>4,130</b>			<b>44,600.59</b>
	SPRING ALLEY	1,740	1980	14.94	25,997.90
	SR2003/COLLEGE STREET	4,850	1980	14.94	72,465.41
	<b>TOTAL 1980</b>	<b>6,590</b>			<b>98,463.31</b>
	KERR AVENUE	4,070	1985	17.56	71,475.00
	<b>TOTAL 1985</b>	<b>4,070</b>			<b>71,475.00</b>
	LAMARTINE	9,100	1986	18.86	171,640.29
	MARIASVILLE	3,000	1986	18.86	56,584.71
	PEARL STREET	2,930	1986	18.86	55,264.40
	<b>TOTAL 1986</b>	<b>15,030</b>			<b>283,489.40</b>
	LAMARTINE	4,200	1987	19.45	81,703.88
	MARIASVILLE	1,200	1987	19.45	23,343.97
	<b>TOTAL 1987</b>	<b>5,400</b>			<b>105,047.85</b>
	RIVER STREET/ALLEGHENY AVENUE	2,850	1991	26.01	74,117.67
	<b>TOTAL 1991</b>	<b>2,850</b>			<b>74,117.67</b>

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
DETAILED ORIGINAL COST AS OF DECEMBER 31, 2016

ACCOUNT	LOCATION	QUANTITY	YEAR	UNIT COST	TOTAL COST
361.00, cont.	MARIASVILLE	500	1992	26.35	13,172.52
	<b>TOTAL 1992</b>	<b>500</b>			<b>13,172.52</b>
	LAMARTINE	700	1993	27.19	19,034.50
	<b>TOTAL 1992</b>	<b>700</b>			<b>19,034.50</b>
	MAIN STREET, KERR AND RIVER AVENUE	1,980	2008	36.04	72,353.00
	<b>TOTAL 2008</b>	<b>1,980</b>			<b>72,353.00</b>
	<b>TOTAL COLLECTION MAINS</b>				<b>957,699.14</b>
361.10	<b>MANHOLES</b>				
	1ST STREET	3	1945	148.91	446.74
	CENTER STREET	3	1945	148.91	446.74
	MAIN STREET	5	1945	148.91	744.57
	<b>TOTAL 1945</b>	<b>11</b>			<b>1,638.05</b>
	3RD STREET	3	1955	303.55	910.66
	5TH STREET	3	1955	303.55	910.66
	CHESTNUT STREET	3	1955	303.55	910.66
	OAK ALLEY	3	1955	303.55	910.66
	<b>TOTAL 1955</b>	<b>12</b>			<b>3,642.64</b>
	WALNUT STREET	3	1960	389.47	1,168.40
	<b>TOTAL 1960</b>	<b>3</b>			<b>1,168.40</b>
	8TH STREET	3	1965	423.83	1,271.49
	9TH STREET	3	1965	423.83	1,271.49
	HILL STREET	3	1965	423.83	1,271.49
	MYRTLE STREET	3	1965	423.83	1,271.49
	<b>TOTAL 1965</b>	<b>12</b>			<b>5,085.96</b>

AQUA PENNSYLVANIA WASTEWATER, INC  
 ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
 DETAILED ORIGINAL COST AS OF DECEMBER 31, 2016

ACCOUNT	LOCATION	QUANTITY	YEAR	UNIT COST	TOTAL COST
361.10, cont.	GARDEN STREET	3	1970	481.11	1,443.32
	HICKORY STREET	3	1970	481.11	1,443.32
	<b>TOTAL 1970</b>	<b>6</b>			<b>2,886.64</b>
	HIGHLAND AVENUE	3	1975	836.21	2,508.62
	KERR AVENUE	2	1975	836.21	1,672.42
	<b>TOTAL 1975</b>	<b>5</b>			<b>4,181.04</b>
	SPRING ALLEY	2	1980	1,156.95	2,313.89
	SR2003/COLLEGE STREET	6	1980	1,156.95	6,941.67
	<b>TOTAL 1980</b>	<b>8</b>			<b>9,255.56</b>
	PEARL STREET	3	1986	1,460.50	4,381.50
	<b>TOTAL 1986</b>	<b>3</b>			<b>4,381.50</b>
	RIVER STREET/ALLEGHENY AVENUE	4	1991	1,758.33	7,033.31
	<b>TOTAL 1991</b>	<b>4</b>			<b>7,033.31</b>
	<b>TOTAL MANHOLES</b>				<b>39,273.10</b>
363.00	<b>SERVICE LATERALS</b>				
	SERVICES - RESIDENTIAL	178	1945	30.98	5,515.09
	<b>TOTAL 1945</b>	<b>178</b>			<b>5,515.09</b>
	SERVICES - RESIDENTIAL	114	1955	65.61	7,479.81
	<b>TOTAL 1955</b>	<b>114</b>			<b>7,479.81</b>
	SERVICES - RESIDENTIAL	59	1960	87.48	5,161.51
	<b>TOTAL 1960</b>	<b>59</b>			<b>5,161.51</b>
	SERVICES - COMMERCIAL/INSTITUTIONAL	21	1965	140.95	2,959.85
	SERVICES - RESIDENTIAL	15	1965	105.71	1,585.63
	<b>TOTAL 1965</b>	<b>36</b>			<b>4,545.48</b>

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
DETAILED ORIGINAL COST AS OF DECEMBER 31, 2016

ACCOUNT	LOCATION	QUANTITY	YEAR	UNIT COST	TOTAL COST
363.00, cont.	SERVICES - RESIDENTIAL	7	1970	143.98	1,007.88
	<b>TOTAL 1970</b>	<b>7</b>			<b>1,007.88</b>
	SERVICES - COMMERCIAL/INSTITUTIONAL	7	1975	298.90	2,092.31
	SERVICES - RESIDENTIAL	12	1975	224.18	2,690.11
	<b>TOTAL 1975</b>	<b>19</b>			<b>4,782.42</b>
	SERVICES - COMMERCIAL/INSTITUTIONAL	5	1980	425.27	2,126.33
	SERVICES - RESIDENTIAL	10	1980	318.95	3,189.49
	<b>TOTAL 1980</b>	<b>15</b>			<b>5,315.82</b>
	SERVICES - COMMERCIAL/INSTITUTIONAL	3	1986	549.20	1,647.60
	SERVICES - RESIDENTIAL	17	1986	411.90	7,002.30
	<b>TOTAL 1986</b>	<b>20</b>			<b>8,649.90</b>
	<b>TOTAL SERVICE LATERALS</b>				<b>42,457.91</b>
371.00	<b>PUMPING EQUIPMENT</b>				
	EMLENTON - CUSTOMER GRINDER PUMPS	4	1986	1,628.68	6,514.73
	<b>TOTAL 1986</b>	<b>4</b>			<b>6,514.73</b>
	LAMARTINE	60	1987	1,714.70	102,882.19
	MARIASVILLE	20	1987	1,714.70	34,294.06
	<b>TOTAL 1987</b>	<b>80</b>			<b>137,176.25</b>
	<b>TOTAL PUMPING EQUIPMENT</b>				<b>143,690.98</b>

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
DETAILED ORIGINAL COST AS OF DECEMBER 31, 2016

ACCOUNT	LOCATION	QUANTITY	YEAR	UNIT COST	TOTAL COST
380.00	TREATMENT AND DISPOSAL EQUIPMENT				
	EMLENTON - BLOWERS	5	1986	24,471.28	122,356.40
	EMLENTON - POLYMER SYSTEM	1	1986	3,582.13	3,582.13
	<b>TOTAL 1986</b>	<b>6</b>			<b>125,938.53</b>
	LAMARTINE - HYDROMATIC SINGLE PHASE PUMPS	1	1987	860.40	860.40
	LAMARTINE - MEYERS SINGLE PHASE PUMPS	2	1987	860.40	1,720.80
	MARIASVILLE - HYDROMATIC SINGLE PHASE PUMPS	2	1987	860.40	1,720.80
	<b>TOTAL 1987</b>	<b>5</b>			<b>4,302.00</b>
	EMLENTON - SLUDGE PRESS	1	2002	11,965.00	11,965.00
	<b>TOTAL 1986</b>	<b>1</b>			<b>11,965.00</b>
	<b>TOTAL TREATMENT AND DISPOSAL EQUIPMENT</b>				<b>142,205.53</b>
390.00	OFFICE EQUIPMENT				
	OFFICE EQUIPMENT		1998		1,916.00
	<b>TOTAL 1986</b>				<b>1,916.00</b>
	OFFICE EQUIPMENT		2002		5,747.00
	<b>TOTAL 1986</b>				<b>5,747.00</b>
	<b>TOTAL OFFICE EQUIPMENT</b>				<b>7,663.00</b>
	<b>TOTAL PLANT IN SERVICE</b>				<b>4,487,522.01</b>
	<b>CONTRIBUTIONS IN AID OF CONSTRUCTION</b>				
354.30	STRUCTURES AND IMPROVEMENTS - TREATMENT				
	EMLENTON		1986		561,771.00
	<b>TOTAL 1986</b>				<b>561,771.00</b>



AQUA PENNSYLVANIA WASTEWATER, INC  
 ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
 DETAILED ORIGINAL COST AS OF DECEMBER 31, 2016

ACCOUNT	LOCATION	QUANTITY	YEAR	UNIT COST	TOTAL COST
354.30, cont.	LAMARTINE		1987		277,742.40
	MARIASVILLE		1987		191,862.00
	<b>TOTAL 1987</b>				<b>469,604.40</b>
	<b>TOTAL STRUCTURES AND IMPROVEMENTS</b>				<b>1,031,375.40</b>
361.00	<b>COLLECTION MAINS</b>				
	MARIASVILLE		1980		22,093.00
	<b>TOTAL 1980</b>				<b>22,093.00</b>
	LAMARTINE		1986		53,412.00
	<b>TOTAL 1986</b>				<b>53,412.00</b>
371.00	EMLENTON		1991		24,968.00
	<b>TOTAL 1991</b>				<b>24,968.00</b>
	<b>PUMPING EQUIPMENT</b>				<b>24,968.00</b>
380.00	LAMARTINE		1987		24,925.60
	MARIASVILLE		1987		18,605.00
	<b>TOTAL 1987</b>				<b>43,530.60</b>
	<b>TREATMENT AND DISPOSAL EQUIPMENT</b>				
	EMLENTON		1986		37,451.00
	<b>TOTAL 1986</b>				<b>37,451.00</b>
	<b>TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION</b>				<b>1,212,830.00</b>
	<b>TOTAL WASTEWATER PLANT</b>				<b>3,274,692.01</b>

PART III. CALCULATION OF ACCRUED DEPRECIATION

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM

SUMMARY OF SURVIVOR CURVES AND CALCULATED ACCRUED  
DEPRECIATION OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2016

ACCOUNT (1)	DESCRIPTION (2)	SURVIVOR CURVE (3)	ORIGINAL COST (4)	ACCRUED DEPRECIATION (5)
353.00	LAND	NONDEPRECIABLE	34,425.00	0
354.30	STRUCTURES AND IMPROVEMENTS - TREATMENT	60-S0	3,000,891.64	1,027,149
354.50	STRUCTURES AND IMPROVEMENTS - GARAGE	45-R3	119,215.71	64,123
361.00	COLLECTION MAINS	80-R2.5	957,699.14	356,011
361.10	MANHOLES	55-S2.5	39,273.10	24,895
363.00	SERVICE LATERALS	70-R3	42,457.91	25,674
371.00	PUMPING EQUIPMENT	40-S1.5	143,690.98	85,043
380.00	TREATMENT AND DISPOSAL EQUIPMENT	40-L3	142,205.53	87,447
390.00	OFFICE EQUIPMENT	15-SQ	<u>7,663.00</u>	<u>7,471</u>
	<b>TOTAL PLANT IN SERVICE</b>		<b>4,487,522.01</b>	<b>1,677,813</b>
	<b>CONTRIBUTIONS IN AID OF CONSTRUCTION</b>			
354.30	STRUCTURES AND IMPROVEMENTS - TREATMENT	60-S0	1,031,375.40	365,883
361.00	COLLECTION MAINS	80-R2.5	100,473.00	34,485
371.00	PUMPING EQUIPMENT	40-S1.5	43,530.60	25,737
380.00	TREATMENT AND DISPOSAL EQUIPMENT	40-L3	<u>37,451.00</u>	<u>23,941</u>
	<b>TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION</b>		<b><u>1,212,830.00</u></b>	<b><u>450,046</u></b>
	<b>TOTAL WASTEWATER PLANT</b>		<b><u><u>3,274,692.01</u></u></b>	<b><u><u>1,227,767</u></u></b>

DETAILED DEPRECIATION CALCULATIONS

UTILITY PLANT IN SERVICE

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 60-S0							
NET SALVAGE PERCENT.. 0							
1986	2,120,188.62	60.00	1.67	35,407.15	38.46	0.3590	761,148
1987	674,240.69	60.00	1.67	11,259.82	39.02	0.3497	235,762
1995	16,034.67	60.00	1.67	267.78	43.75	0.2708	4,343
2002	35,890.00	60.00	1.67	599.36	48.32	0.1947	6,987
2007	4,395.00	60.00	1.67	73.40	51.92	0.1347	592
2008	150,142.66	60.00	1.67	2,507.38	52.68	0.1220	18,317
	3,000,891.64			50,114.89			1,027,149
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67							

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM

ACCOUNT 354.50 STRUCTURES AND IMPROVEMENTS - GARAGE

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 45-R3							
NET SALVAGE PERCENT.. 0							
1988	78,197.28	45.00	2.22	1,735.98	19.44	0.5680	44,416
1993	41,018.43	45.00	2.22	910.61	23.38	0.4804	19,707
	119,215.71			2,646.59			64,123
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22							

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM

ACCOUNT 361.00 COLLECTION MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 80-R2.5							
NET SALVAGE PERCENT.. 0							
1945	15,400.97	80.00	1.25	192.51	23.41	0.7074	10,894
1955	39,007.78	80.00	1.25	487.60	29.38	0.6328	24,682
1960	14,737.17	80.00	1.25	184.21	32.69	0.5914	8,715
1965	70,389.90	80.00	1.25	879.87	36.18	0.5478	38,556
1970	36,409.48	80.00	1.25	455.12	39.85	0.5019	18,273
1975	44,600.59	80.00	1.25	557.51	43.67	0.4541	20,254
1980	98,463.31	80.00	1.25	1,230.79	47.64	0.4045	39,828
1985	71,475.00	80.00	1.25	893.44	51.74	0.3533	25,249
1986	283,489.40	80.00	1.25	3,543.62	52.57	0.3429	97,203
1987	105,047.85	80.00	1.25	1,313.10	53.41	0.3324	34,916
1991	74,117.67	80.00	1.25	926.47	56.82	0.2898	21,476
1992	13,172.52	80.00	1.25	164.66	57.69	0.2789	3,674
1993	19,034.50	80.00	1.25	237.93	58.56	0.2680	5,101
2008	72,353.00	80.00	1.25	904.41	72.05	0.0994	7,190
	957,699.14			11,971.24			356,011

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.25



AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM

ACCOUNT 361.10 MANHOLES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 55-S2.5							
NET SALVAGE PERCENT.. 0							
1945	1,638.05	55.00	1.82	29.81	7.47	0.8642	1,416
1955	3,642.64	55.00	1.82	66.30	10.17	0.8151	2,969
1960	1,168.40	55.00	1.82	21.26	11.85	0.7846	917
1965	5,085.96	55.00	1.82	92.56	13.81	0.7489	3,809
1970	2,886.64	55.00	1.82	52.54	16.11	0.7071	2,041
1975	4,181.04	55.00	1.82	76.09	18.81	0.6580	2,751
1980	9,255.56	55.00	1.82	168.45	21.94	0.6011	5,563
1986	4,381.50	55.00	1.82	79.74	26.31	0.5216	2,286
1991	7,033.31	55.00	1.82	128.01	30.42	0.4469	3,143
	39,273.10			714.76			24,895

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.82

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM

ACCOUNT 363.00 SERVICES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 70-R3							
NET SALVAGE PERCENT.. 0							
1945	5,515.09	70.00	1.43	78.87	13.43	0.8081	4,457
1955	7,479.81	70.00	1.43	106.96	18.60	0.7343	5,492
1960	5,161.51	70.00	1.43	73.81	21.67	0.6904	3,564
1965	4,545.48	70.00	1.43	65.00	25.02	0.6426	2,921
1970	1,007.88	70.00	1.43	14.41	28.61	0.5913	596
1975	4,782.42	70.00	1.43	68.39	32.42	0.5369	2,567
1980	5,315.82	70.00	1.43	76.02	36.42	0.4797	2,550
1986	8,649.90	70.00	1.43	123.69	41.46	0.4077	3,527
	42,457.91			607.15			25,674
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43							

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 40-S1.5							
NET SALVAGE PERCENT.. 0							
1986	6,514.73	40.00	2.50	162.87	15.82	0.6045	3,938
1987	137,176.25	40.00	2.50	3,429.41	16.35	0.5913	81,105
	143,690.98			3,592.28			85,043
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50							

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM

ACCOUNT 380.00 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 40-L3							
NET SALVAGE PERCENT.. 0							
1986	125,938.53	40.00	2.50	3,148.46	14.43	0.6393	80,506
1987	4,302.00	40.00	2.50	107.55	14.85	0.6288	2,705
2002	11,965.00	40.00	2.50	299.12	25.84	0.3540	4,236
	142,205.53			3,555.13			87,447

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM

ACCOUNT 390.00 OFFICE EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
1998	1,916.00	15.00				1.0000	1,916
2002	5,747.00	15.00	6.67	383.32	0.50	0.9667	5,555
	7,663.00			383.32			7,471

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

CONTRIBUTIONS IN AID OF CONSTRUCTION

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 60-S0							
NET SALVAGE PERCENT.. 0							
1986	561,771.00	60.00	1.67	9,381.58	38.46	0.3590	201,676
1987	469,604.40	60.00	1.67	7,842.39	39.02	0.3497	164,207
	1,031,375.40			17,223.97			365,883
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67							

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 361.00 COLLECTION MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 80-R2.5							
NET SALVAGE PERCENT.. 0							
1980	22,093.00	80.00	1.25	276.16	47.64	0.4045	8,937
1986	53,412.00	80.00	1.25	667.65	52.57	0.3429	18,314
1991	24,968.00	80.00	1.25	312.10	56.82	0.2898	7,234
	100,473.00			1,255.91			34,485
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.25							



AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 40-S1.5							
NET SALVAGE PERCENT.. 0							
1987	43,530.60	40.00	2.50	1,088.26	16.35	0.5913	25,737
	43,530.60			1,088.26			25,737
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50							

AQUA PENNSYLVANIA WASTEWATER, INC  
ACQUISITION OF THE BOROUGH OF EMLENTON WASTEWATER SYSTEM  
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 380.00 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 40-L3							
NET SALVAGE PERCENT.. 0							
1986	37,451.00	40.00	2.50	936.28	14.43	0.6393	23,941
	37,451.00			936.28			23,941
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50							

**Aqua Pennsylvania Wastewater, Inc.**  
**Township of Tobyhanna Costs**  
**M93040**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
897	300000	PPE-Utility Plant in Service	10,733,855.10	
897	271308	CIAC-CASH NON REFUNDABLE BUILDER OR DEVELOPER DEPOSITS		5,404,048.38
897	104000	Utility Plant Purchased/Sold		5,714,004.50
897	108000	AD-General		3,177,995.50
897	272000	Accum Amort of CIAC	1,513,712.40	
897	114000	U Plant Acq Adj	2,048,480.88	
<b>Total</b>			<b>14,296,048.38</b>	<b>14,296,048.38</b>

**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Township of Tobyhanna**

<b>Section 1327(a) Criteria</b>	<b>Satisfied (Y/N)</b>	<b>Explanation</b>
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	<p style="text-align: center;">Yes</p>	<p>On July 1, 2017, Aqua Pennsylvania Wastewater, Inc. (“Aqua”) acquired the Wastewater System Assets (“Assets”) of the Township of Tobyhanna (“Seller”). The Seller’s Assets were used and useful in providing wastewater service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	<p style="text-align: center;">Yes</p>	<p>Prior to Aqua’s acquisition of Seller’s Assets, the Township of Tobyhanna was providing wastewater service to 639 residential and 88 commercial customers in a portion of Tobyhanna Township, Monroe County, Pennsylvania.</p> <p>Reference: Commission Order Docket No. A-2016-2575001</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p> <p style="text-align: center;">(i)</p> <p>violation of statutory or regulatory requirements</p>	<p style="text-align: center;">Yes</p>	

<p>of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and reasonable service;</p>	<p>Yes</p>	

<p>(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;</p>	<p>Yes</p>	<p>Aqua and the Seller entered into an <i>Asset Purchase Agreement</i>, which was negotiated at arm's length. On November 8, 2016, Aqua filed an <i>Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered March 16, 2017, at Docket No. A-2016-2575001, the PUC granted the approvals requested in the <i>Application</i>.</p>
<p>(6) the actual purchase price is reasonable;</p>	<p>Yes</p>	<p>The total purchase price for Seller's Assets was \$5,500,000 and was negotiated at arm's length and an additional \$45,000 was paid towards the Seller's share of closing cost. The Commission approved the company's application to acquire the wastewater assets of Tobyhanna Township and an original cost study was prepared to support the utility plant purchase.</p> <p>Reference: Commission Order Docket No. A-2016-2575001</p>
<p>(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;</p>	<p>Yes</p>	<p>The Seller is not an affiliated interest of Aqua.</p>
<p>(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b></p>	<p>Yes</p>	<p>The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.</p>
<p>(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.</p>	<p>Yes</p>	<p>The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.</p>



**Aqua Pennsylvania, Inc.**

***Acquisition of the Water System Assets  
of Tobyhanna Township Wastewater System***

Original Cost of the Water Utility Plant  
and Depreciation Reserve Calculations  
at June 30, 2017

By

David A. Sheffer, Principal

AUS CONSULTANTS  
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Harrisburg, PA 17110





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Principal

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December 13, 2017

Mr. Chad Nardelli  
Manager, Property Accounting  
Aqua Pennsylvania, Inc.  
762 West Lancaster Ave.  
Bryn Mawr, PA 19010

RE: Acquisition of the Wastewater System of  
the Township of Tobyhanna

Dear Mr. Nardelli:

In accordance with your request, we have prepared an inventory of the wastewater system of the Township of Tobyhanna ("Tobyhanna") as of June 30, 2017.

The inventory was prepared to conform to the Uniform System of Accounts for Water/Wastewater Utilities as prescribed by the National Association of Regulatory Utility Commissioners.

The original cost of the property of Tobyhanna was determined from a detailed analysis of the books and records of Tobyhanna and has been segregated as follows:

	<u>Original Cost</u>	<u>Calculated Reserve</u>
Account 101 - Utility Plant in Service	\$10,602,851	\$3,177,956
Account 271 – Contributions in Aid of Construction	5,404,048	1,513,712

The results of our study are discussed and supported by the Executive Summary contained in Section 1, the detailed original costs in Section 2 and the depreciation calculations in Section 3.

Respectfully submitted,  
AUS Consultants

BY: David A. Sheffer





Aqua Pennsylvania, Inc.

**Acquisition of the Wastewater System Assets  
of Tobyhanna Wastewater System**

Table of Contents

	<u>Page No.</u>
<b><u>SECTION 1</u></b>	
<u>EXECUTIVE SUMMARY</u>	
Background	1-1
Overview of the Tobyhanna's Facilities	1-1
Overview of the Study Techniques	1-3
Explanation of the Study	1-3
Original Cost Analysis	1-5
Summary of Original Cost	1-6
Contributions In Aid of Construction	1-6
Customer Advances for Construction	1-6
Depreciation Reserve	1-7
 <b><u>SECTION 2</u></b>	
<u>ORIGINAL COST</u>	
Summary of the Original Costs of Plant in Service as of June 30, 2017	2-1
 <u>Account 101 - Utility Plant in Service</u>	
353.30 Land & Land Rights – System Pumping Plant	2-2
353.40 Land – Treatments & Disposal	2-3
354.30 Structures & Improvements – System Pump Plant	2-4
354.40 Structures & Improvements – Treatment & Disposal Plant	2-5
354.70 Structures & Improvements – General Plant	2-6
354.80 Structures & Improvements – Miscellaneous Improvements	2-7
355.00 Power Generation Equipment	2-8
360.00 Collection Sewers - Force	2-9



Aqua Pennsylvania, Inc.

**Acquisition of the Wastewater System Assets  
of Tobyhanna Wastewater System**

Table of Contents

	<u>Page No.</u>
361.00 Collection Sewers - Gravity	2-10
363.00 Services to Customers	2-11
364.00 Flow Measuring Devices	2-12
370.00 Receiving Wells	2-13
371.00 Pumping Equipment	2-14
380.00 Treatment & Disposal Equipment	2-16
390.00 Office Furniture & Equipment	2-18
393.00 Tools & Work Equipment	2-19
394.00 Laboratory Equipment	2-20
<b><u>271.00 - CONTRIBUTIONS IN AID OF CONSTRUCTION</u></b>	
Summary of the Contributions in Aid of Construction at June 30, 2017	2-21 – 2-26
<b><u>SECTION 3</u></b>	
<u>Depreciated Original Cost</u>	
Summary of Original Cost, Calculated Depreciation Reserve and Depreciated Original Cost as of June 30, 2017	3-1
<b><u>SECTION 4</u></b>	
Photographs of Plant Assets (site visit)	4-1

# **SECTION 1**



**AQUA PENNSYLVANIA, INC.**

**Acquisition of the Wastewater System Assets  
of Tobyhanna Township Wastewater System**

Executive Summary

**BACKGROUND**

Tobyhanna Township Wastewater System (“Tobyhanna”) provides sanitary sewer service to customers located in a portion of Monroe County, Pennsylvania. Sanitary sewer provides service to approximately 727 customers located Tobyhanna Township in Blakeslee, PA, as of 2017. The Township began providing service to customers in the late 1990’s after the construction of the sewer system which consist of collection lines, conveyance lines and a treatment facility, located in the Township. The population of the Township, as of the 2010 census, was determined to be 8,554.

On November 8, 2016, Aqua Pennsylvania (Aqua) and Tobyhanna filed an application to acquire the assets of the Tobyhanna wastewater system. Aqua has retained AUS Consultants to prepare a study of the original cost of the fixed assets acquired and theoretical depreciation calculations as of June 30, 2017. The results of the study are set forth herein.

**OVERVIEW OF TOBYHANNA’S FACILITIES**

Tobyhanna’s assets acquired consist of facilities for the treatment and collection of wastewater from its customers.

### Treatment Facilities

The wastewater is treated at the treatment plant facility. The treatment of the influent comprises of pumping, grit screening, activated sludge treatment, mixed media filtration and ultraviolet disinfection. The design capacity of the treatment plant is 0.3 million gallons per day (MGD). The Control building is a cinder block structure built on a concrete base with a pitched asphalt roof. Housed in the building are separate rooms for the (3) Spencer blowers, a 300 kW Caterpillar generator, control panels, a full bathroom and an 11 x 16 office/laboratory. Along with the control building, the treatment plant property holds a Headwork fiberglass building, a Filter building, Blower Building, UV Treatment, feed well, batch reactors, aerobic sludge digester and a 20' deep 29 x 57 sludge holding tank.

The Sewer treatment plant is enclosed by a chain link fence. The sand blowers are powered by 15 horse powered motors and all control panels are housed in their own structures inside the treatment plant. The chlorine contact tank is 8' x 10' and is enclosed in the same fence as the building and aeration tanks, as well as two (2) sand filters, and the grinder pumps.

This information was comprised through interviews with Aqua personnel, a site visit and the review of supplied data. Photos from the site visit are located in Section 4 of this report.

### Collection System

The wastewater collection system is a gravity system comprised of approximately 90,000 feet of plastic pipe. The footage of the collection system was verified by scaling of the system maps and were confirmed by physically walking the system using a measuring wheel. Along with Aqua personnel providing a location map of the manholes.

## **OVERVIEW OF THE STUDY TECHNIQUES**

The study of the original cost of Tobyhanna's assets was conducted in three (3) phases. First, a comprehensive utility plant inventory was conducted to ascertain and confirm the kind and quantity of property owned and operated by Tobyhanna.

Second, the original cost of the inventoried property was determined based on a review of Tobyhanna's books of account, construction records, system maps and other available sources. Tobyhanna's records provided data in order to appropriately develop an accurate cost and inventory.

Third, Aqua requested that theoretical accrued depreciation calculations be performed based upon the results of the original cost study to reflect the theoretical capital recovery of the plant in service at June 30, 2017.

A complete discussion of the methodologies employed in the original cost study is set forth in the sections of this report as follows.

## **EXPLANATION OF THE STUDY**

### **Utility Plant Inventory**

A comprehensive inventory of the system's assets as of June 30, 2017 was performed, based upon a complete physical inventory taken at the site on September 27, 2017. At this time, the footage of the mains was verified by using system maps and walking the system, including review of the components of the treatment facility. Aqua personnel provided any additional knowledge of the system to aid in the inventory process. Significant components of the inventory are discussed below.

Mass Property

For the purpose of this study, “mass” property consists of utility plant recorded in accounts 360 (Collection Sewers – Forced), 361 (Collection Sewers – Gravity) and 363 (Services to Customers).

For Accounts 360 and 361, footages of pipe were determined by reviewing the as-built maps and verified by a physical check of the collection system in place. This same procedure was utilized for manholes.

Non-Mass Property

A physical inventory of the wastewater treatment plant was completed. Detailed results of the plant inventory are set forth in Section 2 of this report by the fixed capital accounts prescribed by the National Association of Regulatory Utility Commissioners. The original cost of all inventoried property units is properly recorded in the following accounts:

Acct.

No.                      Account Title

Non-Depreciable Plant:

353.30	Land & Land Rights – System Pumping Plant
353.40	Land – Treatments & Disposal

Depreciable Plant

354.30	Structures & Improvements – System Pump Plant
354.40	Structures & Improvements – Treatment & Disposal Plant
354.70	Structures & Improvements – General Plant
354.80	Structures & Improvements – Miscellaneous Improvements
355.00	Power Generation Equipment

360.00	Collection Sewers – Force
361.00	Collection Sewers – Gravity
363.00	Services to Customers
364.00	Flow Measuring Devices
370.00	Receiving Wells
371.00	Pumping Equipment
380.00	Treatment & Disposal Equipment
390.00	Office Furniture & Equipment
393.00	Tools, Shop & Garage Equipment
394.00	Laboratory Equipment

**ORIGINAL COST ANALYSIS**

The goal of the original cost analysis within each account was to ascertain the original cost of Tobyhanna’s plant in service by fixed capital accounts, to determine the original costs by retirement unit (for non-mass property), size, type (for mass property) and by vintage year. Reasonably good data exists to establish the original cost of Tobyhanna’s property by account. In large measure, this data consisted of system maps and interviews with Aqua personnel. These records were augmented by information obtained from the field inventory.

The original cost determinations for Account 360 (Collection Sewers - Forced) and Account 361 (Collection Sewers - Gravity) are explained as follows:

**Account 360 and 361**

The total original cost of collection sewers was determinable from available system maps of the collection system, Company supplied records and data. In instances that the original costs were not available; costs were established by using footage developed from system maps, installed costs of a comparable collection system, unit costs; developed by utilizing Aqua installed costs, and cost information from other available sources.



As previously explained, the physical inventory verified the total footage of pipe and the total number of units of accessories.

The original cost values at \$4,684,233 for Tobyhanna's Collection Sewers – Forced and Collection Sewer - Gravity, as established by the original cost study, total \$357,596; and \$4,326,637, respectively.

### **SUMMARY OF ORIGINAL COST**

The results of the original cost study determined the original cost of Tobyhanna's utility plant in service is not less than \$10,602,851, as summarized by plant account in Section 2 (p. 2-1).

### **CONTRIBUTIONS IN AID OF CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any contributions in aid of construction (CIAC) existed. The record research included all Company documents that were available. Based on this record research, Tobyhanna Received four grants totaling \$1,187,449 and tapping fee totaling \$4,216,600. Therefore, the total contributions in aid of construction amount to \$5,404,048.

### **CUSTOMER ADVANCES FOR CONSTRUCTION**

AUS Consultants completed an extensive research of records to determine if any customer advances for construction (CAC) existed. The record research included all Company documents that were available. Based on this record research, the Company did not collect any CAC.

## **DEPRECIATION RESERVE**

AUS Consultants, as requested, prepared a theoretical calculated depreciation reserve of the utility plant in service at June 30, 2017. The calculated accrued depreciation reserve amounts to \$1,664,283 at June 30, 2017.

The calculations were based upon the Straight Line-Average Service Life Methodology utilizing appropriate service lives and mortality curves for the specific fixed capital assets by category and condition of the plant at the study date.

The results of those calculations and detailed supporting documentation are included in Section 3 of this report.

## **SECTION 2**

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**

*Acquisition of the Wastewater System of the Township of Tobyhanna*

Summary of Original Cost at June 30, 2017

<u>Account No.</u>	<u>Account Description</u>	<u>Original Cost Totals</u>
<u>Non-Depreciable Plant</u>		
353.30	Land & Land Rights - System Pumping Plant	\$ 4.00
353.40	Land - Treatments & Disposal	1.00
	Total Non-Depreciable Plant	<u>\$ 5.00</u>
<u>Depreciable Plant</u>		
354.30	Structures & Improvements - System Pumping Plant	\$ 45,262.39
354.40	Structures & Improvements - Treatment & Disposal Plant	2,231,940.55
354.70	Structures & Improvements - General Plant	272,157.94
354.80	Structures & Improvements - Miscellaneous Improvements	120,303.38
355.00	Power Generation Equip	222,013.06
360.00	Collection Sewers - Force	357,596.00
361.00	Collection Sewers - Gravity	4,326,637.46
363.00	Services to Customers	786,614.00
364.00	Flow Measuring Devices	41,682.63
370.00	Receiving Wells	461,295.54
371.00	Pumping Equipment	308,394.00
380.00	Treatment & Disposal Equipment	1,389,651.63
390.00	Office Furniture & Equipment	12,690.55
393.00	Tools & Work Equipment	11,002.42
394.00	Laboratory Equipment	15,604.05
	Total Depreciable Plant	<u>\$ 10,602,845.60</u>
	Total Plant in Service	<u><u>\$ 10,602,850.60</u></u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017  
 Account 353.30 - Land & Land Rights - System Pumping Plant

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
<u>Land:</u>				
Pump Station Land #1	1999	Sq. Ft.	2,588.5	\$ 1.00
Pump Station Land #2	1999	Sq. Ft.	1,296.0	1.00
Pump Station Land #3	1999	Sq. Ft.	4,992.6	1.00
Pump Station Land #4	1999	Sq. Ft.	xx	1.00
Total Account 353.30				\$ 4.00

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017  
Account 353.40 - Land - Treatments & Disposal

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Treatment Land (105 Government Center Way, Pocono Pines)	1999	Acres	5	\$ 1.00
Total Account 353.40				<u>\$ 1.00</u>

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**

Summary of Original Cost at June 30, 2017  
Account 354.30 - Structures & Improvements - System Pumping Plant

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Pump Station #1	1999	LOT		\$ 11,223.01
Pump Station #2	1999	LOT		11,223.01
Pump Station #3	1999	LOT		11,223.01
Pump Station #4	1999	LOT		11,593.36
Total Account 354.30				<u>\$ 45,262.39</u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017

Account 354.40 - Structures & Improvements - Treatment & Disposal Plant

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Affluent Control	1999	LOT		\$ 8,884.89
Affluent Tank	1999	LOT		65,935.17
Affluent Wet Well	1999	LOT		14,028.77
Batch Tanks 1 & 2	1999	LOT		593,884.17
Fan	1999	LOT		634.15
Filter Blower Building	1999	LOT		15,899.26
Filter Building	1999	LOT		233,812.66
Filter Feed	1999	LOT		8,884.89
Headworks	1999	LOT		245,970.93
Headworks	1999	LOT		8,884.89
Mud Well	1999	LOT		92,122.19
Mud Well Wet Well	1999	LOT		14,028.77
Partial Flume Pit	1999	LOT		1,215.83
Sewerage Plant Building	1999	LOT		236,289.91
Sludge Thickening	1999	LOT		544,315.88
Splitter Box	1999	LOT		11,223.01
Total 1999				<u>\$ 2,096,015.37</u>
Driveway	2010	LOT		11,877.76
Total 2010				<u>\$ 11,877.76</u>
Water Heater	2011	LOT		1,047.42
Total 2011				<u>\$ 1,047.42</u>
Sand Filter Building Construction	2013	LOT		123,000.00
Total 2013				<u>\$ 123,000.00</u>
Total Account 354.40				<u><u>\$ 2,231,940.55</u></u>



**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**

Summary of Original Cost at June 30, 2017  
Account 354.70 - Structures & Improvements - General Plant

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Control/Lab Building	1999	LOT		\$ 272,157.94
Total Account 354.70				<u>\$ 272,157.94</u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017

Account 354.80 - Structures & Improvements - Miscellaneous Improvements

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Chain Fence	1999	LOT		\$ 4,083.59
Chain Fence	1999	LOT		4,547.63
Chain Fence	1999	LOT		3,433.92
Chain Fence - Treatment Plant	1999	LOT		37,125.55
Chain Fence	1999	LOT		23,202.20
Light Pole	1999	LOT		4,640.44
Light Pole	1999	LOT		4,640.44
Light Pole	1999	LOT		4,640.44
Light Pole	1999	LOT		4,640.44
Storage Container	1999	LOT		5,568.53
Asphalt	1999	LOT		16,984.01
Total 1999				<u>113,507.19</u>
Chain Fence	2000	LOT		6,796.19
Total 2000				<u>6,796.19</u>
Total Account 354.70				<u><u>\$ 120,303.38</u></u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017  
Account 355.00 - Power Generation Equipment

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Generator - Main Plant	1999	Ea.	1	\$ 73,676.90
Generator - Katolight Generator	1999	Ea.	1	44,206.14
Generator - Katolight Generator	1999	Ea.	1	29,470.76
Generator - Katolight Generator	1999	Ea.	1	45,188.50
Generator - Katolight Generator	1999	Ea.	1	29,470.76
Total Account 355.00				<u><u>\$ 222,013.06</u></u>

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**

Summary of Original Cost at June 30, 2017  
Account 360.00 - Collection Sewers - Force

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
PVC Force Sewage Collection Lines	1999	Ft.	14,545	\$ 146,795.86
	2009	Ft.	3,400	182,947.71
	2010	Ft.	3,320	27,852.43
Total Account 360.00				<u>\$ 357,596.00</u>

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**

Summary of Original Cost at June 30, 2017  
Account 361.00 - Collection Sewers - Gravity

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
PVC Gravity Sewage Collection Lines	1999	Ft.	68,573	\$ 4,326,637.46
Total Account 361.00				<u>\$ 4,326,637.46</u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017  
Account 363.00 - Services to Customer

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>			<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>		
Services	1999	Ea.	727	\$	786,614.00
Total Account 361.00					<u>\$ 786,614.00</u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017  
Account 364.00 - Flow Measuring Devices

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Flow Meter	1999	Ea.	1	\$ 7,858.87
Meter	2008	Ea.	1	27,758.78
Meter	2009	Ea.	1	6,064.98
Total Account 364.00				<u>\$ 41,682.63</u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017

Account 370.00 - Receiving Wells

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Filter Feed Wet Well	1999	LOT		\$ 8,510.78
Filter Feed Wet Well	1999	LOT		431,150.55
PS Wet Well #1	1999	LOT		5,611.50
PS Wet Well #2	1999	LOT		6,546.75
PS Wet Well #3	1999	LOT		5,611.50
PS Wet Well #4	1999	LOT		3,864.46
Total Account 370.00				<u>\$ 461,295.54</u>





## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017  
Account 371.00 - Pumping Equipment

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Transducer	2009			1,363.67
Total 2009				<u>1,363.67</u>
Rebuilt Pump PS #2	2010	Ea.		5,834.00
Rebuilt Pump PS #3	2010	Ea.		3,228.00
Total 2010				<u>9,062.00</u>
Gear	2011	Ea.		3,250.00
Rebuilt Pump	2011	Ea.		6,855.00
Submergible Pump	2011	Ea.		4,797.00
VFC Drive	2011	Ea.		3,700.00
Total 2011				<u>18,602.00</u>
Total Account 371.00				<u><u>\$ 308,394.00</u></u>

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**

Summary of Original Cost at June 30, 2017  
Account 380.00 - Treatment & Disposal Equipment

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Aeration System	1999	Ea.		\$ 255,413.22
Air Decent Pump	1999	Ea.		7,858.87
Centrifugal Blower	1999	Ea.		42,241.41
Centrifugal Blower	1999	Ea.		42,241.41
Centrifugal Blower	1999	Ea.		42,241.41
Chemical Equip	1999	Ea.		1,473.54
Chemical Mixer	1999	Ea.		14,735.38
Chemical Mixer	1999	Ea.		14,735.38
Chemical Mixer	1999	Ea.		14,735.38
Chemical Mixer	1999	Ea.		14,735.38
Chemical Pump	1999	Ea.		4,420.61
Chemical Pump	1999	Ea.		4,420.61
Control Panel	1999	Ea.		83,500.48
Decanter	1999	Ea.		44,206.14
Decanter	1999	Ea.		44,206.14
Micro Screen	1999	Ea.		112,971.24
Motor Control Panel	1999	Ea.		108,059.44
Partial Fume	1999	Ea.		20,629.53
PH Meter	1999	Ea.		1,427.20
Refrigerated Equip	1999	Ea.		5,518.50
Rotary Positive	1999	Ea.		12,770.66
Rotary Positive	1999	Ea.		12,770.66
Sand Filtering Equip	1999	Ea.		294,707.56
Sewerage Controls	1999	Ea.		1,473.54
Sewerage Controls	1999	Ea.		1,473.54
Sewerage Controls	1999	Ea.		1,473.54
UV Equip	1999	Ea.		70,729.81
Total 1999				<hr/> 1,275,170.58
Chemical Mixer	2008	Ea.		6,736.40
Control Panel	2008	Ea.		3,750.00
Total 2008				<hr/> 10,486.40
Aerator	2009	Ea.		3,109.62
Total 2009				<hr/> 3,109.62
Actuator	2010	Ea.		5,745.00
Hydraulic Slide	2010	Ea.		29,737.48
Kasco Aerator	2010	Ea.		1,769.30
Miscellaneous	2010	Ea.		19,827.41
Vault Drain	2010	Ea.		20,120.19
Vault Drain	2010	Ea.		509.70
Total 2010				<hr/> 77,709.08
Chemical Mixer	2011	Ea.		8,346.00
Chemical Mixer	2011	Ea.		8,924.00

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**

Summary of Original Cost at June 30, 2017  
Account 380.00 - Treatment & Disposal Equipment

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Diffuser Membranes	2011	Ea.		3,798.00
Heaters (2)	2011	Ea.		1,162.20
Miscellaneous	2011	Ea.		945.75
Total 2011				<u>23,175.95</u>
Total Account 380.00				<u><u>\$ 1,389,651.63</u></u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017  
Account 390.00 - Office Furniture& Equipment

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Computer	1999	Ea.	1	\$ 1,540.00
File	1999	Ea.	1	605.45
Miscellaneous	1999	Ea.	1	1,796.54
Miscellaneous Equip	1999	Ea.	1	5,894.16
Refrigerator	1999	Ea.	1	2,854.40
Total Account 390.00				<u><u>\$ 12,690.55</u></u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017  
Account 393.00 - Tools, Shop, & Garage Equipment

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Air Compressor	1999	Ea.	1	\$ 1,964.72
Hoist	1999	Ea.	1	1,178.83
Hoist	1999	Ea.	1	1,178.83
Hoist	1999	Ea.	1	1,178.83
Hoist	1999	Ea.	1	1,178.83
Hoist	1999	Ea.	1	1,670.01
Hoist	1999	Ea.	1	1,178.83
Washer, High Pressure	1999	Ea.	1	1,473.54
Total Account 393.00				<u>\$ 11,002.42</u>

## Aqua - Pennsylvania, Inc. (Township of Tobyhanna)

Summary of Original Cost at June 30, 2017  
Account 394.00 - Laboratory Equipment

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Balance Scale	1999	Ea.	1	\$ 2,283.52
Lab Furnace	1999	Ea.	1	2,854.40
Lab Oven	1999	Ea.	1	7,136.00
Microscope	1999	Ea.	1	1,427.20
PH Monitor	1999	Ea.	1	1,902.93
Total Account 394.00				<u>\$ 15,604.05</u>





**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**  
 Contribution in Aid of Construction

Summary of Original Cost at June 30, 2017  
 Account 354.40 - Structures & Improvements - Treatment & Disposal Plant

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Treatment Plant	1999	Lot		\$ 1,179,768.83
Total Account 354.40				<u><u>\$ 1,179,768.83</u></u>

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**  
Contribution in Aid of Construction

Summary of Original Cost at June 30, 2017  
Account 360.00 - Collection Sewers - Force

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
PVC Force Sewage Collection Lines	1999	Ft.	-	\$ 228,231.05
Total Account 360.00				<u><u>\$ 228,231.05</u></u>

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**  
 Contribution in Aid of Construction

Summary of Original Cost at June 30, 2017  
 Account 361.00 - Collection Sewers - Gravity

Item:	Year Installed	Quantity		Original Cost
		Unit	No.	
PVC Gravity Sewage Collection Lines	1999	Ft.	-	\$ 2,760,060.31
Total Account 361.00				\$ 2,760,060.31

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**  
**Contribution in Aid of Construction**

Summary of Original Cost at June 30, 2017  
 Account 363.00 - Services to Customer

Item:	Year Installed	Quantity		Original Cost
		Unit	No.	
Services	1999	Ea.	727	\$ 501,480.17
Total Account 363.00				\$ 501,480.17

**Aqua - Pennsylvania, Inc. (Township of Tobyhanna)**  
Contribution in Aid of Construction

Summary of Original Cost at June 30, 2017  
Account 380.00 - Treatment & Disposal Equipment

<u>Item:</u>	<u>Year Installed</u>	<u>Quantity</u>		<u>Original Cost</u>
		<u>Unit</u>	<u>No.</u>	
Treatment Equipment	1999	Lot		\$ 734,508.02
Total Account 380.00				<u>\$ 734,508.02</u>

# **SECTION 3**

**Aqua - Pennsylvania, Inc.**

*Acquisition of the Wastewater System of the Township of Tobyhanna*

Summary of Original Cost, Calculated Depreciation Reserve  
Original Cost at June 30, 2017  
Based Upon Whole Life Depreciation

Acct. No.	Description	Original Cost at 6/30/2017	ASL/Iowa Curve	Calculated Depreciation	Depreciated Original Cost at 6/30/2017
<u>Non-Depreciable Plant</u>					
353.30	Land & Land Rights - System Pumping Plant	\$ 4.00			
353.40	Land - Treatments & Disposal	1.00			
	Total Non-Depreciable Plant	\$ 5.00			
<u>Depreciable Plant</u>					
354.30	Structures & Improvements - System Pumping Plant	\$ 45,262.39	60-R3	\$ 12,992.93	\$ 32,269.46
354.40	Structures & Improvements - Treatment & Disposal Plant	2,231,940.55	60-R3	611,178.35	1,620,762.20
354.70	Structures & Improvements - General Plant	272,157.94	50-R3	92,897.99	179,259.95
354.80	Structures & Improvements - Miscellaneous Improvements	120,303.38	20-R3	89,570.82	30,732.56
355.00	Power Generation Equip	222,013.06	35-R3	105,202.49	116,810.57
360.00	Collection Sewers - Force	357,596.00	70-R3	59,487.45	298,108.55
361.00	Collection Sewers - Gravity	4,326,637.46	85-R3	1,001,552.95	3,325,084.51
363.00	Services to Customers	786,614.00	50-R3	268,501.67	518,112.33
364.00	Flow Measuring Devices	41,682.63	25-R3	16,289.46	25,393.17
370.00	Receiving Wells	461,295.54	50-R3	157,457.95	303,837.59
371.00	Pumping Equipment	308,394.00	25-R3	179,093.59	129,300.41
380.00	Treatment & Disposal Equipment	1,389,651.63	40-R3	555,025.44	834,626.19
390.00	Office Furniture & Equipment	12,690.55	15-L1	7,501.66	5,188.89
393.00	Tools & Work Equipment	11,002.42	15-R3	9,599.13	1,403.29
394.00	Laboratory Equipment	15,604.05	20-R3	11,643.62	3,960.43
	Total Depreciable Plant	\$ 10,602,845.60		\$ 3,177,995.50	\$ 7,424,850.10
	Total Plant in Service	\$ 10,602,850.60		\$ 3,177,995.50	\$ 7,424,850.10
Deduct:					
<u>Contribution in Aid of Construction</u>					
354.40	Structures & Improvements - Treatment & Disposal Plant	\$ 1,179,768.83	60-R3	338,662.02	841,106.81
360.00	Collection Sewers - Force	228,231.05	70-R3	56,485.35	171,745.70
361.00	Collection Sewers - Gravity	2,760,060.31	85-R3	638,913.38	2,121,146.93
363.00	Services to Customers	501,480.17	50-R3	171,174.51	330,305.66
380.00	Treatment & Disposal Equipment	734,508.02	40-R3	308,477.14	426,030.88
	Total C.I.A.C	\$ 5,404,048.38		\$ 1,513,712.40	\$ 3,890,335.98
	Total Plant in Service (Net)	\$ 5,198,802.22		\$ 1,664,283.10	\$ 3,534,514.12

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**354.30 Structures & Improvements-System Pumping Plant**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	45,262.39	42.78	60.00	0.28706	12,993
<b>Total</b>	45,262.39				12,992.93



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**354.40 Structures & Improve.-Treatment & Disposal Plant**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 60 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	2,096,015.37	42.78	60.00	0.28706	601,678
2010	11,877.76	53.16	60.00	0.11399	1,354
2011	1,047.42	54.13	60.00	0.09784	102
2013	123,000.00	56.08	60.00	0.06540	8,044
<b>Total</b>	2,231,940.55				611,178.35

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**354.70 Structures & Improvements - General Plant**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	272,157.94	32.93	50.00	0.34134	92,898
<b>Total</b>	272,157.94				92,897.99

***Aqua - Pennsylvania, Inc.  
Little Washington-Tobyhanna***

***354.80 Structures & Improve.-Miscellaneous Improvements***

***Original Cost Of Utility Plant In Service  
And Development Of Calculated Depr Reserve as of June 30, 2017  
Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0 % Average Service Life: 20 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1999	113,507.19	5.08	20.00	0.74619	84,698
2000	6,796.19	5.66	20.00	0.71696	4,873
<b><i>Total</i></b>	120,303.38				89,570.82

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**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**355.00 Power Generation Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 35 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	222,013.06	18.42	35.00	0.47386	105,202
<b>Total</b>	222,013.06				105,202.49

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**360.00 Collection Sewer-Force**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 70 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	146,795.86	52.68	70.00	0.24749	36,331
2009	182,947.71	62.18	70.00	0.11168	20,432
2010	27,852.43	63.15	70.00	0.09784	2,725
<b>Total</b>	357,596.00				59,487.45

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
 361.00 Collection Sewer-Gravity

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 75 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	4,326,637.46	57.64	75.00	0.23149	1,001,553
<b>Total</b>	4,326,637.46				1,001,552.95



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**363.00 Services**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	786,614.00	32.93	50.00	0.34134	268,502
<b>Total</b>	786,614.00				268,501.67



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
364.00 Flow Measuring Devices

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	7,858.87	9.21	25.00	0.63153	4,963
2008	27,758.78	16.47	25.00	0.34132	9,475
2009	6,064.98	17.37	25.00	0.30529	1,852
<b>Total</b>	41,682.63				16,289.46



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**370.00 Receiving Wells**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	461,295.54	32.93	50.00	0.34134	157,458
<b>Total</b>	461,295.54				157,457.95



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**371.00 Pumping Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 25 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	263,885.33	9.21	25.00	0.63153	166,653
2008	15,481.00	16.47	25.00	0.34132	5,284
2009	1,363.67	17.37	25.00	0.30529	416
2010	9,062.00	18.28	25.00	0.26866	2,435
2011	18,602.00	19.21	25.00	0.23148	4,306
<b>Total</b>	308,394.00				179,093.59

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**380.00 Treatment & Disposal Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	1,275,170.58	23.20	40.00	0.41998	535,543
2008	10,486.40	31.30	40.00	0.21742	2,280
2009	3,109.62	32.25	40.00	0.19381	603
2010	77,709.08	33.20	40.00	0.17003	13,213
2011	23,175.95	34.16	40.00	0.14611	3,386
<b>Total</b>	1,389,651.63				555,025.44

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
 390.00 Office Furniture & Equipment

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 15 Survivor Curve: LI*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	12,690.55	6.13	15.00	0.59112	7,502
<b>Total</b>	12,690.55				7,501.66

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
 393.00 Tools & Work Equipment

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 15 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	11,002.42	1.91	15.00	0.87246	9,599
<b>Total</b>	11,002.42				9,599.13



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobyhanna**  
**394.00 Laboratory Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0 % Average Service Life: 20 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	15,604.05	5.08	20.00	0.74619	11,644
<b>Total</b>	15,604.05				11,643.62

***Aqua - Pennsylvania, Inc.***

***Little Washington-Tobhanna - CIAC***

***354.40 Structures & Improve.-Treatment & Disposal Plant***

***Original Cost Of Utility Plant In Service***

***And Development Of Calculated Depr Reserve as of June 30, 2017***

***Based Upon Broad Group/Remaining Life Procedure and Technique***

***Salvage Value: 0% Average Service Life: 60 Survivor Curve: R3***

<b><i>Year</i></b>	<b><i>Original Cost</i></b>	<b><i>Expectancy</i></b>	<b><i>Avg. Service Life</i></b>	<b><i>Reserve Ratio</i></b>	<b><i>Calculated Reserve</i></b>
<b><i>(1)</i></b>	<b><i>(2)</i></b>	<b><i>(3)</i></b>	<b><i>(4)</i></b>	<b><i>(5)</i></b>	<b><i>(6)</i></b>
1999	1,179,768.83	42.78	60.00	0.28706	338,662
<b><i>Total</i></b>	1,179,768.83				338,662.02

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**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobhanna - CIAC**  
**360.00 Collection Sewer-Force**

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 70 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	228,231.05	52.68	70.00	0.24749	56,485
<b>Total</b>	228,231.05				56,485.35



**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobhanna - CIAC**  
 361.00 Collection Sewer-Gravity

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 75 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	2,760,060.31	57.64	75.00	0.23149	638,913
<b>Total</b>	2,760,060.31				638,913.38



***Aqua - Pennsylvania, Inc.***  
***Little Washington-Tobhanna - CIAC***  
***363.00 Services***

***Original Cost Of Utility Plant In Service***  
***And Development Of Calculated Depr Reserve as of June 30, 2017***  
***Based Upon Broad Group/Remaining Life Procedure and Technique***

*Salvage Value: 0% Average Service Life: 50 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	501,480.17	32.93	50.00	0.34134	171,175
<b><i>Total</i></b>	501,480.17				171,174.51

---

**Aqua - Pennsylvania, Inc.**  
**Little Washington-Tobhanna - CIAC**  
 380.00 Treatment & Disposal Equipment

**Original Cost Of Utility Plant In Service**  
**And Development Of Calculated Depr Reserve as of June 30, 2017**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Salvage Value: 0% Average Service Life: 40 Survivor Curve: R3*

<i>Year</i>	<i>Original Cost</i>	<i>Expectancy</i>	<i>Avg. Service Life</i>	<i>Reserve Ratio</i>	<i>Calculated Reserve</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	734,508.02	23.20	40.00	0.41998	308,477
<b>Total</b>	734,508.02				308,477.14



AQUA Pennsylvania, Inc. – Tobyhanna Wastewater  
Dave Hoogstad, Field Supervisor  
Ed Fulk and Bob Soltis



Tobyhanna Sewer Plant Entrance



Control Building



Tobyhanna Sewer Plant

AQUA Pennsylvania, Inc. – Tobyhanna Wastewater  
Dave Hoogstad, Field Supervisor  
Ed Fulk and Bob Soltis



Back of Control Building



Control Building



Control Building



Blower Room

AQUA Pennsylvania, Inc. – Tobyhanna Wastewater  
 Dave Hoogstad, Field Supervisor  
 Ed Fulk and Bob Soltis



Control Panel



Serial Plate for Blower #1



Serial Plate for Blower #2



Serial Plate for Blower #3



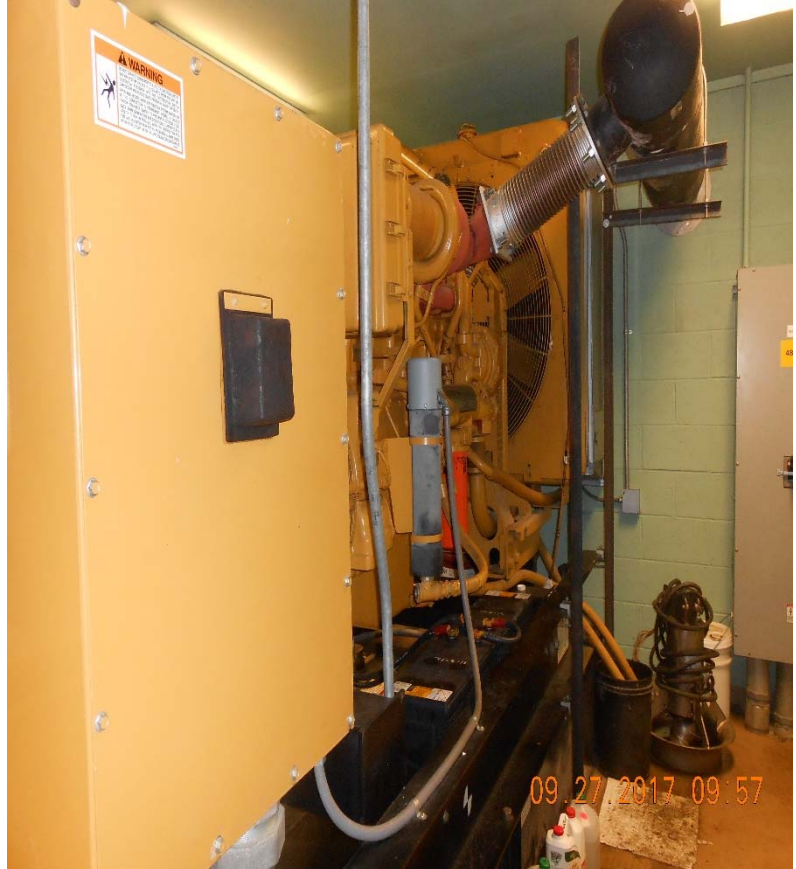
Blower #3



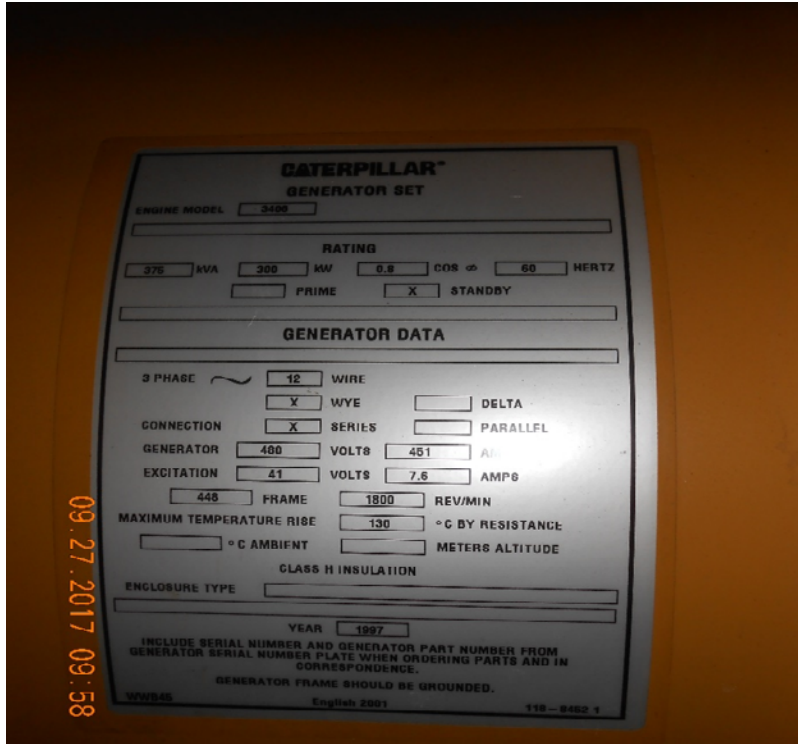
Blower Control Panel



Generator Room



300kw Generator



Serial # Plate for Generator



Headwork and Control Building



Screen & Compactor



Screen & Compactor



AQUA Pennsylvania, Inc. – Tobyhanna Wastewater  
Dave Hoogstad, Field Supervisor  
Ed Fulk and Bob Soltis



Headwork and Control Building



Backwash pumps



Splinter Box



Control Panel for Submersible Pumps



Control Panel for Submersible Pumps



Sludge Holding Tank



Sludge Holding Tank



Filter Tanks

AQUA Pennsylvania, Inc. – Tobyhanna Wastewater  
Dave Hoogstad, Field Supervisor  
Ed Fulk and Bob Soltis



UV Filter Tanks



SBR Screened Tanks



Control Building for UV Filters



Control Panel in UV Control Building

AQUA Pennsylvania, Inc. – Tobyhanna Wastewater  
Dave Hoogstad, Field Supervisor  
Ed Fulk and Bob Soltis



Control Panel in UV Control Building



Filter Building



Filter and Blower Buildings



Mud Well



Back Wash Pumps



Back Wash Pumps



Sand Blowers



Sand Blowers



Heaters for Blowers

AQUA Pennsylvania, Inc. – Tobyhanna Wastewater  
Dave Hoogstad, Field Supervisor  
Ed Fulk and Bob Soltis



Pump Station #1 – Lady Jennifer



Pump Station #1 – Lady Jennifer



Pump Station #1 – Lady Jennifer



Lady Jennifer Pump Station



Control Panel for Pump Station #1



Control Panel for Pump Station #1



AQUA Pennsylvania, Inc. – Tobyhanna Wastewater  
Dave Hoogstad, Field Supervisor  
Ed Fulk and Bob Soltis



Pump Station #2 = Greenwood



Pump Station #2 – Greenwood



Greenwood Pump Station



Control Panel for Greenwood Pump Station

AQUA Pennsylvania, Inc. – Tobyhanna Wastewater  
Dave Hoogstad, Field Supervisor  
Ed Fulk and Bob Soltis



Pump Station #3 – 940



Pump Station #3 – 940



940 Pump Station



940 Pump Station



Control Panel for 940 Pump Station



Pump Station #4 – Fernridge



Pump Station #4 – Fernridge



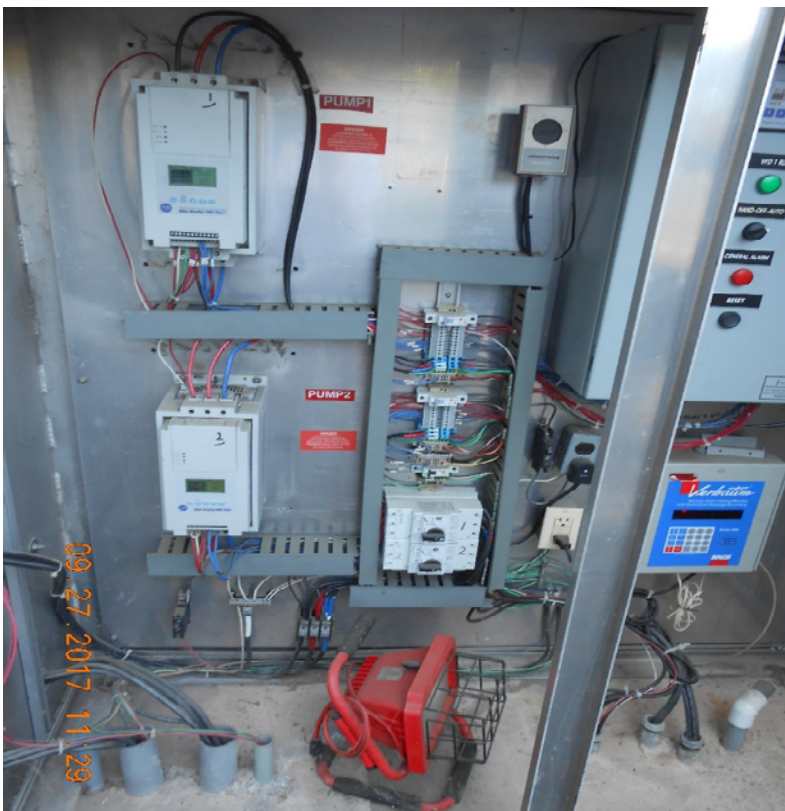
Fernridge Pump Station



Fernridge Pump Station



Fernridge Control Panel



**Aqua Pennsylvania Wastewater, Inc.**  
**Avon Grove School District Costs**  
**M92967**  
**Journal Entry**

Accounting Unit	Account Number	Description	Amount	
			Debit	Credit
898	300000	PPE-Utility Plant in Service	522,381.72	
898	104000	Utility Plant Purchased/Sold		206,098.59
900	104000	Utility Plant Purchased/Sold		263.74
898	108000	AD-General		390,777.50
898	114000	U Plant Acq Adj	74,758.11	
<b>Total</b>			<b>597,139.83</b>	<b>597,139.83</b>

**SATISFACTION OF THE CRITERIA ESTABLISHED BY §1327(A)  
FOR INCLUDING IN RATE BASE A POSITIVE ACQUISITION ADJUSTMENT**

**Avon Grove School District**

<b>Section 1327(a) Criteria</b>	<b>Satisfied (Y/N)</b>	<b>Explanation</b>
<p style="text-align: center;">(1)</p> <p>the property is used and useful in providing water or sewer service;</p>	Yes	<p>On September 8, 2017, Aqua Pennsylvania Wastewater, Inc. (“Aqua”) acquired the Wastewater System Assets (“Assets”) of Avon Grove School District (“Seller”). The Seller’s Assets were used and useful in providing wastewater service and an original cost study was prepared and submitted to the Commission.</p> <p>Reference: Original Cost Study</p>
<p style="text-align: center;">(2)</p> <p>the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;</p>	Yes	<p>Prior to Aqua’s acquisition of Seller’s Assets, the Avon Grove School District was providing wastewater service to the Administration Building, the Penn London Elementary School and the Avon Grove Intermediate School in portions of New London and Penn Township, Chester County, Pennsylvania.</p> <p>Reference: Commission Order Docket No. A-2017-2586983</p>
<p style="text-align: center;">(3)</p> <p>the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:</p> <p style="text-align: center;">(i)</p>	Yes	



<p>violation of statutory or regulatory requirements of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;</p> <p>(ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;</p> <p>(iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;</p> <p>(iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; <b>or</b></p> <p>(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;</p>		
<p>(4) reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and</p>	<p>Yes</p>	

reasonable service;		
(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;	Yes	Aqua and the Seller entered into an <i>Asset Purchase Agreement</i> , which was negotiated at arm's length. On February 2, 2017, Aqua filed an <i>Application</i> with the PUC requesting the approvals necessary for the proposed transfer. By <i>Order</i> entered July 12, 2017, at Docket No. A-2017-2586983, the PUC granted the approvals requested in the <i>Application</i> .
(6) the actual purchase price is reasonable;	Yes	The total purchase price for Seller's Assets was \$100,000 and was negotiated at arm's length. The Commission approved the company's application to acquire the wastewater assets of Avon Grove School District and an original cost study was prepared to support the utility plant purchase.  Reference: Commission Order Docket No. A-2017-2586983
(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;	Yes	The Seller is not an affiliated interest of Aqua.
(8) the rates charged by the acquiring public utility to its pre-acquisition customers will not increase unreasonably because of the acquisition; <b>and</b>	Yes	The <i>Asset Purchase Agreement</i> and the PUC <i>Order</i> stipulated that Aqua adopt the Seller's existing rate structure.
(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.	Yes	The excess of the acquisition cost over depreciated original cost has been included in Aqua's rate base claim in this case and will be amortized over 20 years commencing on the date new base rates become effective.



March 23, 2018

**VIA FEDERAL EXPRESS**

Rosemary Chiavetta, Secretary  
Commonwealth of Pennsylvania  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Application of Aqua Pennsylvania Wastewater, Inc. (APW) for approval of: (1) the acquisition by APW of the wastewater system assets of Avon Grove School District situated in a portion of New London Township and a portion of Penn Township, Chester County, Pennsylvania; and (2) the right of APW to begin to offer, render, furnish and supply wastewater service to the public in a portion of New London Township and a portion of Penn Township, Chester County, Pennsylvania.

Docket No: A-2017-2586983

Dear Secretary Chiavetta:

Pursuant to the Commission's Statement Policy relating to water and wastewater system acquisitions at 52 Pa. Code § 69.721(f) and as directed in Paragraph 7 of the Commission's Order entered July 12, 2017, enclosed is a copy of the original plant-in-service valuation of the wastewater system assets acquired from Avon Grove School District on September 8, 2017. As noted in that Order, Aqua Pennsylvania, Inc. is also serving these documents to the Bureau of Technical Utility Services.

Should you have any questions regarding this filing, please contact me at (610) 645-1021.

Sincerely,

A handwritten signature in blue ink, appearing to read "Renee T. Marquis", is written over a horizontal line.

Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.

Enclosures  
cc: Certificate of Service

**BEFORE THE**  
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Aqua Pennsylvania Wastewater, Inc.

Docket Nos. A-2017-2586983

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of the following document, the original cost plant-in-service valuation, in accordance with the requirements of 52 Pa. Code § 1.54 upon the person(s) and in the manner indicated below:

**VIA FEDERAL EXPRESS**

Christine Hoover, Esq.  
Office of Consumer Advocate  
555 Walnut Avenue  
Fifth Floor, Forum Place  
Harrisburg, PA 17101-1923

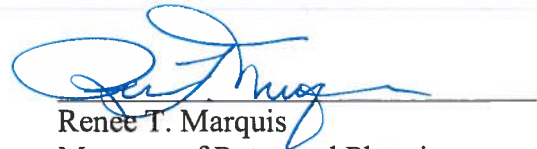
John R. Evans  
Office of Small Business Advocate  
Suite 202, Commerce Bldg.  
300 North Second Street  
Harrisburg, PA 17101

Richard Kanaskie, Director  
Bureau of Investigation and Enforcement  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Paul Diskin, Director  
Bureau of Technical Utility Services  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Larry Treaster  
Bureau of Audits  
Pennsylvania Public Utility Commission  
Three East Keystone  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Dated: March 23, 2018



Renee T. Marquis  
Manager of Rates and Planning  
Aqua Pennsylvania, Inc.  
762 W. Lancaster Ave.  
Bryn Mawr, PA 19010  
610-645-1021  
[RTMarquis@AquaAmerica.com](mailto:RTMarquis@AquaAmerica.com)

Aqua Pennsylvania Wastewater, Inc.

Acquisition of the Wastewater System Assets of  
Avon Grove School District

Original Cost of Wastewater Utility Plant and  
Related Accrued Depreciation  
As of December 31, 2017

762 W. Lancaster Avenue, Bryn Mawr, PA 19010

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Aqua Pennsylvania Wastewater, Inc.

Original Cost and Related Accrued Depreciation of  
Avon Grove School District  
As of December 31, 2017

The Avon Grove School District wastewater treatment system was built to provide wastewater service to its Administration Building, the Penn London Elementary School and the Avon Grove Intermediate School in a portion of New London Township and a portion of Penn Township, Chester County. The wastewater system facilities were constructed in 1992 and consist of a collection system and a wastewater treatment plant with an effluent stream discharge.

On February 2, 2017, Aqua Pennsylvania Wastewater, Inc. filed an Application for approval to begin to offer, render, furnish, or supply wastewater service to the public. An Order was entered on July 12, 2017 closing Docket No. A-2017-2586983 and a Certificate of Public Convenience was issued with an effective date of September 8, 2017. The original cost of the assets of the water system and accrued depreciation are based on the records of information and other data provided by Avon Grove School District.

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Aqua Pennsylvania Wastewater, Inc.  
 Acquisition of Avon Grove School District  
 Depreciated Original Cost

Account	Account Title	Description	In Service Date	Quantity	Original Cost	Depreciation Rate	Accumulated Depreciation	Depreciated Original Cost
<b>NON-DEPRECIABLE PLANT</b>								
353.40	Land and Land Rights	Land	7/31/1992		\$ 1.00		\$ -	\$ 1.00
	<b>TOTAL ACCOUNT 353.4</b>				<u>\$ 1.00</u>		<u>\$ -</u>	<u>\$ 1.00</u>
		<b>TOTAL NON-DEPRECIABLE PLANT</b>			<u>\$ 1.00</u>		<u>\$ -</u>	<u>\$ 1.00</u>
<b>DEPRECIABLE PLANT</b>								
354.40	Structures and Improvements	Masonry Control Building	7/31/1992	1	\$ 150,000.00	2.7400%	\$ 103,777.50	\$ 46,222.50
	<b>TOTAL ACCOUNT 354</b>				<u>\$ 150,000.00</u>		<u>\$ 103,777.50</u>	<u>\$ 46,222.50</u>
380.40	Treatment and Disposal Equipment	Precast Concrete Process Tanks	7/31/1992	11	\$ 194,833.33	5.5500%	\$ 194,833.33	\$ -
380.40	Treatment and Disposal Equipment	Clarifiers	7/31/1992	2	26,333.33	5.5500%	26,333.33	-
380.40	Treatment and Disposal Equipment	Sand Filter	7/31/1992	1	13,166.67	5.5500%	13,166.67	-
380.40	Treatment and Disposal Equipment	PD Blowers	7/31/1992	4	52,666.67	5.5500%	52,666.67	-
	<b>TOTAL ACCOUNT 380.4</b>				<u>\$ 287,000.00</u>		<u>\$ 287,000.00</u>	<u>\$ -</u>
		<b>TOTAL DEPRECIABLE PLANT</b>			<u>\$ 437,000.00</u>		<u>\$ 390,777.50</u>	<u>\$ 46,222.50</u>
		<b>TOTAL UTILITY PLANT IN SERVICE</b>			<u>\$ 437,001.00</u>		<u>\$ 390,777.50</u>	<u>\$ 46,223.50</u>

AQUA PENNSYLVANIA, INC.

Docket No. R-2018-3003068

EXHIBIT TO ACCOMPANY  
THE DIRECT TESTIMONY OF  
PAUL R. MOUL  
WITH REGARD TO  
COST OF CAPITAL

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

August 17, 2018



AQUA PENNSYLVANIA, INC.  
Index of Schedules

	<u>Schedule</u>
Summary Cost of Capital and Cost of Equity	1
Aqua Pennsylvania, Inc. Historical Capitalization and Financial Statistics	2
Water Group Historical Capitalization and Financial Statistics	3
Standard & Poor's Public Utilities Historical Capitalization and Financial Statistics	4
Aqua Pennsylvania, Inc. Capitalization and Capital Structure Ratios	5
Aqua Pennsylvania, Inc. Embedded Cost of Long-Term Debt	6
Dividend Yields	7
Historical Growth Rates	8
Projected Growth Rates	9
Financial Risk Adjustment	10
Interest Rates for Investment Grade Public Utility Bonds	11
Common Equity Risk Premiums	12
Component Inputs for the Capital Market Pricing Model	13
Comparable Earnings Approach	14

**Aqua Pennsylvania, Inc.**  
Summary Cost of Capital  
Estimated at March 31, 2020

<u>Type of Capital</u>	<u>Ratios</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	47.15%	4.43%	2.09%
Common Equity	<u>52.85%</u>	10.75%	<u>5.68%</u>
Total	<u>100.00%</u>		<u>7.77%</u>

Indicated levels of fixed charge coverage assuming that the Company could actually achieve its overall cost of capital:

Pre-tax coverage of interest expense based upon a 28.8921% composite federal and state income tax rate ( 10.08% ÷ 2.09% )	4.82 x
Post-tax coverage of interest expense ( 7.77% ÷ 2.09% )	3.72 x

**Agua Pennsylvania, Inc.**

Cost of Equity  
as of May 31, 2018

<b>Discounted Cash Flow (DCF)</b>	$D_1/P_0$	<sup>(1)</sup>	+	<b>g</b>	<sup>(2)</sup>	+	<b>lev.</b>	<sup>(3)</sup>	=	<b>k</b>			
Water Group	2.18%		+	6.75%		+	1.61%		=	10.54%			
Water Group Excl. CTWS and SJW	2.23%		+	6.75%		+	1.67%		=	10.65%			
<b>Risk Premium (RP)</b>				<b>I</b>	<sup>(4)</sup>	+	<b>RP</b>	<sup>(5)</sup>	=	<b>k</b>			
Water Group				4.75%		+	6.50%		=	11.25%			
<b>Capital Asset Pricing Model (CAPM)</b>	<b>Rf</b>	<sup>(6)</sup>	+	<b>β</b>	<sup>(7)</sup>	x	<b>(Rm-Rf)</b>	<sup>(8)</sup>	+	<b>size</b>	<sup>(9)</sup>	=	<b>k</b>
Water Group	3.75%		+	0.95		x	( 8.61% )		+	1.02%		=	12.95%
Water Group Excl. CTWS and SJW	3.75%		+	0.96		x	( 8.61% )		+	1.02%		=	13.04%
<b>Comparable Earnings (CE)</b>		<sup>(10)</sup>					<b>Historical</b>	<b>Forecast</b>		<b>Average</b>			
Comparable Earnings Group							11.9%	13.0%		12.45%			

- References
- <sup>(1)</sup> Schedule 7, page 1
  - <sup>(2)</sup> Schedule 9, page 1
  - <sup>(3)</sup> Schedule 10, page 1
  - <sup>(4)</sup> A-rated public utility bond yield comprised of a 3.75% risk-free rate of return (Schedule 13, page 2) and a yield spread of 1.00% (Schedule 11, page 3)
  - <sup>(5)</sup> Schedule 12, page 1
  - <sup>(6)</sup> Schedule 13, page 2
  - <sup>(7)</sup> Schedule 9, page 1
  - <sup>(8)</sup> Schedule 13, page 2
  - <sup>(9)</sup> Schedule 13, page 3
  - <sup>(10)</sup> Schedule 14, page 2

Aqua Pennsylvania, Inc.  
Capitalization and Financial Statistics  
2017-2013, Inclusive

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	
	(Millions of Dollars)					
Amount of Capital Employed						
Permanent Capital	\$ 2,851.4	\$ 2,609.7	\$ 2,438.3	\$ 2,256.1	\$ 2,124.4	
Short-Term Debt	\$ 3.7	\$ 5.5	\$ 7.3	\$ 13.7	\$ 30.0	
Total Capital	<u>\$ 2,855.1</u>	<u>\$ 2,615.2</u>	<u>\$ 2,445.6</u>	<u>\$ 2,269.7</u>	<u>\$ 2,154.4</u>	
Capital Structure Ratios						<u>Average</u>
Based on Permanent Capital:						
Long-Term Debt	46.4%	45.6%	46.3%	44.6%	45.0%	45.6%
Common Equity <sup>(1)</sup>	53.6%	54.4%	53.7%	55.4%	55.0%	54.4%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Based on Total Capital:						
Total Debt incl. Short Term	46.5%	45.7%	46.5%	45.0%	45.7%	45.9%
Common Equity <sup>(1)</sup>	53.5%	54.3%	53.5%	55.0%	54.3%	54.1%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Rate of Return on Book Common Equity <sup>(1)</sup>	12.0%	12.7%	13.4%	13.3%	14.9%	13.3%
Operating Ratio <sup>(2)</sup>	52.2%	51.7%	49.9%	51.8%	50.1%	51.1%
Coverage incl. AFUDC <sup>(3)</sup>						
Pre-tax: All Interest Charges	3.80 x	4.17 x	4.41 x	4.20 x	4.38 x	4.19 x
Post-tax: All Interest Charges	4.21 x	4.40 x	4.48 x	4.29 x	4.42 x	4.36 x
Coverage excl. AFUDC <sup>(3)</sup>						
Pre-tax: All Interest Charges	3.60 x	4.04 x	4.30 x	4.12 x	4.34 x	4.08 x
Post-tax: All Interest Charges	4.00 x	4.27 x	4.38 x	4.21 x	4.38 x	4.25 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	6.3%	29.4%	3.1%	2.6%	1.1%	8.5%
Effective Income Tax Rate	-14.6%	-7.2%	-2.2%	-2.9%	-1.1%	-5.6%
Internal Cash Generation/Construction <sup>(4)</sup>	67.7%	85.5%	70.5%	100.7%	100.9%	85.1%
Gross Cash Flow/ Avg. Total Debt <sup>(5)</sup>	19.3%	20.0%	21.2%	22.7%	22.0%	21.0%
Gross Cash Flow Interest Coverage <sup>(6)</sup>	5.68 x	5.85 x	5.51 x	5.57 x	5.42 x	5.61 x
Common Dividend Coverage <sup>(7)</sup>	4.86 x	7.77 x	3.81 x	15.16 x	x	7.90 x

See Page 2 for Notes.

Aqua Pennsylvania, Inc.  
Capitalization and Financial Statistics  
2013-2017, Inclusive

Notes:

- (1) Excluding Accumulated Other Comprehensive Income (“OCI”) from the equity account.
- (2) Total operating expenses, maintenance, depreciation and taxes other than income as a percentage of operating revenues.
- (3) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (4) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (5) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less AFUDC) as a percentage of average total debt.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (7) Common dividend coverage is the relationship of internally generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: Certified Annual Reports by PricewaterhouseCoopers LLP

Water Group  
Capitalization and Financial Statistics <sup>(1)</sup>  
2013-2017, Inclusive

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	
	(Millions of Dollars)					
Amount of Capital Employed						
Permanent Capital	\$ 2,302.9	\$ 2,167.1	\$ 2,053.2	\$ 1,951.4	\$ 1,858.7	
Short-Term Debt	\$ 147.3	\$ 123.2	\$ 85.7	\$ 66.7	\$ 86.2	
Total Capital	<u>\$ 2,450.2</u>	<u>\$ 2,290.3</u>	<u>\$ 2,138.9</u>	<u>\$ 2,018.1</u>	<u>\$ 1,944.9</u>	
Market-Based Financial Ratios						<u>Average</u>
Price-Earnings Multiple	28 x	25 x	21 x	19 x	21 x	23 x
Market/Book Ratio	296.2%	265.6%	219.3%	206.6%	202.1%	238.0%
Dividend Yield	2.1%	2.3%	2.8%	2.9%	2.9%	2.6%
Dividend Payout Ratio	56.8%	56.8%	58.0%	56.0%	63.5%	58.2%
Capital Structure Ratios						
Based on Permanent Capital:						
Long-Term Debt	45.3%	45.7%	46.0%	45.7%	46.3%	45.8%
Preferred Stock	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Common Equity <sup>(2)</sup>	<u>54.6%</u>	<u>54.2%</u>	<u>53.9%</u>	<u>54.2%</u>	<u>53.6%</u>	<u>54.1%</u>
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Based on Total Capital:						
Total Debt incl. Short Term	48.3%	48.1%	47.5%	47.3%	48.0%	47.8%
Preferred Stock	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Common Equity <sup>(2)</sup>	<u>51.6%</u>	<u>51.9%</u>	<u>52.4%</u>	<u>52.6%</u>	<u>51.9%</u>	<u>52.1%</u>
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Rate of Return on Book Common Equity <sup>(2)</sup>	10.9%	10.7%	10.2%	10.8%	9.6%	10.4%
Operating Ratio <sup>(3)</sup>	68.3%	67.9%	69.1%	68.2%	70.2%	68.7%
Coverage incl. AFUDC <sup>(4)</sup>						
Pre-tax: All Interest Charges	4.61 x	4.60 x	4.30 x	4.43 x	3.95 x	4.38 x
Post-tax: All Interest Charges	3.53 x	3.50 x	3.35 x	3.39 x	3.00 x	3.35 x
Overall Coverage: All Int. & Pfd. Div.	3.52 x	3.49 x	3.33 x	3.37 x	2.99 x	3.34 x
Coverage excl. AFUDC <sup>(4)</sup>						
Pre-tax: All Interest Charges	4.50 x	4.52 x	4.24 x	4.38 x	3.90 x	4.31 x
Post-tax: All Interest Charges	3.43 x	3.42 x	3.29 x	3.33 x	2.96 x	3.29 x
Overall Coverage: All Int. & Pfd. Div.	3.41 x	3.41 x	3.28 x	3.32 x	2.94 x	3.27 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	4.6%	3.3%	2.7%	2.2%	2.6%	3.1%
Effective Income Tax Rate	28.9%	30.5%	28.6%	30.6%	32.7%	30.3%
Internal Cash Generation/Construction <sup>(5)</sup>	60.9%	65.4%	82.9%	94.6%	82.9%	77.3%
Gross Cash Flow/ Avg. Total Debt <sup>(6)</sup>	23.8%	23.8%	24.2%	26.2%	21.9%	24.0%
Gross Cash Flow Interest Coverage <sup>(7)</sup>	5.96 x	5.88 x	5.85 x	6.00 x	5.23 x	5.78 x
Common Dividend Coverage <sup>(8)</sup>	3.76 x	3.83 x	3.83 x	4.24 x	3.92 x	3.92 x

See Page 2 for Notes.

Water Group  
Capitalization and Financial Statistics  
2013-2017, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
- (2) Excluding Accumulated Other Comprehensive Income (“OCI”) from the equity account.
- (3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
- (4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (7) Gross Cash Flow plus interest charges divided by interest charges.
- (8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Basis of Selection:

The Water Group companies have the following common characteristics: (i) they are listed in the “Water Utility Industry” section (basic and expanded editions) of The Value Line Investment Survey, and (ii) their stock is publicly traded.

Ticker	Company	Corporate Credit Ratings		Stock Traded	S&P Stock Ranking	Value Line Beta
		Moody's	S&P			
AWR	American States Water	A2	A+	NYSE	B+	0.75
AWK	American Water Works Co.	A3	A	NYSE	NR	0.65
WTR	Aqua America, Inc.	-	A+	NYSE	A	0.70
ARTNA	Artesian Resources Corp.	-	-	NASDAQ	NR	0.60
CWT	California Water Serv. Grp.	-	A+	NYSE	A-	0.75
CTWS	Connecticut Water Services	-	A	NASDAQ	A-	0.65
MSEX	Middlesex Water Company	-	A	NASDAQ	A-	0.80
SJW	SJW Corporation	-	A	NYSE	A-	0.70
YORW	York Water Company	-	A-	NASDAQ	A	0.80
	Average	<u>A3</u>	<u>A</u>		<u>A-</u>	<u>0.71</u>

Note: Ratings are those of utility subsidiaries

Source of Information: Utility COMPUSTAT  
Moody's Investors Service  
Standard & Poor's Corporation  
S&P Stock Guide

Standard & Poor's Public Utilities  
Capitalization and Financial Statistics <sup>(1)</sup>  
2013-2017, Inclusive

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	
	(Millions of Dollars)					
Amount of Capital Employed						
Permanent Capital	\$ 32,875.9	\$ 31,133.4	\$ 28,468.3	\$ 27,468.3	\$ 25,958.6	
Short-Term Debt	\$ 1,106.5	\$ 1,113.4	\$ 930.9	\$ 963.9	\$ 764.3	
Total Capital	<u>\$ 33,982.4</u>	<u>\$ 32,246.8</u>	<u>\$ 29,399.2</u>	<u>\$ 28,432.2</u>	<u>\$ 26,722.9</u>	
Market-Based Financial Ratios						<u>Average</u>
Price-Earnings Multiple	22 x	21 x	20 x	20 x	19 x	20 x
Market/Book Ratio	206.6%	191.5%	179.3%	179.1%	164.4%	184.2%
Dividend Yield	3.4%	3.6%	3.7%	3.6%	3.9%	3.6%
Dividend Payout Ratio	74.0%	75.0%	70.0%	73.2%	73.3%	73.1%
Capital Structure Ratios						
Based on Permanent Capital:						
Long-Term Debt	56.9%	56.7%	54.9%	53.3%	53.3%	55.0%
Preferred Stock	1.4%	1.8%	1.5%	1.3%	1.1%	1.4%
Common Equity <sup>(2)</sup>	41.7%	41.5%	43.6%	45.4%	45.7%	43.6%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Based on Total Capital:						
Total Debt incl. Short Term	58.4%	58.3%	56.3%	55.0%	54.7%	56.5%
Preferred Stock	1.4%	1.8%	1.5%	1.3%	1.0%	1.4%
Common Equity <sup>(2)</sup>	40.3%	39.9%	42.2%	43.7%	44.3%	42.1%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Rate of Return on Book Common Equity <sup>(2)</sup>	10.4%	9.0%	9.2%	9.6%	9.0%	9.4%
Operating Ratio <sup>(3)</sup>	77.4%	78.8%	80.4%	81.2%	80.7%	79.7%
Coverage incl. AFUDC <sup>(4)</sup>						
Pre-tax: All Interest Charges	3.26 x	3.15 x	3.41 x	3.56 x	3.22 x	3.32 x
Post-tax: All Interest Charges	2.78 x	2.53 x	2.65 x	2.71 x	2.48 x	2.63 x
Overall Coverage: All Int. & Pfd. Div.	2.76 x	2.50 x	2.62 x	2.67 x	2.45 x	2.60 x
Coverage excl. AFUDC <sup>(4)</sup>						
Pre-tax: All Interest Charges	3.16 x	3.05 x	3.31 x	3.46 x	3.13 x	3.22 x
Post-tax: All Interest Charges	2.68 x	2.43 x	2.55 x	2.62 x	2.39 x	2.53 x
Overall Coverage: All Int. & Pfd. Div.	2.66 x	2.40 x	2.52 x	2.58 x	2.36 x	2.50 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	6.0%	6.4%	6.0%	7.1%	6.4%	6.4%
Effective Income Tax Rate	18.9%	28.1%	31.5%	28.6%	33.2%	28.1%
Internal Cash Generation/Construction <sup>(5)</sup>	76.4%	78.7%	70.6%	88.7%	83.2%	79.5%
Gross Cash Flow/ Avg. Total Debt <sup>(6)</sup>	19.6%	20.7%	20.0%	22.8%	22.4%	21.1%
Gross Cash Flow Interest Coverage <sup>(7)</sup>	5.47 x	5.56 x	5.39 x	5.66 x	5.46 x	5.51 x
Common Dividend Coverage <sup>(8)</sup>	4.26 x	4.37 x	4.23 x	4.80 x	4.41 x	4.41 x

See Page 2 for Notes.



Standard & Poor's Public Utilities  
Capitalization and Financial Statistics  
2013-2017, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
- (2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account
- (3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
- (4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) as a percentage of average total debt.
- (7) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: Annual Reports to Shareholders  
Utility COMPUSTAT

**Standard & Poor's Public Utilities**  
Company Identities

	Ticker	Credit Rating <sup>(1)</sup>		Common Stock Traded	S&P Stock Ranking	Value Line Beta
		Moody's	S&P			
AGL Resources Inc.	GAS	A2	BBB+	NYSE	A	0.60
Ameren Corporation	AEE	Baa1	BBB+	NYSE	B	0.75
American Electric Power	AEP	Baa1	BBB	NYSE	B	0.70
CMS Energy	CMS	A3	BBB	NYSE	B	0.75
CenterPoint Energy	CNP	A3	A-	NYSE	B	0.85
Consolidated Edison	ED	A2	A-	NYSE	B+	0.60
DTE Energy Co.	DTE	A2	BBB+	NYSE	B+	0.75
Dominion Resources	D	A2	A-	NYSE	B+	0.70
Duke Energy	DUK	A1	BBB+	NYSE	B	0.65
Edison Int'l	EIX	A2	BBB+	NYSE	B	0.70
Entergy Corp.	ETR	Baa1	BBB	NYSE	A	0.70
EQT Corp.	EQT	Baa3	BBB	NYSE	B+	1.20
Exelon Corp.	EXC	A2	BBB	NYSE	B+	0.70
Eversource	NU	Baa1	A-	NYSE	B	0.75
FirstEnergy Corp.	FE	Baa2	BBB-	NYSE	B+	0.70
NextEra Energy Inc.	NEE	A1	A-	NYSE	A	0.75
NiSource Inc.	NI	Baa2	BBB+	NYSE	B	NMF
NRG Energy Inc.	NRG	Ba3	BB-	NYSE	B	1.00
ONEOK, Inc.	OKE	Baa3	BB+	NYSE	A-	0.85
PG&E Corp.	PCG	A3	BBB	NYSE	B	0.65
PPL Corp.	PPL	Baa1	BBB	NYSE	B+	0.70
Pinnacle West Capital	PNW	A3	A-	NYSE	B	0.75
Public Serv. Enterprise Inc.	PEG	A2	BBB+	NYSE	B+	0.75
SCANA Corp.	SCG	Baa2	BBB+	NYSE	A-	0.75
Sempra Energy	SRE	A1	A	NYSE	B+	0.80
Southern Co.	SO	A3	A	NYSE	A-	0.60
TECO Energy	TE	A2	BBB+	NYSE	B	0.85
Wisconsin Energy Corp.	WEC	A1	A-	NYSE	A	0.70
Xcel Energy Inc	XEL	A2	A-	NYSE	B+	0.65
Average for S&P Utilities		<u>A3</u>	<u>BBB+</u>		<u>B+</u>	<u>0.75</u>

Note: <sup>(1)</sup> Ratings are those of utility subsidiaries

Source of Information: SNL Financial LLC  
Standard & Poor's Stock Guide  
Value Line Investment Survey for Windows

**Aqua Pennsylvania, Inc.**  
Capitalization and Related Capital Structure Ratios  
Actual at March 31, 2018 and Estimated at March 31, 2020

	Actual at March 31, 2018			Estimated at March 31, 2020		
	Amount Outstanding (\$000)	Ratios Excl. S-T Debt    Incl. S-T Debt		Amount Outstanding (\$000)	Ratios Excl. S-T Debt    Incl. S-T Debt	
Long-Term Debt <sup>(1)</sup>	<u>\$ 1,333,383</u>	46.05%	45.73%	<u>\$ 1,608,094</u> <sup>(2)</sup>	47.15%	46.47%
Common Equity						
Common stock	100			100		
Capital in excess of par value	106,178			106,178		
Retained earnings	1,455,902			1,695,902		
Total Common Equity	<u>1,562,181</u>	<u>53.95%</u>	<u>53.57%</u>	<u>1,802,181</u> <sup>(3)</sup>	<u>52.85%</u>	<u>52.08%</u>
Total Permanent Capital	2,895,563	<u>100.00%</u>	99.30%	3,410,274	<u>100.00%</u>	98.56%
Revolving Credit Facility	<u>20,342</u>		<u>0.70%</u>	<u>50,000</u> <sup>(4)</sup>		<u>1.44%</u>
Total Capital Employed	<u>\$ 2,915,906</u>		<u>100.00%</u>	<u>\$ 3,460,274</u>		<u>100.00%</u>

Notes: <sup>(1)</sup> Includes current portion of long-term debt.

<sup>(2)</sup> Reflects the issuance and retirement of long-term debt as follows:

Series	
Redemptions & maturities	\$ (138,800)
Pennvest payments	(11,489)
First Mortgage Bonds	425,000
Total	<u>\$ 274,711</u>

<sup>(3)</sup> Reflects build-up of Retained Earnings of:

Net Income	\$ 360,000
Dividends	(120,000)
Total	<u>\$ 240,000</u>

<sup>(4)</sup> Projection of short-term debt.

Source of Information: Company provided data

**Agua Pennsylvania, Inc.**  
Calculation of the Embedded Cost of Long-Term Debt  
Actual at March 31, 2018

Series		Principal Amount Outstanding	Percent to Total	Effective Cost Rate <sup>(1)</sup>	Weighted Cost Rate
First Mortgage Bonds	Due 6/1/2018	\$ 5,000,000	0.37%	10.07%	0.04%
First Mortgage Bonds	Due 9/15/2021	1,600,000	0.12%	9.22%	0.01%
First Mortgage Bonds	Due 9/15/2026	12,000,000	0.90%	9.36%	0.08%
First Mortgage Bonds	Due 5/15/2025	15,000,000	1.12%	7.81%	0.09%
First Mortgage Bonds	Due 5/15/2019	15,000,000	1.12%	5.90%	0.07%
First Mortgage Bonds	Due 5/15/2019	5,000,000	0.37%	5.90%	0.02%
First Mortgage Bonds	Due 5/10/2027	15,000,000	1.12%	6.18%	0.07%
First Mortgage Bonds	Due 5/10/2027	5,000,000	0.37%	6.18%	0.02%
First Mortgage Bonds	Due 5/15/2028	3,000,000	0.22%	6.10%	0.01%
First Mortgage Bonds	Due 12/1/2041	40,000,000	3.00%	3.92%	0.12%
First Mortgage Bonds	Due 12/1/2042	20,000,000	1.50%	3.93%	0.06%
First Mortgage Bonds	Due 12/1/2047	20,000,000	1.50%	3.97%	0.06%
First Mortgage Bonds	Due 11/1/2031	25,000,000	1.87%	4.05%	0.08%
First Mortgage Bonds	Due 11/1/2045	25,000,000	1.87%	4.69%	0.09%
First Mortgage Bonds	Due 11/1/2046	25,000,000	1.87%	4.70%	0.09%
First Mortgage Bonds	Due 1/15/2035	25,000,000	1.87%	3.68%	0.07%
First Mortgage Bonds	Due 1/15/2040	15,000,000	1.12%	4.05%	0.05%
First Mortgage Bonds	Due 1/15/2045	13,000,000	0.97%	4.09%	0.04%
First Mortgage Bonds	Due 12/29/2054	12,000,000	0.90%	4.14%	0.04%
First Mortgage Bonds	Due 1/15/2036	65,000,000	4.87%	3.87%	0.19%
First Mortgage Bonds	Due 1/15/2037	20,000,000	1.50%	3.84%	0.06%
First Mortgage Bonds	Due 1/15/2038	25,000,000	1.87%	3.87%	0.07%
First Mortgage Bonds	Due 1/15/2046	60,000,000	4.50%	4.18%	0.19%
First Mortgage Bonds	Due 1/15/2047	20,000,000	1.50%	4.20%	0.06%
First Mortgage Bonds	Due 1/15/2048	20,000,000	1.50%	4.22%	0.06%
First Mortgage Bonds	Due 1/15/2051	25,000,000	1.87%	3.90%	0.07%
First Mortgage Bonds	Due 1/15/2056	60,000,000	4.50%	4.00%	0.18%
First Mortgage Bonds	Due 2/1/2042	10,000,000	0.75%	3.70%	0.03%
First Mortgage Bonds	Due 2/1/2044	40,000,000	3.00%	3.74%	0.11%
First Mortgage Bonds	Due 7/15/2055	40,000,000	3.00%	4.05%	0.12%
First Mortgage Bonds	Due 7/15/2057	40,000,000	3.00%	4.20%	0.13%
First Mortgage Bonds	Due 10/15/2054	35,000,000	2.62%	4.07%	0.11%
First Mortgage Bonds	Due 10/15/2055	20,000,000	1.50%	4.13%	0.06%
First Mortgage Bonds	Due 10/15/2057	20,000,000	1.50%	4.10%	0.06%
Tax Exempt	Due 7/1/2042	24,830,000	1.86%	5.34%	0.10%
Tax Exempt	Due 7/1/2043	24,830,000	1.86%	5.33%	0.10%
Tax Exempt	Due 10/1/2018	13,000,000	0.97%	7.09%	0.07%
Tax Exempt	Due 10/1/2039	58,000,000	4.35%	5.37%	0.23%
Tax Exempt	Due 11/15/2040	62,165,000	4.66%	5.06%	0.24%
Tax Exempt	Due 11/15/2040	12,520,000	0.94%	5.03%	0.05%
Tax Exempt	Due 12/1/2033	25,910,000	1.94%	5.25%	0.10%
Tax Exempt	Due 12/1/2034	19,270,000	1.45%	5.34%	0.08%
Tax Exempt	Due 12/1/2042	15,000,000	1.12%	4.83%	0.05%
Tax Exempt	Due 12/1/2043	81,205,000	6.09%	4.89%	0.30%
Unsecured Note	Due 3/31/2023	10,000,000	0.75%	5.98%	0.04%
Unsecured Note	Due 3/31/2024	10,000,000	0.75%	5.98%	0.04%
Unsecured Note	Due 3/31/2033	10,000,000	0.75%	5.97%	0.04%
Unsecured Note	Due 3/31/2034	10,000,000	0.75%	5.97%	0.04%
Unsecured Note	Due 9/30/2020	5,466,000	0.41%	5.67%	0.02%
Unsecured Note	Due 9/30/2021	5,461,000	0.41%	5.67%	0.02%
PNC Bank Note	Due 5/6/2018	50,000,000	3.75%	1.98%	0.07%
PNC Bank Note	Due 9/29/2019	50,000,000	3.75%	2.48%	0.09%
Pennvest loans:					
Hawley	Due 10/1/2021	142,300	0.01%	1.02%	0.00%
Ferndale Booster	Due 12/1/2020	77,285	0.01%	1.37%	0.00%
Hawley	Due 12/1/2020	57,088	0.00%	1.37%	0.00%
Bristol	Due 8/1/2019	605,647	0.05%	3.58%	0.00%
Susquehanna	Due 12/1/2020	31,188	0.00%	3.66%	0.00%
Glenside Tank	Due 12/1/2020	73,247	0.01%	4.08%	0.00%
Fernhill Tank	Due 12/1/2020	133,256	0.01%	4.08%	0.00%
Susquehanna	Due 5/1/2021	88,986	0.01%	3.66%	0.00%
Pickering Dam	Due 8/1/2021	165,580	0.01%	4.08%	0.00%
North Wayne # 2	Due 8/1/2021	266,188	0.02%	4.08%	0.00%
Shenango	Due 9/1/2021	288,888	0.02%	3.06%	0.00%
North Wayne # 1	Due 8/1/2022	355,807	0.03%	3.84%	0.00%
Ingrams Mill	Due 11/14/2021	2,972,729	0.22%	3.50%	0.01%
Tank Paintings	Due 12/13/2021	692,268	0.05%	3.82%	0.00%
Tinicum Boster	Due 12/13/2021	143,662	0.01%	3.50%	0.00%
Well #20	Due 4/10/2022	217,966	0.02%	3.36%	0.00%
NUI	Due 3/1/2024	1,903,226	0.14%	2.76%	0.00%
Fawn Lake	Due 4/1/2024	790,464	0.06%	2.80%	0.00%
Ralpho Tank	Due 11/1/2023	227,457	0.02%	1.18%	0.00%
Meyers Tract	Due 7/23/2023	422,754	0.03%	3.46%	0.00%
Neshmainy	Due 1/1/2025	2,465,139	0.18%	3.50%	0.01%
Crum Water Treatment	Due 5/1/2025	3,757,754	0.28%	3.49%	0.01%
Caanan	Due 3/1/2024	634,122	0.05%	2.80%	0.00%
Wapwallopen	Due 6/1/2024	120,783	0.01%	2.80%	0.00%
Tafton Water System	Due 4/1/2035	319,151	0.02%	1.02%	0.00%
NE PA Mains	Due 3/23/2025	954,968	0.07%	2.70%	0.00%
Coal Twsp Tank	Due 5/1/2026	432,623	0.03%	2.74%	0.00%
Shickshinny	Due 4/1/2026	145,278	0.01%	2.80%	0.00%
White Rock Acres	Due 5/1/2026	314,852	0.02%	3.50%	0.00%
Wilbar	Due 5/1/2027	1,028,504	0.08%	2.80%	0.00%
Moscow	Due 10/1/2028	518,250	0.04%	3.08%	0.00%
Paupac	Due 10/1/2028	1,213,273	0.09%	3.40%	0.00%
Midway Manor	Due 7/1/2027	1,355,748	0.10%	2.80%	0.00%
NE Mains 2005	Due 4/1/2027	627,212	0.05%	2.58%	0.00%
Pickering West	Due 10/1/2027	1,215,034	0.09%	3.22%	0.00%
Eagle Rock/Oneida	Due 5/1/2028	771,985	0.06%	2.58%	0.00%
Sharon New Castle	Due 10/1/2028	286,979	0.02%	2.58%	0.00%
Roaring Creek Main Repl	Due 2/1/2029	858,823	0.06%	2.58%	0.00%
Mountain Home	Due 2/1/2030	1,274,336	0.10%	2.57%	0.00%
NE Mains 2007	Due 7/1/2029	387,379	0.03%	2.57%	0.00%
Crum Filtration	Due 8/1/2029	906,536	0.07%	3.08%	0.00%
Brush Valley Wells	Due 5/1/2030	1,025,737	0.08%	2.57%	0.00%
Forest Park	Due 9/1/2030	741,240	0.06%	2.57%	0.00%
Country Club Gardens	Due 1/1/2031	822,073	0.06%	2.57%	0.00%
Honesdale Water	Due 11/1/2030	807,709	0.06%	2.72%	0.00%
Shady Acres	Due 9/1/2030	866,778	0.07%	2.58%	0.00%
Bristol Residuals	Due 2/1/2031	1,430,764	0.11%	3.17%	0.00%
Emlenton	Due 10/1/2030	2,098,778	0.16%	1.54%	0.00%
2009 NE Mains	Due 12/1/2030	1,586,532	0.12%	2.58%	0.00%
Washington Park Water	Due 1/1/2031	694,589	0.05%	2.58%	0.00%
Neshaminy Water Treatment	Due 1/1/2034	6,533,925	0.49%	1.02%	0.00%
Shenango Intake Dam	Due 4/1/2031	935,520	0.07%	1.02%	0.00%
Eagle Rock Phase II	Due 12/1/2033	522,685	0.04%	2.57%	0.00%
Little Washington Wastewater	Due 5/1/2019	218,887	0.02%	1.01%	0.00%
Rivercrest	Due 7/1/2025	177,218	0.01%	2.81%	0.00%
Washington Park WW	Due 1/1/2032	577,247	0.04%	1.05%	0.00%
Little Washington Treasure Lake	Due 2/1/2023	841,393	0.06%	1.24%	0.00%
Long Term- Debt		<u>\$ 1,333,382,786</u>	<u>100.00%</u>		<u>4.40%</u>

Notes: <sup>(1)</sup> As calculated on page 2 of this schedule.

Source of Information: Company provided data

Aqua Pennsylvania, Inc.  
Calculation of the Effective Cost of Long-Term Debt by Series  
Actual at March 31, 2018

Series	Date of Issue	Date of Maturity	Coupon Rate	Principal Amount Issued	Discount and Expense	Net Proceeds	Net Proceeds Ratio	Effective Cost Rate <sup>(1)</sup>
First Mortgage Bonds	06/01/88	06/01/18	9.97%	\$ 5,000,000	\$ 46,489	\$4,953,511	99.07%	10.07%
First Mortgage Bonds	11/01/91	09/15/21	9.17%	8,000,000	44,192	7,955,808	99.45%	9.22%
First Mortgage Bonds	11/01/91	09/15/26	9.29%	12,000,000	90,983	11,909,017	99.24%	9.36%
First Mortgage Bonds	05/19/95	05/15/25	7.72%	15,000,000	160,429	14,839,571	98.93%	7.81%
First Mortgage Bonds	05/10/04	05/15/19	5.75%	15,000,000	219,891	14,780,109	98.53%	5.90%
First Mortgage Bonds	05/10/04	05/15/19	5.75%	5,000,000	73,297	4,926,703	98.53%	5.90%
First Mortgage Bonds	05/10/04	05/10/27	6.06%	15,000,000	219,891	14,780,109	98.53%	6.18%
First Mortgage Bonds	05/10/04	05/10/27	6.06%	5,000,000	73,297	4,926,703	98.53%	6.18%
First Mortgage Bonds	05/10/04	05/15/28	5.98%	3,000,000	43,978	2,956,022	98.53%	6.10%
First Mortgage Bonds	11/13/12	12/01/41	3.79%	40,000,000	927,429	39,072,571	97.68%	3.92%
First Mortgage Bonds	11/13/12	12/01/42	3.80%	20,000,000	463,715	19,536,285	97.68%	3.93%
First Mortgage Bonds	11/13/12	12/01/47	3.85%	20,000,000	463,715	19,536,285	97.68%	3.97%
First Mortgage Bonds	10/24/13	11/01/31	3.94%	25,000,000	340,228	24,659,772	98.64%	4.05%
First Mortgage Bonds	10/24/13	11/01/45	4.61%	25,000,000	340,228	24,659,772	98.64%	4.69%
First Mortgage Bonds	10/24/13	11/01/46	4.62%	25,000,000	340,228	24,659,772	98.64%	4.70%
First Mortgage Bonds	12/29/14	01/15/35	3.64%	25,000,000	145,122	24,854,878	99.42%	3.68%
First Mortgage Bonds	12/29/14	01/15/40	4.01%	15,000,000	87,088	14,912,912	99.42%	4.05%
First Mortgage Bonds	12/29/14	01/15/45	4.06%	13,000,000	75,466	12,924,534	99.42%	4.09%
First Mortgage Bonds	12/29/14	12/29/54	4.11%	12,000,000	69,655	11,930,345	99.42%	4.14%
First Mortgage Bonds	12/03/15	01/15/36	3.77%	65,000,000	944,500	64,055,500	98.55%	3.87%
First Mortgage Bonds	12/03/15	01/15/37	3.82%	20,000,000	57,700	19,942,300	99.71%	3.84%
First Mortgage Bonds	12/03/15	01/15/38	3.85%	25,000,000	72,125	24,927,875	99.71%	3.87%
First Mortgage Bonds	12/03/15	01/15/46	4.16%	60,000,000	173,101	59,826,899	99.71%	4.18%
First Mortgage Bonds	12/03/15	01/15/47	4.18%	20,000,000	57,700	19,942,300	99.71%	4.20%
First Mortgage Bonds	12/03/15	01/15/48	4.20%	20,000,000	57,700	19,942,300	99.71%	4.22%
First Mortgage Bonds	12/15/16	01/15/51	3.85%	25,000,000	222,673	24,777,327	99.11%	3.90%
First Mortgage Bonds	12/15/16	01/15/56	3.95%	60,000,000	534,415	59,465,585	99.11%	4.00%
First Mortgage Bonds	01/31/17	02/01/42	3.65%	10,000,000	83,638	9,916,362	99.16%	3.70%
First Mortgage Bonds	01/31/17	02/01/44	3.69%	40,000,000	330,054	39,669,946	99.17%	3.74%
First Mortgage Bonds	07/21/17	07/15/55	4.04%	40,000,000	64,967	39,935,033	99.84%	4.05%
First Mortgage Bonds	07/21/17	07/15/57	4.06%	40,000,000	1,059,048	38,940,952	97.35%	4.20%
First Mortgage Bonds	10/26/17	10/15/54	4.06%	35,000,000	55,927	34,944,073	99.84%	4.07%
First Mortgage Bonds	10/26/17	10/15/55	4.07%	20,000,000	214,193	19,785,807	98.93%	4.13%
First Mortgage Bonds	10/26/17	10/15/57	4.09%	20,000,000	31,958	19,968,042	99.84%	4.10%
Tax Exempt	12/20/07	07/01/42	5.25%	24,830,000	334,241	24,495,759	98.65%	5.34%
Tax Exempt	12/20/07	07/01/43	5.25%	24,830,000	333,880	24,496,120	98.66%	5.33%
Tax Exempt	12/18/08	10/01/18	6.75%	15,000,000	309,196	12,930,804	87.62%	7.03%
Tax Exempt	07/16/09	10/01/39	5.00%	58,000,000	3,206,179	54,793,821	94.47%	5.37%
Tax Exempt	11/17/09	11/15/40	5.00%	62,165,000	601,078	61,563,922	99.03%	5.06%
Tax Exempt	11/17/09	11/15/40	4.75%	12,520,000	541,477	11,978,523	95.68%	5.03%
Tax Exempt	11/17/10	12/01/33	5.00%	25,910,000	852,493	25,057,507	96.71%	5.25%
Tax Exempt	11/17/10	12/01/34	5.00%	19,270,000	890,025	18,379,975	95.38%	5.34%
Tax Exempt	11/17/10	12/01/42	4.50%	15,000,000	813,938	14,186,062	94.57%	4.83%
Tax Exempt	11/17/10	12/01/43	5.00%	81,205,000	(1,505,773)	82,710,773	101.85%	4.89%
Unsecured Note	03/31/06	03/31/23	5.95%	10,000,000	28,082	9,971,918	99.72%	5.98%
Unsecured Note	03/31/06	03/31/24	5.95%	10,000,000	28,082	9,971,918	99.72%	5.98%
Unsecured Note	03/31/06	03/31/33	5.95%	10,000,000	28,082	9,971,918	99.72%	5.97%
Unsecured Note	03/31/06	03/31/34	5.95%	10,000,000	28,082	9,971,918	99.72%	5.97%
Unsecured Note	09/29/06	09/30/20	5.64%	5,466,000	15,453	5,450,547	99.72%	5.67%
Unsecured Note	09/29/06	09/30/21	5.64%	5,461,000	15,453	5,445,547	99.72%	5.67%
PNC Bank Note	05/06/15	05/06/18	1.98%	50,000,000	-	50,000,000	100.00%	1.98%
PNC Bank Note	09/29/17	09/29/19	2.48%	50,000,000	-	50,000,000	100.00%	2.48%
Pennvest loans:								
Hawley	05/01/94	10/01/21	1.000%	972,041	4,410	967,631	99.55%	1.02%
Ferndale Booster	03/22/00	12/01/20	1.349%	651,125	2,954	648,171	99.55%	1.37%
Hawley	04/19/00	12/01/20	1.349%	343,845	1,560	342,285	99.55%	1.37%
Bristol	08/01/00	08/01/19	3.552%	5,949,630	26,994	5,922,636	99.55%	3.58%
Susquehanna	08/08/00	12/01/20	3.631%	175,725	797	174,928	99.55%	3.66%
Glenside Tank	08/08/00	12/01/20	4.047%	415,250	1,884	413,366	99.55%	4.08%
Fernhill Tank	08/08/00	12/01/20	4.047%	768,543	3,487	765,056	99.55%	4.08%
Susquehanna	11/29/00	05/01/21	3.631%	487,000	2,210	484,790	99.55%	3.66%
Pickering Dam	11/29/00	08/01/21	4.047%	920,802	4,178	916,624	99.55%	4.08%
North Wayne # 2	11/29/00	08/01/21	4.050%	1,174,916	5,331	1,169,585	99.55%	4.08%
Shenango	03/13/01	09/01/21	3.030%	1,715,000	7,781	1,707,219	99.55%	3.06%
North Wayne # 1	03/13/01	08/01/22	3.810%	1,346,773	6,110	1,340,663	99.55%	3.84%
Ingrams Mill	11/14/01	11/14/21	3.468%	9,582,806	43,478	9,539,328	99.55%	3.50%
Tank Paintings	12/13/01	12/13/21	3.790%	2,025,180	9,188	2,015,992	99.55%	3.82%
Tinicum Booster	12/13/01	12/13/21	3.468%	356,520	1,618	354,902	99.55%	3.50%
Well #20	04/10/02	04/10/22	3.330%	843,227	3,826	839,401	99.55%	3.36%
NUI	06/27/02	03/01/24	2.730%	5,538,900	25,130	5,513,770	99.55%	2.76%
Fawn Lake	11/05/02	04/01/24	2.774%	2,201,840	9,990	2,191,850	99.55%	2.80%
Ralpho Tank	12/12/02	11/01/23	1.156%	778,625	3,533	775,092	99.55%	1.18%
Meyers Tract	07/23/03	07/23/23	3.430%	1,547,054	7,019	1,540,035	99.55%	3.46%
Neshmainy	08/07/03	01/01/25	3.470%	6,366,625	28,886	6,337,739	99.55%	3.50%
Crum Water Treatment	08/07/03	05/01/25	3.460%	9,975,741	45,261	9,930,480	99.55%	3.49%
Caanan	12/19/03	03/01/24	2.774%	1,646,400	7,470	1,638,930	99.55%	2.80%
Wapwallopen	06/01/04	06/01/24	2.774%	333,878	1,515	332,363	99.55%	2.80%
Tafton Water System	12/01/04	04/01/35	1.000%	600,000	2,722	597,278	99.55%	1.02%
NE PA Mains	03/23/05	03/23/25	2.668%	2,122,850	9,632	2,113,218	99.55%	2.70%
Coal Twsp Tank	04/21/05	05/01/26	2.711%	1,054,868	4,786	1,050,082	99.55%	2.74%
Shickshinny	05/25/05	04/01/26	2.774%	321,522	1,459	320,063	99.55%	2.80%
White Rock Acres	05/25/05	05/01/26	3.468%	677,839	3,075	674,764	99.55%	3.50%
Wilbar	08/02/05	05/01/27	2.774%	2,311,200	10,486	2,300,714	99.55%	2.80%
Moscow	08/25/05	10/01/26	3.052%	1,151,000	5,222	1,145,778	99.55%	3.08%
Paupac	10/02/05	10/01/26	3.365%	2,249,960	10,208	2,239,752	99.55%	3.40%
Midway Manor	04/05/06	07/01/27	2.774%	2,611,380	11,848	2,599,532	99.55%	2.80%
NE Mains 2005	07/25/06	04/01/27	2.556%	1,253,000	5,685	1,247,315	99.55%	2.58%
Pickering West	07/25/06	10/01/27	3.195%	2,225,000	10,095	2,214,905	99.55%	3.22%
Eagle Rock/Oneida	04/18/07	05/01/28	2.554%	1,395,800	6,333	1,389,467	99.55%	2.58%
Sharon New Castle	05/27/08	10/01/28	2.547%	698,000	3,167	694,833	99.55%	2.58%
Roaring Creek Main Repl	06/04/08	02/01/29	2.547%	1,708,100	7,750	1,700,350	99.55%	2.58%
Mountain Home	06/17/08	02/01/30	2.547%	2,045,000	9,278	2,035,722	99.55%	2.57%
NE Mains 2007	09/30/08	07/01/29	2.547%	723,069	3,281	719,788	99.55%	2.57%
Crum Filtration	09/30/08	08/01/29	3.046%	1,493,848	6,778	1,487,070	99.55%	3.08%
Brush Valley Wells	02/05/09	05/01/30	2.547%	1,697,000	7,699	1,689,301	99.55%	2.57%
Forest Park	07/22/09	09/01/30	2.547%	1,132,200	5,137	1,127,063	99.55%	2.57%
Country Club Gardens	01/26/10	01/01/31	2.547%	1,226,000	5,562	1,220,438	99.55%	2.57%
Honedale Water	04/15/10	11/01/30	2.690%	1,217,305	5,523	1,211,782	99.55%	2.72%
Shady Acres	09/09/10	09/01/30	2.547%	1,402,518	6,363	1,396,155	99.55%	2.58%
Bristol Residuals	09/09/10	02/01/31	3.143%	2,144,750	9,731	2,135,019	99.55%	3.17%
Emlenton	10/07/10	10/01/30	1.510%	3,138,825	14,241	3,124,584	99.55%	1.54%
2009 NE Mains	12/15/10	12/01/30	2.547%	2,347,056	10,649	2,336,407	99.55%	2.58%
Washington Park Water	01/27/11	01/01/31	2.547%	975,645	4,427	971,218	99.55%	2.58%
Neshmainy Water Treatment	01/27/11	01/01/34	1.000%	9,955,500	45,169	9,910,331	99.55%	1.02%
Shenango Intake Dam	04/12/11	04/01/31	1.000%	1,413,729	6,414	1,407,315	99.55%	1.02%
Eagle Rock Phase II	11/30/10	12/01/33	2.547%	882,000	4,002	877,998	99.55%	2.57%
Little Washington Wastewater	03/12/02	05/01/19	1.000%	3,251,000	3,223	3,247,777	99.90%	1.01%
Rivercrest	12/15/04	07/01/25	2.774%	419,630	2,609	417,021	99.38%	2.81%
Washington Park WW	09/22/10	01/01/32	1.000%	975,645	8,498	967,147	99.13%	1.05%
Little Washington Treasure Lake	03/01/13	02/01/23	1.156%	1,635,581	12,387	1,623,194	99.24%	1.24%

Notes: <sup>(1)</sup> The effective cost for each issue is the yield to maturity using as inputs the date of issue, the date of maturity, the coupon rate, and the net proceeds ratio.

Aqua Pennsylvania, Inc.  
Calculation of the Embedded Cost of Long-Term Debt  
Actual at March 31, 2020

Series		Principal Amount Outstanding	Percent to Total	Effective Cost Rate <sup>(1)</sup>	Weighted Cost Rate
First Mortgage Bonds	Due 9/15/2021	\$ 800,000	0.05%	9.22%	0.00%
First Mortgage Bonds	Due 9/15/2026	12,000,000	0.75%	9.36%	0.07%
First Mortgage Bonds	Due 5/15/2025	15,000,000	0.93%	7.81%	0.07%
First Mortgage Bonds	Due 5/10/2027	15,000,000	0.93%	6.18%	0.06%
First Mortgage Bonds	Due 5/10/2027	5,000,000	0.31%	6.18%	0.02%
First Mortgage Bonds	Due 5/15/2028	3,000,000	0.19%	6.10%	0.01%
First Mortgage Bonds	Due 12/1/2041	40,000,000	2.49%	3.92%	0.10%
First Mortgage Bonds	Due 12/1/2042	20,000,000	1.24%	3.93%	0.05%
First Mortgage Bonds	Due 12/1/2047	20,000,000	1.24%	3.97%	0.05%
First Mortgage Bonds	Due 11/1/2031	25,000,000	1.55%	4.05%	0.06%
First Mortgage Bonds	Due 11/1/2045	25,000,000	1.55%	4.69%	0.07%
First Mortgage Bonds	Due 11/1/2046	25,000,000	1.55%	4.70%	0.07%
First Mortgage Bonds	Due 1/15/2035	25,000,000	1.55%	3.68%	0.06%
First Mortgage Bonds	Due 1/15/2040	15,000,000	0.93%	4.05%	0.04%
First Mortgage Bonds	Due 1/15/2045	13,000,000	0.81%	4.09%	0.03%
First Mortgage Bonds	Due 12/29/2054	12,000,000	0.75%	4.14%	0.03%
First Mortgage Bonds	Due 1/15/2036	65,000,000	4.04%	3.87%	0.16%
First Mortgage Bonds	Due 1/15/2037	20,000,000	1.24%	3.84%	0.05%
First Mortgage Bonds	Due 1/15/2038	25,000,000	1.55%	3.87%	0.06%
First Mortgage Bonds	Due 1/15/2046	60,000,000	3.73%	4.18%	0.16%
First Mortgage Bonds	Due 1/15/2047	20,000,000	1.24%	4.20%	0.05%
First Mortgage Bonds	Due 1/15/2048	20,000,000	1.24%	4.22%	0.05%
First Mortgage Bonds	Due 1/15/2051	25,000,000	1.55%	3.90%	0.06%
First Mortgage Bonds	Due 1/15/2056	60,000,000	3.73%	4.00%	0.15%
First Mortgage Bonds	Due 2/1/2042	10,000,000	0.62%	3.70%	0.02%
First Mortgage Bonds	Due 2/1/2044	40,000,000	2.49%	3.74%	0.09%
First Mortgage Bonds	Due 7/15/2055	40,000,000	2.49%	4.05%	0.10%
First Mortgage Bonds	Due 7/15/2057	40,000,000	2.49%	4.20%	0.10%
First Mortgage Bonds	Due 10/15/2054	35,000,000	2.18%	4.07%	0.09%
First Mortgage Bonds	Due 10/15/2055	20,000,000	1.24%	4.13%	0.05%
First Mortgage Bonds	Due 10/15/2057	20,000,000	1.24%	4.10%	0.05%
First Mortgage Bonds	Due 6/1/2038	100,000,000	6.22%	4.09%	0.25%
First Mortgage Bonds	Due 11/1/2038	125,000,000	7.77%	4.13%	0.32%
First Mortgage Bonds	Due 6/1/2039	100,000,000	6.22%	4.28%	0.27%
First Mortgage Bonds	Due 11/1/2039	100,000,000	6.22%	4.28%	0.27%
First Mortgage Bonds	Due 7/1/2042	24,830,000	1.54%	5.34%	0.06%
Tax Exempt	Due 7/1/2043	24,830,000	1.54%	5.33%	0.06%
Tax Exempt	Due 10/1/2039	58,000,000	3.61%	5.37%	0.19%
Tax Exempt	Due 11/15/2040	62,165,000	3.87%	5.06%	0.20%
Tax Exempt	Due 11/15/2040	12,520,000	0.78%	5.03%	0.04%
Tax Exempt	Due 12/1/2033	25,910,000	1.61%	5.25%	0.08%
Tax Exempt	Due 12/1/2034	19,270,000	1.20%	5.34%	0.06%
Tax Exempt	Due 12/1/2042	15,000,000	0.93%	4.83%	0.05%
Tax Exempt	Due 12/1/2043	81,205,000	5.05%	4.89%	0.25%
Unsecured Note	Due 3/31/2023	10,000,000	0.62%	5.98%	0.04%
Unsecured Note	Due 3/31/2024	10,000,000	0.62%	5.98%	0.04%
Unsecured Note	Due 3/31/2033	10,000,000	0.62%	5.97%	0.04%
Unsecured Note	Due 3/31/2034	10,000,000	0.62%	5.97%	0.04%
Unsecured Note	Due 9/30/2020	5,466,000	0.34%	5.67%	0.02%
Unsecured Note	Due 9/30/2021	5,461,000	0.34%	5.67%	0.02%
Pennvest loans:					
Hawley	Due 10/1/2021	63,505	0.00%	1.02%	0.00%
Ferndale Booster	Due 12/1/2020	21,362	0.00%	1.37%	0.00%
Hawley	Due 12/1/2020	15,779	0.00%	1.37%	0.00%
Susquehanna	Due 12/1/2020	8,817	0.00%	3.66%	0.00%
Glenside Tank	Due 12/1/2020	20,790	0.00%	4.08%	0.00%
Fernhill Tank	Due 12/1/2020	37,823	0.00%	4.08%	0.00%
Susquehanna	Due 5/1/2021	33,979	0.00%	3.66%	0.00%
Pickering Dam	Due 8/1/2021	63,480	0.00%	4.08%	0.00%
North Wayne # 2	Due 8/1/2021	114,845	0.01%	4.08%	0.00%
Shenango	Due 9/1/2021	127,567	0.01%	3.06%	0.00%
North Wayne # 1	Due 8/1/2022	202,061	0.01%	3.84%	0.00%
Ingrams Mill	Due 11/14/2021	1,845,012	0.11%	3.50%	0.00%
Tank Paintings	Due 12/13/2021	453,003	0.03%	3.82%	0.00%
Tinicum Booster	Due 12/13/2021	104,537	0.01%	3.50%	0.00%
Well #20	Due 4/10/2022	130,369	0.01%	3.36%	0.00%
NUI	Due 3/1/2024	1,303,035	0.08%	2.76%	0.00%
Fawn Lake	Due 4/1/2024	545,138	0.03%	2.80%	0.00%
Ralpo Tank	Due 11/1/2023	148,873	0.01%	1.18%	0.00%
Meyers Tract	Due 7/23/2023	239,223	0.01%	3.46%	0.00%
Neshmainy	Due 1/1/2025	1,764,781	0.11%	3.50%	0.00%
Crum Water Treatment	Due 5/1/2025	2,734,101	0.17%	3.49%	0.01%
Caanan	Due 3/1/2024	434,347	0.03%	2.80%	0.00%
Wapwallopen	Due 6/1/2024	84,383	0.01%	2.80%	0.00%
Tafton Water System	Due 4/1/2035	284,541	0.02%	1.02%	0.00%
NE PA Mains	Due 3/23/2025	715,742	0.04%	2.70%	0.00%
Coal Twsp Tank	Due 5/1/2026	335,348	0.02%	2.74%	0.00%
Shickshinny	Due 4/1/2026	112,303	0.01%	2.80%	0.00%
White Rock Acres	Due 5/1/2026	245,771	0.02%	3.50%	0.00%
Wilbar	Due 5/1/2027	825,832	0.05%	2.80%	0.00%
Moscow	Due 10/1/2026	409,315	0.03%	3.08%	0.00%
Paupac	Due 10/1/2026	960,999	0.06%	3.40%	0.00%
Midway Manor	Due 7/1/2027	1,093,992	0.07%	2.80%	0.00%
NE Mains 2005	Due 4/1/2027	501,320	0.03%	2.58%	0.00%
Pickering West	Due 10/1/2027	991,191	0.06%	3.22%	0.00%
Eagle Rock/Onaida	Due 5/1/2028	635,512	0.04%	2.58%	0.00%
Sharon New Castle	Due 10/1/2028	238,498	0.01%	2.58%	0.00%
Roaring Creek Main Repl	Due 2/1/2029	718,789	0.04%	2.58%	0.00%
Mountain Home	Due 2/1/2030	1,086,510	0.07%	2.57%	0.00%
NE Mains 2007	Due 7/1/2029	326,839	0.02%	2.57%	0.00%
Crum Filtration	Due 8/1/2029	769,588	0.05%	3.08%	0.00%
Brush Valley Wells	Due 5/1/2030	878,154	0.05%	2.57%	0.00%
Forest Park	Due 9/1/2030	637,896	0.04%	2.57%	0.00%
Country Club Gardens	Due 1/1/2031	710,934	0.04%	2.57%	0.00%
Honesdale Water	Due 11/1/2030	697,721	0.04%	2.72%	0.00%
Shady Acres	Due 9/1/2030	749,595	0.05%	2.58%	0.00%
Bristol Residuals	Due 2/1/2031	1,242,403	0.08%	3.17%	0.00%
Emlenton	Due 10/1/2030	1,799,963	0.11%	1.54%	0.00%
2009 NE Mains	Due 12/1/2030	1,379,946	0.09%	2.58%	0.00%
Washington Park Water	Due 1/1/2031	609,849	0.04%	2.58%	0.00%
Neshaminy Water Treatment	Due 1/1/2034	5,770,714	0.36%	1.02%	0.00%
Shenango Intake Dam	Due 4/1/2031	810,552	0.05%	1.02%	0.00%
Eagle Rock Phase II	Due 12/1/2033	458,464	0.03%	2.57%	0.00%
Rivercrest	Due 7/1/2025	132,400	0.01%	2.81%	0.00%
Washington Park WW	Due 1/1/2032	498,644	0.03%	1.05%	0.00%
Little Washington Treasure Lake	Due 2/1/2023	510,663	0.03%	1.24%	0.00%
Long Term Debt		\$ 1,608,093,800	100.00%		4.43%

Notes: <sup>(1)</sup> As calculated on page 4 of this schedule.

Source of Information: Company provided data

Agua Pennsylvania, Inc.  
 Calculation of the Effective Cost of Long-Term Debt by Series  
 Actual at March 31, 2020

Series	Date of Issue	Date of Maturity	Coupon Rate	Principal Amount Issued	Discount and Expense	Net Proceeds	Net Proceeds Ratio	Effective Cost Rate <sup>(1)</sup>
First Mortgage Bonds	11/01/91	09/15/21	9.17%	\$ 8,000,000	\$ 44,192	\$ 7,955,808	99.45%	9.22%
First Mortgage Bonds	11/01/91	09/15/26	9.29%	12,000,000	90,983	11,909,017	99.24%	9.36%
First Mortgage Bonds	05/19/95	05/15/25	7.72%	15,000,000	160,429	14,839,571	98.93%	7.81%
First Mortgage Bonds	05/10/04	05/10/27	6.06%	15,000,000	219,891	14,780,109	98.53%	6.18%
First Mortgage Bonds	05/10/04	05/10/27	6.06%	5,000,000	73,297	4,926,703	98.53%	6.18%
First Mortgage Bonds	05/10/04	05/15/28	5.98%	3,000,000	43,978	2,956,022	98.53%	6.10%
First Mortgage Bonds	11/13/12	12/01/41	3.79%	40,000,000	927,429	39,072,571	97.68%	3.92%
First Mortgage Bonds	11/13/12	12/01/42	3.80%	20,000,000	463,715	19,536,285	97.68%	3.93%
First Mortgage Bonds	11/13/12	12/01/47	3.85%	20,000,000	463,715	19,536,285	97.68%	3.97%
First Mortgage Bonds	10/24/13	11/01/31	3.94%	25,000,000	340,228	24,659,772	98.64%	4.05%
First Mortgage Bonds	10/24/13	11/01/45	4.61%	25,000,000	340,228	24,659,772	98.64%	4.69%
First Mortgage Bonds	10/24/13	11/01/46	4.62%	25,000,000	340,228	24,659,772	98.64%	4.70%
First Mortgage Bonds	12/29/14	01/15/35	3.64%	25,000,000	145,122	24,854,878	99.42%	3.68%
First Mortgage Bonds	12/29/14	01/15/40	4.01%	15,000,000	87,088	14,912,912	99.42%	4.05%
First Mortgage Bonds	12/29/14	01/15/45	4.06%	13,000,000	75,466	12,924,534	99.42%	4.09%
First Mortgage Bonds	12/29/14	12/29/54	4.11%	12,000,000	69,655	11,930,345	99.42%	4.14%
First Mortgage Bonds	12/03/15	01/15/36	3.77%	65,000,000	944,500	64,055,500	98.55%	3.87%
First Mortgage Bonds	12/03/15	01/15/37	3.82%	20,000,000	57,700	19,942,300	99.71%	3.84%
First Mortgage Bonds	12/03/15	01/15/38	3.85%	25,000,000	72,125	24,927,875	99.71%	3.87%
First Mortgage Bonds	12/03/15	01/15/46	4.16%	60,000,000	173,101	59,826,899	99.71%	4.18%
First Mortgage Bonds	12/03/15	01/15/47	4.18%	20,000,000	57,700	19,942,300	99.71%	4.20%
First Mortgage Bonds	12/03/15	01/15/48	4.20%	20,000,000	57,700	19,942,300	99.71%	4.22%
First Mortgage Bonds	12/15/16	01/15/51	3.85%	25,000,000	222,673	24,777,327	99.11%	3.90%
First Mortgage Bonds	12/15/16	01/15/56	3.95%	60,000,000	534,415	59,465,585	99.11%	4.00%
First Mortgage Bonds	01/31/17	02/01/42	3.65%	10,000,000	83,638	9,916,362	99.16%	3.70%
First Mortgage Bonds	01/31/17	02/01/44	3.69%	40,000,000	330,054	39,669,946	99.17%	3.74%
First Mortgage Bonds	07/21/17	07/15/55	4.04%	40,000,000	64,967	39,935,033	99.84%	4.05%
First Mortgage Bonds	07/21/17	07/15/57	4.06%	40,000,000	1,059,048	38,940,952	97.35%	4.20%
First Mortgage Bonds	10/26/17	10/15/54	4.06%	35,000,000	55,927	34,944,073	99.84%	4.07%
First Mortgage Bonds	10/26/17	10/15/55	4.07%	20,000,000	214,193	19,785,807	98.93%	4.13%
First Mortgage Bonds	10/26/17	10/15/57	4.09%	20,000,000	31,958	19,968,042	99.84%	4.10%
First Mortgage Bonds	06/01/18	06/01/38	4.06%	100,000,000	400,000	99,600,000	99.60%	4.09%
First Mortgage Bonds	11/01/18	11/01/38	4.10%	125,000,000	500,000	124,500,000	99.60%	4.13%
First Mortgage Bonds	06/01/19	06/01/39	4.25%	100,000,000	400,000	99,600,000	99.60%	4.28%
First Mortgage Bonds	11/01/19	11/01/39	4.25%	100,000,000	400,000	99,600,000	99.60%	4.28%
Tax Exempt	12/20/07	07/01/42	5.25%	24,830,000	334,241	24,495,759	98.65%	5.34%
Tax Exempt	12/20/07	07/01/43	5.25%	24,830,000	333,880	24,496,120	98.66%	5.33%
Tax Exempt	07/16/09	10/01/39	5.00%	58,000,000	3,206,179	54,793,821	94.47%	5.37%
Tax Exempt	11/17/09	11/15/40	5.00%	62,165,000	601,078	61,563,922	99.03%	5.06%
Tax Exempt	11/17/09	11/15/40	4.75%	12,520,000	541,477	11,978,523	95.68%	5.03%
Tax Exempt	11/17/10	12/01/33	5.00%	25,910,000	852,493	25,057,507	96.71%	5.25%
Tax Exempt	11/17/10	12/01/34	5.00%	19,270,000	890,025	18,379,975	95.38%	5.34%
Tax Exempt	11/17/10	12/01/42	4.50%	15,000,000	813,938	14,186,062	94.57%	4.83%
Tax Exempt	11/17/10	12/01/43	5.00%	81,205,000	(1,505,773)	82,710,773	101.85%	4.89%
Unsecured Note	03/31/06	03/31/23	5.95%	10,000,000	28,082	9,971,918	99.72%	5.98%
Unsecured Note	03/31/06	03/31/24	5.95%	10,000,000	28,082	9,971,918	99.72%	5.98%
Unsecured Note	03/31/06	03/31/33	5.95%	10,000,000	28,082	9,971,918	99.72%	5.97%
Unsecured Note	03/31/06	03/31/34	5.95%	10,000,000	28,082	9,971,918	99.72%	5.97%
Unsecured Note	09/29/06	09/30/20	5.64%	5,466,000	15,453	5,450,547	99.72%	5.67%
Unsecured Note	09/29/06	09/30/21	5.64%	5,461,000	15,453	5,445,547	99.72%	5.67%
Pennvest loans:								
Hawley	05/01/94	10/01/21	1.000%	972,041	4,410	967,631	99.55%	1.02%
Ferdale Booster	03/22/00	12/01/20	1.349%	651,125	2,954	648,171	99.55%	1.37%
Hawley	04/19/00	12/01/20	1.349%	343,845	1,560	342,285	99.55%	1.37%
Susquehanna	08/08/00	12/01/20	3.631%	175,725	797	174,928	99.55%	3.66%
Glenside Tank	08/08/00	12/01/20	4.047%	415,250	1,884	413,366	99.55%	4.08%
Fernhill Tank	08/08/00	12/01/20	4.047%	768,543	3,487	765,056	99.55%	4.08%
Susquehanna	11/29/00	05/01/21	3.631%	487,000	2,210	484,790	99.55%	3.66%
Pickering Dam	11/29/00	08/01/21	4.047%	920,802	4,178	916,624	99.55%	4.08%
North Wayne # 2	11/29/00	08/01/21	4.050%	1,174,916	5,331	1,169,585	99.55%	4.08%
Shenango	03/13/01	09/01/21	3.030%	1,715,000	7,781	1,707,219	99.55%	3.06%
North Wayne # 1	03/13/01	08/01/22	3.810%	1,346,773	6,110	1,340,663	99.55%	3.84%
Ingrams Mill	11/14/01	11/14/21	3.468%	9,582,806	43,478	9,539,328	99.55%	3.50%
Tank Paintings	12/13/01	12/13/21	3.790%	2,025,180	9,188	2,015,992	99.55%	3.82%
Tinicum Booster	12/13/01	12/13/21	3.468%	356,520	1,618	354,902	99.55%	3.50%
Well #20	04/10/02	04/10/22	3.300%	843,227	3,826	839,401	99.55%	3.36%
NUI	06/27/02	03/01/24	2.730%	5,538,900	25,130	5,513,770	99.55%	2.76%
Fawn Lake	11/05/02	04/01/24	2.774%	2,201,840	9,990	2,191,850	99.55%	2.80%
Ralpo Tank	12/12/02	11/01/23	1.156%	778,625	3,533	775,092	99.55%	1.18%
Meyers Tract	07/23/03	07/23/23	3.430%	1,547,054	7,019	1,540,035	99.55%	3.46%
Neshmainy	08/07/03	01/01/25	3.470%	6,366,625	28,886	6,337,739	99.55%	3.50%
Crum Water Treatment	08/07/03	05/01/25	3.460%	9,975,741	45,261	9,930,480	99.55%	3.49%
Caanan	12/19/03	03/01/24	2.774%	1,646,400	7,470	1,638,930	99.55%	2.80%
Wapwallopen	06/01/04	06/01/24	2.774%	333,878	1,515	332,363	99.55%	2.80%
Tafton Water System	12/01/04	04/01/35	1.000%	600,000	2,722	597,278	99.55%	1.02%
NE PA Mains	03/23/05	03/23/25	2.688%	2,122,850	9,632	2,113,218	99.55%	2.70%
Coal Twsp Tank	04/21/05	05/01/26	2.711%	1,054,868	4,786	1,050,082	99.55%	2.74%
Shickshinny	05/25/05	04/01/26	2.774%	321,522	1,459	320,063	99.55%	2.80%
White Rock Acres	05/25/05	05/01/26	3.468%	677,839	3,075	674,764	99.55%	3.50%
Wilbar	08/02/05	05/01/27	2.774%	2,311,200	10,486	2,300,714	99.55%	2.80%
Moscow	08/25/05	10/01/26	3.052%	1,151,000	5,222	1,145,778	99.55%	3.08%
Paupac	10/02/05	10/01/26	3.365%	2,249,960	10,208	2,239,752	99.55%	3.40%
Midway Manor	04/05/06	07/01/27	2.774%	2,611,380	11,848	2,599,532	99.55%	2.80%
NE Mains 2005	07/25/06	04/01/27	2.556%	1,253,000	5,685	1,247,315	99.55%	2.58%
Pickering West	07/25/06	10/01/27	3.195%	2,225,000	10,095	2,214,905	99.55%	3.22%
Eagle Rock/Oneida	04/18/07	05/01/28	2.544%	1,395,800	6,333	1,389,467	99.55%	2.58%
Sharon New Castle	05/27/08	10/01/28	2.547%	698,000	3,167	694,833	99.55%	2.58%
Roaring Creek Main Repl	06/04/08	02/01/29	2.547%	1,708,100	7,750	1,700,350	99.55%	2.58%
Mountain Home	06/17/08	02/01/30	2.547%	2,045,000	9,278	2,035,722	99.55%	2.57%
NE Mains 2007	09/30/08	07/01/29	2.547%	723,069	3,281	719,788	99.55%	2.57%
Crum Filtration	09/30/08	08/01/29	3.046%	1,493,848	6,778	1,487,070	99.55%	3.08%
Brush Valley Wells	02/05/09	05/01/30	2.547%	1,697,000	7,699	1,689,301	99.55%	2.57%
Forest Park	07/22/09	09/01/30	2.547%	1,132,200	5,137	1,127,063	99.55%	2.57%
Country Club Gardens	01/26/10	01/01/31	2.547%	1,226,000	5,562	1,220,438	99.55%	2.57%
Honesdale Water	04/15/10	11/01/30	2.690%	1,217,305	5,523	1,211,782	99.55%	2.72%
Shady Acres	09/09/10	09/01/30	2.547%	1,402,518	6,363	1,396,155	99.55%	2.58%
Bristol Residuals	09/09/10	02/01/31	3.143%	2,144,750	9,731	2,135,019	99.55%	3.17%
Emlenton	10/07/10	10/01/30	1.510%	3,138,825	14,241	3,124,584	99.55%	1.54%
2009 NE Mains	12/15/10	12/01/30	2.547%	2,347,056	10,649	2,336,407	99.55%	2.58%
Washington Park Water	01/27/11	01/01/31	2.547%	975,645	4,427	971,218	99.55%	2.58%
Neshaminy Water Treatment	01/27/11	01/01/34	1.000%	9,955,500	45,169	9,910,331	99.55%	1.02%
Shenango Intake Dam	04/12/11	04/01/31	1.000%	1,413,729	6,414	1,407,315	99.55%	1.02%
Eagle Rock Phase II	11/30/10	12/01/33	2.547%	882,000	4,002	877,998	99.55%	2.57%
Rivercrest	12/15/04	07/01/25	2.774%	419,630	2,609	417,021	99.38%	2.81%
Washington Park WW	09/22/10	01/01/32	1.000%	975,645	8,498	967,147	99.13%	1.05%
Little Washington Treasure Lake	03/01/13	02/01/23	1.156%	1,635,581	12,387	1,623,194	99.24%	1.24%

Notes: <sup>(1)</sup> The effective cost for each issue is the yield to maturity using as inputs the date of issue, the date of maturity, the coupon rate, and the net proceeds ratio.

**Monthly Dividend Yields for  
Water Group  
for the Twelve Months Ending May 2018**

<u>Company</u>	<u>Jun-17</u>	<u>Jul-17</u>	<u>Aug-17</u>	<u>Sep-17</u>	<u>Oct-17</u>	<u>Nov-17</u>	<u>Dec-17</u>	<u>Jan-18</u>	<u>Feb-18</u>	<u>Mar-18</u>	<u>Apr-18</u>	<u>May-18</u>	<b>12-Month Average</b>	<b>6-Month Average</b>	<b>3-Month Average</b>
American States Water Co (AWR)	2.05%	2.07%	2.07%	2.08%	1.91%	1.77%	1.77%	1.85%	1.92%	1.93%	1.84%	1.81%			
American Water Works Co Inc (AWK)	2.14%	2.06%	2.05%	2.06%	1.90%	1.81%	1.82%	2.01%	2.09%	2.03%	2.11%	2.19%			
Aqua America Inc (WTR)	2.30%	2.47%	2.45%	2.47%	2.32%	2.16%	2.09%	2.27%	2.40%	2.41%	2.34%	2.36%			
Artesian Resource Corp Class A (ARTNA)	2.47%	2.40%	2.50%	2.46%	2.33%	2.22%	2.45%	2.54%	2.85%	2.59%	2.51%	2.45%			
California Water Service Group (CWT)	1.96%	1.86%	1.93%	1.89%	1.72%	1.58%	1.59%	1.85%	1.98%	2.02%	1.94%	1.87%			
Connecticut Water Service Inc (CTWS)	2.15%	2.10%	2.19%	2.01%	1.93%	1.88%	2.08%	2.25%	2.30%	1.97%	1.84%	1.94%			
Middlesex Water Co (MSEX)	2.14%	2.16%	2.23%	2.16%	2.07%	1.94%	2.25%	2.39%	2.53%	2.45%	2.16%	2.02%			
SJW Corp (SJW)	1.77%	1.65%	1.57%	1.54%	1.47%	1.28%	1.37%	1.88%	2.12%	2.13%	1.86%	1.78%			
The York Water Co (YORW)	1.84%	1.84%	1.95%	1.89%	1.90%	1.80%	1.97%	2.11%	2.38%	2.15%	2.08%	2.05%			
<b>Average</b>	<b>2.09%</b>	<b>2.07%</b>	<b>2.10%</b>	<b>2.06%</b>	<b>1.95%</b>	<b>1.83%</b>	<b>1.93%</b>	<b>2.13%</b>	<b>2.29%</b>	<b>2.19%</b>	<b>2.08%</b>	<b>2.05%</b>	<b>2.06%</b>	<b>2.11%</b>	<b>2.11%</b>
<b>Excl. CTWS and SJW</b>	<b>2.13%</b>	<b>2.12%</b>	<b>2.17%</b>	<b>2.14%</b>	<b>2.02%</b>	<b>1.90%</b>	<b>1.99%</b>	<b>2.15%</b>	<b>2.31%</b>	<b>2.23%</b>	<b>2.14%</b>	<b>2.11%</b>	<b>2.12%</b>	<b>2.16%</b>	<b>2.16%</b>

Note: Monthly dividend yields are calculated by dividing the annualized quarterly dividend by the month-end closing stock price adjusted by the fraction of the ex-dividend.

Source of Information: <http://performance.morningstar.com/stock/performance-return>  
<http://www.nasdaq.com>

<b>Forward-looking Dividend Yield</b>	1/2 Growth	$D_0/P_0$	(.5g)	$D_1/P_0$	<b>Excl. CTWS and SJW</b>	
		2.11%	1.033750	2.18%	2.23%	$K = \frac{D_0(1+g)^0 + D_0(1+g)^1 + D_0(1+g)^2 + D_0(1+g)^3}{P_0} + g$
	Discrete	$D_0/P_0$	Adj.	$D_1/P_0$	2.25%	$K = \frac{D_0(1+g)^{25} + D_0(1+g)^{50} + D_0(1+g)^{75} + D_0(1+g)^{100}}{P_0} + g$
		2.11%	1.041843	2.20%		
	Quarterly	$D_0/P_0$	Adj.	$D_1/P_0$		$K = \left[ \left( 1 + \frac{D_0(1+g)^{25}}{P_0} \right)^4 - 1 \right] + g$
		0.5279%	1.016464	2.16%	2.21%	
	Average			2.18%	2.23%	
	<b>Growth rate</b>			6.75%	6.75%	
	<b>K</b>			8.93%	8.98%	



**Historical Growth Rates**  
Earnings Per Share, Dividends Per Share,  
Book Value Per Share, and Cash Flow Per Share

<b>Company</b>	<b>Earnings per Share</b>		<b>Dividends per Share</b>		<b>Book Value per Share</b>		<b>Cash Flow per Share</b>	
	<u>Value Line</u>		<u>Value Line</u>		<u>Value Line</u>		<u>Value Line</u>	
	<u>5 Year</u>	<u>10 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>5 Year</u>	<u>10 Year</u>
American States Water	9.50%	10.00%	10.50%	7.00%	5.00%	5.50%	6.50%	7.50%
American Water Works Co., Inc.	11.00%	-	9.00%	-	4.00%	1.50%	8.50%	23.00%
Aqua America, Inc.	11.00%	8.50%	8.00%	8.00%	7.50%	7.00%	7.00%	7.50%
Artesian Res. Corp.	6.00%	-	3.00%	-	3.00%	-	5.00%	-
California Water Serv. Grp.	4.00%	4.50%	2.50%	2.00%	5.00%	4.50%	3.50%	5.50%
Connecticut Water Services	12.00%	8.00%	3.00%	2.50%	9.00%	6.00%	9.50%	6.50%
Middlesex Water Company	8.00%	5.00%	1.50%	1.50%	3.00%	4.00%	6.50%	4.50%
SJW Corporation	18.50%	8.00%	5.00%	4.50%	8.00%	5.50%	11.00%	7.00%
York Water Company	6.50%	5.50%	3.50%	3.50%	3.50%	5.00%	6.00%	6.00%
Average	<u>9.61%</u>	<u>7.07%</u>	<u>5.11%</u>	<u>4.14%</u>	<u>5.33%</u>	<u>4.88%</u>	<u>7.06%</u>	<u>8.44%</u>
Excl. CTWS and SJW	<u>8.00%</u>	<u>6.70%</u>	<u>5.43%</u>	<u>4.40%</u>	<u>4.43%</u>	<u>4.58%</u>	<u>6.14%</u>	<u>9.00%</u>

Source of Information: Value Line Investment Survey, April 13, 2018

Earnings Per Share, Dividends Per Share,  
Book Value Per Share, and Cash Flow Per Share

<u>Water Group</u>	<u>I/B/E/S First Call</u>	<u>Zacks</u>	<u>Morningstar</u>	<u>Value Line</u>				
				<u>Earnings Per Share</u>	<u>Dividends Per Share</u>	<u>Book Value Per Share</u>	<u>Cash Flow Per Share</u>	<u>Percent Retained to Common Equity</u>
American States Water	4.00%	5.00%	-	6.50%	7.50%	4.00%	6.00%	6.00%
American Water Works	8.20%	7.70%	7.60%	8.50%	10.00%	5.00%	7.00%	4.50%
Aqua America, Inc.	5.00%	5.50%	-	7.00%	9.00%	6.50%	6.00%	4.50%
Artesian Resources Corp.	4.00%	NA	-	-	-	-	-	-
California Water Serv. Grp.	9.80%	NA	-	9.50%	6.50%	3.00%	4.50%	5.50%
Connecticut Water Services	6.00%	NA	-	5.50%	5.50%	4.50%	5.00%	5.00%
Middlesex Water Company	2.70%	NA	-	8.00%	5.00%	4.00%	6.50%	6.00%
SJW Corporation	14.00%	NA	-	6.00%	8.50%	3.00%	3.50%	8.00%
York Water Company	4.90%	NA	-	9.00%	8.00%	4.50%	7.50%	5.00%
Average	<u>6.51%</u>	<u>6.07%</u>	<u>7.60%</u>	<u>7.50%</u>	<u>7.50%</u>	<u>4.31%</u>	<u>5.75%</u>	<u>5.56%</u>
Excl. CTWS and SJW	<u>5.51%</u>	<u>6.07%</u>	<u>7.60%</u>	<u>8.08%</u>	<u>7.67%</u>	<u>4.50%</u>	<u>6.25%</u>	<u>5.25%</u>

Source of Information :

Yahoo First Call, May 30, 2018  
Zacks, May 30, 2018  
Morningstar, May 30, 2018  
Value Line, April 13, 2018

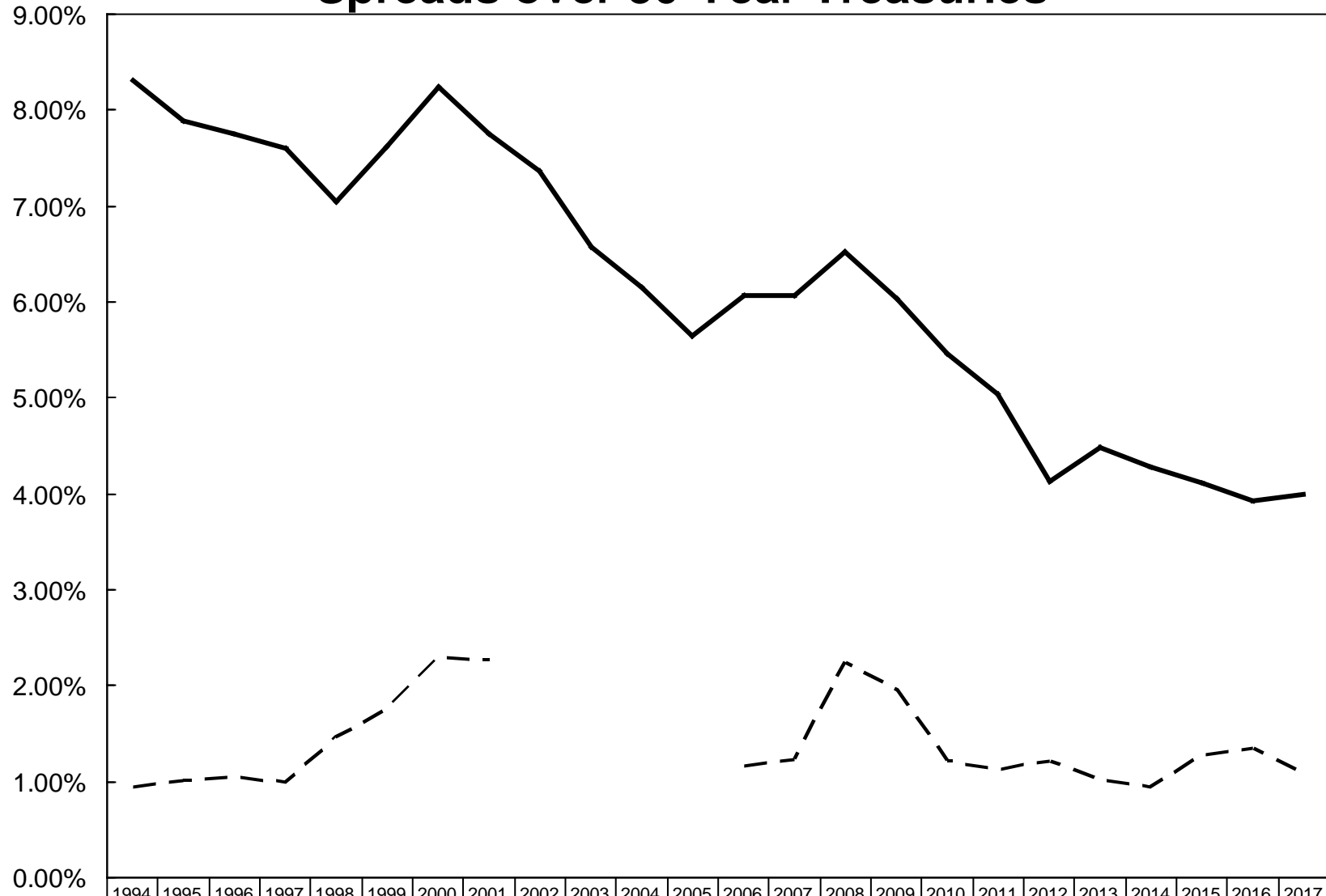
Water Group  
Financial Risk Adjustment

Fiscal Year	American States	American Water	Aqua America	Artesian	California Water	Connecticut	Middlesex Water	SJW Corp	The York Water	Average										
	Water Co (NYSE:AWR)	Works Co. (NYSE:AWK)	Inc. (NYSE:WTR)	Resources Corp (NDS:ARTNA)	Service Group (NYSE:CWT)	Water Service (NDS:CTWS)	Co. (NDS:MSEX)	(NYSE:SJW)	Company (NDS:YORW)											
	12/31/17	12/31/17	12/31/17	12/31/17	12/31/17	12/31/17	12/31/17	12/31/17	12/31/17											
<b>Capitalization at Fair Values</b>																				
Debt(D)	\$424,042	\$7,643,000	\$2,262,785	\$110,524	\$607,492	\$268,628	\$150,536	\$537,840	\$108,000	1,345,872										
Preferred(P)	0	14,000	0	0	0	772	2,433	0	0	1,912										
Equity(E)	2,124,185	16,325,892	6,971,718	355,330	2,177,344	692,653	652,608	1,309,846	436,386	3,449,551										
Total	\$2,548,227	\$23,982,892	\$9,234,503	\$465,854	\$2,784,836	\$962,053	\$805,577	\$1,847,686	\$544,386	4,797,335										
<b>Capital Structure Ratios</b>																				
Debt(D)	16.64%	31.87%	24.50%	23.73%	21.81%	27.92%	18.69%	29.11%	19.84%	23.79%										
Preferred(P)	0.00%	0.06%	0.00%	0.00%	0.00%	0.08%	0.30%	0.00%	0.00%	0.05%										
Equity(E)	83.36%	68.07%	75.50%	76.27%	78.19%	72.00%	81.01%	70.89%	80.16%	76.16%										
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%										
<b>Common Stock</b>																				
Issued	36,680,794	182,508,564	180,700,251	9,215,000	48,012,000	12,065,016	16,352,000	20,520,856	12,872,742											
Treasury	0,000	4,064,010	2,986,308	0,000	0,000	0,000	0,000	0,000	0,000											
Outstanding	36,680,794	178,444,554	177,713,943	9,215,000	48,012,000	12,065,016	16,352,000	20,520,856	12,872,742											
Market Price	\$57.91	\$91.49	\$39.23	\$38.56	\$45.35	\$57.41	\$39.91	\$63.83	\$33.90											
<b>Capitalization at Carrying Amounts</b>																				
Debt(D)	\$325,265	\$6,809,000	\$2,143,127	\$106,931	\$531,713	\$258,272	\$147,822	\$435,000	\$92,833	1,205,551										
Preferred(P)	0	10,000	0	0	0	772	2,433	0	0	1,467										
Equity(E)	529,945	5,385,000	1,957,621	146,644	693,462	293,630	229,175	463,209	119,405	1,090,899										
Total	\$855,210	\$12,204,000	\$4,100,748	\$253,575	\$1,225,175	\$552,674	\$379,430	\$898,209	\$212,238	2,297,918										
<b>Capital Structure Ratios</b>																				
Debt(D)	38.03%	55.79%	52.26%	42.17%	43.40%	46.73%	38.96%	48.43%	43.74%	45.50%										
Preferred(P)	0.00%	0.08%	0.00%	0.00%	0.00%	0.14%	0.64%	0.00%	0.00%	0.10%										
Equity(E)	61.97%	44.12%	47.74%	57.83%	56.60%	53.13%	60.40%	51.57%	56.26%	54.40%										
Total	100.00%	99.99%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%										
<b>Betas</b>																				
Value Line	0.75	0.65	0.70	0.60	0.75	0.65	0.80	0.70	0.80	0.71										
<b>Hamada</b>																				
BI	=	Bu	[1+	(1 - t)	D/E	+	P/E	]												
0.71	=	Bu	[1+	(1-0.21)	0.3124	+	0.0007	]												
0.71	=	Bu	[1+	0.79	0.3124	+	0.0007	]												
0.71	=	Bu	1.2475																	
0.57	=	Bu																		
<b>Hamada</b>																				
BI	=	0.57	[1+	(1 - t)	D/E	+	P/E	]												
BI	=	0.57	[1+	0.79	0.8364	+	0.0018	]												
BI	=	0.57	1.6626																	
BI	=	0.95																		
<b>M&amp;M</b>																				
ku	=	ke	- (((	ku	-	i	)	1-t	)	D	/	E	)-(	ku	-	d	)	P	/	E
7.95%	=	8.93%	- (((	7.96%	-	4.05%	)	0.79	)	23.79%	/	76.16%	)-(	7.96%	-	5.68%	)	0.05%	/	76.16%
7.95%	=	8.93%	- (((	3.91%	)			0.79	)	0.3124			)-(	2.28%	)			0.0007		
7.95%	=	8.93%	- ((	3.09%	)					0.3124			)-(	2.28%	)			0.0007		
7.95%	=	8.93%	-	0.97%									-	0.00%						
<b>M&amp;M</b>																				
ke	=	ku	+ (((	ku	-	i	)	1-t	)	D	/	E	)+(	ku	-	d	)	P	/	E
10.54%	=	7.96%	+ (((	7.96%	-	4.05%	)	0.79	)	45.50%	/	54.40%	)+(	7.96%	-	5.68%	)	0.10%	/	54.40%
10.54%	=	7.96%	+ (((	3.91%	)			0.79	)	0.8364			)+(	2.28%	)			0.0018		
10.54%	=	7.96%	+ ((	3.09%	)					0.8364			)+(	2.28%	)			0.0018		
10.54%	=	7.96%	+	2.58%									+	0.00%						

**Interest Rates for Investment Grade Public Utility Bonds  
Yearly for 2013-2017  
and the Twelve Months Ended May 2018**

<u>Years</u>	<u>Aa Rated</u>	<u>A Rated</u>	<u>Baa Rated</u>	<u>Average</u>
2013	4.24%	4.48%	4.98%	4.57%
2014	4.19%	4.28%	4.80%	4.42%
2015	4.00%	4.12%	5.03%	4.38%
2016	3.73%	3.93%	4.68%	4.11%
2017	3.82%	4.00%	4.38%	4.07%
<b>Five-Year Average</b>	<u>4.00%</u>	<u>4.16%</u>	<u>4.77%</u>	<u>4.31%</u>
 <b><u>Months</u></b>				
Jun-17	3.77%	3.94%	4.32%	4.01%
Jul-17	3.82%	3.99%	4.36%	4.06%
Aug-17	3.67%	3.86%	4.23%	3.92%
Sep-17	3.70%	3.87%	4.24%	3.93%
Oct-17	3.74%	3.91%	4.26%	3.97%
Nov-17	3.65%	3.83%	4.16%	3.88%
Dec-17	3.62%	3.79%	4.14%	3.85%
Jan-18	3.69%	3.86%	4.18%	3.91%
Feb-18	3.94%	4.09%	4.42%	4.15%
Mar-18	3.97%	4.13%	4.52%	4.21%
Apr-18	3.99%	4.17%	4.58%	4.24%
May-18	4.10%	4.28%	4.71%	4.36%
<b>Twelve-Month Average</b>	<u>3.81%</u>	<u>3.98%</u>	<u>4.34%</u>	<u>4.04%</u>
<b>Six-Month Average</b>	<u>3.89%</u>	<u>4.05%</u>	<u>4.43%</u>	<u>4.12%</u>
<b>Three-Month Average</b>	<u>4.02%</u>	<u>4.19%</u>	<u>4.60%</u>	<u>4.27%</u>

# Yields on A-rated Public Utility Bonds and Spreads over 30-Year Treasuries



— A-rated Public Utility	8.31%	7.89%	7.75%	7.60%	7.04%	7.62%	8.24%	7.76%	7.37%	6.58%	6.16%	5.65%	6.07%	6.07%	6.53%	6.04%	5.46%	5.04%	4.13%	4.48%	4.28%	4.12%	3.93%	4.00%
- - Spread vs. 30-year	0.94%	1.01%	1.04%	0.99%	1.46%	1.75%	2.30%	2.27%					1.16%	1.23%	2.25%	1.96%	1.21%	1.13%	1.21%	1.03%	0.94%	1.28%	1.34%	1.10%

**A rated Public Utility Bonds over 30-Year Treasuries**

Year	A-rated Public Utility	30-Year Treasuries		Year	A-rated Public Utility	30-Year Treasuries		Year	A-rated Public Utility	30-Year Treasuries		Year	A-rated Public Utility	30-Year Treasuries		Year	A-rated Public Utility	30-Year Treasuries				
		Yield	Spread			Yield	Spread			Yield	Spread			Yield	Spread			Yield	Spread			
Jan-99	6.97%	5.16%	1.81%	Jan-03	7.07%			Jan-07	5.96%	4.85%	1.11%	Jan-11	5.57%	4.52%	1.05%	Jan-15	3.58%	2.46%	1.12%			
Feb-99	7.09%	5.37%	1.72%	Feb-03	6.93%			Feb-07	5.90%	4.82%	1.08%	Feb-11	5.68%	4.65%	1.03%	Feb-15	3.67%	2.57%	1.10%			
Mar-99	7.26%	5.58%	1.68%	Mar-03	6.79%			Mar-07	5.85%	4.72%	1.13%	Mar-11	5.56%	4.51%	1.05%	Mar-15	3.74%	2.63%	1.11%			
Apr-99	7.22%	5.55%	1.67%	Apr-03	6.64%			Apr-07	5.97%	4.87%	1.10%	Apr-11	5.55%	4.50%	1.05%	Apr-15	3.75%	2.59%	1.16%			
May-99	7.47%	5.81%	1.66%	May-03	6.36%			May-07	5.99%	4.90%	1.09%	May-11	5.32%	4.29%	1.03%	May-15	4.17%	2.96%	1.21%			
Jun-99	7.74%	6.04%	1.70%	Jun-03	6.21%			Jun-07	6.30%	5.20%	1.10%	Jun-11	5.26%	4.23%	1.03%	Jun-15	4.39%	3.11%	1.28%			
Jul-99	7.71%	5.98%	1.73%	Jul-03	6.57%			Jul-07	6.25%	5.11%	1.14%	Jul-11	5.27%	4.27%	1.00%	Jul-15	4.40%	3.07%	1.33%			
Aug-99	7.91%	6.07%	1.84%	Aug-03	6.78%			Aug-07	6.24%	4.93%	1.31%	Aug-11	4.69%	3.65%	1.04%	Aug-15	4.25%	2.86%	1.39%			
Sep-99	7.93%	6.07%	1.86%	Sep-03	6.56%			Sep-07	6.18%	4.79%	1.39%	Sep-11	4.48%	3.18%	1.30%	Sep-15	4.39%	2.95%	1.44%			
Oct-99	8.06%	6.26%	1.80%	Oct-03	6.43%			Oct-07	6.11%	4.77%	1.34%	Oct-11	4.52%	3.13%	1.39%	Oct-15	4.29%	2.89%	1.40%			
Nov-99	7.94%	6.15%	1.79%	Nov-03	6.37%			Nov-07	5.97%	4.52%	1.45%	Nov-11	4.25%	3.02%	1.23%	Nov-15	4.40%	3.03%	1.37%			
Dec-99	8.14%	6.35%	1.79%	Dec-03	6.27%			Dec-07	6.16%	4.53%	1.63%	Dec-11	4.33%	2.98%	1.35%	Dec-15	4.35%	2.97%	1.38%			
Jan-00	8.35%	6.63%	1.72%	Jan-04	6.15%			Jan-08	6.02%	4.33%	1.69%	Jan-12	4.34%	3.03%	1.31%	Jan-16	4.27%	2.86%	1.41%			
Feb-00	8.25%	6.23%	2.02%	Feb-04	6.15%			Feb-08	6.21%	4.52%	1.69%	Feb-12	4.36%	3.11%	1.25%	Feb-16	4.11%	2.62%	1.49%			
Mar-00	8.28%	6.05%	2.23%	Mar-04	5.97%			Mar-08	6.21%	4.39%	1.82%	Mar-12	4.48%	3.28%	1.20%	Mar-16	4.16%	2.68%	1.48%			
Apr-00	8.29%	5.85%	2.44%	Apr-04	6.35%			Apr-08	6.29%	4.44%	1.85%	Apr-12	4.40%	3.18%	1.22%	Apr-16	4.00%	2.62%	1.38%			
May-00	8.70%	6.15%	2.55%	May-04	6.62%			May-08	6.28%	4.60%	1.68%	May-12	4.20%	2.93%	1.27%	May-16	3.93%	2.63%	1.30%			
Jun-00	8.36%	5.93%	2.43%	Jun-04	6.46%			Jun-08	6.38%	4.69%	1.69%	Jun-12	4.08%	2.70%	1.38%	Jun-16	3.78%	2.45%	1.33%			
Jul-00	8.25%	5.85%	2.40%	Jul-04	6.27%			Jul-08	6.40%	4.57%	1.83%	Jul-12	3.93%	2.59%	1.34%	Jul-16	3.57%	2.23%	1.34%			
Aug-00	8.13%	5.72%	2.41%	Aug-04	6.14%			Aug-08	6.37%	4.50%	1.87%	Aug-12	4.00%	2.77%	1.23%	Aug-16	3.59%	2.26%	1.33%			
Sep-00	8.23%	5.83%	2.40%	Sep-04	5.98%			Sep-08	6.49%	4.27%	2.22%	Sep-12	4.02%	2.88%	1.14%	Sep-16	3.66%	2.35%	1.31%			
Oct-00	8.14%	5.80%	2.34%	Oct-04	5.94%			Oct-08	7.56%	4.17%	3.39%	Oct-12	3.91%	2.90%	1.01%	Oct-16	3.77%	2.50%	1.27%			
Nov-00	8.11%	5.78%	2.33%	Nov-04	5.97%			Nov-08	7.60%	4.00%	3.60%	Nov-12	3.84%	2.80%	1.04%	Nov-16	4.08%	2.86%	1.22%			
Dec-00	7.84%	5.49%	2.35%	Dec-04	5.92%			Dec-08	6.52%	2.87%	3.65%	Dec-12	4.00%	2.88%	1.12%	Dec-16	4.27%	3.11%	1.16%			
Jan-01	7.80%	5.54%	2.26%	Jan-05	5.78%			Jan-09	6.39%	3.13%	3.26%	Jan-13	4.15%	3.08%	1.07%	Jan-17	4.14%	3.02%	1.12%			
Feb-01	7.74%	5.45%	2.29%	Feb-05	5.61%			Feb-09	6.30%	3.59%	2.71%	Feb-13	4.18%	3.17%	1.01%	Feb-17	4.18%	3.03%	1.15%			
Mar-01	7.68%	5.34%	2.34%	Mar-05	5.83%			Mar-09	6.42%	3.64%	2.78%	Mar-13	4.20%	3.16%	1.04%	Mar-17	4.23%	3.08%	1.15%			
Apr-01	7.94%	5.65%	2.29%	Apr-05	5.64%			Apr-09	6.48%	3.76%	2.72%	Apr-13	4.00%	2.93%	1.07%	Apr-17	4.12%	2.94%	1.18%			
May-01	7.99%	5.78%	2.21%	May-05	5.53%			May-09	6.49%	4.23%	2.26%	May-13	4.17%	3.11%	1.06%	May-17	4.12%	2.96%	1.16%			
Jun-01	7.85%	5.67%	2.18%	Jun-05	5.40%			Jun-09	6.20%	4.52%	1.68%	Jun-13	4.53%	3.40%	1.13%	Jun-17	3.94%	2.80%	1.14%			
Jul-01	7.78%	5.61%	2.17%	Jul-05	5.51%			Jul-09	5.97%	4.41%	1.56%	Jul-13	4.68%	3.61%	1.07%	Jul-17	3.99%	2.88%	1.11%			
Aug-01	7.59%	5.48%	2.11%	Aug-05	5.50%			Aug-09	5.71%	4.37%	1.34%	Aug-13	4.73%	3.76%	0.97%	Aug-17	3.86%	2.80%	1.06%			
Sep-01	7.75%	5.48%	2.27%	Sep-05	5.52%			Sep-09	5.53%	4.19%	1.34%	Sep-13	4.80%	3.79%	1.01%	Sep-17	3.87%	2.78%	1.09%			
Oct-01	7.63%	5.32%	2.31%	Oct-05	5.79%			Oct-09	5.55%	4.19%	1.36%	Oct-13	4.70%	3.68%	1.02%	Oct-17	3.91%	2.88%	1.03%			
Nov-01	7.57%	5.12%	2.45%	Nov-05	5.88%			Nov-09	5.64%	4.31%	1.33%	Nov-13	4.77%	3.80%	0.97%	Nov-17	3.83%	2.80%	1.03%			
Dec-01	7.83%	5.48%	2.35%	Dec-05	5.80%			Dec-09	5.79%	4.49%	1.30%	Dec-13	4.81%	3.89%	0.92%	Dec-17	3.79%	2.77%	1.02%			
Jan-02	7.66%	5.45%	2.21%	Jan-06	5.75%			Jan-10	5.77%	4.60%	1.17%	Jan-14	4.63%	3.77%	0.86%	Jan-18	3.86%	2.88%	0.98%			
Feb-02	7.54%	5.40%	2.14%	Feb-06	5.82%	4.54%	1.28%	Feb-10	5.87%	4.62%	1.25%	Feb-14	4.53%	3.66%	0.87%	Feb-18	4.09%	3.13%	0.96%			
Mar-02	7.76%			Mar-06	5.98%	4.73%	1.25%	Mar-10	5.84%	4.64%	1.20%	Mar-14	4.51%	3.62%	0.89%	Mar-18	4.13%	3.09%	1.04%			
Apr-02	7.57%			Apr-06	6.29%	5.06%	1.23%	Apr-10	5.81%	4.69%	1.12%	Apr-14	4.41%	3.52%	0.89%	Apr-18	4.17%	3.07%	1.10%			
May-02	7.52%			May-06	6.42%	5.20%	1.22%	May-10	5.50%	4.29%	1.21%	May-14	4.26%	3.39%	0.87%	May-18	4.28%	3.13%	1.15%			
Jun-02	7.42%			Jun-06	6.40%	5.15%	1.25%	Jun-10	5.46%	4.13%	1.33%	Jun-14	4.29%	3.42%	0.87%							
Jul-02	7.31%			Jul-06	6.37%	5.13%	1.24%	Jul-10	5.26%	3.99%	1.27%	Jul-14	4.23%	3.33%	0.90%							
Aug-02	7.17%			Aug-06	6.20%	5.00%	1.20%	Aug-10	5.01%	3.80%	1.21%	Aug-14	4.13%	3.20%	0.93%							
Sep-02	7.08%			Sep-06	6.00%	4.85%	1.15%	Sep-10	5.01%	3.77%	1.24%	Sep-14	4.24%	3.26%	0.98%							
Oct-02	7.23%			Oct-06	5.98%	4.85%	1.13%	Oct-10	5.10%	3.87%	1.23%	Oct-14	4.06%	3.04%	1.02%	Average:						
Nov-02	7.14%			Nov-06	5.80%	4.69%	1.11%	Nov-10	5.37%	4.19%	1.18%	Nov-14	4.09%	3.04%	1.05%	12-months			1.06%			
Dec-02	7.07%			Dec-06	5.81%	4.68%	1.13%	Dec-10	5.56%	4.42%	1.14%	Dec-14	3.95%	2.83%	1.12%	6-months			1.04%			
																			3-months			1.10%

**Common Equity Risk Premiums**  
**Years 1926-2016**

	<b><u>Large Common Stocks</u></b>	<b><u>Long- Term Corp. Bonds</u></b>	<b><u>Equity Risk Premium</u></b>	<b><u>Long- Term Govt. Bonds Yields</u></b>
Low Interest Rates	11.97%	4.89%	7.08%	2.96%
Average Across All Interest Rates	11.95%	6.31%	5.64%	5.07%
High Interest Rates	11.93%	7.75%	4.18%	7.22%

Source of Information: 2017 SBBI Yearbook Stocks, Bonds, Bills, and Inflation

**Basic Series**  
**Annual Total Returns (except yields)**

<b>Year</b>	<b>Large Common Stocks</b>	<b>Long- Term Corp. Bonds</b>	<b>Long- Term Govt. Bonds Yields</b>
1940	-9.78%	3.39%	1.94%
1945	36.44%	4.08%	1.99%
1941	-11.59%	2.73%	2.04%
1949	18.79%	3.31%	2.09%
1946	-8.07%	1.72%	2.12%
1950	31.71%	2.12%	2.24%
1939	-0.41%	3.97%	2.26%
1948	5.50%	4.14%	2.37%
1947	5.71%	-2.34%	2.43%
1942	20.34%	2.60%	2.46%
1944	19.75%	4.73%	2.46%
2012	16.00%	10.68%	2.46%
2014	13.69%	17.28%	2.46%
1943	25.90%	2.83%	2.48%
1938	31.12%	6.13%	2.52%
1936	33.92%	6.74%	2.55%
2011	2.11%	17.95%	2.55%
2015	1.38%	-1.02%	2.68%
1951	24.02%	-2.69%	2.69%
1954	52.62%	5.39%	2.72%
2016	11.96%	6.70%	2.72%
1937	-35.03%	2.75%	2.73%
1953	-0.99%	3.41%	2.74%
1935	47.67%	9.61%	2.76%
1952	18.37%	3.52%	2.79%
1934	-1.44%	13.84%	2.93%
1955	31.56%	0.48%	2.95%
2008	-37.00%	8.78%	3.03%
1932	-8.19%	10.82%	3.15%
1927	37.49%	7.44%	3.17%
1957	-10.78%	8.71%	3.23%
1930	-24.90%	7.98%	3.30%
1933	53.99%	10.38%	3.36%
1928	43.61%	2.84%	3.40%
1929	-8.42%	3.27%	3.40%
1956	6.56%	-6.81%	3.45%
1926	11.62%	7.37%	3.54%
2013	32.39%	-7.07%	3.78%
1960	0.47%	9.07%	3.80%
1958	43.36%	-2.22%	3.82%
1962	-8.73%	7.95%	3.95%
1931	-43.34%	-1.85%	4.07%
2010	15.06%	12.44%	4.14%
1961	26.89%	4.82%	4.15%
1963	22.80%	2.19%	4.17%
1964	16.48%	4.77%	4.23%
1959	11.96%	-0.97%	4.47%
1965	12.45%	-0.46%	4.50%
2007	5.49%	2.60%	4.50%
1966	-10.06%	0.20%	4.55%
2009	26.46%	3.02%	4.58%
2005	4.91%	5.87%	4.61%
2002	-22.10%	16.33%	4.84%
2004	10.88%	8.72%	4.84%
2006	15.79%	3.24%	4.91%
2003	28.68%	5.27%	5.11%
1998	28.58%	10.76%	5.42%
1967	23.98%	-4.95%	5.56%
2000	-9.10%	12.87%	5.58%
2001	-11.89%	10.65%	5.75%
1971	14.30%	11.01%	5.97%
1968	11.06%	2.57%	5.98%
1972	18.99%	7.26%	5.99%
1997	33.36%	12.95%	6.02%
1995	37.58%	27.20%	6.03%
1970	3.86%	18.37%	6.48%
1993	10.08%	13.19%	6.54%
1996	22.96%	1.40%	6.73%
1999	21.04%	-7.45%	6.82%
1969	-8.50%	-8.09%	6.87%
1976	23.93%	18.65%	7.21%
1973	-14.69%	1.14%	7.26%
1992	7.62%	9.39%	7.26%
1991	30.47%	19.89%	7.30%
1974	-26.47%	-3.06%	7.60%
1986	18.67%	19.85%	7.89%
1994	1.32%	-5.76%	7.99%
1977	-7.16%	1.71%	8.03%
1975	37.23%	14.64%	8.05%
1989	31.69%	16.23%	8.16%
1990	-3.10%	6.78%	8.44%
1978	6.57%	-0.07%	8.98%
1988	16.61%	10.70%	9.19%
1987	5.25%	-0.27%	9.20%
1985	31.73%	30.09%	9.56%
1979	18.61%	-4.18%	10.12%
1982	21.55%	42.56%	10.95%
1984	6.27%	16.86%	11.70%
1983	22.56%	6.26%	11.97%
1980	32.50%	-2.76%	11.99%
1981	-4.92%	-1.24%	13.34%



**Yields for Treasury Constant Maturities  
Yearly for 2013-2017  
and the Twelve Months Ended May 2018**

<u>Years</u>	<u>1-Year</u>	<u>2-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>7-Year</u>	<u>10-Year</u>	<u>20-Year</u>	<u>30-Year</u>
2013	0.13%	0.31%	0.54%	1.17%	1.74%	2.35%	3.12%	3.45%
2014	0.12%	0.46%	0.90%	1.64%	2.14%	2.54%	3.07%	3.34%
2015	0.32%	0.69%	1.03%	1.53%	1.89%	2.14%	2.55%	2.84%
2016	0.61%	0.84%	1.01%	1.34%	1.64%	1.84%	2.23%	2.60%
2017	1.20%	1.40%	1.58%	1.91%	2.16%	2.33%	2.65%	2.90%
<b>Five-Year Average</b>	<u>0.48%</u>	<u>0.74%</u>	<u>1.01%</u>	<u>1.52%</u>	<u>1.91%</u>	<u>2.24%</u>	<u>2.72%</u>	<u>3.03%</u>
<b><u>Months</u></b>								
Jun-17	1.20%	1.34%	1.49%	1.77%	2.01%	2.19%	2.54%	2.80%
Jul-17	1.22%	1.37%	1.54%	1.87%	2.13%	2.32%	2.65%	2.88%
Aug-17	1.23%	1.34%	1.48%	1.78%	2.03%	2.21%	2.55%	2.80%
Sep-17	1.28%	1.38%	1.51%	1.80%	2.03%	2.20%	2.53%	2.78%
Oct-17	1.40%	1.55%	1.68%	1.98%	2.20%	2.36%	2.65%	2.88%
Nov-17	1.56%	1.70%	1.81%	2.05%	2.23%	2.35%	2.60%	2.80%
Dec-17	1.70%	1.84%	1.96%	2.18%	2.32%	2.40%	2.60%	2.77%
Jan-18	1.80%	2.03%	2.15%	2.38%	2.51%	2.58%	2.73%	2.88%
Feb-18	1.96%	2.18%	2.36%	2.60%	2.78%	2.86%	3.02%	3.13%
Mar-18	2.06%	2.28%	2.42%	2.63%	2.77%	2.84%	2.97%	3.09%
Apr-18	2.15%	2.38%	2.52%	2.70%	2.82%	2.87%	2.96%	3.07%
May-18	2.27%	2.51%	2.66%	2.82%	2.93%	2.98%	3.05%	3.13%
<b>Twelve-Month Average</b>	<u>1.65%</u>	<u>1.83%</u>	<u>1.97%</u>	<u>2.21%</u>	<u>2.40%</u>	<u>2.51%</u>	<u>2.74%</u>	<u>2.92%</u>
<b>Six-Month Average</b>	<u>1.99%</u>	<u>2.20%</u>	<u>2.35%</u>	<u>2.55%</u>	<u>2.69%</u>	<u>2.76%</u>	<u>2.89%</u>	<u>3.01%</u>
<b>Three-Month Average</b>	<u>2.16%</u>	<u>2.39%</u>	<u>2.53%</u>	<u>2.72%</u>	<u>2.84%</u>	<u>2.90%</u>	<u>2.99%</u>	<u>3.10%</u>

**Measures of the Risk-Free Rate & Corporate Bond Yields**

The forecast of Treasury and Corporate yields  
per the consensus of nearly 50 economists  
reported in the Blue Chip Financial Forecasts dated June 1, 2018

Year	Quarter	Treasury					Corporate	
		1-Year Bill	2-Year Note	5-Year Note	10-Year Note	30-Year Bond	Aaa Bond	Baa Bond
2018	Second	2.2%	2.5%	2.8%	3.0%	3.2%	4.1%	4.8%
2018	Third	2.4%	2.6%	2.9%	3.1%	3.3%	4.3%	5.0%
2018	Fourth	2.6%	2.8%	3.0%	3.2%	3.4%	4.4%	5.2%
2019	First	2.7%	2.9%	3.1%	3.3%	3.5%	4.6%	5.3%
2019	Second	2.9%	3.0%	3.2%	3.4%	3.7%	4.7%	5.5%
2019	Third	3.0%	3.1%	3.3%	3.5%	3.8%	4.8%	5.6%

**Measures of the Market Premium**

Value Line Return

As of:	Dividend Yield	+	Median Appreciation Potential	=	Median Total Return
25-May-18	2.1%		9.73%		11.83%

DCF Result for the S&P 500 Composite

D/P	( 1+5g )	+	g	=	k
1.89%	( 1.0610 )		12.20%		14.21%

where:

Price (P)	at	30-May-18	=	2705.27
Dividend (D)	for	1st Qtr. '18	=	12.79
Dividend (D)		annualized	=	51.16
Growth (g)	by	Morningstar	=	12.20%

Summary

Value Line		11.83%
S&P 500		14.21%
Average		13.02%
Risk-free Rate of Return (Rf)		3.75%
Forecast Market Premium		9.27%
Historical Market Premium (Rm)	(Rf)	
1926-2016 Arith. mean	11.96%	4.02%
		7.94%
Average - Forecast/Historical		8.61%

**Exhibit 7.8:** Size-Decile Portfolios of the NYSE/NYSE MKT/NASDAQ Long-Term Returns in Excess of CAPM  
1926–2016

<b>Size Grouping</b>	<b>OLS Beta</b>	<b>Arithmetic Mean</b>	<b>Return in Excess of Risk-free Rate (actual)</b>	<b>Return in Excess of Risk-free Rate (as predicted by CAPM)</b>	<b>Size Premium</b>
Mid-Cap (3–5)	1.12	13.82%	8.80%	7.79%	1.02%
Low-Cap (6–8)	1.22	15.26%	10.24%	8.49%	1.75%
Micro-Cap (9–10)	1.35	18.04%	13.02%	9.35%	3.67%
<b>Breakdown of Deciles 1–10</b>					
1-Largest	0.92	11.05%	6.04%	6.38%	-0.35%
2	1.04	12.82%	7.81%	7.19%	0.61%
3	1.11	13.57%	8.55%	7.66%	0.89%
4	1.13	13.80%	8.78%	7.80%	0.98%
5	1.17	14.62%	9.60%	8.09%	1.51%
6	1.17	14.81%	9.79%	8.14%	1.66%
7	1.25	15.41%	10.39%	8.67%	1.72%
8	1.30	16.14%	11.12%	9.04%	2.08%
9	1.34	16.97%	11.96%	9.28%	2.68%
10-Smallest	1.39	20.27%	15.25%	9.66%	5.59%

Betas are estimated from monthly returns in excess of the 30-day U.S. Treasury bill total return, January 1926–December 2016. Historical riskless rate measured by the 91-year arithmetic mean income return component of 20-year government bonds (5.02%). Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (11.95%) minus the arithmetic mean income return component of 20-year government bonds (5.02%) from 1926–2016. Source: Morningstar *Direct* and CRSP. Calculated based on data from CRSP US Stock Database and CRSP US Indices Database ©2017 Center for Research. Used with permission. All calculations performed by Duff & Phelps, LLC.

**Comparable Earnings Approach**

Using Non-Utility Companies with  
Timeliness of 2, 3 & 4; Safety Rank of 2 & 3; Financial Strength of B+, B++, & A;  
Price Stability of 60 to 100; Betas of .60 to .80; and Technical Rank of 2, 3, 4 & 5

<u>Company</u>	<u>Industry</u>	<u>Timeliness Rank</u>	<u>Safety Rank</u>	<u>Financial Strength</u>	<u>Price Stability</u>	<u>Beta</u>	<u>Technical Rank</u>
Altria Group Inc	Tobacco	3	2	B+	95	0.70	3
Brinker International Inc	Restaurant	3	3	B+	65	0.80	4
Campbell Soup Co	Food Processing	4	2	B++	90	0.70	3
Capitol Federal Financial Inc	Thrift	4	2	B+	100	0.75	4
Caseys General Stores Inc	Retail/Wholesale Food	4	3	B+	70	0.75	3
Cboe Global Markets	Brokers & Exchanges	2	2	B++	80	0.75	2
Cheesecake Factory Inc	Restaurant	4	3	A	80	0.75	3
Chemed Corporation	Diversified Co.	2	3	B++	80	0.80	4
Clorox Co	Household Products	4	2	B++	100	0.70	3
CME Group Inc	Brokers & Exchanges	3	2	A	90	0.75	2
Constellation Brands	Beverage	2	3	A	90	0.80	2
Cracker Barrel Old Country Store Inc	Restaurant	3	2	A	70	0.80	2
Dunkin Brands Group Inc	Restaurant	3	3	B+	80	0.65	4
Erie Indemnity Company	Insurance (Prop/Cas.)	3	2	B++	95	0.80	3
Estee Lauder Companies Inc	Toiletries/Cosmetics	2	2	A	95	0.80	2
Hershey Company	Food Processing	3	2	B++	90	0.80	3
Hormel Foods Corporation	Food Processing	3	2	A	85	0.75	3
Integra LifeSciences Holdings Corporat	Med Supp Invasive	3	3	B+	75	0.80	3
Intercontinental Exch.	Brokers & Exchanges	2	2	A	90	0.80	2
Jack in the Box Inc	Restaurant	4	3	B+	60	0.80	4
Northwest Bancshares Inc	Thrift	3	2	B+	95	0.80	3
Pinnacle Foods Inc	Food Processing	3	3	B+	85	0.80	3
Republic Services Inc	Environmental	2	2	B++	100	0.80	2
Schweitzer Mauduit International Inc	Tobacco	4	3	B+	60	0.80	3
<b>Average</b>		<b>3</b>	<b>2</b>	<b>A</b>	<b>84</b>	<b>0.77</b>	<b>3</b>
Water Group	Average	<b>3</b>	<b>3</b>	<b>B++</b>	<b>79</b>	<b>0.71</b>	<b>3</b>

Source of Information: Value Line Investment Survey for Windows, May 2018

**Comparable Earnings Approach**  
Five -Year Average Historical Earned Returns  
for Years 2012-2016 and  
Projected 3-5 Year Returns

Company	2012	2013	2014	2015	2016	Average	Projected 2019-21
Altria Group Inc	NMF	NMF	NMF	NMF	41.5%	41.5%	53.0%
Brinker International Inc	51.0%	NMF	NMF	NMF	NMF	51.0%	NMF
Campbell Soup Co	87.2%	64.6%	49.5%	60.2%	59.9%	64.3%	26.5%
Capitol Federal Financial Inc	4.1%	4.2%	5.2%	5.5%	6.0%	5.0%	7.0%
Caseys General Stores Inc	18.4%	18.7%	20.9%	20.9%	14.9%	18.8%	16.0%
Cboe Global Markets	65.8%	61.9%	75.9%	79.0%	58.4%	68.2%	12.5%
Cheesecake Factory Inc	17.9%	19.7%	18.3%	20.4%	23.1%	19.9%	21.5%
Chemed Corporation	19.7%	17.2%	22.0%	21.5%	20.7%	20.2%	23.5%
Clorox Co	-	NMF	NMF	NMF	NMF	-	53.5%
CME Group Inc	4.7%	4.6%	5.4%	6.1%	7.5%	5.7%	8.5%
Constellation Brands	14.6%	12.9%	15.5%	16.9%	20.1%	16.0%	22.0%
Cracker Barrel Old Country Store Inc	28.2%	24.6%	25.6%	30.5%	36.0%	29.0%	37.5%
Dunkin Brands Group Inc	42.8%	40.7%	50.7%	-	NMF	44.7%	NMF
Erie Indemnity Company	-	-	23.8%	22.7%	25.9%	24.1%	26.0%
Estee Lauder Companies Inc	33.0%	31.0%	31.2%	29.9%	31.2%	31.3%	49.0%
Hershey Company	71.4%	52.6%	61.6%	91.2%	120.7%	79.5%	42.5%
Hormel Foods Corporation	17.7%	15.9%	16.7%	17.9%	20.0%	17.6%	18.5%
Integra LifeSciences Holdings Corporation	16.8%	10.5%	4.8%	0.9%	8.9%	8.4%	13.5%
Intercontinental Exch.	15.1%	5.1%	8.9%	9.2%	10.6%	9.8%	10.5%
Jack in the Box Inc	15.3%	17.2%	39.9%	718.3%	NMF	197.7%	NMF
Northwest Bancshares Inc	5.6%	5.8%	5.8%	5.2%	4.2%	5.3%	9.5%
Pinnacle Foods Inc	5.9%	11.5%	11.9%	11.8%	13.0%	10.8%	16.5%
Republic Services Inc	8.6%	9.0%	9.0%	9.3%	9.9%	9.2%	13.5%
Schweitzer Mauduit International Inc	16.4%	14.0%	18.3%	19.2%	16.3%	16.8%	17.5%
Average						<u>34.6%</u>	<u>23.7%</u>
Average (excluding companies with values >20%)						<u>11.9%</u>	<u>13.0%</u>

### Comparable Earnings Approach

#### Screening Parameters

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##### Timeliness Rank

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The rank for a stock's probable relative market performance in the year ahead. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the year-ahead market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next 12 months. Stocks ranked 3 (Average) will probably advance or decline with the market in the year ahead. Investors should try to limit purchases to stocks ranked 1 (Highest) or 2 (Above Average) for Timeliness.

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##### Safety Rank

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A measure of potential risk associated with individual common stocks rather than large diversified portfolios (for which Beta is good risk measure). Safety is based on the stability of price, which includes sensitivity to the market (see Beta) as well as the stock's inherent volatility, adjusted for trend and other factors including company size, the penetration of its markets, product market volatility, the degree of financial leverage, the earnings quality, and the overall condition of the balance sheet. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative investors should try to limit purchases to equities ranked 1 (Highest) or 2 (Above Average) for Safety.

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##### Financial Strength

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The financial strength of each of the more than 1,600 companies in the VS II data base is rated relative to all the others. The ratings range from A++ to C in nine steps. (For screening purposes, think of an A rating as "greater than" a B). Companies that have the best relative financial strength are given an A++ rating, indicating ability to weather hard times better than the vast majority of other companies. Those who don't quite merit the top rating are given an A+ grade, and so on. A rating as low as C++ is considered satisfactory. A rating of C+ is well below average, and C is reserved for companies with very serious financial problems. The ratings are based upon a computer analysis of a number of key variables that determine (a) financial leverage, (b) business risk, and (c) company size, plus the judgment of Value Line's analysts and senior editors regarding factors that cannot be quantified across-the-board for companies. The primary variables that are indexed and studied include equity coverage of debt, equity coverage of intangibles, "quick ratio", accounting methods, variability of return, fixed charge coverage, stock price stability, and company size.

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##### Price Stability Index

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An index based upon a ranking of the weekly percent changes in the price of the stock over the last five years. The lower the standard deviation of the changes, the more stable the stock. Stocks ranking in the top 5% (lowest standard deviations) carry a Price Stability Index of 100; the next 5%, 95; and so on down to 5. One standard deviation is the range around the average weekly percent change in the price that encompasses about two thirds of all the weekly percent change figures over the last five years. When the range is wide, the standard deviation is high and the stock's Price Stability Index is low.

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##### Beta

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A measure of the sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Average. A Beta of 1.50 indicates that a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Average. Use Beta to measure the stock market risk inherent in any diversified portfolio of, say, 15 or more companies. Otherwise, use the Safety Rank, which measures total risk inherent in an equity, including that portion attributable to market fluctuations. Beta is derived from a least squares regression analysis between weekly percent changes in the price of a stock and weekly percent changes in the NYSE Average over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are periodically adjusted for their long-term tendency to regress toward 1.00.

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##### Technical Rank

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A prediction of relative price movement, primarily over the next three to six months. It is a function of price action relative to all stocks followed by Value Line. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next six months. Stocks ranked 3 (Average) will probably advance or decline with the market. Investors should use the Technical and Timeliness Ranks as complements to one another.

Exhibit No. 5-A, Part I  
Docket No. R-2018-3003068  
Witness: P. R. Herbert

# AQUA PENNSYLVANIA, INC.

BRYN MAWR, PENNSYLVANIA

## WATER OPERATIONS COST OF SERVICE ALLOCATION STUDY AS OF MARCH 31, 2020



*Excellence Delivered **As Promised***

Exhibit No. 5-A, Part I  
Docket No. R-2018-3003068  
Witness: P. R. Herbert

AQUA PENNSYLVANIA, INC.  
Bryn Mawr, Pennsylvania

WATER OPERATIONS  
COST OF SERVICE ALLOCATION STUDY  
AS OF MARCH 31, 2020

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Harrisburg, Pennsylvania



PART I

TABLE OF CONTENTS

WATER COST OF SERVICE ALLOCATION STUDY

	<u>Page</u>
Plan of Report.....	2
Basis of Study.....	2
Allocation Procedures.....	3
Base Costs.....	3
Extra Capacity Costs.....	3
Customer Costs.....	3
Fire Protection Costs.....	4
Results of Studies.....	4
Schedule A. Comparison of Pro Forma Cost of Service with Revenues Under Present and Proposed Rates for the Twelve Months Ended March 31, 2020.....	7
Schedule B. Development of Rate of Return by Customer Classification Under Present Rates.....	8
Schedule C. Development of Rate of Return by Customer Classification Under Proposed Rates.....	9
Schedule D. Allocation of Cost of Service to Customer Classifications for the Twelve Months Ended March 31, 2020.....	10
Schedule E. Factors for Allocating Cost of Service to Customer Classifications.....	16
Schedule F. Summary of Average Daily Send Out, Maximum Daily Use and Maximum Hourly Use for the Years 1962-2017.....	38
Schedule G. Basis for Allocating Demand Related Costs of Fire Service to Residential and Private and Public Fire Protection Customer Classifications.....	39
Schedule H. Calculation of Commodity/Demand Rates for Standby Service.....	40
Schedule I. Present and Proposed Rates by Class.....	41

**TABLE OF CONTENTS, cont.**

Page

APPENDIX

RESPONSES TO RATE STRUCTURE AND  
COST OF SERVICE FILING REQUIREMENTS

RS1a.....	A-2
RS1b.....	A-3
RS1c.....	A-4
RS1d.....	A-28
RS1e.....	A-29
RS1f.....	A-30
RS1g.....	A-32
RS1h.....	A-34
RS1i.....	A-35
RS1j.....	A-42
RS2.....	A-44

## PART I. INTRODUCTION

AQUA PENNSYLVANIA, INC.  
COST OF SERVICE ALLOCATION STUDY  
AS OF MARCH 31, 2020

PART I. INTRODUCTION

PLAN OF REPORT

The report sets forth the results of the cost of service allocation study based on pro forma costs as of March 31, 2020, for Aqua Pennsylvania, Inc. Part I, Introduction, contains statements with respect to the basis of the study, the procedures employed, the customer class demand study, and a summary of the results of the studies. Part II, Cost of Service by Customer Classification, presents detailed schedules of the allocation of costs to customer classifications, as well as the bases for the allocations. Schedule A in Part II summarizes the cost allocation and the revenues produced under present and proposed rates. Responses to rate structure and cost of service filing requirements are provided in the Appendix.

BASIS OF STUDY

The purpose of the cost allocation study was to determine the relative cost of service responsibilities of the several customer classifications based on considerations of quantity of water consumed, variability of rate of consumption, and costs associated with customer metering, billing and accounting. The allocation study incorporated generally-accepted principles and procedures for allocating the several categories of cost to customer classifications in proportion to each classification's use of facilities, commodities and services required in providing water service.

## ALLOCATION PROCEDURES

The allocation study was based on the Base-Extra Capacity Method for allocating costs to customer classifications. The method is described in the 2017 and prior editions of the Water Rates Manual, published by the American Water Works Association. The four basic categories of cost responsibility are base, extra capacity, customer, and fire protection costs. The following discussion presents a brief description of these costs and the manner in which they were allocated.

Base Costs are costs that tend to vary with the quantity of water used, plus costs associated with supplying, treating, pumping, and distributing water to customers under average load conditions, without the elements necessary to meet peak demands. Base costs were allocated to customer classifications on the basis of average daily usage.

Extra Capacity Costs are costs associated with meeting usage requirements in excess of the average. They include operating and capital costs for additional plant and system capacity beyond that required for average use. The extra capacity costs in this study are subdivided into costs necessary to meet maximum day extra demand and costs to meet maximum hour extra demand. The extra capacity costs were allocated to customer classifications on the bases of each classification's maximum day and hour usage in excess of average usage.

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the operating and capital costs related to meters and services, meter reading costs, and billing and

collecting costs. The customer costs were allocated on the bases of capital cost of meters and services and the number of customer bills.

Fire Protection Costs are costs associated with providing the facilities to meet the potential peak demand of fire protection service. Fire Protection costs are subdivided into costs to meet Public Fire Protection and Private Fire Protection demands. The extra capacity costs assigned to fire protection service were allocated to Public and Private Fire Protection and Residential General Service on the basis of the total relative demands of the hydrants, fire service lines, and residential service lines sized to provide fire protection, as well as general service.

## RESULTS OF STUDIES

The results of the cost of service allocation study are set forth in Part II. The data summarized in Schedule A, "Comparison of Pro Forma Cost of Service with Revenues Under Present and Proposed Rates for the Twelve Months Ending March 31, 2020", constitute the principal results of the cost allocation study and subsequent rate design.

The cost of service by customer classification shown in column 2 of Schedule A is developed in Schedule D, "Allocation of Cost of Service to Customer Classifications for the Twelve Months Ended March 31, 2020". The allocation of the total cost of service to the several customer classifications was performed by applying the allocation factors referenced in column 3 of Schedule D to the cost of service set forth in column 3. The bases for the allocation factors are presented in Schedule E.

Schedule F, "Summary of Average Daily Send Out, Maximum Daily Use, and Maximum Hourly Use for the Years 1962-2010", presents the determination of the

maximum day and hour ratios for the overall system. Schedule G, "Basis for Allocating Demand Related Costs of Fire Service to Residential and Private and Public Fire Protection Customer Classifications", presents the calculation of the total relative demand of fire hydrants and fire service lines.

Schedule H sets forth the calculation of the firm and interruptible standby rates based on the functional allocation provided in the Appendix. Also provided in the Appendix are responses to Rate Structure and Cost of Service Filing Requirements RS1a through RS1j and RS2.

PART II. COST OF SERVICE BY CUSTOMER CLASSIFICATION



AQUA PENNSYLVANIA, INC.

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES - WATER  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Customer Classification (1)	Pro Forma Cost of Service, as of March 31, 2020		Pro Forma Revenues Under Present Rates		Pro Forma Revenues Under Proposed Rates		Proposed Increase		
	Amount (2)	Act 11 (3)	Water COS Plus Act 11 (4)	Amount (6)	Percent of Total (7)	Amount (8)	Percent of Total (9)	Amount (10)	Percent Increase (11)
Residential	\$322,651,806	\$5,768,033	\$328,419,839	\$278,837,020	65.9%	\$324,335,983	66.3%	\$45,498,963	16.3%
Commercial	114,010,739	2,205,787	116,216,526 *	101,595,579	24.0%	116,989,646	23.9%	15,394,068	15.2%
Industrial	18,256,574		18,256,574 *	14,794,252	3.5%	17,298,158	3.5%	2,503,907	16.9%
Public	7,824,651	100,168	7,924,819 *	7,497,388	1.8%	8,567,432	1.8%	1,070,044	14.3%
Other Water Utilities	5,153		5,153 *	11,647	0.0%	13,180	0.0%	1,532	13.2%
Private Fire Protection	11,839,061		11,839,061	14,388,843	3.4%	15,457,369	3.2%	1,068,526	7.4%
Public Fire Protection	6,253,812		6,253,812	5,963,794	1.4%	6,253,812	1.3%	290,019	4.9%
Total Tariff Sales of Water	480,841,796	8,073,988	488,915,784	423,088,523	100.0%	488,915,580	100.0%	65,827,057	15.6%
Contract Sales - Commercial	63,243		63,243	50,740		63,243		12,503	24.6%
Contract Sales - Industrial	3,587,762		3,587,762	3,409,936		3,587,762		177,826	5.2%
Contract Sales - Public	1,320,750		1,320,750	1,147,456		1,320,750		173,294	15.1%
Contract Sales - OWU	2,694,136		2,694,136	2,512,273		2,694,136		181,863	7.2%
Subtotal Contract Sales	7,665,891	0	7,665,891	7,120,404		7,665,891		545,486	7.7%
Total Sales of Water	488,507,687	8,073,988	496,581,675	430,208,927		496,581,470		66,372,543	15.4%
Other Water Revenues	1,159,716		1,159,716	1,159,716		1,159,716		0	0.0%
Total	\$489,667,403	\$8,073,988	\$497,741,391	\$431,368,643		\$497,741,187		\$66,372,543	15.4%

\* Contract Sales Excluded.

AQUA PENNSYLVANIA, INC.

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION  
UNDER PRESENT RATES

(1) ITEM	(2) COST OF SERVICE	(3) RESIDENTIAL	(4) COMMERCIAL	(5) INDUSTRIAL	(6) PUBLIC	(7) OTHER WATER UTILITIES		(8) FIRE PROTECTION	
						PRIVATE	PUBLIC	PRIVATE	PUBLIC
1. REVENUES FROM SALES	423,088,523	278,837,020	101,595,579	14,794,252	7,497,388	11,647	14,388,843	5,963,794	
2. OTHER REVENUES	8,280,120	5,564,373	1,949,753	312,475	133,815	91	198,524	121,088	
3. TOTAL OPERATING REVENUES	431,368,643	284,401,393	103,545,332	15,106,727	7,631,203	11,739	14,587,367	6,084,882	
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & ACT 11)	236,481,373	172,276,801	53,395,699	8,483,297	3,687,224	2,970	4,481,289	-5,845,907	
5. RETURN AND INCOME TAXES	194,887,270	112,124,592	50,149,633	6,623,430	3,943,979	8,768	10,106,078	11,930,790	
6. LESS: TAXABLE EXCLUSIONS (FACTOR 18)	68,208,887	41,172,385	16,843,025	2,725,150	1,148,160	614	2,042,310	4,277,243	
7. TAXABLE INCOME	126,678,383	70,952,208	33,306,608	3,898,280	2,795,819	8,155	8,063,767	7,653,547	
8. LESS: INCOME TAXES (TAX. INC.)	(17,783,033)	(9,960,227)	(4,675,561)	(547,238)	(392,475)	(1,145)	(1,131,987)	(1,074,400)	
9. NET RETURN (Line 5 - Line 8)	212,670,303	122,084,820	54,825,194	7,170,668	4,336,454	9,913	11,238,064	13,005,190	
10. ORIGINAL COSTS MEASURE OF VALUE	3,265,240,569	1,970,970,814	806,294,809	130,457,337	54,963,740	29,705	97,768,907	204,755,264	
11. RATE OF RETURN, PERCENT	6.51	6.19	6.80	5.50	7.89	33.37	11.49	6.35	
12. RELATIVE RATE OF RETURN	1.00	0.95	1.04	0.84	1.21	5.12	1.76	0.98	

AQUA PENNSYLVANIA, INC.

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION  
UNDER PROPOSED RATES

(1) ITEM	(2) COST OF SERVICE	(3) RESIDENTIAL	(4) COMMERCIAL	(5) INDUSTRIAL	(6) PUBLIC	(7) OTHER WATER UTILITIES		(8) FIRE PROTECTION	
						(6) PUBLIC	(7) OTHER WATER UTILITIES	(6) PRIVATE	(9) PUBLIC
1. REVENUES FROM SALES	488,915,580	324,335,983	116,989,646	17,298,158	8,567,432	13,180	15,457,369	6,253,812	
2. OTHER REVENUES	8,825,607	5,921,506	2,093,752	335,285	143,690	97	217,807	113,471	
3. TOTAL OPERATING REVENUES	497,741,187	330,257,488	119,083,398	17,633,443	8,711,122	13,277	15,675,176	6,367,283	
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & ACT 11)	245,146,598	181,852,647	55,947,149	8,501,960	3,817,338	2,977	4,493,675	-9,469,148	
5. RETURN AND INCOME TAXES	252,594,589	148,404,841	63,136,249	9,131,483	4,893,784	10,300	11,181,501	15,836,431	
6. LESS: TAXABLE EXCLUSIONS (FACTOR 18)	68,208,887	41,176,955	16,840,092	2,724,604	1,147,956	614	2,042,310	4,276,356	
7. TAXABLE INCOME	184,385,702	107,227,887	46,296,156	6,406,879	3,745,828	9,686	9,139,191	11,560,074	
8. LESS: INCOME TAXES (TAX. INC.)	(1,109,276)	(645,090)	(278,521)	(38,544)	(22,535)	(58)	(54,982)	(69,546)	
9. NET RETURN (Line 5 - Line 8)	253,703,865	149,049,931	63,414,769	9,170,027	4,916,319	10,358	11,236,483	15,905,977	
10. ORIGINAL COSTS MEASURE OF VALUE	3,265,240,569	1,971,191,843	806,156,066	130,429,515	54,953,537	29,705	97,766,435	204,713,469	
11. RATE OF RETURN, PERCENT	7.77	7.56	7.87	7.03	8.95	34.87	11.49	7.77	
12. RELATIVE RATE OF RETURN	1.00	0.97	1.01	0.90	1.15	4.49	1.48	1.00	

AQUA PENNSYLVANIA, INC.  
ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Account Number (1)	Account Description (2)	Factor Ref. (3)	Cost of Service (4)	Residential (5)	Commercial (6)	Industrial (7)	Other Public Authority (8)	Other Water Utilities (9)	Private Fire Protection (10)	Public Fire Protection (11)
<b>OPERATION AND MAINTENANCE EXPENSES</b>										
<b>Source of Supply</b>										
<b>----Operation----</b>										
601.1	Operation Labor									
	Treatment Plants & Wells	2	215,578	130,261	67,653	12,031	4,597	2	290	744
	Booster Stations	3	12,184	6,871	3,562	633	242	0	301	574
620.1	Materials and Supplies									
	Treatment Plants & Wells	2	48,883	29,537	15,341	2,728	1,042	0	66	169
	Booster Stations	3	2,763	1,558	808	144	55	0	68	130
631.1	Contract Services - Engineering	2	167	101	52	9	4	0	0	1
636.1	Contract Services Other	2	219,070	132,371	68,748	12,226	4,672	2	295	756
641.1	Building Rental									
	Treatment Plants & Wells	2	498,095	300,969	156,312	27,798	10,622	4	670	1,719
	Booster Stations	3	28,152	15,877	8,230	1,464	559	0	695	1,327
650.1	Transportation									
	Treatment Plants & Wells	2	-	-	-	-	-	-	-	-
	Booster Stations	3	-	-	-	-	-	-	-	-
675.1	Miscellaneous									
	Treatment Plants & Wells	2	2,144	1,295	673	120	46	0	3	7
	Booster Stations	3	123	69	36	6	2	0	3	6
	<b>Total Operation</b>		<b>1,027,159</b>	<b>618,909</b>	<b>321,414</b>	<b>57,159</b>	<b>21,842</b>	<b>8</b>	<b>2,392</b>	<b>5,434</b>
<b>----Maintenance----</b>										
601.2	Maintenance Labor									
	Treatment Plants & Wells	2	477,606	288,588	149,882	26,655	10,185	4	643	1,649
	Booster Stations	3	177,547	100,131	51,901	9,230	3,527	1	4,386	8,371
620.2	Materials and Supplies									
	Treatment Plants & Wells	2	21,620	13,064	6,785	1,207	461	0	29	75
	Booster Stations	3	8,037	4,533	2,350	418	160	0	199	379
631.2	Contractor Services									
	Treatment Plants & Wells	2	-	-	-	-	-	-	-	-
	Booster Stations	3	-	-	-	-	-	-	-	-
636.2	Contractor Services - other	2	231,570	139,923	72,671	12,924	4,938	2	312	799
642.2	Equipment Rental									
	Treatment Plants & Wells	2	-	-	-	-	-	-	-	-
	Booster Stations	3	-	-	-	-	-	-	-	-
650.2	Transportation									
	Treatment Plants & Wells	2	837	506	263	47	18	0	1	3
	Booster Stations	3	311	175	91	16	6	0	8	15
675.2	Miscellaneous									
	Treatment Plants & Wells	2	46	28	14	3	1	0	0	0
	Booster Stations	3	17	10	5	1	0	0	0	1
	<b>Total Maintenance</b>		<b>917,592</b>	<b>546,958</b>	<b>283,962</b>	<b>50,499</b>	<b>19,297</b>	<b>7</b>	<b>5,577</b>	<b>11,291</b>

AQUA PENNSYLVANIA, INC.  
ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Account Number (1)	Account Description (2)	Factor Ref. (3)	Cost of Service (4)	Residential (5)	Commercial (6)	Industrial (7)	Other Public Authority (8)	Other Water Utilities (9)	Private Fire Protection (10)	Public Fire Protection (11)
<b>-----Miscellaneous-----</b>										
610.1	Water Purchased for Resale	1	4,811,052	2,855,114	1,524,194	295,808	103,577	43	9,064	23,252
615.1	Power Purchased	1	8,556,154	5,077,641	2,710,684	526,075	184,205	77	16,120	41,352
616.1	Power Purchased	1	261,702	155,307	82,910	16,091	5,634	2	493	1,265
	<b>Total Miscellaneous</b>		<b>13,628,908</b>	<b>8,088,062</b>	<b>4,317,788</b>	<b>837,973</b>	<b>293,417</b>	<b>123</b>	<b>25,677</b>	<b>65,869</b>
	<b>Total Source of Supply Expenses</b>		<b>15,573,658</b>	<b>9,253,929</b>	<b>4,923,164</b>	<b>945,632</b>	<b>334,556</b>	<b>138</b>	<b>33,646</b>	<b>82,594</b>
<b>Water Treatment Expenses</b>										
<b>-----Operation-----</b>										
601.3	Operating Labor	2	9,787,702	5,914,111	3,071,577	546,242	208,733	78	13,174	33,787
615.3	Purchased Power	1	217,793	129,249	68,999	13,391	4,689	2	410	1,053
616.3	Purchased Power	1	28,333	16,814	8,976	1,742	610	0	53	137
618.3	Chemicals	1	5,369,526	3,186,540	1,701,125	330,145	115,601	48	10,116	25,951
620.3	Materials and Supplies	2	475,636	287,398	149,264	26,545	10,143	4	640	1,642
631.3	Contractor Services	2	14,959	9,039	4,694	835	319	0	20	52
635.3	Contractor Services - testing	2	353,943	213,866	111,074	19,753	7,548	3	476	1,222
636.3	Contractor Services - other	2	724,990	438,067	227,516	40,461	15,461	6	976	2,503
642.3	Equipment Rental	2	4,168	2,518	1,308	233	89	0	6	14
650.3	Transportation	2	-	-	-	-	-	-	-	-
675.3	Miscellaneous	2	25,780	15,577	8,090	1,439	550	0	35	89
	<b>Total Operation</b>		<b>17,002,828</b>	<b>10,213,179</b>	<b>5,352,624</b>	<b>980,785</b>	<b>363,742</b>	<b>142</b>	<b>25,907</b>	<b>66,449</b>
<b>-----Maintenance-----</b>										
601.4	Maintenance Labor	2	219,058	132,363	68,745	12,225	4,672	2	295	756
620.4	Materials and Supplies	2	85,592	51,718	26,860	4,777	1,825	1	115	295
631.4	Contractor Services - Eng	2	-	-	-	-	-	-	-	-
635.4	Contractor Services - Testing	2	531	321	167	30	11	0	1	2
636.4	Contractor Services - Other	2	3,146,206	1,901,060	987,342	175,587	67,096	25	4,235	10,861
642.4	Equipment Rental	2	-	-	-	-	-	-	-	-
650.4	Transportation	2	-	-	-	-	-	-	-	-
675.4	Miscellaneous	2	28,755	17,375	9,024	1,605	613	0	39	99
	<b>Total Maintenance</b>		<b>3,480,141</b>	<b>2,102,837</b>	<b>1,092,138</b>	<b>194,223</b>	<b>74,217</b>	<b>28</b>	<b>4,684</b>	<b>12,013</b>
	<b>Total Water Treatment Expenses</b>		<b>20,482,970</b>	<b>12,316,016</b>	<b>6,444,762</b>	<b>1,175,008</b>	<b>437,960</b>	<b>169</b>	<b>30,591</b>	<b>78,462</b>
<b>Transmission &amp; Distribution Expenses</b>										
<b>-----Operation-----</b>										
601.5	Operating Labor	12	471,087	358,258	64,990	7,665	4,961	15	10,802	24,396
	Supervision & Engineering	12	904,593	687,936	124,795	14,719	9,527	28	20,742	46,846
	Maps & Records	5	614,696	366,233	174,644	27,597	11,856	2	11,827	22,536
	Storage Facilities	3	149,647	84,396	43,745	7,780	2,973	1	3,697	7,055
	12 inch and Over Mains	4	809,302	454,249	216,197	34,174	14,691	5	31,153	58,832

AQUA PENNSYLVANIA, INC.  
ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Account Number (1)	Account Description (2)	Factor Ref. (3)	Cost of Service (4)	Residential (5)	Commercial (6)	Industrial (7)	Other Public Authority (8)	Other Water Utilities (9)	Private Fire Protection (10)	Public Fire Protection (11)
	Hydrants	6	206,688	-	-	-	-	-	18,829	187,859
	Removing and Resetting Meters	7	3,097,628	2,748,318	267,081	15,600	24,016	146	42,468	-
	Miscellaneous Meter Expense	7	144,278	128,008	12,440	727	1,119	7	1,978	-
	Services on Customer's Premises	8	312,715	275,980	21,888	927	1,535	7	12,378	-
6502.2	Operating Labor	12	687,739	523,020	94,878	11,190	7,243	21	15,770	35,616
615.5	Purchased Power	1	1,242,197	737,181	393,542	76,376	26,743	11	2,340	6,004
615.6	Purchased Power	1	1,396	828	442	86	30	0	3	7
620.5	Materials and Supplies	12	927,576	705,414	127,966	15,093	9,769	29	21,269	48,036
631.5	Contractor Services - Eng	12	1,543	1,173	213	25	16	0	35	80
636.5	Contractor Services - Other	12	550,911	418,963	76,002	8,964	5,802	17	12,632	28,530
641.5	Property Rental	12	21,090	16,039	2,910	343	222	1	484	1,092
642.5	Property & Equipment Rental	12	-	-	-	-	-	-	-	-
650.5	Transportation	12	1,058,572	805,036	146,037	17,224	11,149	33	24,273	54,820
675.5	Miscellaneous	12	2,748	2,090	379	45	29	0	63	142
	Total Operation		11,204,406	8,313,123	1,768,149	238,534	131,682	322	230,744	521,852
	-----Maintenance-----									
601.6	Maintenance Labor									
	Supervision & Engineering	13	151,715	88,793	26,784	3,933	1,841	2	6,508	23,855
	Structures & Improvements	5	37,987	22,633	10,793	1,705	733	0	731	1,393
	12 inch and Over Mains	3	174,087	98,180	50,890	9,050	3,458	1	4,300	8,208
	Under 12 inch Mains	4	1,031,473	578,950	275,548	43,556	18,724	6	39,706	74,983
	Services	8	538,808	475,514	37,713	1,598	2,644	11	21,327	-
	Meters	7	112,563	99,869	9,705	567	873	5	1,543	-
	Hydrants	6	283,853	-	-	-	-	-	25,859	257,994
	Materials and Supplies	13	468,337	274,098	82,682	12,140	5,682	5	20,091	73,638
620.6	Contractor Services	13	-	-	-	-	-	-	-	-
631.6	Contractor Services - Eng	13	5,466,543	3,199,343	965,085	141,698	66,320	60	234,509	859,526
636.6	Contractor Services - Other	13	-	-	-	-	-	-	-	-
641.6	Equipment Rental	13	-	-	-	-	-	-	-	-
650.6	Transportation	13	-	-	-	-	-	-	-	-
675.6	Miscellaneous	13	6,742	3,946	1,190	175	82	0	289	1,060
	Total Maintenance		8,272,107	4,841,326	1,460,390	214,421	100,357	91	354,864	1,300,657
	<b>Total Transmission and Distribution Expenses</b>		19,476,513	13,154,449	3,228,539	452,955	232,039	413	585,609	1,822,509

AQUA PENNSYLVANIA, INC.  
ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Account Number (1)	Account Description (2)	Factor Ref. (3)	Cost of Service (4)	Residential (5)	Commercial (6)	Industrial (7)	Other Public Authority (8)	Other Water Utilities (9)	Private Fire Protection (10)	Public Fire Protection (11)
<b>Customer Accounting and Collecting Expenses</b>										
601.7	Labor	11	484,967	448,869	26,566	916	1,479	5	6,968	164
616.7	Purchased Power	11	10,465	9,686	573	20	32	0	150	4
620.7	Materials and Supplies	9	459	425	25	1	1	0	7	0
636.7	Contractor Services - Billing	9	6,657,078	6,160,899	364,621	12,569	20,304	73	95,636	2,976
636.7	Contractor Services - Meter Reading	10	2,899,205	2,684,313	158,868	5,477	8,848	32	41,667	-
650.7	Transportation	9	-	-	-	-	-	-	-	-
670.7	Bad Debt Expense	9	2,494,353	2,308,439	136,621	4,709	7,608	27	35,834	1,115
675.7	Miscellaneous	9	52	48	3	0	0	0	1	0
	Total Customer Accounting and Collecting Expenses		12,546,580	11,612,681	687,277	23,691	38,273	138	180,262	4,259
<b>Administrative and General Expenses</b>										
601.8	Labor	14	9,912,009	7,118,418	1,831,313	278,577	125,327	139	164,847	393,388
603.8	Officers Labor	14	2,633,872	1,891,544	486,626	74,025	33,303	37	43,804	104,533
604.8	Employee Health Plans	16	19,919,646	13,596,473	4,287,724	682,965	296,743	299	295,249	760,193
615.8	Purchased Power	14	364,240	261,583	67,296	10,237	4,605	5	6,058	14,456
616.8	Purchased Power	14	133,368	95,780	24,641	3,748	1,686	2	2,218	5,293
620.8	Materials and Supplies	14	80,741	57,985	14,917	2,269	1,021	1	1,343	3,204
631.8	Contractor Services - Engineering	14	220,326	158,229	40,707	6,192	2,786	3	3,664	8,744
632.8	Contractor Services - Accounting	14	713,868	512,672	131,892	20,063	9,026	10	11,872	28,332
633.8	Contractor Services - Legal	14	397,744	285,644	73,486	11,179	5,029	6	6,615	15,786
634.8	Contractor Services - Mgmt Fee	14	24,149,865	17,343,491	4,461,857	678,732	305,351	338	401,636	958,460
635.8	Contractor Services - Testing	14	-	-	-	-	-	-	-	-
636.8	Contractor Services - Other	14	1,621,477	1,164,481	299,579	45,572	20,502	23	26,967	64,353
641.8	Rent - Building	14	26,843	19,278	4,959	754	339	0	446	1,065
642.8	Rent - Equipment	14	75,937	54,535	14,030	2,134	960	1	1,263	3,014
650.8	Transportation	14	71,235	51,158	13,161	2,002	901	1	1,185	2,827
656.8	Vehicle Insurance	14	306,936	220,430	56,709	8,626	3,881	4	5,105	12,182
657.8	General Liability Insurance	14	2,624,066	1,884,502	484,815	73,749	33,179	37	43,641	104,144
658.8	A&G Workers Comp Insurance	16	1,952,157	1,332,476	420,204	66,932	29,081	29	28,935	74,500
659.8	A&G General Liability Insurance	14	1,128,114	810,168	208,427	31,706	14,264	16	18,762	44,773
660.8	Advertising	14	201,843	144,956	37,292	5,673	2,552	3	3,357	8,011
666.8	Rate Case Amortization	19	630,420	422,978	149,558	23,950	10,264	7	15,558	8,105
676.21	Labor (Transfrd)	16	(1,887,159)	(1,288,111)	(406,213)	(64,703)	(28,113)	(28)	(27,971)	(72,020)
676.22	Employee Benefits (Transfrd)	16	(8,402,049)	(5,734,953)	(1,808,549)	(288,073)	(125,165)	(126)	(124,535)	(320,647)
676.24	Other (Transfrd)	14	(1,856,281)	(1,333,109)	(342,961)	(52,171)	(23,471)	(26)	(30,872)	(73,672)
406.0	Amortization of UPAA	14	198,491	142,549	36,673	5,579	2,510	3	3,301	7,878
404.8	Employee Benefits (Transfrd)	16	(83,406)	(56,930)	(17,953)	(2,860)	(1,242)	(1)	(1,236)	(3,183)
675.8	A & G Miscellaneous	14	2,686,104	1,929,055	496,277	75,493	33,963	38	44,673	106,606
	Subtotal Administrative and General		57,820,408	41,085,283	11,066,465	1,702,351	759,282	819	945,883	2,260,325
	<b>Total Operation &amp; Maintenance Expense:</b>		<b>125,900,129</b>	<b>87,422,357</b>	<b>26,350,207</b>	<b>4,299,637</b>	<b>1,802,109</b>	<b>1,678</b>	<b>1,775,991</b>	<b>4,248,149</b>

AQUA PENNSYLVANIA, INC.  
ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Account Number (1)	Account Description (2)	Factor Ref. (3)	Cost of Service (4)	Residential (5)	Commercial (6)	Industrial (7)	Other Public Authority (8)	Other Water Utilities (9)	Private Fire Protection (10)	Public Fire Protection (11)
503.00	<b>DEPRECIATION EXPENSE</b>									
304.20	Power and Pumping Structures	2	222,340	134,346	69,775	12,409	4,742	2	299	768
	Major Treatment Plants	3	1,027,760	579,625	300,438	53,429	20,416	8	25,389	48,455
304.30	Purification Buildings	2	4,022,345	2,430,458	1,262,292	224,483	85,781	32	5,414	13,885
	Other Structures	2	891,681	538,788	279,827	49,764	19,016	7	1,200	3,078
304.61	Office Buildings	14	2,659,188	1,909,725	491,304	74,736	33,623	37	44,225	105,538
304.62	Stores, Shop and Garage Bldgs.	14	267,465	192,083	49,416	7,517	3,382	4	4,448	10,615
304.63	Misc. Structures and Impr.	14	1,293,314	928,808	238,949	36,349	16,353	18	21,509	51,329
305.00	Collecting & Impounding Res.	1	871,917	517,438	276,233	53,610	18,772	8	1,643	4,214
306.00	Lake, River and Other Intakes	2	481,433	290,901	151,083	26,868	10,267	4	648	1,662
307.00	Wells and Springs	2	1,204,618	727,877	378,033	67,229	25,690	10	1,621	4,158
310.40	Other Power Producing Equipment	3	1,378,340	777,341	402,920	71,654	27,381	11	34,049	64,983
311.00	Electric Pumping Equipment	3	2,759,331	1,556,177	806,616	143,447	54,814	22	68,164	130,091
320.00	Purification System									
	Structures	2	2,231,799	1,348,540	700,383	124,554	47,595	18	3,004	7,704
	Wells and Boosters	2	392,341	237,068	123,124	21,896	8,367	3	528	1,354
	Equipment	2	3,836,962	2,318,442	1,204,115	214,137	81,827	31	5,165	13,245
	Computers	2	-	-	-	-	-	-	-	-
	Painting	2	1,766	1,067	554	99	38	0	2	6
	Filter Media	2	10,250	6,193	3,217	572	219	0	14	35
330.00	Distr. Reservoirs & Standpipes									
	Tanks	5	1,535,416	914,795	436,235	68,933	29,615	6	29,541	56,291
	Tank Painting	5	4,529,440	2,698,622	1,286,882	203,349	87,364	18	87,146	166,058
331.00	Mains and Accessories									
	12 inch and Over	3	5,993,713	3,380,268	1,752,100	311,589	119,065	48	148,063	282,580
	Under 12 inch	4	29,171,001	16,373,245	7,792,741	1,231,804	529,541	175	1,122,909	2,120,586
333.00	Services	8	7,304,332	6,446,292	511,259	21,657	35,850	153	289,120	-
334.00	Meters									
	Remote	7	4,096,844	3,634,855	353,234	20,632	31,763	193	56,168	-
	ERTS	7A	2,060,255	1,853,335	180,105	10,520	16,196	99	-	-
335.00	Fire Hydrants	6	1,607,600	-	-	-	-	-	146,452	1,461,148
336.00	Back Flow Prevention Devices	7	11,896	10,555	1,026	60	92	1	163	-
339.00	Other Plant and Miscellaneous	14	33,351	23,951	6,162	937	422	0	555	1,324
340.00	Office Furniture and Equipment									
	Furniture	14	350,111	251,436	64,685	9,840	4,427	5	5,823	13,895
	Mechanical Equipment	14	243,596	174,941	45,006	6,846	3,080	3	4,051	9,668
	Computers	14	13,172,136	9,459,714	2,433,644	370,203	166,548	184	219,066	522,776
341.00	Transportation Equipment									
	Vehicles	14	2,405,278	1,727,377	444,392	67,600	30,412	34	40,002	95,461
	Other	14	233,672	167,814	43,173	6,567	2,955	3	3,886	9,274
342.00	Stores Equipment	14	167,063	119,978	30,866	4,695	2,112	2	2,778	6,630



AQUA PENNSYLVANIA, INC.  
ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Account Number (1)	Account Description (2)	Factor Ref. (3)	Cost of Service (4)	Residential (5)	Commercial (6)	Industrial (7)	Other Public Authority (8)	Other Water Utilities (9)	Private Fire Protection (10)	Public Fire Protection (11)
343.10	Shop Equipment	14	64,701	46,466	11,954	1,818	818	1	1,076	2,568
343.20	Tools & Work Equipment - General	14	1,041,314	747,831	192,390	29,266	13,166	15	17,318	41,328
344.00	Laboratory Equipment	2	42,673	25,785	13,392	2,382	910	0	57	147
	Conventional Electronic	2	201,190	121,567	63,137	11,228	4,291	2	271	695
346.00	Communication Equipment	14	251,120	180,345	46,396	7,058	3,175	4	4,176	9,966
	Communication Equipment	3	2,597,139	1,464,706	759,203	135,015	51,592	21	64,157	122,445
347	SCADA Equipment	14	99,624	71,546	18,406	2,800	1,260	1	1,657	3,954
348	Miscellaneous Equipment	14	1,631	1,171	301	46	21	0	27	65
	Other Tangible Plant									
	<b>Total Depreciation Expense</b>		100,767,946	64,391,474	23,224,971	3,707,598	1,592,955	1,183	2,461,786	5,387,979
	<b>TAXES OTHER THAN INCOME TAXES</b>									
	Federal and State Payroll Taxes	16		1,925,760	607,299	96,733	42,030	42	41,818	107,671
	State Capital Stock Tax	18		-	-	-	-	-	-	-
	PUC Assessment	19	2,075,142	1,392,308	492,298	78,835	33,785	23	51,212	26,680
	OCA and SBA Assessments	19	390,314	261,879	92,596	14,828	6,355	4	9,633	5,018
	Local Property Taxes	18	917,726	564,021	226,577	36,659	15,445	8	27,479	57,537
	Public Utility Realty Taxes	18	4,200,000	2,535,494	1,036,938	167,769	70,686	38	125,756	263,319
	<b>Total Taxes Other Than Income Taxes</b>		10,404,535	6,669,462	2,455,709	394,823	168,301	115	255,898	480,226
	<b>INCOME TAXES</b>									
	Federal Income Taxes	18	10,790,740	6,514,251	2,664,126	431,036	181,608	97	323,096	676,525
	State Income Taxes	18	4,708,283	2,842,339	1,162,428	188,072	79,240	42	140,975	295,186
	Deferred Taxes	18	(16,354,887)	(9,873,265)	(4,037,858)	(653,296)	(275,253)	(147)	(489,698)	(1,025,370)
	ITC-ARMORTIZED	18	(253,413)	(152,983)	(62,565)	(10,123)	(4,265)	(2)	(7,588)	(15,888)
	<b>Total Income Taxes</b>		(1,109,276)	(669,658)	(273,869)	(44,310)	(18,669)	(10)	(33,214)	(69,546)
	<b>UTILITY OPERATING INCOME</b>	18	253,704,069	153,158,356	62,636,998	10,134,209	4,269,839	2,283	7,596,407	15,905,977
	<b>Total Cost of Service</b>		489,667,403	310,971,991	114,394,016	18,491,957	7,814,536	5,250	12,056,868	25,932,784
	<b>Less:</b>									
	Other Water Revenues	19	(1,159,716)	(778,107)	(275,126)	(44,058)	(18,881)	(13)	(28,621)	(14,910)
	Revenues from Contract Sales	19	(7,665,891)	(5,143,399)	(1,818,625)	(291,227)	(124,808)	(84)	(189,187)	(98,560)
	Unrecovered Public Fire	20	-	-	-	-	-	-	-	-
	Reallocate Unrecovered Public Fire	21	17,601,321	17,601,321	1,710,475	99,901	153,804	-	-	(19,565,501)
	<b>Total Cost of Service Related to Sales</b>		480,841,796	322,651,806	114,010,739	18,256,574	7,824,651	5,153	11,839,061	6,253,812
	<b>Act 11</b>		8,073,988	5,768,033	2,205,787	100,168				
	<b>Total Cost of Service</b>		\$ 488,915,784	\$ 328,419,839	\$ 116,216,526	\$ 18,256,574	\$ 7,924,819	\$ 5,153	\$ 11,839,061	\$ 6,253,812

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1. ALLOCATION OF COSTS WHICH VARY WITH THE AMOUNT OF WATER CONSUMED.

Factors are based on the pro forma, future test year average daily consumption for each customer classification.

Customer Classification (1)	Average Daily Consumption, 100 Gallons (2)	Allocation Factor (3)
Residential	514,574	0.593449
Commercial	274,705	0.316811
Industrial	53,313	0.061485
Public	18,668	0.021529
Other Water Utilities	8	0.000009
Private Fire Protection	1,634	0.001884
Public Fire Protection	4,191	0.004833
Total	<u>867,093</u>	<u>1.000000</u>

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.

Factors are based on the weighting of the factors for average daily consumption (Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification , as follows:

Customer Classification (1)	Average Daily Consumption		Maximum Day Extra Capacity		Allocation Factor (6)=(3)+(5)
	Allocation Factor 1 (2)	Weighted Factor (3)=(2)x 0.714300	Allocation Factor (4)	Weighted Factor (5)=(4)x 0.285700	
Residential	0.593449	0.423901	0.631218	0.180338	0.60424
Commercial	0.316811	0.226298	0.306341	0.087522	0.31382
Industrial	0.061485	0.043919	0.041617	0.011890	0.05581
Public	0.021529	0.015378	0.020818	0.005948	0.02133
Other Water Utilities	0.000009	0.000006	0.000006	0.000002	0.00001
Private Fire Protection	0.001884	0.001346			0.00135
Public Fire Protection	0.004833	0.003452			0.00345
Total	<u>1.000000</u>	<u>0.714300</u>	<u>1.00000</u>	<u>0.285700</u>	<u>1.00000</u>

The derivation of the maximum day extra capacity factors in column 4 and the basis for the column 3 and 5 weightings are presented on the following page.

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND  
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.

Customer Classification	Average Daily Consumption, 100 Gallons	Maximum Day Extra Capacity		
		Factor*	Rate of Flow, 100 Gallons Per Day	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	514,574	1.1	566,031.4	0.631218
Commercial	274,705	1.0	274,705.0	0.306341
Industrial	53,313	0.7	37,319.1	0.041617
Public	18,668	1.0	18,668.0	0.020818
Other Water Utilities	<u>8</u>	0.7	<u>5.6</u>	<u>0.000006</u>
Total	<u><u>861,268</u></u>		<u><u>896,729.1</u></u>	<u><u>1.000000</u></u>

The weightings of the factors is based on the maximum day ratio of 1.40, based on a review of maximum day ratios experienced during the period 1966 through 2017 (see Schedule F)

	Maximum Day Ratio	Weight
Average Day	1.00	0.7143
Maximum Day Extra Capacity	<u>0.40</u>	<u>0.2857</u>
Total	<u><u>1.40</u></u>	<u><u>1.0000</u></u>

\* Ratio of maximum day to average day minus 1.0.

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Fire Protection		Allocation Factor (8)=(3)+(5)+(7)
	Allocation Factor (2)	Weighted Factor (3)=(2) X 0.665400	Allocation Factor (4)	Weighted Factor (5)=(4) X 0.266100	Allocation Factor (6)	Weighted Factor (7)=(6) X 0.068500	
Residential	0.593449	0.394881	0.631218	0.167967	0.016370	0.001121	0.563969
Commercial	0.316811	0.210806	0.306341	0.081517			0.292323
Industrial	0.061485	0.040912	0.041617	0.011074			0.051986
Public	0.021529	0.014325	0.020818	0.005540			0.019865
Other Water Utilities	0.000009	0.000006	0.000006	0.000002			0.000008
Private Fire Protection	0.001884	0.001254			0.342318	0.023449	0.024703
Public Fire Protection	0.004833	0.003216			0.641312	0.043930	0.047146
<b>Total</b>	<b>1.0000</b>	<b>0.665400</b>	<b>1.000000</b>	<b>0.266100</b>	<b>1.0000</b>	<b>0.068500</b>	<b>1.000000</b>

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS, cont.

The weightings of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 1.40 and the total system sendout for the test year of 116 mgd. The ratio is based on a review of the experienced maximum day ratios during the period 1966 through 2017 (see Schedule F). The system demand for fire protection is 20,000 gpm for 10 hours.

	<u>Ratio</u>	<u>Rate of Flow, (GPD)</u>	<u>Weight</u>
Average Hour	1.00	116,498,560	0.6654
Maximum Hour Extra Capacity	<u>0.40</u>	<u>46,599,424</u>	<u>0.2661</u>
Subtotal	<u>1.40</u>	163,097,984	0.9315
Fire Protection		<u>12,000,000</u>	<u>0.0685</u>
Total		<u>175,097,984</u>	<u>1.0000</u>

The public and private fire protection allocation factors in column 6 on the previous page are based on the relative potential demands (see Schedule G).

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification (1)	Average Hourly Consumption		Maximum Hour Extra Capacity		Fire Protection		Allocation Factor (9)=(4)+(6)+(8)
	100 Gals. (2)	Allocation Factor (3)	Allocation Factor (5)	Weighted Factor (4)=(3) X 0.445000	Allocation Factor (7)	Weighted Factor (8)=(7) X 0.110000	
Residential	21,440.6	0.593448	0.663822	0.264084	0.016370	0.001801	0.561285
Commercial	11,446.0	0.316811	0.283503	0.140981			0.267140
Industrial	2,221.4	0.061486	0.033406	0.027361			0.042227
Public	777.8	0.021529	0.019265	0.009580			0.018153
Other Water Utilities	0.3	0.000008	0.000004	0.000004			0.000006
Private Fire Protection	68.1	0.001885		0.000839	0.342318	0.037655	0.038494
Public Fire Protection	174.6	0.004833		0.002151	0.641312	0.070544	0.072695
<b>Total</b>	<b>36,128.8</b>	<b>1.000000</b>	<b>1.000000</b>	<b>0.445000</b>	<b>1.000000</b>	<b>0.110000</b>	<b>1.000000</b>

The maximum hour extra capacity factors in column 5 are determined as follows:

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS, cont.

The weightings of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum hour ratio of 2.0 and the total system sendout for the test year of 116 mgd. The ratio is based on a review of the experienced maximum hour ratios during the period 1966 through 2017 (see Schedule F) The system demand for fire protection is 20,000 gpm.

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.00	80,902	0.4450
Maximum Hour Extra Capacity	<u>1.00</u>	<u>80,902</u>	<u>0.4450</u>
Subtotal	<u>2.00</u>	161,804	0.8900
Fire Protection		<u>20,000</u>	<u>0.1100</u>
Total		<u>181,804</u>	<u>1.0000</u>

The maximum hour extra capacity factors in column 5 of the previous page are determined as follows:

Customer Classification	Average Hourly Consumption 100 Gals.	Maximum Hour Extra Capacity		
		Factor*	100 Gals. Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	21,440.6	3.5	75,042.1	0.663822
Commercial	11,446.0	2.8	32,048.8	0.283503
Industrial	2,221.4	1.7	3,776.4	0.033406
Public	777.8	2.8	2,177.8	0.019265
Other Water Utilities	<u>0.3</u>	1.5	<u>0.5</u>	<u>0.000004</u>
Total	<u>35,886.1</u>		<u>113,045.6</u>	<u>1.000000</u>

\* Ratio of Maximum Hour To Average Hour Minus 1.0.

The public and private fire protection allocation factors in column 7 on the previous page are based on the relative potential demands (see Schedule G).

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Factors are based on the weightings of the average hourly consumption, the maximum hour extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption		Maximum Hour Extra Capacity		Fire Protection		Allocation Factor (9)=(4)+(6)+(8)
	100 Gals. (2)	Allocation Factor (3)	Allocation Factor (5)	Weighted Factor (4)=(3) X 0.473200	Allocation Factor (7)	Weighted Factor (8)=(7) X 0.053600	
Residential	21,440.6	0.593448	0.663822	0.280819	0.016370	0.000877	0.595796
Commercial	11,446.0	0.316811	0.283503	0.149915			0.284115
Industrial	2,221.4	0.061486	0.033406	0.029095			0.044895
Public	777.8	0.021529	0.019265	0.010188			0.019288
Other Water Utilities	0.3	0.000008	0.000004	0.000004			0.000004
Private Fire Protection	68.1	0.001885		0.000892	0.342318	0.018348	0.019240
Public Fire Protection	174.6	0.004833		0.002287	0.641312	0.034375	0.036662
<b>Total</b>	<b>36,128.8</b>	<b>1.000000</b>	<b>1.000000</b>	<b>0.473200</b>	<b>1.000000</b>	<b>0.053600</b>	<b>1.000000</b>

The weighting of the factors is based on the ratio of the capacity required for a 10-hour demand of fire flow, as related to total storage capacity. The calculation is shown on the following page.



AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES, cont.

The weighting of the factors is based on the ratio of the capacity required for a 10-hour demand of fire flow, as related to total storage capacity.

$$\text{Fire Protection Weight} = \frac{20,000 \text{ GPM} \times 60 \text{ Min.} \times 10 \text{ Hours}}{223,894,672 \text{ Gallons}} = 0.0536$$

$$\text{General Service Weight} = 1.0000 - 0.0536 = 0.9464$$

The weighting of the average hourly consumption and maximum hour extra demand for general service is based on the maximum hour ratio, as follows:

	<u>Maximum Hour Ratio</u>	<u>Percent</u>	<u>Weight</u>
Average Hour	1.00	50.00	0.4732
Extra Capacity Maximum Hour	<u>1.00</u>	<u>50.00</u>	<u>0.4732</u>
Total	<u><u>2.00</u></u>	<u><u>100.00</u></u>	<u><u>0.9464</u></u>

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 6. ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

Factors are based on the number of hydrants, as follows:

<u>Customer Classification</u> (1)	<u>Number of Hydrants</u> (2)	<u>Allocation Factor</u> (3)
Private Fire Protection	2,086	0.0911
Public Fire Protection	<u>20,798</u>	<u>0.9089</u>
Total	<u><u>22,884</u></u>	<u><u>1.0000</u></u>

FACTOR 7 AND 7A. ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below:

<u>Customer Classification</u> (1)	<u>5/8" Dollar Equivalents</u> (2)	<u>Factor 8 Allocation Factor</u> (3)	<u>Factor 8A Allocation Factor</u> (3)
Residential	377,746	0.887233	0.899566
Commercial	36,709	0.086221	0.087419
Industrial	2,144	0.005036	0.005106
Public	3,301	0.007753	0.007861
Other Water Utilities	20	0.000047	0.000048
Private Fire Protection	<u>5,837</u>	<u>0.013710</u>	
Total	<u><u>425,757</u></u>	<u><u>1.000000</u></u>	<u><u>1.000000</u></u>

AQUA PENNSYLVANIA, INC.

BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size	5/8" Dollar Equivalent	Residential		Commercial		Industrial		Public		Other Water Utilities		Private Fire Protection		Total	
		Number of Meters (3)	Weighting (4)=(2)X(3)	Number of Meters (5)	Weighting (6)=(2)X(5)	Number of Meters (7)	Weighting (8)=(2)X(7)	Number of Meters (9)	Weighting (10)=(2)X(9)	Number of Meters (11)	Weighting (12)=(2)X(11)	Number of Meters (13)	Weighting (14)=(2)X(13)	Number of Meters (15)	Weighting (16)
5/8	1.00	360,674	360,674	11,093	11,093	211	211	366	366	3	3	5,837	5,837	378,184	378,184
3/4	1.07	10,037	10,740	1,869	2,000	54	58	96	103	0	0	0	0	12,056	12,901
1	1.17	5,085	5,949	3,206	3,751	174	204	216	253	0	0	0	0	8,681	10,157
1-1/2	1.81	140	253	2,239	4,053	61	110	99	179	0	0	0	0	2,539	4,595
2	2.37	55	130	2,671	6,330	143	339	217	514	0	0	0	0	3,086	7,313
3	5.61	0	0	595	3,338	35	196	130	729	0	0	0	0	760	4,263
4	8.40	0	0	399	3,352	52	437	93	781	2	17	0	0	546	4,587
6	14.00	0	0	142	1,988	26	364	14	196	0	0	0	0	182	2,548
8	19.81	0	0	34	674	7	139	8	158	0	0	0	0	49	971
10	21.60	0	0	6	130	4	86	1	22	0	0	-	0	11	238
Total		375,991	377,746	22,254	36,709	767	2,144	1,240	3,301	5	20	5,837	5,837	406,094	425,757

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 8. ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the following page and summarized below:

<u>Customer Classification</u> (1)	<u>3/4" Dollar Equivalents</u> (2)	<u>Allocation Factor</u> (3)
Residential	378,875	0.882530
Commercial	30,049	0.069994
Industrial	1,273	0.002965
Public	2,107	0.004908
Other Water Utilities	9	0.000021
Private Fire Protection	<u>16,993</u>	<u>0.039582</u>
 Total	 <u><u>429,306</u></u>	 <u><u>1.000000</u></u>

AQUA PENNSYLVANIA, INC.

BASIS FOR ALLOCATING SERVICE COSTS TO CUSTOMER CLASSIFICATIONS

Service Size (1)	3/4" Dollar Equivalent (2)	Residential		Commercial		Industrial		Public		Other Water Utilities		Private Fire Protection		Total	
		Number of Services (3)	Weighting (4)=(2)X(3)	Number of Services (5)	Weighting (6)=(2)X(5)	Number of Services (7)	Weighting (8)=(2)X(7)	Number of Services (9)	Weighting (10)=(2)X(9)	Number of Services (11)	Weighting (12)=(2)X(11)	Number of Services (13)	Weighting (14)=(2)X(13)	Number of Services (15)	Weighting (16)
3/4	1.00	370,711	370,711	12,962	12,962	265	265	462	462	3	3	0	0	384,403	384,403
1	1.54	5,085	7,831	3,206	4,937	174	268	216	333	0	0	266	410	8,947	13,779
1-1/2	1.68	140	235	2,239	3,762	61	102	99	166	0	0	148	249	2,687	4,514
2	1.78	55	98	2,671	4,754	143	255	217	386	0	0	322	573	3,408	6,066
4	3.09	0	0	994	3,071	87	269	223	689	2	6	1,808	5,586	3,114	9,621
6	3.09	0	0	142	439	26	80	14	43	0	0	2,350	7,260	2,532	7,822
8	3.09	0	0	34	105	7	22	8	25	0	0	894	2,761	943	2,913
10	3.09	0	0	6	19	4	12	1	3	0	0	49	151	60	185
12	3.09											1	3	1	3
Total		375,991	378,875	22,254	30,049	767	1,273	1,240	2,107	5	9	5,837	16,993	406,094	429,306

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 9. ALLOCATION OF BILLING AND COLLECTING COSTS.

Factors are based on number of bills

Customer Classification	Total Bills	Allocation Factor
(1)	(2)	(3)
Residential	4,511,903	0.925466
Commercial	267,030	0.054772
Industrial	9,206	0.001888
Public	14,872	0.003050
Other Water Utilities	53	0.000011
Private Fire Protection	70,039	0.014366
Public Fire Protection	2,180	0.000447
Total	<u>4,875,282</u>	<u>1.000000</u>

FACTOR 10. ALLOCATION OF METER READING COSTS.

Factors are based on number of bills for metered customers

Customer Classification	Total Bills	Allocation Factor
(1)	(2)	(3)
Residential	4,511,903	0.925879
Commercial	267,030	0.054797
Industrial	9,206	0.001889
Public	14,872	0.003052
Other Water Utilities	53	0.000011
Private Fire Protection	70,039	0.014372
Total	<u>4,873,102</u>	<u>1.000000</u>

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 11. ALLOCATION OF CUSTOMERS' ACCOUNTING AND COLLECTING EXPENSES, MATERIAL AND SUPPLIES.

Factors are based on customers' accounting and collecting expenses, meter reading and billing and collecting expenses as follows:

<u>Customer Classification</u> (1)	<u>Operating Expenses</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$11,154,125	0.925567
Commercial	660,138	0.054778
Industrial	22,755	0.001888
Public	36,762	0.003050
Other Water Utilities	133	0.000011
Private Fire Protection	173,144	0.014367
Public Fire Protection	<u>4,091</u>	<u>0.000339</u>
Total	<u><u>\$12,051,148</u></u>	<u><u>1.000000</u></u>

FACTOR 12. ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATION AND MAINTENANCE SUPERVISION AND ENGINEERING, MAPS AND RECORDS AND OTHER DEPARTMENTAL EXPENSES

Factors are based on transmission and distribution operation expenses other than those being allocated, as follows:

<u>Customer Classification</u> (1)	<u>Transmission and Distribution Operating Expenses</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$4,057,185	0.760492
Commercial	735,995	0.137957
Industrial	86,804	0.016271
Public	56,190	0.010532
Other Water Utilities	167	0.000031
Private Fire Protection	122,330	0.022930
Public Fire Protection	<u>276,282</u>	<u>0.051787</u>
Total	<u><u>\$5,334,953</u></u>	<u><u>1.000000</u></u>

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 13. ALLOCATION OF TRANSMISSION AND DISTRIBUTION MAINTENANCE EXPENSES.

Factors are based on transmission and distribution maintenance expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Maintenance Labor	Allocation Factor
(1)	(2)	(3)
Residential	\$1,275,146	0.5853
Commercial	384,649	0.1765
Industrial	56,476	0.0259
Public	26,432	0.0121
Other Water Utilities	24	0.0000
Private Fire Protection	93,466	0.0429
Public Fire Protection	342,578	0.1572
Total	<u>\$2,178,771</u>	<u>1.0000</u>

FACTOR 14. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power and chemicals.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$34,178,400	0.7182
Commercial	8,792,870	0.1848
Industrial	1,337,572	0.0281
Public	601,738	0.0126
Other Water Utilities	675	0.0000
Private Fire Protection	791,509	0.0166
Public Fire Protection	1,888,805	0.0397
Total	<u>\$47,591,568</u>	<u>1.0000</u>



AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 15. ALLOCATION OF CASH WORKING - EXPENSES

Factors are based on the allocation of total operation and maintenance expenses.

<u>Customer Classification</u> (1)	<u>Operation &amp; Maintenance Expenses</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$86,999,380	0.6945
Commercial	26,200,649	0.2092
Industrial	4,275,688	0.0341
Public	1,791,845	0.0143
Other Water Utilities	1,671	0.0000
Private Fire Protection	1,760,433	0.0141
Public Fire Protection	<u>4,240,044</u>	<u>0.0338</u>
Total	<u>\$125,269,709</u>	<u>1.0000</u>

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

<u>Customer Classification</u> (1)	<u>Direct Labor Expense</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$22,498,475	0.6826
Commercial	7,095,037	0.2153
Industrial	1,130,131	0.0343
Public	491,017	0.0149
Other Water Utilities	504	0.0000
Private Fire Protection	488,557	0.0148
Public Fire Protection	<u>1,257,923</u>	<u>0.0382</u>
Total	<u><u>\$32,961,642</u></u>	<u><u>1.0000</u></u>

FACTOR 17. ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS, MISCELLANEOUS INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.

Factors are based on the allocation of the original cost less depreciaton other than those items being allocated, as follows:

<u>Customer Classification</u> (1)	<u>Original Cost Less Depreciation</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$2,162,713,303	0.603609
Commercial	884,755,985	0.246934
Industrial	143,150,777	0.039953
Public	60,311,426	0.016833
Other Water Utilities	32,552	0.000009
Private Fire Protection	107,313,150	0.029951
Public Fire Protection	<u>224,691,124</u>	<u>0.062711</u>
Total	<u><u>\$3,582,968,317</u></u>	<u><u>1.000000</u></u>

AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 18. ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are base on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	\$1,971,191,843	0.603689
Commercial	806,156,066	0.246890
Industrial	130,429,515	0.039945
Public	54,953,537	0.016830
Other Water Utilities	29,705	0.000009
Private Fire Protection	97,766,435	0.029942
Public Fire Protection	204,713,469	0.062695
	<u>                    </u>	<u>                    </u>
Total	<u><u>\$3,265,240,570</u></u>	<u><u>1.000000</u></u>

FACTOR 19. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS AND OTHER WATER REVENUES.

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	\$324,570,387	0.670946
Commercial	114,762,739	0.237236
Industrial	18,377,514	0.037990
Public	7,875,907	0.016281
Other Water Utilities	5,174	0.000011
Private Fire Protection	11,938,647	0.024679
Public Fire Protection	6,219,808	0.012857
	<u>                    </u>	<u>                    </u>
Total	<u><u>\$483,750,174</u></u>	<u><u>1.000000</u></u>

AQUA PENNSYLVANIA, INC.

RESIDENTIAL, COMMERCIAL, INDUSTRIAL, PUBLIC, SALES TO OTHER WATER UTILITIES AND FIRE PROTECTION CUSTOMER CLASSIFICATIONS

FACTOR 18. ORIGINAL COST MEASURE OF VALUE RATE BASE ALLOCATED TO

Account (1)	Factor Ref. (2)	Measure of Value (3)	Residential (4)	Commercial (5)	Industrial (6)	Other Public Authority (7)	Other Water Utilities (8)	Private Fire Protection (9)	Public Fire Protection (10)
<b>NONDEPRECIABLE PLANT</b>									
301	17	6,621,061	3,996,532	1,634,965	264,531	111,452	60	198,307	415,213
302	17	2,883,289	1,740,379	711,982	115,196	48,534	26	86,357	180,814
303	17	2,626,891	1,585,615	648,669	104,952	44,218	24	78,678	164,735
303.1	1	3,559,184	2,112,194	1,127,589	218,836	76,626	32	6,706	17,202
303.1	1	2,856,843	1,695,391	905,079	175,653	61,505	26	5,382	13,807
303.1	2	6,878,759	4,156,415	2,158,692	383,897	146,696	55	9,259	23,745
303.2	3	1,198,525	675,931	350,356	62,307	23,809	10	29,607	56,506
303.3	2	1,662,385	1,004,479	521,690	92,776	35,452	13	2,238	5,739
303.4	3	1,711,221	965,076	500,229	88,960	33,993	14	42,272	80,677
303.5	5	3,174,949	783,441	373,597	59,035	25,363	5	25,300	48,209
303.6	14	3,173,180	2,278,854	586,267	89,182	40,122	44	52,773	125,937
303.6	14	1,002,955	720,283	185,303	28,188	12,681	14	16,680	39,805
303.6	14	1,236,302	887,864	228,415	34,746	15,632	17	20,561	49,066
		36,725,544	22,602,454	9,932,833	1,718,259	676,083	340	574,120	1,221,455
<b>DEPRECIABLE PLANT</b>									
304.2	2	7,822,452	4,726,631	2,454,842	436,563	166,822	63	10,529	27,003
	3	40,574,833	22,882,948	11,860,957	2,109,323	806,019	325	1,002,320	1,912,941
304.3	2	129,873,256	78,474,487	40,756,825	7,248,097	2,769,677	1,039	174,809	448,322
	2	37,432,908	22,618,424	11,747,195	2,089,093	798,294	299	50,385	129,218
304.3	14	59,996,348	43,087,038	11,084,745	1,686,197	758,594	840	997,799	2,381,135
304.3	14	3,747,885	2,691,586	692,448	105,334	47,388	52	62,331	148,746
304.3	14	25,226,983	18,117,035	4,660,862	709,004	318,970	353	419,550	1,001,209
305	1	30,647,621	18,187,800	9,709,503	1,884,369	659,813	276	57,740	148,120
306	2	12,322,502	7,445,736	3,867,048	687,707	262,790	99	16,586	42,537
307	2	49,380,460	29,837,600	15,496,576	2,755,874	1,053,088	395	66,466	170,461
310.4	3	24,326,543	13,719,416	7,111,208	1,264,640	483,247	195	600,939	1,146,899
311	3	56,093,858	31,635,197	16,397,525	2,916,095	1,114,304	449	1,385,687	2,644,601
320	2	60,285,397	36,426,789	18,918,763	3,364,468	1,285,646	482	81,144	208,105
	2	12,476,901	7,539,031	3,915,501	696,323	266,082	100	16,794	43,070
	2	124,057,977	74,960,668	38,931,874	6,923,552	2,645,660	992	166,982	428,248
	2	0	-	-	-	-	-	-	-

AQUA PENNSYLVANIA, INC.

RESIDENTIAL, COMMERCIAL, INDUSTRIAL, PUBLIC, SALES TO OTHER WATER UTILITIES AND FIRE PROTECTION CUSTOMER CLASSIFICATIONS

FACTOR 18. ORIGINAL COST MEASURE OF VALUE RATE BASE ALLOCATED TO

Account (1)	Factor Ref. (2)	Measure of Value (3)	Residential (4)	Commercial (5)	Industrial (6)	Other Public Authority (7)	Other Water Utilities (8)	Private Fire Protection (9)	Public Fire Protection (10)
Painting	2	7,505	4,535	2,355	419	160	-	10	26
Filter Media	2	55,053	33,265	17,277	3,072	1,174	-	74	190
Distr. Reservoirs & Standpipes									
Tanks	5	66,544,823	39,647,139	18,906,382	2,987,530	1,283,517	266	1,280,322	2,439,666
Tank Painting	5	25,738,565	15,334,934	7,312,712	1,155,533	496,445	103	495,210	943,627
Mains & Accessories									
12 Inch and Over	3	500,871,975	282,476,268	146,416,398	26,038,330	9,949,822	4,007	12,373,040	23,614,110
Under 12 Inch	4	1,705,246,483	957,129,273	455,539,545	72,007,443	30,955,339	10,231	65,641,758	123,962,893
Services	8	350,247,240	309,103,698	24,515,205	1,038,483	1,719,013	7,355	13,863,486	-
Meters									
Remote	7	47,471,862	42,118,604	4,093,071	239,068	368,049	2,231	650,839	-
ERTS	7A	15,726,623	14,147,135	1,374,806	80,300	123,627	755	-	-
Fire Hydrants	6	63,960,247	-	-	-	-	-	5,826,779	58,133,468
Back Flow Prevention Devices	7	349,708	310,273	30,152	1,761	2,711	16	4,794	-
Other Plant and Misc.	14	671,357	482,143	124,038	18,868	8,489	9	11,165	26,645
Office Furniture & Equipment									
Furniture	14	4,026,080	2,891,374	743,846	113,153	50,906	56	66,958	159,787
Mechanical Equipment	14	1,490,730	1,070,584	275,423	41,897	18,849	21	24,792	59,164
Computers	14	48,595,198	34,899,176	8,978,303	1,365,768	614,438	680	808,187	1,928,646
Transportation Equipment									
Vehicles	14	10,079,628	7,238,796	1,862,282	283,288	127,447	141	167,634	400,040
Other	14	3,563,761	2,559,354	658,430	100,160	45,060	50	59,269	141,439
Stores Equipment	14	2,575,775	1,849,822	475,892	72,392	32,568	36	42,838	102,227
Shop Equipment	14	861,002	618,339	159,076	24,198	10,887	12	14,319	34,171
Tools & Work Equipment - General	14	13,539,451	9,723,506	2,501,508	380,526	171,193	190	225,175	537,354
Laboratory Equipment									
Conventional	2	1,010,861	610,802	317,228	56,415	21,558	8	1,361	3,489
Electronic	2	2,744,363	1,658,251	861,236	153,160	58,526	22	3,694	9,474
Communication Equipment									
Communication Equipment	14	2,836,599	2,037,135	524,082	79,723	35,866	40	47,175	112,579
SCADA Equipment	3	14,756,231	8,322,057	4,313,586	767,117	293,133	118	364,523	695,697
Miscellaneous Equipment	14	1,110,458	797,488	205,165	31,209	14,041	16	18,468	44,072
Other Intangible Plant	14	26,509	19,038	4,898	745	335	-	441	1,052
Total Depreciable Plant		3,558,374,011	2,147,433,375	877,818,768	141,917,197	59,839,547	32,322	107,102,372	224,230,431
Total Utility Plant		3,595,099,555	2,170,035,829	887,751,601	143,635,456	60,515,630	32,662	107,676,492	225,451,886

AQUA PENNSYLVANIA, INC.

RESIDENTIAL, COMMERCIAL, INDUSTRIAL, PUBLIC, SALES TO OTHER WATER UTILITIES AND FIRE PROTECTION CUSTOMER CLASSIFICATIONS

FACTOR 18. ORIGINAL COST MEASURE OF VALUE RATE BASE ALLOCATED TO

Account (1)	Factor Ref. (2)	Measure of Value (3)	Residential (4)	Commercial (5)	Industrial (6)	Other Public Authority (7)	Other Water Utilities (8)	Private Fire Protection (9)	Public Fire Protection (10)
OTHER RATE BASE ELEMENTS									
Materials and Supplies	17	6,954,190	4,197,612	1,717,226	277,841	117,060	63	208,285	436,104
Cash Working Capital - Expenses	14	2,286,000	1,641,716	422,355	64,248	28,904	32	38,018	90,727
Cash Working Capital - Taxes	17	-	-	-	-	-	-	-	-
Cash Working Capital - P/R Tax	16	-	-	-	-	-	-	-	-
Acquisition Adjustments	17	5,407,913	3,264,265	1,335,398	216,062	91,031	49	161,972	339,136
Previously Approved Rate Base Item	17	-	-	-	-	-	-	-	-
Hubbard Contract Adjustment	2	-	-	-	-	-	-	-	-
Deferred Income Taxes	17	(344,507,090)	(207,947,579)	(85,070,514)	(13,764,092)	(5,799,088)	(3,101)	(10,318,332)	(21,604,384)
Accrued Interest	17	-	-	-	-	-	-	-	-
Total Other Rate Base Elements		(329,858,986)	(198,843,986)	(81,595,535)	(13,205,941)	(5,562,093)	(2,957)	(9,910,057)	(20,738,417)
Total Original Cost Measure of Value		3,265,240,569	1,971,191,843	806,156,066	130,429,515	54,953,537	29,705	97,766,435	204,713,469

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AQUA PENNSYLVANIA, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 20. ALLOCATION OF UNRECOVERED PUBLIC FIRE PROTECTION.

These costs are deducted directly from the Public Fire Protection Classification.

<u>Customer Classification</u> (1)	<u>Allocation Factor</u> (2)
Public Fire Protection	1.0000

FACTOR 21. REALLOCATION OF UNRECOVERED PUBLIC FIRE PROTECTION.

These costs are allocated based on meter equivalents.

<u>Customer Classification</u> (1)	<u>5/8" Dollar Equivalents</u> (2)	<u>Allocation Factor</u> (3)
Residential	377,746	0.899610
Commercial	36,709	0.087423
Industrial	2,144	0.005106
Public	<u>3,301</u>	<u>0.007861</u>
Total	<u><u>419,900</u></u>	<u><u>1.000000</u></u>

AQUA PENNSYLVANIA, INC.

SUMMARY OF AVERAGE DAILY SEND OUT,  
MAXIMUM DAILY USE AND MAXIMUM HOURLY USE FOR THE YEARS 1962 - 2017

Year	Average Daily Send Out (MGD)	Maximum Daily Use			Maximum Hourly Use		
		MGD	Ratio to Average	Highest Use Day	MGD	Ratio to Average	Highest Use Hour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1962	56.90	78.18	1.37	5/19/62	131.83	2.32	6-7PM
1963	59.10	88.52	1.50	6/27/63	145.10	2.46	7-8PM
1966	66.50	94.68	1.42	6/25/66	133.20	2.00	7-8PM
1967	68.80	101.83	1.48	6/16/67	152.40	2.22	8-9PM
1968	72.90	92.06	1.26	7/23/68	152.11	2.09	7-8PM
1969	73.90	93.41	1.26	5/29/69	129.98	1.76	6-7PM
1970	74.60	91.28	1.22	9/24/70	129.46	1.74	6-7PM
1971	76.20	99.97	1.31	7/08/71	145.60	1.91	8-9PM
1972	75.90	94.35	1.24	8/25/72	137.59	1.81	6-7PM
1973	76.30	95.65	1.25	6/11/73	142.13	1.86	10-11AM
1974	77.60	97.21	1.25	6/10/74	134.21	1.73	7-8PM
1975	77.10	90.78	1.18	5/24/75	136.70	1.77	9-10AM
1976	79.40	96.90	1.22	6/10/76	132.20	1.66	7-8AM
1977	79.60	100.51	1.26	5/28/77	149.21	1.87	10-11AM
1978	78.60	91.53	1.16	6/19/78	129.77	1.65	8-9AM
1979	78.20	88.75	1.13	5/10/79	122.81	1.57	7-8AM
1980	80.80	102.04	1.26	7/15/80	147.88	1.83	7-8PM
1981	76.80	86.30	1.12	6/16/81	118.08	1.54	9-10PM
1982	78.50	93.00	1.18	7/26/82	130.01	1.66	N/A
1983	80.70	104.43	1.29	7/16/83	146.66	1.82	10-11AM
1984	82.20	100.75	1.23	6/11/84	152.09	1.85	7-8PM
1985	81.30	92.21	1.13	4/22/85	129.19	1.59	7-8AM
1986	88.00	114.19	1.30	7/07/86	157.94	1.79	7-8PM
1987	87.40	107.84	1.23	8/04/87	147.12	1.68	7-8PM
1988	89.20	117.52	1.32	6/21/88	128.90	1.45	8-9PM
1989	87.90	101.19	1.15	7/11/89	138.00	1.57	7-8AM
1990	88.40	102.75	1.16	7/04/90	151.52	1.71	9-10AM
1991	87.20	113.49	1.30	6/10/91	159.00	1.82	8-9PM
1992	85.40	100.30	1.17	6/15/92	132.00	1.55	9-10AM
1993	89.10	118.80	1.33	7/10/93	170.00	1.91	9-10AM
1994	89.80	113.90	1.27	7/13/94	142.40	1.59	7-8AM
1995	92.60	121.80	1.32	7/15/95	180.15	1.95	9-10AM
1996	94.20	110.00	1.17	6/8/96	161.09	1.71	9-10AM
1997	103.80	142.53	1.37	7/16/97	205.57	1.98	7-8PM
1998	108.80	139.39	1.28	7/29/98	182.65	1.68	7-8AM
1999	108.10	148.16	1.37	7/16/99	198.99	1.84	8-9PM
2000	113.54	136.91	1.21	6/11/00	195.58	1.72	10-11AM
2001	119.11	160.48	1.35	8/8/01	228.58	1.92	11-12AM
2002	115.41	152.07	1.32	8/14/02	196.46	1.70	7-8AM
2003	111.22	130.48	1.17	6/30/03	172.19	1.55	7-8AM
2004	112.93	133.44	1.18	7/11/04	177.15	1.57	8-9PM
2005	116.28	142.40	1.22	6/26/05	192.45	1.66	10-11AM
2006	113.19	142.50	1.26	8/23/06	180.09	1.59	8-9AM
2007	114.41	137.64	1.20	8/4/07	190.15	1.66	9-10AM
2008	113.27	141.79	1.25	7/18/08	192.98	1.70	3-4PM
2009	106.32	123.45	1.16	5/25/09	173.22	1.63	11-12PM
2010	109.92	152.25	1.39	7/7/10	222.17	2.02	6-7PM
2011	108.90	149.69	1.37	7/22/11	210.20	1.93	10-11AM
2012 *	106.33	139.36	1.31	7/9/12	180.20	1.69	10-11PM
2013	129.91	**	**		**	**	**
2014	125.67	**	**		**	**	**
2015	121.52	**	**		**	**	**
2016	121.10	**	**		**	**	**
2017	116.50	**	**		**	**	**

\* Data for 2012 and prior reflect southeast PA only.

\*\* Maximum day and hour data not available State-wide



AQUA PENNSYLVANIA, INC.

BASIS FOR ALLOCATING DEMAND RELATED COSTS OF FIRE SERVICE  
TO RESIDENTIAL AND PRIVATE AND PUBLIC FIRE PROTECTION CUSTOMER CLASSIFICATIONS

Description			Restrictive Diameters Squared	Quantity	Relative Demand	Allocation Factor
(1)			(2)	(3)	(4)=(2)x(3)	(5)
<u>GENERAL SERVICE - RESIDENTIAL</u>						
3/4	- inch meter		0.56	75	42	
1	- inch meter		1.00	6,669	6,669	
1-1/2	- inch meter		2.25	1,944	4,374	
2	- inch meter		4.00	71	282	
				8,759	11,367	0.016370
<u>PRIVATE FIRE PROTECTION</u>						
<u>Hydrant</u>	<u>Lead</u>	<u>Nozzle Sizes</u>				
6	6	2-2 1/2", 1-4 1/2"	32.75	1,584	51,862	
4	4	2-2 1/2", 1-4 1/2"	16.00	200	3,200	
4	4	2-2 1/2"	12.50	200	2,500	
5	6	2-2 1/2", 1-4"	25.00	102	2,550	
<u>Fire Lines</u>						
1	-inch		1.00	266	266	
1-1/2	-inch		2.25	148	333	
2	-inch		4.00	322	1,287	
3	-inch		9.00	3	27	
4	-inch		16.00	1,805	28,874	
6	-inch		36.00	2,350	84,582	
8	-inch		64.00	894	57,189	
10	-inch		100.00	49	4,875	
12	-inch		144.00	1	144	
Total Fire Lines				5,837	177,577	
Total Private Fire Protection				7,922	237,689	0.342318
<u>PUBLIC FIRE PROTECTION</u>						
<u>Hydrant</u>	<u>Lead</u>	<u>Nozzle Sizes</u>				
6	6	2-5"	25.00	14,752	368,800	
6	6	2-2 1/2",	12.50	2,170	27,128	
4	4	2-2 1/2", 1-4 1/2"	16.00	95	1,520	
4	4	2-2 1/2"	12.50	590	7,375	
6	4	2-2 1/4", 1-4 1/2"	16.00	167	2,672	
5	6	2-2 1/2"	12.50	3,024	37,800	
Total Public Fire Protection				20,798	445,295	0.641312
Total Fire Protection				37,479	694,351	1.000000

AQUA PENNSYLVANIA IINC.

CALCULATION OF COMMODITY/DEMAND RATES FOR STANDBY SERVICE

**Firm Standby Service:**

<u>Description:</u>	<u>Cost of Service</u>		<u>Units Hundred Gals.</u>	<u>Cost Per Unit</u>
	<u>Annual</u>	<u>Per Month</u>		
Total Base Costs	215,376,996			
Less: Variable Costs	<u>18,736,731</u>		314,362,820	0.0596 Per Hundred Gallons
Fixed Base Costs	196,640,265	\$16,386,689	861,268 Avg Day	19.0262 Per Hundred of Avg Day
Max Day Extra Capacity	44,423,526	\$3,701,961	1,757,997 Peak Day	2.1058 Per Hundred of Peak Day
Max Hour Extra Capacity	81,436,146	\$6,786,346	148,932 Peak Hour	45.5668 Per Hundred Peak Hour

**Interruptible Standby Service:**

<u>Description:</u>	<u>Cost of Service</u>		<u>Units Hundred Gals.</u>	<u>Cost Per Unit</u>
	<u>Annual</u>	<u>Per Month</u>		
Fixed Base Costs	196,640,265			
Less: Depreciation Return and Taxes	<u>161,300,758</u>			
Total	35,339,507	\$2,944,959	861,268 Avg Day	3.4193 Per Hundred of Avg Day
Max Day Extra Capacity	44,423,526			
Less: Depreciation Return and Taxes	<u>32,653,511</u>			
Total	11,770,015	\$980,835	1,757,997 Peak Day	0.5579 Per Hundred of Peak Day
Max Hour Extra Capacity	81,436,146			
Less: Depreciation Return and Taxes	<u>75,368,997</u>			
Total	6,067,149	\$505,596	148,932 Peak Hour	3.3948 Per Hundred Peak Hour
Depreciation, Return & Taxes for Base, Max Day and Max Hour	269,323,266			
Plus: Variable Costs	<u>18,736,731</u>			
Total	288,059,997		314,362,820	\$0.9163 Per Hundred Gallons

**AQUA PENNSYLVANIA, INC.**  
**COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES**

	Main Division			Superior			Western Et Al			Bensalem			Chalfont		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
<b>RESIDENTIAL</b>															
<b>Customer Charges:</b>															
5/8	16.00	18.50	15.6%	16.80	18.50	10.1%	26.00	30.10	15.8%	16.00	18.50	15.6%	15.00	18.50	23.3%
3/4	27.50	31.80	15.6%	16.80	24.30	44.6%	26.00	30.10	15.8%	27.50	31.80	15.6%	15.00	24.30	62.0%
1	46.70	54.00	15.6%	26.25	40.10	52.8%	46.70	54.00	15.6%	46.70	54.00	15.6%	21.40	40.10	87.4%
1-1/2	89.90	103.90	15.6%	26.25	65.10	148.0%	89.90	103.90	15.6%	89.90	103.90	15.6%	35.50	65.10	83.4%
2	127.90	147.90	15.6%	35.00	91.50	161.4%	127.90	147.90	15.6%	127.90	147.90	15.6%	71.00	91.50	28.9%
3	257.00	297.00	15.6%	43.75	170.40	289.5%	257.00	297.00	15.6%	257.00	297.00	15.6%	213.10	170.40	-20.0%
4	418.00	483.00	15.6%	105.00	294.00	180.0%	418.00	483.00	15.6%	418.00	483.00	15.6%	227.50	294.00	29.2%
6	862.00	997.00	15.7%	157.50	997.00	533.0%	862.00	997.00	15.6%	862.00	997.00	15.7%	356.50	997.00	179.7%
8	1,508.00	1,744.00	15.6%	402.50	1,744.00	333.3%	1,508.00	1,743.60	15.6%	1,508.00	1,744.00	15.6%	1,744.00	1,744.00	
10	2,229.00	2,577.00	15.6%	22.98	2,577.00	-9.9%	2,229.00	2,577.30	15.6%	2,229.00	2,577.00	15.6%	2,577.00	2,577.00	
5/8,3/4	18.21	20.71	13.7%		20.71		18.21	20.71	13.7%	18.21	20.71	13.7%			
5/8,1	18.56	21.06	13.5%		21.06		18.56	21.06	13.5%	18.56	21.06	13.5%			
5/8,1-1/2	21.89	24.39	11.4%		24.39		21.89	24.39	11.4%	21.89	24.39	11.4%	21.89	24.39	11.4%
5/8,2	24.00	26.50	10.4%		26.50		24.00	26.50	10.4%	24.00	26.50	10.4%			
3/4,1	30.06	34.36	14.3%		34.36		30.06	34.36	14.3%	30.06	34.36	14.3%			
3/4,1-1/2	33.39	37.69	12.9%		37.69		33.39	37.69	12.9%	33.39	37.69	12.9%			
3/4,2	35.50	39.80	12.1%		39.80		35.50	39.80	12.1%	35.50	39.80	12.1%			
1,1	49.26	56.56	14.8%		56.56		49.26	56.56	14.8%	49.26	56.56	14.8%			
1,1-1/2	52.59	59.89	13.9%		59.89		52.59	59.89	13.9%	52.59	59.89	13.9%			
1,2	54.70	62.00	13.3%		62.00		54.70	62.00	13.3%	54.70	62.00	13.3%			
1-1/2,1	91.96	99.26	7.9%		99.26		91.96	99.26	7.9%	91.96	99.26	7.9%			
1-1/2,1-1/2	95.29	102.59	7.7%		102.59		95.29	102.59	7.7%	95.29	102.59	7.7%			
1-1/2,2	97.40	104.70	7.5%		104.70		97.40	104.70	7.5%	97.40	104.70	7.5%			
2,1-1/2	130.79	138.09	5.6%		138.09		130.79	138.09	5.6%	130.79	138.09	5.6%			
2,2	132.90	140.20	5.5%		140.20		132.90	140.20	5.5%	132.90	140.20	5.5%			
<b>Consumption Charges:</b>															
1st block	0.9071	1.1330	24.9%	0.9528	1.1330	18.9%	0.7212	0.9474	31.4%	0.8800	1.1330	28.8%	0.7100	1.1330	59.6%
2nd block	1.0352	1.3418	29.6%		1.3418		1.0352	1.3418	29.6%		1.3418			1.3418	
3rd block															
Block Size (100 gallons)															
First	20	20		40	20		40	40		0	20		0	20	
Over	20	20		40	20		40	40		0	20		0	20	
Average Bill at 4,080 Gallons*	\$ 55.67	\$ 69.07	24.1%	\$ 55.67	\$ 69.07	24.1%	\$ 55.68	\$ 69.07	24.0%	\$ 51.90	\$ 69.07	33.1%	\$ 43.97	\$ 69.07	57.1%
*Excludes DSIC and STAS	\$ 59.85	\$ 13.40	15.4%	\$ 59.85	\$ 13.40	15.4%	\$ 59.86	\$ 13.39	15.4%	\$ 55.80	\$ 17.17	23.8%	\$ 47.27	\$ 25.10	46.1%

AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES

	Main Division			Superior			Western Et Al			Bensalem			Chalfont		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
<b>COMMERCIAL</b>															
<b>Customer Charges:</b>															
5/8	16.00	18.50	15.6%	16.80	18.50	10.1%	26.00	30.10	15.8%	16.00	18.50	15.6%	15.00	18.50	23.3%
3/4	27.50	31.80	15.6%	16.80	24.30	44.6%	26.00	30.10	15.8%	27.50	31.80	15.6%	15.00	24.30	62.0%
1	46.70	54.00	15.6%	26.25	40.10	52.8%	46.70	54.00	15.6%	46.70	54.00	15.6%	21.40	40.10	87.4%
1-1/2	89.90	103.90	15.6%	26.25	65.10	148.0%	89.90	103.90	15.6%	89.90	103.90	15.6%	35.50	65.10	83.4%
2	127.90	147.90	15.6%	35.00	91.50	161.4%	127.90	147.90	15.6%	127.90	147.90	15.6%	71.00	91.50	28.9%
3	257.00	297.00	15.6%	43.75	170.40	289.5%	257.00	297.00	15.6%	257.00	297.00	15.6%	213.10	170.40	-20.0%
4	418.00	483.00	15.6%	105.00	294.00	180.0%	418.00	483.00	15.6%	418.00	483.00	15.6%	227.50	294.00	29.2%
6	862.00	997.00	15.7%	157.50	997.00	533.0%	862.00	997.00	15.7%	862.00	997.00	15.7%	356.50	997.00	179.7%
8	1,508.00	1,744.00	15.6%	402.50	1,744.00	333.3%	1,508.00	1,744.00	15.6%	1,508.00	1,744.00	15.6%	1,744.00	1,744.00	
10	2,229.00	2,577.00	15.6%		2,577.00		2,229.00	2,577.00	15.6%	2,229.00	2,577.00	15.6%		2,577.00	
12															
<b>Consumption Charges:</b>															
1st block	1.0000	1.2490	24.9%	0.9528	1.2490	31.1%	1.0000	1.2490	24.9%	0.8800	1.2490	41.9%	0.7100	1.2490	75.9%
2nd block	0.8785	1.0973	24.9%	0.9528	1.0973	15.2%	0.8785	1.0973	24.9%	0.8800	1.0973	24.7%	0.7100	1.0973	54.5%
3rd block	0.7288	0.9104	24.9%	0.9528	0.9104	-4.4%	0.7288	0.9104	24.9%	0.7288	0.9104	24.9%	0.7100	0.9104	28.2%
4th block	0.6668	0.8330	24.9%	0.9528	0.8330	-12.6%	0.6668	0.8330	24.9%	0.6668	0.8330	24.9%	0.7100	0.8330	17.3%
5th block	0.0000	-	#DIV/0!												
6th block	0.0000	-	#DIV/0!												
<b>Block Size (100 gallons)</b>															
First	100						100			100			0		
Next	233						233			233			0		
Next	3,000						3,000			3,000			0		
Over	3,333						3,333			3,333			0		
<b>INDUSTRIAL</b>															
<b>Customer Charges:</b>															
5/8	16.00	18.50	15.6%				26.00	30.10	15.8%	16.00	18.50	15.6%	15.00	18.50	23.3%
3/4	27.50	31.80	15.6%				26.00	30.10	15.8%	27.50	31.80	15.6%	15.00	24.30	62.0%
1	46.70	54.00	15.6%				46.70	54.00	15.6%	46.70	54.00	15.6%	21.40	40.10	87.4%
1-1/2	89.90	103.90	15.6%				89.90	103.90	15.6%	89.90	103.90	15.6%	35.50	65.10	83.4%
2	127.90	147.90	15.6%				127.90	147.90	15.6%	127.90	147.90	15.6%	71.00	91.50	28.9%
3	257.00	297.00	15.6%				257.00	297.00	15.6%	257.00	297.00	15.6%	213.10	170.40	-20.0%
4	418.00	483.00	15.6%				418.00	483.00	15.6%	418.00	483.00	15.6%	227.50	294.00	29.2%
6	862.00	997.00	15.7%				862.00	997.00	15.7%	862.00	997.00	15.7%	356.50	997.00	179.7%
8	1,508.00	1,744.00	15.6%				1,508.00	1,744.00	15.6%	1,508.00	1,744.00	15.6%	1,744.00	1,744.00	
10	2,229.00	2,577.00	15.6%				2,229.00	2,577.00	15.6%	2,229.00	2,577.00	15.6%		2,577.00	
12															
<b>Consumption Charges:</b>															
1st block	1.0000	1.2490	24.9%				1.0000	1.2490	24.9%	0.8800	1.2490	41.9%	0.7100	1.2490	75.9%
2nd block	0.8785	1.0973	24.9%				0.8785	1.0973	24.9%	0.8800	1.0973	24.7%	0.7100	1.0973	54.5%
3rd block	0.7288	0.9104	24.9%				0.7288	0.9104	24.9%	0.7288	0.9104	24.9%	0.7100	0.9104	28.2%
4th block	0.6668	0.8330	24.9%				0.6668	0.8330	24.9%	0.6668	0.8330	24.9%	0.7100	0.8330	17.3%
5th block	0.6052	0.7868	30.0%				0.6052	0.7868	30.0%	0.6052	0.7868	30.0%	0	0.7868	
6th block	0.4842	0.6293	30.0%				0.4842	0.6293	30.0%	0.4842	0.6293	30.0%	0	0.6293	
<b>Block Size (100 gallons)</b>															
First	100						100			100			0		
Next	233						233			233			0		
Next	3,000						3,000			3,000			0		
Next	30,000						30,000			30,000			0		
Next	66,667						66,667			66,667			0		
Over	100,000						100,000			100,000			0		

**AQUA PENNSYLVANIA, INC.**  
**COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES**

	Main Division			Superior			Western EtAl			Bensalem			Chalfont		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
<b>Public</b>															
<b>Customer Charges:</b>															
5/8	16.00	18.50	15.6%	16.80	18.50	10.1%	26.00	30.10	15.8%	16.00	18.50	15.6%	15.00	18.50	23.3%
3/4	27.50	31.80	15.6%	16.80	24.30	44.6%	26.00	30.10	15.8%	27.50	31.80	15.6%	15.00	24.30	62.0%
1	46.70	54.00	15.6%	26.25	40.10	52.8%	46.70	54.00	15.6%	46.70	54.00	15.6%	21.40	40.10	87.4%
1-1/2	89.90	103.90	15.6%	26.25	65.10	148.0%	89.90	103.90	15.6%	89.90	103.90	15.6%	35.50	65.10	83.4%
2	127.90	147.90	15.6%	35.00	91.50	161.4%	127.90	147.90	15.6%	127.90	147.90	15.6%	71.00	91.50	28.9%
3	257.00	297.00	15.6%	43.75	170.40	289.5%	257.00	297.00	15.6%	257.00	297.00	15.6%	213.10	170.40	-20.0%
4	418.00	483.00	15.6%	105.00	294.00	180.0%	418.00	483.00	15.6%	418.00	483.00	15.6%	227.50	294.00	29.2%
6	862.00	997.00	15.7%	157.50	997.00	533.0%	862.00	997.00	15.7%	862.00	997.00	15.7%			
8	1,508.00	1,744.00	15.6%	402.50	1,744.00	333.3%	1,508.00	1,744.00	15.6%	1,508.00	1,744.00	15.6%			
10	2,229.00	2,577.00	15.6%		2,577.00										
5/8-1-1/2	21.89	26.50	21.1%												
<b>Consumption Charges:</b>															
1st block	1,000.00	1,249.00	24.9%	0.9528	1,249.00	31.1%	1,000.00	1,249.00	24.9%	0.8800	1,249.00	41.9%	0.7100	1,249.00	75.9%
2nd block	0.8785	1.0973	24.9%		1.0973		0.8785	1.0973	24.9%	0.8800	1.0973	24.7%		1.0973	
3rd block	0.7288	0.9104	24.9%		0.9104		0.7288	0.9104	24.9%	0.7288	0.9104	24.9%		0.9104	
4th block	0.6668	0.8330	24.9%		0.8330		0.6668	0.8330	24.9%	0.6668	0.8330	24.9%		0.8330	
<b>Sales to Other Water Utilities</b>															
<b>Customer Charges:</b>															
First	100				100					100			0		
Next	233				233					233			0		
Next	3,000				3,000					3,000			0		
Over	3,333				3,333					3,333			0		

	Main Division			Superior			Western EtAl			Bensalem			Chalfont		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
<b>Consumption Charges:</b>															
All consumption	0.8833	1,249.00	41.4%				0.8833	1,249.00	41.4%	0.88	1.25	41.4%			
First Block	0.1998	0.2100	5.1%												
Hubbard Township contract	0.5660	0.6890	21.7%												
Chemung MD %	0.2450	0.2570	4.9%												
Horsham (contract) CPI	0.6210	0.6520	5.0%												
Bucks County (contract) ?	0.5170	0.6300	21.9%												
New Wilmington (contract) MD%	0.2500	0.3050	22.0%												
United Water CPI	0.179484	0.1910	6.4%												
Masury Water Company April '17 to June '17	0.18176	0.1910	5.1%												
July '17 to April '18															
Borough of Sharpville CPI	0.2270	0.2380	4.8%												
Schwensville ?	0.3600	0.3780	5.0%												
Warwick (contract) CPI	0.2190	0.2300	5.0%												
up to 243,333	0.2190	0.2300	5.0%												
over 243,333															

AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES

	Oakland Beach and Lakeside		CS Water (Masthope)		Country Club Gardens		Clarendon		Kratzerville		
	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	
<b>RESIDENTIAL</b>											
<b>Customer Charges:</b>											
5/8	23.50	30.10	28.1%	30.10	15.8%	18.50	23.3%	18.50	16.00	18.50	15.6%
3/4	23.50	30.10	28.1%	30.10	15.8%	31.80	112.0%	31.80	27.50	31.80	15.6%
1	46.70	54.00	15.6%	54.00	15.6%	30.00	80.0%	54.00	46.70	54.00	15.6%
1-1/2	89.90	103.90	15.6%	103.90	15.6%	50.00	107.8%	103.90	89.90	103.90	15.6%
2	127.90	147.90	15.6%	147.90	15.6%	70.00	111.3%	147.90	127.90	147.90	15.6%
3	257.00	297.20	15.6%	297.20	15.6%	133.34	122.7%	297.00	257.00	297.00	15.6%
4	418.00	483.30	15.6%	483.30	15.6%	211.66	128.2%	483.00	418.00	483.00	15.6%
6	862.00	996.70	15.6%	996.70	15.6%	428.34	132.8%	997.00	862.00	997.00	15.7%
8	1508.00	1,743.60	15.6%	1,743.60	15.6%	741.66	135.1%	1,744.00	1508.00	1,744.00	15.6%
10	2229.00	2,577.30	15.6%	2,577.30	15.6%	1093.34	135.7%	2,577.00	2229.00	2,577.00	15.6%
5/8,3/4											
5/8,1						21.89					
5/8,1-1/2						24.39					
5/8,2											
3/4,1											
3/4,1-1/2											
3/4,2											
1,1											
1,1-1/2											
1,2											
1-1/2,1											
1-1/2,1-1/2											
1-1/2,2											
2,1-1/2											
2,2											
<b>Consumption Charges:</b>											
1st block	0.7212	0.9474	31.4%	0.9474	97.4%	0.5000	63.4%	0.8170	0.7208	1.1330	57.2%
2nd block	0.8962	1.3418	49.7%	1.3418	49.7%	0.6000	61.8%	0.9710	0.8208	1.3418	63.5%
3rd block											
Block Size (100 gallons)											
First	40	40		40		20		20	20	20	
Over	40	40		40		20		20	20	20	
Average Bill at 4,080 Gallons	\$ 53.06	\$ 69.07	30.2%	\$ 69.07	50.4%	\$ 37.48	46.8%	\$ 55.04	\$ 47.49	\$ 69.07	45.4%
*Excludes DSIC and STAS	\$ 57.04	\$ 16.00	21.1%	\$ 23.15	39.9%	\$ 40.29	36.6%	\$ 17.56	\$ 51.05	\$ 21.58	35.3%
									\$ 48.64	\$ 69.07	42.0%
									\$ 52.29	\$ 20.43	32.1%

AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES

Oakland Beach and Lakeside		CS Water (Masthope)		Country Club Gardens		Clarendon		Kratzville	
Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates
<b>COMMERCIAL</b>									
<b>Customer Charges:</b>									
5/8	30.10	28.1%	30.10	15.8%	18.50	23.3%	16.00	18.50	15.6%
3/4	23.50	28.1%	26.00	15.8%	31.80	112.0%	27.50	31.80	15.6%
1	46.70	15.6%	54.00	15.6%	30.00	80.0%	40.00	54.00	35.0%
1-1/2	89.90	103.90	103.90	15.6%	50.00	107.8%	40.00	103.90	159.8%
2	127.90	147.90	147.90	15.6%	70.00	111.3%	40.00	147.90	147.90
3	257.00	297.20	297.20	15.6%	133.34	122.7%	70.00	297.00	324.3%
4	418.00	483.30	483.30	15.6%	211.66	128.2%	418.00	483.00	15.6%
6	862.00	996.70	996.70	15.6%	428.34	132.8%	862.00	997.00	15.7%
8	1508.00	1743.60	1743.60	15.6%	741.66	135.1%	1,508.00	1,744.00	15.6%
10	2229.00	2577.30	2577.30	15.6%	1093.34	135.7%	2,229.00	2,577.00	15.6%
12									
<b>Consumption Charges:</b>									
1st block	1.0000	1.2490	24.9%	1.0000	1.2490	38.7%	0.7208	1.2490	73.3%
2nd block	0.8785	1.0973	24.9%	0.8785	1.0973	24.9%	0.7208	1.0973	52.2%
3rd block	0.7288	0.9104	24.9%	0.7288	0.9104	24.9%	0.7208	0.9104	26.3%
4th block	0.6668	0.8330	24.9%	0.6668	0.8330	24.9%	0.6668	0.8330	24.9%
5th block									
6th block									
<b>Block Size (100 gallons)</b>									
First	100		100		0		100	800	
Next	233		233				233	2,530	
Next	3,000		3,000				3,000	3,000	
Over	3,333		3,333				3,333	3,333	
<b>INDUSTRIAL</b>									
<b>Customer Charges:</b>									
5/8	30.10	28.1%	30.10	15.6%	18.50	23.3%	16.00	18.50	15.6%
3/4	23.50	28.1%	26.00	15.6%	31.80	112.0%	27.50	31.80	15.6%
1	46.70	15.6%	54.00	15.6%	30.00	80.0%	40.00	54.00	35.0%
1-1/2	89.90	103.90	103.90	15.6%	50.00	107.8%	40.00	103.90	159.8%
2	127.90	147.90	147.90	15.6%	70.00	111.3%	40.00	147.90	147.90
3	257.00	297.20	297.20	15.6%	133.34	122.7%	70.00	297.00	324.3%
4	418.00	483.30	483.30	15.6%	211.66	128.2%	418.00	483.00	15.6%
6	862.00	996.70	996.70	15.6%	428.34	132.8%	862.00	997.00	15.7%
8	1508.00	1743.60	1743.60	15.6%	741.66	135.1%	1,508.00	1,744.00	15.6%
10	2229.00	2577.30	2577.30	15.6%	1093.34	135.7%	2,229.00	2,577.00	15.6%
12									
<b>Consumption Charges:</b>									
1st block	1.0000	1.2490	24.9%	1.0000	1.2490	38.7%	0.7208	1.2490	73.3%
2nd block	0.8785	1.0973	24.9%	0.8785	1.0973	24.9%	0.7208	1.0973	52.2%
3rd block	0.7288	0.9104	24.9%	0.7288	0.9104	24.9%	0.7208	0.9104	26.3%
4th block	0.6668	0.8330	24.9%	0.6668	0.8330	24.9%	0.6668	0.8330	24.9%
5th block									
6th block									
<b>Block Size (100 gallons)</b>									
First	100		100		0		100	800	
Next	233		233				233	2,530	
Next	3,000		3,000				3,000	3,000	
Over	3,333		3,333				3,333	3,333	
<b>Customer Charges:</b>									
5/8	30.10	28.1%	30.10	15.6%	18.50	23.3%	16.00	18.50	15.6%
3/4	23.50	28.1%	26.00	15.6%	31.80	112.0%	27.50	31.80	15.6%
1	46.70	15.6%	54.00	15.6%	30.00	80.0%	40.00	54.00	35.0%
1-1/2	89.90	103.90	103.90	15.6%	50.00	107.8%	40.00	103.90	159.8%
2	127.90	147.90	147.90	15.6%	70.00	111.3%	40.00	147.90	147.90
3	257.00	297.20	297.20	15.6%	133.34	122.7%	70.00	297.00	324.3%
4	418.00	483.30	483.30	15.6%	211.66	128.2%	418.00	483.00	15.6%
6	862.00	996.70	996.70	15.6%	428.34	132.8%	862.00	997.00	15.7%
8	1508.00	1743.60	1743.60	15.6%	741.66	135.1%	1,508.00	1,744.00	15.6%
10	2229.00	2577.30	2577.30	15.6%	1093.34	135.7%	2,229.00	2,577.00	15.6%
12									
<b>Consumption Charges:</b>									
1st block	1.0000	1.2490	24.9%	1.0000	1.2490	38.7%	0.7208	1.2490	73.3%
2nd block	0.8785	1.0973	24.9%	0.8785	1.0973	24.9%	0.7208	1.0973	52.2%
3rd block	0.7288	0.9104	24.9%	0.7288	0.9104	24.9%	0.7208	0.9104	26.3%
4th block	0.6668	0.8330	24.9%	0.6668	0.8330	24.9%	0.6668	0.8330	24.9%
5th block									
6th block									
<b>Block Size (100 gallons)</b>									
First	100		100		0		100	800	
Next	233		233				233	2,530	
Next	3,000		3,000				3,000	3,000	
Over	3,333		3,333				3,333	3,333	

AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES

	Oakland Beach and Lakeside		CS Water (Masthope)		Country Club Gardens		Clarendon		Kratzerville		
	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	
<b>Public</b>											
<b>Customer Charges:</b>											
5/8	23.50	30.10	28.1%	28.1%					16.00	18.50	15.6%
3/4	23.50	30.10	28.1%	28.1%					27.50	31.80	15.6%
1	46.70	54.00	15.6%	15.6%					46.70	54.00	15.6%
1-1/2	89.90	103.90	15.6%	15.6%					89.90	103.90	15.6%
2	127.90	147.90	15.6%	15.6%					127.90	147.90	15.6%
3	257.00	297.20	15.6%	15.6%					257.00	297.00	15.6%
4	418.00	483.30	15.6%	15.6%					418.00	483.00	15.6%
6	862.00	996.70	15.6%	15.6%					862.00	997.00	15.7%
8	1508.00	1743.60	15.6%	15.6%					1,508.00	1,744.00	15.6%
10	2,229.00	2,577.30	15.6%	15.6%					2,229.00	2,577.00	15.6%
5/8, 1-1/2											

**Consumption Charges:**

1st block	1.0000	1.2490	24.9%
2nd block	0.8785	1.0973	24.9%
3rd block	0.7288	0.9104	24.9%
4th block	0.6668	0.8330	24.9%

First  
Next  
Next  
Over

**Sales to Other Water Utilitie**

**Customer Charges:**

5/8	800
3/4	2,530
1	3,000
1-1/2	3,333
2	10,000
3	
4	
6	
8	
10	

**Consumption Charges:**

All consumption  
First Block



AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES

	Honesdale		Sand Springs		Mifflin Township		Beech Mountain		Treasure Lake		
	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	
<b>RESIDENTIAL</b>											
<b>Customer Charges:</b>											
5/8	16.00	18.50	15.6%	18.50	13.8%	28.00	18.50	23.3%	12.84	18.50	44.1%
3/4	27.50	31.80	15.6%	31.80	95.7%	33.00	31.80	112.0%	12.84	24.30	89.3%
1	46.70	54.00	15.6%	54.00	232.3%	33.33	54.00	62.0%	23.87	40.10	68.0%
1-1/2	89.90	103.90	15.6%	103.90	539.4%	41.67	103.90	149.3%	35.39	65.10	84.0%
2	127.90	147.90	15.6%	147.90	810.2%		147.90		47.50	91.50	92.6%
3	257.00	297.00	15.6%	297.00	1727.7%	<b>Allowance</b>	297.00		79.17	170.40	115.2%
4	418.00	483.00	15.6%	483.00	2872.3%		483.00		194.87	294.00	50.9%
6	862.00	997.00	15.7%	997.00	6035.4%		997.00		390.95	997.00	155.0%
8		1,744.00		1,744.00	10632.3%		1,744.00			1,744.00	
10		2,577.00		2,577.00	15758.5%		2,577.00			2,577.00	
5/8,3/4											
5/8,1											
5/8,1-1/2											
3/4,1											
3/4,1-1/2											
3/4,2											
1,1											
1,1-1/2											
1,2											
1-1/2,1											
1-1/2,1-1/2											
1-1/2,2											
2,1-1/2											
2,2											
<b>Consumption Charges:</b>											
1st block	0.7980	1.1330	42.0%	0.8170	36.2%	0.0000	0.8000	161.8%	0.3520	0.6082	72.8%
2nd block	0.7980	1.3418	68.1%	0.9710		0.0000					
3rd block						0.3500		-100.0%			
						0.4500		-100.0%			
Block Size (100 gallons)											
First	20	20		0	20				0	0	0
Over	20	20		0	20				0	0	0
Average Bill at 4,080 Gallons \$	48.56	\$ 69.07	42.2%	\$ 40.73	\$ 55.04	\$ 37.11	\$ 51.14	37.8%	\$ 21.45	\$ 35.38	65.0%
*Excludes DSIC and STAS	52.20	\$ 20.51	32.3%	43.78	\$ 14.31	39.89	\$ 14.03	28.2%	23.05	\$ 13.93	53.4%
									27.20	\$ 43.31	59.2%
									29.24	\$ 16.11	48.1%

AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES

	Honesdale		Sand Springs		Mifflin Township		Beech Mountain		Treasure Lake		
	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	
<b>COMMERCIAL</b>											
<b>Customer Charges:</b>											
5/8	16.00	18.50	65.00	18.50	28.00	18.50	15.00	18.50	12.84	18.50	
3/4	27.50	31.80	65.00	31.80	33.00	31.80	15.00	31.80	12.84	24.30	
1	46.70	54.00	65.00	54.00	33.33	54.00	40.69	54.00	23.87	40.10	
1-1/2	89.90	103.90	65.00	103.90	41.67	103.90	81.38	103.90	35.39	65.10	
2	127.90	147.90	65.00	147.90		147.90	130.20	147.90	47.50	91.50	
3	257.00	297.00	65.00	297.00		297.00	244.13	297.00	79.17	170.40	
4	418.00	483.00	65.00	483.00		483.00	278.00	483.00	194.87	294.00	
6	862.00	997.00	65.00	997.00		997.00	813.75	997.00	390.95	997.00	
8		1,744.00	65.00	1,744.00		1,744.00		1,744.00		1744.00	
10		2,577.00	65.00	2,577.00		2,577.00		2,577.00		2577.00	
12											
<b>Consumption Charges:</b>											
1st block	0.8833	1.2490	0.6000	0.9710	0.0000	0.8000	0.1580	0.4136	0.3520	0.6082	
2nd block	0.7760	1.0973	0.6000	0.9710	0.0000	-	0.0000				
3rd block	0.4000	0.9104	0.6000	0.9710	0.3500	-	0.3500				
4th block	0.3000	0.8330	0.4500	-	0.4500	-					
5th block											
6th block											
Block Size (100 gallons)											
First	100		0		20		0		0		
Next	233		0		20-30		0		0		
Next	3,000				30-66						
Over	3,333				66						
<b>INDUSTRIAL</b>											
<b>Customer Charges:</b>											
5/8	16.00	18.50		18.50		18.50		18.50		18.50	
3/4	27.50	31.80		31.80		31.80		31.80		31.80	
1	46.70	54.00		54.00		54.00		54.00		54.00	
1-1/2	89.90	103.90		103.90		103.90		103.90		103.90	
2	127.90	147.90		147.90		147.90		147.90		147.90	
3	257.00	297.00		297.00		297.00		297.00		297.00	
4	418.00	483.00		483.00		483.00		483.00		483.00	
6	862.00	997.00		997.00		997.00		997.00		997.00	
8		1,744.00		1,744.00		1,744.00		1,744.00		1,744.00	
10		2,577.00		2,577.00		2,577.00		2,577.00		2,577.00	
12											
<b>Consumption Charges:</b>											
1st block	0.8833	1.2490		1.2490		1.2490		1.2490		1.2490	
2nd block	0.7760	1.0973		1.0973		1.0973		1.0973		1.0973	
3rd block	0.4000	0.9104		0.9104		0.9104		0.9104		0.9104	
4th block	0.3000	0.8330		0.8330		0.8330		0.8330		0.8330	
5th block		0.7868		0.7868		0.7868		0.7868		0.7868	
6th block		0.6293		0.6293		0.6293		0.6293		0.6293	
First	100										
Next	233										
Next	3,000										
Over	3,333										
<b>AVAILABILITY CHARGE</b>											
									3.04	3.3440	10.0%
									Semi Annual Charge		
									18.24	-	-100.0%



AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES

	Concord Park		Bristol		Mt. Jewett		Bunker Hill		Robin Hood Lakes	
	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates
<b>RESIDENTIAL</b>										
<b>Customer Charges:</b>										
5/8	11.70	18.50	58.1%	18.50	-23.7%	18.50	18.00	18.50	2.8%	114.8%
3/4		24.30		24.24	31.2%	31.80		31.80		18.50
1		40.10		24.24	122.7%	54.00		54.00		26.80
1-1/2		65.10		24.24	328.6%	103.90		103.90		13.40
2		91.50		24.24	510.1%	147.90		147.90		18.50
3		170.40		24.24	1125.1%	297.00		297.00		31.80
4		294.00		24.24	1892.3%	483.00		483.00		
6		997.00		24.24	4012.5%	997.00		997.00		
8		1,744.00		24.24		1,744.00		1,744.00		
10		2,577.00		24.24		2,577.00		2,577.00		
5/8,3/4										
5/8,1										
5/8,1-1/2										
5/8,2										
3/4,1										
3/4,1-1/2										
3/4,2										
1,1										
1,1-1/2										
1,2										
1-1/2,1										
1-1/2,1-1/2										
1-1/2,2										
2,1-1/2										
2,2										
<b>Consumption Charges:</b>										
1st block	0.4700	0.6600	40.4%	0.5590	-10.6%	0.5000	0.6850	1.1330	65.4%	111.3%
2nd block										
3rd block										
Block Size (100 gallons)				Allowance	Allowance					
First	0	0		43	0		0	20		0
Over	0	0		43	0		0	20		0
Average Bill at 4,080 Gallons	\$ 30.88	\$ 45.43	47.1%	\$ 24.24	\$ 38.90	<b>60.5%</b>	\$ 45.95	\$ 69.07	50.3%	<b>112.4%</b>
*Excludes DSIC and STAS	\$ 33.19	\$ 14.55	36.9%	\$ 26.06	\$ 14.66	49.3%	\$ 49.39	\$ 23.12	39.8%	97.6%
							\$ 40.16	\$ 55.02		37.0%
							\$ 43.18	\$ 14.85		27.4%

AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES

	Concord Park		Bristol		Mt. Jewett		Bunker Hill		Robin Hood Lakes	
	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates
<b>COMMERCIAL</b>										
<b>Customer Charges:</b>										
5/8	53.56	18.50	58.65	18.50	18.00	18.50	18.00	18.50	18.00	18.50
3/4		24.30	58.65	31.80		31.80		31.80		31.80
1		40.10	81.30	54.00		54.00		54.00		54.00
1-1/2		65.10	102.58	103.90		103.90		103.90		103.90
2		91.50	143.25	147.90		147.90		147.90		147.90
3		170.40	217.79	297.00		297.00		297.00		297.00
4	53.56	294.00	319.47	483.00		483.00		483.00		483.00
6		997.00	455.05	997.00		997.00		997.00		997.00
8		1,744.00	827.83	1,744.00		1,744.00		1,744.00		1,744.00
10		2,577.00	1,370.06	2,577.00		2,577.00		2,577.00		2,577.00
12										
<b>Consumption Charges:</b>										
1st block	0.4460	0.6600	0.7070	0.8700	0.6850	1.1330	0.6850	1.1330	0.6850	1.1330
2nd block										
3rd block										
4th block										
5th block										
6th block										
Block Size (100 gallons)										
First	0				0		0		0	
Next	0				0		0		0	
Next										
Over										
<b>INDUSTRIAL</b>										
<b>Customer Charges:</b>										
5/8	59.51	65.46			18.00	18.50	18.00	18.50	18.00	18.50
3/4						31.80		31.80		31.80
1						54.00		54.00		54.00
1-1/2						103.90		103.90		103.90
2						147.90		147.90		147.90
3						297.00		297.00		297.00
4						483.00		483.00		483.00
6						997.00		997.00		997.00
8						1,744.00		1,744.00		1,744.00
10						2,577.00		2,577.00		2,577.00
12										
<b>Consumption Charges:</b>										
1st block	0.3870	0.6600			0.6850	1.1330	0.6850	1.1330	0.6850	1.1330
2nd block						1.0973		1.0973		1.0973
3rd block						0.9104		0.9104		0.9104
4th block						0.8330		0.8330		0.8330
5th block						0.7868		0.7868		0.7868
6th block						0.6293		0.6293		0.6293





## APPENDIX



## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- a. A description of the allocation methods used. A comparison of the allocated cost of service by class with the present and proposed revenues. A cost of service schedule showing the rate of return produced by present and proposed rates by class of service.

## RESPONSE

A description of the methods used for the cost of service study is provided on pages 3 through 5 of Exhibit 5-A, Part I and in APA Statement No. 5. A comparison of the allocated cost of service by class with the present and proposed revenues is provided on Schedule A of Exhibit 5-A, Part I. Schedules B and C showing the rate of return produced by present and proposed rates by customer classification are provided in Exhibit No. 5-A, Part I.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- b. Indicate if the method used for establishing the allocation factors in the cost of service study deviates from the previous study submitted in the last rate case. If yes, indicate which allocation factors were changed and discuss the reason for the changes.

RESPONSE

The methods used for establishing the allocation factors in the cost of service study have not deviated from the previous study submitted in the last case.

## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- c. Supply the average day, the maximum day and the maximum hour deliveries to the system adjusted for storage for the historic test year and 2 prior years. Also provide workpapers, analyses, comparative data or other documentation supporting the estimated maximum day and peak hour demands by customer class reflected in the company's cost of service study.

## RESPONSE

Refer to Schedule F of Exhibit 5-A, Part I for the average day and maximum day and maximum hour system deliveries for the years 1962 through 2017. Support for the customer class demand factors is provided on the following pages, which were taken from the discussion of the customer class demand study submitted in the Company's filing at Docket No. R-00973952.

## CUSTOMER CLASS DEMAND STUDY

The purpose of the customer class demand study is to develop empirical bases for the maximum day and hour extra capacity factors used in the cost allocation study. The study of customer demands is being conducted in accordance with the plans submitted by the Company to the Pennsylvania Public Utility Commission during the course of the rate proceeding at Docket No. R-911892.

Previous reports on the customer class demand study were submitted as Exhibit No. 9-A in Docket No. R-00922476, and as part of Exhibit No. 50-B in Docket Nos. R-00932868, R-00953343 and R-00973952. The initial report sets forth descriptions of the selection of customers, the initial experience with data collection in 1991, and the data obtained in 1992. Subsequent reports included the observed maximum day and hour use for each customer or group of customers being monitored during the 1992 through 1996 data collection periods.

This report sets forth the data through the 1996 monitoring period as shown in the schedule on pages 7 through 22 of this response. Data during each period were reviewed to determine the maximum day and hour use for each customer or group of customers being monitored. The maximum use was divided by the average use for the year in which the monitoring was performed to develop indications of maximum day and hour ratios for the customer's classification.

The customers and customer groups, i.e., residential neighborhoods, were classified based on their revenue or billing category or, with respect to residential

neighborhoods, the housing density and annual use. The monitoring results were organized in this manner, inasmuch as data related to the proportions of the customer classification represented by these categories were available. For example, the Company prepares an analysis of consumption in each of its load control areas which indicates the housing density, high, medium or low, the number of residential customers and their annual consumption. The neighborhoods were grouped according to housing density and annual consumption, e.g., medium density housing with customers whose average annual use is between 60,000 and 70,000 gallons. Similarly, commercial and public customers were organized by revenue categories such as apartments, colleges, etc., and industrial customers were organized based on their billing frequency, quarterly or monthly.

Average ratios were calculated for each category and also are presented in the schedule on pages 7 through 22 of this response. The average ratios of the categories for which empirical data were available, and estimated ratios for six residential categories representing 3.49 percent of residential consumption, are weighted to determine the composite ratios for the several classifications in the schedule on pages 23 and 24 of this response.

Residential. The residential maximum day and hour ratios used in the most recent cost allocation study were 2.1 and 4.5, respectively. The maximum day ratio used in studies of other water utilities which were based on empirical demands is 2.5 and the maximum hour ratios range from 4.5 to 6.0.

The observed maximum day ratios of selected Philadelphia Suburban residential neighborhoods range from 0.76 to 5.27. The observed maximum hour ratios range from 1.31 to 33.86. The average maximum day and hour ratios by residential neighborhood category range from 1.23 to 3.87 and from 2.57 to 7.31, respectively. The weighted ratios, as shown in the schedule on page 23 of this response, are 2.119 for maximum day and 4.508 for maximum hour. The weighted maximum day and hour ratios of 2.1 and 4.5 confirm their continued use in the cost allocation study.

Commercial and Public. The commercial and public maximum day and hour ratios used in the most recent study were 2.0 and 3.8, respectively. Maximum day and hour ratios used in studies of other water utilities which were based on empirical demands range from 1.6 to 2.5 and 3.3 to 5.0, respectively.

The observed maximum day ratios of selected commercial and public customers range from 0.70 to 9.88. The observed maximum hour ratios range from 1.85 to 39.95. The average maximum day and hour ratios by revenue category range from 1.28 to 6.36 and from 2.52 to 23.84, respectively. The upper end of each range represents data for a golf course. A review of the data indicates that the golf course would likely contribute to the peak day load; however, its peak hour occurs in the early morning and would not occur at the same time as the peak hour of other commercial and public customers.

Thus, the weighted maximum day ratio of 2.0, as shown in the schedule on page 24 of this response, continues to be used for the commercial and public classifications. It includes the effect of the golf course and is within the range of

ratios used in other studies. The weighted maximum hour ratio excluding the golf course data of 3.8 is maintained for use in the cost allocation study and also is within the range of ratios used in other studies.

The weighted ratios for commercial and public customers do not reflect the initial data obtained in 1996 for six small commercial customers as shown in the schedule on page 18 of this response. The ratios for the small customers are generally higher than the weighted ratios of the other commercial and public customers. However, inasmuch as limited data are available, no further increase in the ratios for these classifications is proposed.

Industrial. The industrial maximum day and hour ratios used in the most recent study were 1.7 and 2.7, respectively. Maximum day ratios used in studies of other water utilities which were based on empirical demands range from 1.5 to 1.8 for day and the maximum hour ratio is 2.7.

The observed maximum day ratios of selected industrial customers range from 1.03 to 3.10. The observed maximum hour ratios range from 1.43 to 6.25. The average maximum day ratios by billing frequency are 1.68 and 1.73 and the weighted maximum day ratio is 1.69. The average maximum hour ratios by billing frequency are 2.58 and 3.12 and the weighted maximum hour ratio is 2.73.

Based on the current estimates, estimates of other utilities and the observed ratios during 1992-1996; maximum day and hour ratios of 1.7 and 2.7, respectively, continue to be used in the allocation study.

Sales to Other Water Utilities. The Sales to Other Water Utilities maximum day and hour ratios used in the most recent cost allocation study were

10.0 and 20.0, respectively, for the customers located in the Main Division. Maximum day and hour ratios used in a study for another water utility which were based on empirical demands range from 2.0 to 10.0 for maximum day and 5.0 to 20.0 for maximum hour. The observed maximum day ratios of selected resale customers range from 1.46 to 20.23. The observed maximum hour ratios range from 4.80 to 52.52. The maximum day and hour ratios for the Bristol Division customers in the last study were estimated at 1.5 and 2.0, respectively.

As a result of acquisitions since the last study, the Company has lost and gained Sales to Other Water Utilities customers. There are now several customers with relatively uniform demand characteristics. These customers have been assigned maximum day and hour ratios of 1.50 and 2.00, respectively, and designated as Group A. There also are several customers whose demand characteristics are less favorable, but collectively, not as high as the Main Division customers in the last study. Maximum day and hour ratios of 3.00 and 5.00, respectively, have been assigned to these customers, designated as Group B.



PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1986

AREA (1)	LCA (2)	NUMBER OF CUST. (3)	AVERAGE ANNUAL CONSUMPTION CONSUMPTIONS WITH TEST YEAR (gallons)				MAXIMUM DAY DURING TEST PERIOD				MAXIMUM HOUR DURING TEST PERIOD					
			TEST PERIOD FROM (4) TO (5)	ANNUAL AVG DAY (6)	ANNUAL AVG HOUR (7)	PER DAY PER CUST. (10)	TEST GALLONS (11)	TEST RATIO (12)	DATE (13)	TEST GALLONS (14)	TEST RATIO (15)	HOUR (16)	DATE (17)			
<b>RESIDENTIAL-LOW DENSITY</b>																
<b>ANNUAL USE OF 70-80,000</b>																
Proctor																
	527	105	05/01/82	05/31/82	19,523.0	813.5	165.9	32,165.0	1.65	5/23/82	3,041.0	3.74	10-11 AM	5/23/82		
		105	05/01/83	05/31/83	21,431.0	860.0	204.1	44,539.0	2.08	7/12/83	4,486.0	5.02	8-9 PM	7/12/83		
		105	08/01/84	10/31/84	20,837.0	872.4	189.4	27,184.0	1.30	8/17/84	2,588.0	2.98	10-11 AM	8/17/84		
Average for Annual Use of 70-80,000														3.81		
<b>ANNUAL USE OF 80-90,000</b>																
Narberth																
	247	37	05/24/83	10/08/83	8,286.0	344.4	223.4	18,427.8	2.23	6/3/83	1,822.7	4.42	11-12 AM	6/3/83		
		37	05/02/84	10/21/84	8,912.0	367.2	239.2	17,181.0	1.86	8/7/84	1,361.0	3.68	9-10 AM	8/7/84		
		37	05/24/85	10/08/85	8,636.5	358.9	230.8	20,182.0	2.36	8/04/85	1,886.0	5.24	4-5 PM	8/04/85		
		37	04/12/86	08/18/86	8,678.0	361.6	234.5	14,008.1	1.61	8/2/86	4,054.4	11.21	11-12 AM	8/3/86		
Average for Annual Use of 80-90,000														4.45		
<b>ANNUAL USE OF 90-100,000</b>																
Arlington																
	346	48	05/14/82	07/31/82	12,271.0	511.3	265.6	35,788.5	2.92	5/18/82	3,648.4	7.14	3-4 PM	5/23/82		
		48	05/17/83	10/08/83	12,701.0	528.2	284.8	50,780.4	4.00	7/13/83	9,333.4	10.08	11-12 AM	7/18/83		
		48	08/02/84	10/21/84	12,136.0	505.6	282.8	63,940.0	5.27	8/13/84	11,822.0	23.68	2-3 AM	8/13/84		
		48	08/24/85	10/08/85	12,398.0	518.4	287.7	62,365.0	4.24	8/17/85	4,419.0	8.67	3-4 PM	8/17/85		
		48	04/12/86	08/17/86	12,628.0	528.1	283.0	66,447.4	4.71	8/28/86	4,401.6	8.37	2-3 AM	5/28/86		
Average for Annual Use of 90-100,000														7.31		
<b>Wheatland</b>																
	354	40	05/01/82	09/25/82	12,786.0	532.8	319.7	40,927.4	3.20	8/23/82	2,682.7	4.88	4-8 AM	8/23/82		
		40	05/17/83	10/08/83	11,861.0	485.5	287.3	38,688.8	3.34	7/10/83	3,088.6	6.18	7-8 PM	7/8/83		
		40	05/03/84	10/21/84	11,463.0	478.9	287.3	30,338.0	2.84	8/18/84	2,757.0	5.78	8-9 PM	8/23/84		
		40	05/24/85	07/27/85	12,058.7	502.4	301.4	64,888.0	4.54	7/15/85	4,243.0	8.48	10-11 AM	7/04/85		
		40	04/12/86	08/17/86	9,518.0	386.5	237.9	21,041.0	2.21	7/23/86	5,238.0	13.21	12-1 PM	4/28/86		
Average for Annual Use of 90-100,000														7.31		
<b>ANNUAL USE OF 2,100,000</b>																
Roshar																
	230	51	05/14/82	10/01/82	17,430.0	738.3	341.8	48,388.0	2.77	7/11/82	3,638.8	5.01	9-10 AM	6/28/82		
		51	05/17/83	10/08/83	20,720.0	863.3	408.3	68,859.7	3.38	7/11/83	8,117.1	6.93	9-10 PM	7/11/83		
		51	05/02/84	10/21/84	19,227.0	801.1	377.0	58,207.0	2.82	7/13/84	4,374.0	5.48	10-11 AM	6/28/84		
		51	05/24/85	10/08/85	18,126.7	756.9	375.0	68,589.0	3.84	8/4/85	4,463.0	5.69	7-8 AM	9/3/85		
		51	04/07/86	08/18/86	16,480.0	685.4	322.5	57,208.0	3.48	8/8/86	3,885.7	5.38	7-8 AM	8/7/86		
Average for Annual Use of > 100,000														5.50		

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1988

AREA (1)	LCA (2)	NUMBER OF CUST. (3)	TEST PERIOD FROM (4) TO (5)	AVERAGE ANNUAL CONSUMPTION CORRELATED WITH TEST YEAR (gallons)			MAXIMUM DAY DURING TEST PERIOD			MAXIMUM HOUR DURING TEST PERIOD				
				ANNUAL AVG DAY (6)	ANNUAL AVG HOUR (7)	PER DAY PER CUST. (8)	GALLONS (11)	TEST RATIO (12)	DATE (13)	GALLONS (14)	TEST RATIO (15)	HOUR (16)	DATE (17)	
<b>RESIDENTIAL USE IN DENSITY</b>														
<b>ANNUAL USE OF 60-80,000</b>														
Northh	283	48	05/01/82	08/30/82	286.3	144.8	144.8	12,480.7	1.80	7/16/82	3,758.9	13.00	8-9 AM	8/16/82
		48	08/08/83	10/08/83	279.0	139.0	139.0	10,146.8	1.82	8/18/83	1,301.7	4.88	8-9 PM	7/8/83
		48	04/28/84	10/21/84	240.7	120.4	120.4	10,894.0	1.83	8/6/84	1,178.0	4.38	7-8 PM	8/8/84
		48	08/28/86	10/08/86	289.3	134.7	134.7	13,488.0	2.08	7/30/86	1,303.0	4.84	8-7 PM	7/30/86
		48	04/12/88	08/18/88	284.4	142.2	142.2	8,488.0	1.24	8/6/88	878.2	3.43	8-10 PM	4/28/88
Average for Annual Use of 60-80,000														
									1.81			4.80		
<b>ANNUAL USE OF 80-10,000</b>														
Free	117	54	04/30/82	10/01/82	438.9	186.5	186.5	17,836.6	1.88	8/28/82	1,807.9	3.43	8-10 AM	7/11/82
		54	05/17/83	10/08/83	443.3	187.0	187.0	18,091.5	1.70	8/28/83	1,878.4	3.78	7-8 PM	7/27/83
		54	05/12/84	10/21/84	414.0	182.8	182.8	18,280.0	1.84	7/12/84	1,888.0	3.78	8-9 PM	7/5/84
		54	05/24/86	10/08/86	432.4	181.8	181.8	18,848.0	1.82	7/14/86	1,888.0	3.80	8-9 PM	8/14/86
Willow Grove	344	27	08/20/82	10/01/82	184.3	186.6	186.6	7,828.0	1.71	8/28/82	874.2	4.88	8-8 AM	7/14/82
		27	05/17/83	10/08/83	186.3	173.6	173.6	19,781.4	2.28	8/18/83	1,124.5	5.78	8-7 PM	7/8/83
		27	05/09/84	10/21/84	208.0	184.8	184.8	21,318.0	4.27	8/18/84	7,042.0	33.88	8-10 AM	8/18/84
		27	05/24/86	10/08/86	188.6	174.7	174.7	14,888.0	3.08	7/13/86	1,287.0	6.40	3-4 PM	8/18/86
		27	04/12/88	08/17/88	202.8	180.1	180.1	8,784.8	1.80	8/18/88	807.5	3.88	7-8 PM	5/23/88
Stratford	218	23	08/02/82	10/01/82	178.5	186.3	186.3	7,834.4	1.78	8/14/82	803.5	4.80	8-9 PM	7/30/82
		23	05/17/83	10/08/83	182.7	201.0	201.0	15,830.8	3.38	7/12/83	1,382.9	7.23	8-7 PM	8/28/83
		23	05/02/84	10/21/84	187.5	186.7	186.7	12,473.0	2.77	7/10/84	3,708.0	18.78	10-11 AM	8/10/84
		23	05/24/86	10/08/86	188.2	184.3	184.3	12,818.0	2.87	8/21/86	1,214.0	6.82	1-2 PM	8/24/86
		23	04/12/88	08/18/88	182.1	200.5	200.5	8,887.0	1.88	8/27/88	878.3	4.88	7-8 PM	8/2/88
Average for Annual Use of 80-10,000														
									2.86			4.97		

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAJOR DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1992-1998

AREA (1)	LCA (2)	NUMBER OF CUST. (3)	TEST PERIOD		AVERAGE ANNUAL CONSUMPTION CORRESPONDS WITH TEST YEAR (gallons)			MAJOR DAY DURING TEST PERIOD			MAJOR HOUR DURING TEST PERIOD															
			FROM (4)	TO (5)	ANNUAL AVG DAY (6)	ANNUAL AVG HOUR (7)	PER DAY PER CUST. (10)	GALLONS (11)	TEST RATIO (12)	DATE (13)	GALLONS (14)	TEST RATIO (15)	HOUR (16)	DATE (17)												
<b>RESIDENTIAL-MEDIUM DENSITY ANNUAL USE OF 80-99,000</b>																										
<b>ANNUAL USE OF 70-89,000</b>																										
Lawrence Park	405	77	04/30/92	10/01/92	15,240.0	647.5	201.8	28,427.8	1.70	6/23/92	4,008.4	6.19	7-8 PM	5/16/92												
		77	05/17/93	10/09/93	15,463.0	648.1	201.1	28,340.0	1.63	6/11/93	2,690.9	4.12	8-8 PM	7/11/93												
		77	05/08/94	10/18/94	16,086.0	670.3	208.9	28,777.0	1.85	5/7/94	2,514.0	3.75	8-9 PM	7/8/94												
		77	05/24/95	10/09/95	15,703.0	654.3	203.9	24,003.0	1.56	6/16/95	2,316.0	3.54	10-11 AM	6/16/95												
		77	04/12/96	09/17/96	14,888.0	620.3	193.4	23,140.5	1.55	6/18/96	2,170.7	3.50	11-12 AM	5/19/96												
<b>81. Albane</b>																										
	254	22	05/23/92	09/31/92	4,209.0	175.4	191.3	11,321.5	2.69	4/7/92	602.5	5.15	7-8 AM	4/7/92												
		22	05/17/93	10/06/93	4,138.0	171.9	187.5	6,255.9	1.52	7/10/93	684.9	5.15	7-8 PM	7/12/93												
		22	05/02/94	10/21/94	4,367.0	182.8	196.4	8,469.0	1.47	7/10/94	692.0	3.79	4-6 PM	7/10/94												
		22	05/24/95	10/09/95	4,240.7	178.7	192.8	8,737.0	2.09	8/29/95	901.0	4.93	5-6 PM	7/14/95												
		22	05/16/96	09/29/96	3,901.0	158.4	172.9	5,478.3	1.44	5/23/96	707.2	4.47	7-8 PM	6/6/96												
Average for Annual Use of 70-80,000													1.61													
<b>ANNUAL USE OF 60-69,000</b>																										
Wynode	336	35	05/24/93	10/09/93	7,486.0	311.9	213.8	14,099.0	1.86	6/4/93	1,458.6	4.67	3-4 PM	7/18/93												
		35	05/09/94	10/21/94	6,227.0	342.8	236.1	23,476.0	2.66	6/6/94	1,684.0	4.83	6-7 PM	8/9/94												
		35	05/24/95	10/09/95	7,898.0	327.3	234.5	28,461.0	3.37	7/09/95	2,154.0	6.58	7-8 PM	7/09/95												
		35	04/12/96	09/17/96	9,643.0	401.8	275.5	18,094.8	1.97	6/16/96	1,814.0	4.91	12-1 PM	7/14/96												
Average for Annual Use of 60-69,000													2.70													

\* Not included in average.

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1952-1966

AREA (1)	LCA (2)	NUMBER OF CUST. (3)	TEST PERIOD		AVERAGE ANNUAL CONSUMPTION CONSERVED WITH TEST YEAR			MAXIMUM DAY			MAXIMUM HOUR			
			FROM (5)	TO (6)	ANNUAL AVG DAY (8)	ANNUAL AVG HOUR (9)	PER DAY PER CENT. (10)	GALLONS (11)	TEST RATIO (12)	DATE (13)	GALLONS (14)	TEST RATIO (15)	HOUR (16)	DATE (17)
<b>RESIDENTIAL - WOODBORO</b>														
<b>ANNUAL USE OF 66-73,000</b>														
Derby	424	36	05/07/62	08/31/62	5,946.0	235.2	199.9	7,904.6	1.36	8/23/62	731.9	3.11	7-8 AM	8/14/62
		36	05/17/63	10/08/63	5,191.0	218.0	143.4	8,078.7	1.57	7/5/63	739.7	3.44	11-12 AM	7/10/63
		36	05/02/64	10/21/64	5,467.0	228.0	152.4	11,847.0	2.12	8/25/64	901.0	3.94	4-5 PM	8/14/64
		36	05/24/65	10/09/65	5,431.0	228.3	150.9	12,840.0	2.36	7/15/65	785.0	3.47	10-11 AM	7/15/65
		36	04/12/66	07/23/66	6,993.0	233.0	155.4	4,243.4	0.78	8/14/66	304.7	1.31	1-2 PM	8/14/66
<b>Cityen Heights</b>														
	416	84	05/07/62	10/01/62	12,577.0	524.0	146.7	18,824.4	1.32	6/6/62	1,404.7	2.68	9-10 AM	6/1/62
		84	05/17/63	10/06/63	12,218.0	509.0	145.4	15,398.1	1.28	7/8/63	1,491.9	2.87	10-11 AM	7/11/63
		84	05/02/64	10/21/64	12,717.0	528.9	151.4	17,289.0	1.36	7/10/64	1,536.0	2.90	10-11 AM	8/4/64
		84	05/24/65	10/09/65	12,903.0	521.0	148.8	28,116.0	2.25	7/24/65	4,477.0	8.59	1-2 PM	8/2/65
		84	04/12/66	07/23/66	12,889.0	540.4	154.4	18,941.3	1.24	4/23/66	1,488.7	2.75	11-12 PM	4/21/66
Average for Annual Use of 50-60,000														
									1.99			3.59		
<b>ANNUAL USE OF 66-73,000</b>														
Upper Darby	412	74	05/07/62	08/31/62	12,501.0	538.9	174.7	13,389.0	1.04	7/16/62	1,254.4	2.33	9-10 AM	8/27/62
		74	05/17/63	10/08/63	11,704.0	487.7	158.2	16,172.1	1.38	7/17/63	1,472.3	3.02	9-10 AM	7/14/63
		74	08/23/64	10/21/64	12,993.0	529.5	171.4	16,319.0	1.29	8/11/64	1,296.0	2.36	10-11 AM	10/8/64
		74	05/24/65	10/09/65	12,439.3	518.3	168.1	15,337.0	1.23	8/20/65	1,318.0	2.54	12-1 PM	8/12/65
		74	04/12/66	09/17/66	11,864.0	494.3	160.3	15,191.0	1.26	5/8/66	1,298.8	2.63	11-12 AM	8/8/66
Average for Annual Use of 60-70,000														
									1.23			2.57		

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1992-1998

Test Site (1)	Test Period		Test Days (4)	Average Annual Consumption Consumption with Test Period (gallons)		Maximum Day During Test Period			Maximum Hour During Test Period			
	From (2)	To (3)		Average Day (5)	Average Hour (6)	Gallons (7)	Ratio (8)	Date (9)	Gallons (10)	Ratio (11)	Hour (12)	Date (13)
<b>COMMERCIAL AND PUBLIC</b>												
<b>APARTMENTS</b>												
Valley Stream Village	07/13/92	08/03/92	21	28,046.1	1,088.2	29,809.2	1.14	10/4/92	2,986.0	2.72	6-7 AM	9/30/92
	09/14/92	10/05/92	21	24,909.0	1,037.9	31,017.3	1.25	10/3/93	2,910.0	2.80	7-8 AM	10/1/93
	07/03/93	07/19/93	13									
	08/17/93	08/30/93	13									
	09/28/93	10/11/93	13									
	06/06/94	08/21/94	16	24,978.0	1,040.7	30,678.2	1.23	8/20/94	2,754.3	2.85	12-1 PM	10/30/94
	07/05/94	07/18/94	13									
	06/19/94	08/29/94	13									
	10/14/94	11/04/94	21									
<b>Greenhill Condo Assoc.</b>												
	07/20/93	08/03/93	14	119,990.9	4,999.2	154,990.9	1.29	9/5/93	11,460.0	2.29	10-11 AM	9/5/93
	08/31/93	09/13/93	13									
	10/12/93	10/25/93	13									
	08/24/94	08/08/94	13	119,936.0	4,997.3	163,143.9	1.36	7/21/94	13,144.0	2.63	9-10 AM	5/25/94
	08/23/94	07/05/94	15									
	07/18/94	08/01/94	14									
	08/29/94	09/12/94	14									
<b>Cambridge Hill Apart.</b>												
	05/03/92	07/30/92	85	26,394.8	1,099.8	46,887.5	1.74	5/8/92	3,879.7	3.62	8-9 AM	6/25/92
	08/31/92	10/01/92	31									
	06/17/93	10/09/93	144	22,231.5	926.3	37,135.9	1.87	5/24/93	3,311.7	3.66	8-9 AM	8/28/93
	08/20/94	10/21/94	123	30,240.0	1,280.0	36,522.0	1.21	7/21/94	3,237.0	2.57	7-8 AM	9/21/94
				28,084.0	1,169.3							
	04/15/96	08/18/96	158	26,734.0	1,113.9	46,821.2	1.70	5/20/96	3,501.0	3.14	7-8 AM	5/17/96
<b>Total Apartments</b>				449,511.8	16,729.7	674,273.1	1.28		47,261.3	2.62		

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1962-1966

Test Site (1)	Test Period		Test Days (4)	Average Annual Consumption Corresponds with Test Period (gallons)		Minimum Day During Test Period			Maximum Hour During Test Period			
	From (2)	To (3)		Average Day (5)	Average Hour (6)	Gallons (7)	Ratio (8)	Date (9)	Gallons (10)	Ratio (11)	Hour (12)	Date (13)
<b>HOSPITALS</b> Fitzgerald Marroy Hospital	07/07/63	07/20/63	13	37,401.9	1,558.4	51,650.1	1.38	6/24/63	5,254.8	3.57	7-8 AM	7/11/63
	08/17/63	08/30/63	13									
	08/28/63	10/12/63	14	40,465.0	1,586.0	65,561.2	1.65	8/3/64	5,627.7	3.34	10-11 AM	8/3/64
	08/22/64	07/05/64	13									
	08/01/64	08/28/64	28	38,260.7	1,583.6	58,849.0	1.53	9/28/65	4,747.0	2.98	7-8 AM	7/20/65
	08/28/65	07/24/65	28									
	08/05/65	10/03/65	28									
Holy Redeemer Hospital	08/07/63	07/07/63	30	94,141.6	3,922.0	129,821.7	1.38	8/4/63	9,167.7	2.34	2-3 PM	8/3/63
	08/03/63	08/18/63	13									
	07/05/64	07/18/64	13	100,835.0	4,183.1	146,532.5	1.48	7/13/64	10,299.8	2.46	2-3 PM	7/13/64
	08/16/64	08/29/64	13									
	08/12/64	08/27/64	16									
	08/12/65	08/28/65	14	102,691.7	4,278.8	115,941.0	1.13	9/8/65	9,377.0	2.19	12-1 PM	8/8/65
	07/24/65	08/02/65	8									
	08/05/65	08/18/65	13									
<b>Total Hospitals</b>				413,895.9	17,252.7	699,175.5	1.39		44,493.8	2.59		

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1986

Test Site (1)	Test Period		Test Days (4)	Average Annual Consumption Corresponds with Test Period (gallons)			Maximum Day During Test Period			Maximum Hour During Test Period		
	From (2)	To (3)		Average Day (5)	Average Hour (6)	Gallons (7)	Ratio (8)	Date (9)	Gallons (10)	Ratio (11)	Hour (12)	Date (13)
BURNERS Shrewfords & Cabbler	07/07/83	07/20/83	13	10,538.2	439.0	22,346.1	2.11	7/14/83	2,285.9	5.14	3-4 PM	7/10/83
	08/17/83	08/30/83	13									
	04/22/84	05/09/84	17	10,307.0	429.5	14,541.2	1.41	4/24/84	1,655.5	3.85	2-3 PM	9/30/84
	08/27/84	10/14/84	17									
	08/18/85	08/31/85	16	10,423.1	434.3	28,528.0	2.49	8/15/85	4,404.0	10.14	11-12 AM	10/16/85
	08/12/85	08/29/85	14									
	08/22/85	09/05/85	14									
	10/16/85	10/31/85	15									
	08/21/86	08/29/86	9	8,536.0	434.3	16,811.5	1.97	8/28/86	1,641.7	3.78	3-4 PM	7/5/86
Stouffer Restaurant & Inn	08/04/83	08/16/83	12									
	08/31/83	09/13/83	13	54,186.9	2,267.9	60,500.1	1.68	8/7/83	8,589.7	3.80	8-9 AM	9/2/83
	10/11/83	10/25/83	14									
	07/05/84	07/18/84	13	50,760.0	2,115.0	116,219.8	2.29	8/3/84	10,810.5	5.11	12-1 PM	6/3/84
	08/01/84	08/16/84	15									
	08/29/84	09/12/84	14									
	08/27/84	10/14/84	17									
	07/24/85	08/06/85	15	58,985.9	2,331.9	94,148.0	1.68	9/3/85	7,176.0	3.08	12-1 PM	9/4/85
	08/23/85	08/30/85	14									
	08/17/85	10/02/85	15									
Arco Chemical Company	06/23/82	07/13/82	21	112,534.4	4,705.8	202,818.4	1.80	8/25/82	13,519.6	2.87	8-9 PM	8/25/82
	08/24/82	09/14/82	21									
	08/07/83	07/08/83	29	118,808.2	4,942.0	206,727.8	1.78	6/20/83	13,623.4	2.78	6-7 AM	8/20/83
	08/24/84	08/08/84	13	122,677.0	5,111.5	218,105.0	1.79	7/20/84	15,844.4	3.08	3-4 PM	7/28/84
	07/16/84	08/01/84	14									
	08/28/84	09/12/84	14									

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1992-1995

Test Site (1)	Test Period		Test Days (4)	Average Annual Consumption (gallons) Corresponds with Test Period		Minimum Day During Test Period			Maximum Hour During Test Period			
	From (2)	To (3)		Average Day (5)	Average Hour (6)	Gallons (7)	Ratio (8)	Date (9)	Gallons (10)	Ratio (11)	Hour (12)	Date (13)
BURNHAM COURT Rydal Presbyterian Home	06/03/93	06/30/93	27	71,728.6	2,966.7	101,008.9	1.41	06/03	6,663.0	2.30	9-10-AM	8/13/93
	06/25/93	10/12/93	14									
	06/21/94	07/06/94	14	67,368.0	2,607.0	66,711.9	1.32	7/21/94	6,672.2	2.36	2-3 AM	7/25/94
	07/18/94	09/01/94	14									
	06/30/95	06/13/95	14	76,651.6	3,160.5	142,808.0	1.66	6/6/95	16,602.0	5.91	6-9 AM	6/6/95
	07/10/95	07/29/95	15									
	06/07/95	06/21/95	14									
	06/24/93	06/08/93	15	120,271.2	6,011.3	246,325.9	2.06	6/4/93	23,565.2	4.71	4-5 PM	6/3/93
	06/21/93	07/06/93	15									
	06/03/93	06/16/93	13									
	06/06/94	06/15/94	9	146,250.0	6,177.1	269,156.6	1.82	6/6/94	24,665.1	3.96	12-1 PM	6/13/94
	07/18/94	08/01/94	14									
	06/29/94	06/12/94	14									
	06/30/95	06/12/95	13	167,969.2	6,669.6	376,467.0	2.25	6/10/95	22,164.0	3.17	6-9 AM	6/10/95
06/29/95	07/11/95	15										
06/07/95	06/23/95	15										
10/16/95	10/31/95	15										
CIBA GALEY	07/06/93	07/18/93	13	29,214.5	1,217.3	52,431.0	1.79	6/20/93	5,669.4	4.64	1-2 PM	9/30/93
	06/17/93	06/30/93	13									
	06/29/93	10/11/93	13									
	07/05/94	07/18/94	13	32,468.0	1,354.1	53,965.1	1.66	6/12/94	5,122.3	3.76	1-2 PM	7/12/94
	06/01/94	06/16/94	15									
	06/12/94	06/27/94	15									
	06/12/95	06/29/95	14	26,655.0	1,110.6	42,666.0	1.60	6/6/95	5,365.0	4.65	12-1 PM	7/25/95
	07/24/95	06/09/95	15									
	06/27/95	06/05/95	14									



PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1988

Test Site (1)	Test Period		Test Days (4)	Average Annual Consumption (gallons) Corresponds with Test Period		Maximum Day During Test Period			Maximum Hour During Test Period			
	From	To		Average Day	Average Hour	Gallons	Ratio	Hour	Gallons	Ratio	Hour	
	(2)	(3)		(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
BUSINESS DISTRICT Suburban Bakery	07/07/83	07/20/83	13	38,512.1	1,804.7	82,367.9	1.82	7/6/83	5,011.2	3.12	4-5 AM	7/11/83
	08/17/83	08/30/83	13									
	04/22/84	05/05/84	17	34,131.0	1,422.1	51,846.2	1.81	6/15/84	2,628.1	1.85	5-6 AM	6/15/84
	08/08/84	08/20/84	14									
	08/29/84	09/12/84	14									
	10/14/84	11/04/84	21									
	05/15/85	05/30/85	15	30,023.0	1,281.0	40,088.0	1.34	10/28/85	3,056.0	2.44	7-8 AM	5/20/85
	05/30/85	06/13/85	14									
	08/21/85	09/03/85	15									
	10/18/85	10/31/85	15									
<b>Total Business</b>			<b>1,387,632.9</b>	<b>58,304.9</b>	<b>2,542,947.1</b>	<b>1.82</b>		<b>208,065.1</b>	<b>3.58</b>			
GOLF COURSE Springfield Club Sprinkler	07/20/83	08/03/83	14	34,282.2	1,428.4	182,339.5	6.61	7/28/83	29,280.2	20.80	5-6 AM	8/2/83
	08/31/83	09/13/83	13									
	10/12/83	10/26/83	14									
	08/09/84	08/20/84	14	27,988.0	1,166.5	189,728.8	6.82	8/10/84	27,850.5	23.88	4-5 PM	10/23/84
	07/20/84	08/01/84	12									
	08/16/84	08/28/84	13									
	10/14/84	11/04/84	21									
	08/28/85	07/10/85	14	31,180.7	1,288.8	208,733.0	6.88	9/7/85	35,708.0	27.48	6-7 AM	7/4/85
	08/02/85	08/22/85	20									
	08/08/85	08/18/85	13									
<b>Total Golf Course</b>			<b>93,468.9</b>	<b>3,884.5</b>	<b>584,801.8</b>	<b>6.38</b>		<b>82,838.7</b>	<b>23.84</b>			

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1986

Test Site	Test Period		Test Days	Average Annual Consumption (gallons)			Maximum Day During Test Period			Maximum Hour During Test Period		
	From	To		Average Day	Average Hour	Gallons	Ratio	Date	Gallons	Ratio	Hour	Date
	(2)	(3)		(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1)			(4)									
<b>HOTELS</b>												
Radisson Hotel	07/07/83	07/20/83	13	48,082.3	1,820.5	78,844.1	1.70	8/28/83	8,371.2	3.32	8-10 AM	8/28/83
	08/17/83	08/30/83	13									
	08/20/84	07/05/84	16	44,422.0	1,850.9	71,184.9	1.80	8/4/84	5,748.5	3.11	7-8 AM	9/15/84
	08/01/84	08/16/84	15									
	08/12/84	08/27/84	16									
	08/30/85	08/12/85	13	34,874.2	1,463.1	79,733.0	2.29	8/27/85	7,588.0	5.22	7-8 AM	8/28/85
	08/22/85	08/06/85	15									
	08/17/85	10/02/85	16									
<b>Total Hotels</b>				125,388.50	5,224.52	229,471.97	1.83		19,707.72	3.77		
<b>COLLEGES</b>												
Swarthmore College	06/24/82	08/14/82	21	79,908.7	3,329.5	134,837.9	1.69	8/28/82	26,744.3	8.03	8-9 PM	8/25/82
	04/28/83	05/11/83	15	65,084.0	3,543.9	89,417.8	0.70	8/3/83	8,893.5	2.51	5-8 PM	4/29/83
	04/22/84	05/09/84	17	79,800.0	3,328.0	118,423.0	1.48	8/14/84	12,370.7	3.72	7-8 PM	4/28/84
	08/12/84	10/10/84	28									
	05/15/85	05/31/85	16	60,741.4	2,530.9	88,481.0	1.47	10/8/85	10,008.0	3.85	7-8 AM	5/28/85
	10/03/85	10/31/85	28									
	08/28/86	08/18/86	24	57,838.0	2,409.8	416,829.5	7.20	8/31/86	65,782.6	27.30	10-11 PM	8/28/86
<b>Intercolts College</b>	04/28/83	05/12/83	16	30,440.5	1,288.4	30,908.6	1.02	5/4/83	3,517.3	2.77	9-10 AM	5/10/83
	08/14/83	08/28/83	14									
	04/22/84	05/09/84	17	35,188.0	1,488.2	57,902.0	1.64	11/2/84	5,008.5	3.42	9-10 AM	4/28/84
	08/27/84	11/04/84	38									
	05/15/85	05/30/85	15	30,205.8	1,288.8	33,785.0	1.12	10/25/85	4,088.0	3.25	9-10 AM	10/25/85
	10/16/85	10/31/85	15									
<b>Total Colleges</b>				459,174.20	19,132.28	841,172.87	2.05		138,430.90	7.13		

# PHILADELPHIA SUBURBAN WATER COMPANY

## SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1988

Test Site (1)	Test Period		Test Days (4)	Average Annual Consumption (gallons) Corresponds with Test Period		Maximum Day During Test Period		Maximum Hour During Test Period		Date (13)	
	From (2)	To (3)		Average Day (5)	Average Hour (6)	Gallons (7)	Ratio (8)	Gallons (10)	Ratio (11)		
											Hour (12)
<b>PRIVATE SCHOOLS</b>											
V.F. Military Academy											
	08/24/82	08/14/82	21	18,947.5	708.1	62,541.2	3.88	9,289.5	13.13	7-8 AM	9/4/82
	05/10/83	05/25/83	16	18,817.5	784.1	32,814.4	1.73	3,739.5	4.77	10-11 PM	5/10/83
	08/14/83	08/28/83	14								
	04/22/84	05/12/84	20	21,884.0	914.8	33,058.1	1.51	3,543.7	3.87	5-8 AM	5/5/84
	05/15/85	05/30/85	15	20,827.8	888.5	47,280.0	2.29	4,943.0	6.75	10-11 PM	10/5/85
	10/3/85	10/31/85	28								
	08/17/86	07/23/86	33	30,483.0	1,270.1	82,040.9	2.68	7,845.8	8.18	7-8 AM	9/2/86
	05/20/88	08/19/88	30								
				108,828.8	4,834.6	287,494.7	2.37	29,341.5	6.47		
	<b>Total Private Schools</b>										
<b>PUBLIC SCHOOLS</b>											
Marple Nwin. High Sch.											
	08/14/82	10/05/82	21	10,413.9	433.9	23,420.7	2.25	4,281.3	9.88	8-9 AM	9/30/82
	05/10/83	05/25/83	16	9,285.5	281.9	18,235.8	2.59	6,320.7	24.13	12-1 PM	5/11/83
	08/14/83	08/28/83	14								
	04/22/84	05/24/84	32	10,202.0	425.1	19,255.0	1.89	4,284.3	10.03	9-10 AM	9/20/84
	08/12/84	10/14/84	32								
	05/15/85	05/31/85	16	7,037.9	283.2	23,975.0	3.41	8,118.0	27.88	7-8 AM	5/30/85
	08/18/86	10/30/86	42								
				33,839.3	1,414.1	82,888.3	2.44	22,984.3	18.28		
	<b>Total Public Schools</b>										

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1986

Test Site	Test Period		Test Days	Average Annual Consumption (gallons)		Maximum Day During Test Period			Maximum Hour During Test Period			
	From	To		Average Day	Average Hour	Gallons	Ratio	Date	Gallons	Ratio	Hour	Date
	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) <u>OTHER PUBLIC</u>												
US Postal Service	07/20/83	08/03/83	14	12,357.8	514.9	23,799.0	1.93	7/28/83	1,761.4	3.42	3-4 PM	10/20/83
	08/14/83	08/28/83	14									
	10/11/83	10/25/83	14									
	05/24/84	08/08/84	13	14,218.0	592.4	28,398.9	2.00	5/28/84	3,240.1	5.47	2-3 PM	7/6/84
	07/03/84	07/18/84	13									
	08/01/84	08/16/84	15									
	10/14/84	11/04/84	21									
	08/18/85	08/29/85	24	11,084.7	462.3	21,736.00	1.96	8/31/85	1,543.00	3.34	7-8 AM	8/28/85
	08/28/85	07/11/85	15									
	08/21/85	08/05/85	15									
Total Other Public				37,870.50	1,599.80	73,832.86	1.96		6,544.53	4.17		
<u>SMALL COMMERCIAL</u>												
Great Valley Presb. Church	07/22/88	08/18/88	58	282.00	10.5	2,468.85	9.86	8/14/88	419.50	39.85	1-2 PM	8/30/88
Story Wrm Fuel Co.	07/23/88	08/18/88	56	124.00	5.2	281.50	2.03	8/4/88	138.88	26.90	4-5 PM	8/4/88
Stratford Pharmacy	07/22/88	08/18/88	58	84.00	2.7	147.28	2.30	8/24/88	32.58	12.21	8-10 AM	8/3/88
Dayton Sura Grip	07/23/88	08/18/88	55	407.00	17.0	528.65	1.30	8/11/88	86.94	5.07	11-12 AM	8/21/88
Dollar Land	07/22/88	08/18/88	58	388.00	16.1	287.30	0.77	7/28/88	50.80	3.16	1-2 PM	7/25/88
McCasland Jeep Eagle	07/22/88	08/18/88	58	357.00	14.9	2,678.20	7.50	8/21/88	288.30	20.12	3-4 PM	8/28/88
				1,590.00	66.25	6,380.78	4.02		1,027.08	15.80		

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1992-1996

Test Site (1)	Test Period		Test Days (4)	Average Annual Consumption Corresponds with Test Period (gallons)		Maximum Day During Test Period			Maximum Hour During Test Period			
	From (2)	To (3)		Average Day (5)	Average Hour (6)	Gallons (7)	Ratio (8)	Date (9)	Gallons (10)	Ratio (11)	Hour (12)	Date (13)
INDUSTRIAL  CLARTERLY INDUSTRIAL Johnson Malthevy, Inc.	07/07/93	07/20/93	13	35,706.8	1,467.8	61,767.6	1.73	7/12/93	3,631.6	2.44	1-2 PM	8/20/93
	08/17/93	08/30/93	13									
	09/28/93	10/11/93	13									
	07/18/94	08/01/94	14	47,066.0	1,967.4	77,228.3	1.62	7/21/94	4,226.5	2.19	1-2 PM	7/21/94
	08/29/94	09/12/94	14									
	10/14/94	11/04/94	21									
	08/12/95	08/28/95	14	39,349.3	1,597.9	67,770.0	1.77	8/15/95	3,966.0	2.48	8-9 PM	8/16/95
	07/07/95	07/22/95	15									
	08/19/95	10/03/95	14									
	06/03/92	06/22/92	19	63,341.0	2,638.2	153,614.6	2.43	6/19/92	13,017.5	4.93	12-1 PM	6/19/92
	08/10/92	08/24/92	14									
	07/20/93	08/03/93	14	77,967.4	3,232.0	102,563.9	1.32	8/8/93	4,633.3	1.43	8-9 AM	8/8/93
	08/31/93	09/13/93	13									
	07/05/94	07/18/94	13	64,000.0	2,260.0	76,572.3	1.42	7/8/94	3,946.2	1.75	1-2 PM	7/8/94
10/14/94	11/12/94	29										
05/31/95	06/12/95	12	29,842.5	1,243.4	42,466.0	1.42	6/2/95	3,636.0	2.93	4-5 PM	6/5/95	
07/25/95	08/07/95	13										
08/19/95	10/03/95	14										
08/21/95	08/29/95	60	37,048.0	1,543.7	69,968.0	1.66	8/28/95	4,348.1	2.82	10-11 AM	8/28/95	

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PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1986

Test Site (1)	Test Period		Test Days (4)	Average Annual Consumption (gallons) Corresponds with Test Period		Minimum Day During Test Period			Maximum Hour During Test Period			
	From (2)	To (3)		Average Day (5)	Average Hour (6)	Gallons (7)	Ratio (8)	Date (9)	Gallons (10)	Ratio (11)	Hour (12)	Date (13)
<b>QUARTERLY INDUSTRIAL</b>												
<b>7-UP Bottling Co.</b>												
	06/03/82	06/23/82	19	35,131.7	1,463.6	74,324.9	2.12	6/11/82	5,353.4	3.66	9-10 PM	6/11/82
	08/03/82	08/24/82	21									
	07/20/83	08/03/83	14	42,365.5	1,766.1	64,942.9	1.53	7/28/83	5,754.0	3.28	3-4 PM	7/28/83
	08/31/83	09/13/83	13									
	10/12/83	10/28/83	14									
	08/12/84	09/24/84	12	49,893.0	2,061.9	82,685.2	1.86	8/28/84	7,940.4	3.81	8-9 AM	8/28/84
	08/21/84	07/05/84	14									
	08/01/84	08/16/84	15									
	08/12/84	08/27/84	15									
	05/31/86	08/13/86	13	48,561.0	1,940.0	62,705.0	1.76	8/23/86	12,121.0	6.25	8-9 AM	8/23/86
	08/21/86	09/05/86	15									
				557,598.2	23,233.3	986,638.6	1.73		72,579.1	3.12		
<b>Total Quarterly Industrial</b>												
<b>MONTHLY INDUSTRIAL</b>												
<b>Philadelphia Electric</b>												
	07/13/82	08/03/82	21	327,565.6	13,946.6	636,624.5	2.67	7/15/82	81,953.2	3.81	1-2 PM	7/15/82
	07/20/83	08/03/83	14	540,274.0	22,511.4	867,989.1	1.61	7/27/83	62,709.8	2.34	12-1 AM	7/24/83
	08/31/83	09/28/83	28									
	10/12/83	10/28/83	14									
	05/03/84	05/24/84	15	578,610.0	24,150.4	818,363.2	1.41	5/12/84	49,438.0	2.06	9-10 AM	5/18/84
	08/27/84	11/04/84	38									
	07/24/85	08/02/85	9	277,197.8	11,549.9	361,711.0	1.30	8/6/85	20,822.0	1.81	6-7 AM	8/7/85
	08/22/85	09/08/85	15									
	08/18/86	10/03/86	14									
	08/21/86	09/16/86	27	263,279.0	11,803.3	679,098.0	3.10	8/21/86	47,015.1	3.99	4-5 AM	8/27/86

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1986

Test Site (1)	Test Period		Average Annual Consumption (gallons)			Maximum Day During Test Period			Maximum Hour During Test Period			
	From	To	Average Day	Average Hour	Gallons	Ratio	Date	Gallons	Ratio	Hour	Date	
	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
<b>MONTHLY INDUSTRIAL - 5200L</b>												
Boeing Helicopter-Roadway	05/09/83	05/09/83	370,520.5	15,438.4	478,887.2	1.28	9/15/83	30,247.8	1.88	6-7 AM	8/18/83	
	08/14/83	08/23/83	346,833.0	14,409.7	429,387.2	1.24	9/15/84	25,020.6	1.74	12-1 PM	6/18/84	
	08/08/84	08/23/84	305,071.8	12,711.3	607,571.0	1.88	5/25/85	48,207.0	3.64	1-2 PM	5/25/85	
	08/12/84	08/27/84										
	05/15/85	05/30/85										
	08/28/85	07/10/85										
<b>Boeing Helicopter-Eastington</b>												
	08/24/83	08/08/83	187,850.4	6,887.9	173,383.8	1.03	6/1/83	15,337.0	2.19	9-10 AM	5/25/83	
	08/21/83	07/07/83	188,118.0	7,754.8	208,178.1	1.11	8/15/84	17,881.8	2.28	11-12 AM	8/28/84	
	08/08/84	08/20/84	180,581.8	6,880.9	189,918.0	1.24	8/28/85	22,881.0	3.42	11-12 PM	5/22/85	
	07/05/84	07/20/84										
	08/16/84	08/28/84										
	05/15/85	05/30/85										
	08/28/85	07/10/85										
<b>McNeil CPC</b>												
	08/21/83	07/07/83	185,772.9	4,487.2	178,254.5	1.87	8/13/83	13,046.5	2.88	10-11 AM	8/18/83	
	08/03/83	08/18/83										
	08/14/83	08/28/83										
	07/08/84	07/18/84	104,978.0	4,374.1	180,217.8	1.72	7/8/84	11,820.2	2.73	11-12 AM	7/8/84	
	08/18/84	08/28/84										
	08/27/84	10/14/84										
<b>Total Monthly Industrial</b>			3,754,778.6	158,449.2	6,313,282.1	1.88		404,336.7	2.58			

PHILADELPHIA SUBURBAN WATER COMPANY

SUMMARY OF OBSERVED MAXIMUM DAY AND HOUR DEMAND RATIOS DURING THE PERIOD 1982-1986

Test Site (1)	Test Period		Test Days (4)	Average Annual Consumption Corresponds with Test Period (gallons)		Maximum Day During Test Period			Maximum Hour During Test Period			
	From	To		Average Day	Average Hour	Gallons	Ratio	Date	Gallons	Ratio	Hour	Date
	(2)	(3)		(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<b>SALES TO OTHER WATER UTILITIES</b>												
PA Water Company	08/08/84	08/21/84	15	4,084.0	170.8	70,891.8	17.24	6/8/84	8,524.8	38.28	7-8 AM	6/8/84
	08/16/84	08/29/84	13									
	10/18/84	11/04/84	17									
	08/18/85	08/31/85	12	880.0	28.8	8,470.0	7.93	5/23/85	1,510.0	52.52	10-11 AM	6/23/85
	08/28/85	07/10/85	14									
	08/07/86	08/21/86	14									
Whittember Township Auth.	08/19/85	10/03/85	14									
	08/21/86	07/22/86	31	827.0	34.5	1,208.8	1.46	6/28/86	165.4	4.80	10-11 AM	5/23/85
	07/20/83	08/03/83	14									
	08/31/83	08/13/83	13	95,418.1	3,878.8	378,116.9	3.93	7/28/83	74,908.0	18.77	10-11 AM	7/28/83
	10/12/83	10/28/83	14									
	08/08/84	08/21/84	15	38,825.0	1,821.9	787,331.5	20.23	6/18/84	70,888.8	43.88	8-9 PM	6/18/84
08/29/84	08/12/84	14										
10/14/84	11/04/84	21										
08/12/85	07/11/85	29	87,170.1	2,788.8	718,543.0	10.85	8/12/85	73,148.0	28.13	9-10 AM	8/20/85	
08/07/85	08/21/85	14										
08/03/85	08/18/85	14										
<b>Total Sales to Other Water Utilities</b>				207,121.20	8,630.10	1,958,282.57	9.44		228,820.80	28.28		



PHILADELPHIA SUBURBAN WATER COMPANY

WEIGHTED MAXIMUM DAY AND HOUR RATIOS BY CUSTOMER CLASSIFICATION

Annual Average Consumption Per Customer (1)	1994 Consumption		Maximum Day Ratio		Maximum Hour Ratio	
	Consumption 1000 Gals (2)	Percent of Total (3)	Average Ratio (4)	Weighted Ratio (5)	Average Ratio (6)	Weighted Ratio (7)
<b>Residential</b>						
<b>High Density</b>						
80-90,000	188,775	1.03%	1.59	0.016	3.59	0.037
80-70,000	2,549,823	15.61%	1.23	0.192	2.57	0.401
80-100,000	48,030	0.29%	2.00	0.006	4.00	0.012
Subtotal	2,786,728	16.93%		0.214		0.450
<b>Medium Density</b>						
80-90,000	114,084	0.70%	1.81	0.013	4.80	0.034
80-70,000	5,738,801	36.10%	2.35	0.825	4.87	1.744
70-80,000	3,858,577	22.39%	1.81	0.405	4.41	0.967
80-80,000	953,157	5.83%	2.70	0.157	5.36	0.312
90-100,000	139,241	0.85%	2.50	0.021	5.00	0.043
>100,000	114,757	0.70%	2.50	0.018	5.00	0.035
Subtotal	10,716,228	65.57%		1.439		3.155
<b>Low Density</b>						
< 60,000	4,918	0.03%	1.50	0.000	3.50	0.001
50-60,000	108,053	0.65%	2.00	0.013	4.00	0.026
60-70,000	157,800	0.97%	2.00	0.019	4.00	0.039
70-80,000	485,275	2.85%	1.87	0.048	3.91	0.111
80-90,000	880,489	5.27%	2.18	0.115	4.46	0.235
90-100,000	599,022	3.67%	3.87	0.142	7.31	0.268
>100,000	952,817	4.06%	3.18	0.129	5.50	0.223
Subtotal	2,856,373	17.50%		0.486		0.903
<b>Total Residential</b>	<b>16,339,329</b>	<b>100.00%</b>		<b>2.119</b>		<b>4.508</b>

PHILADELPHIA SUBURBAN WATER COMPANY

WEIGHTED MAXIMUM DAY AND HOUR RATIOS BY CUSTOMER CLASSIFICATION

Revenue Class	Annual Consumption		Maximum Day Ratio		Maximum Hour Ratio	
	Consumption (1,000 gals)	Percent of Total	Average Ratio	Weighted Ratio	Average Ratio	Weighted Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b><i>Commercial and Public</i></b>						
Apartments	335,900	25.17%	1.28	0.322	2.52	0.635
Hospitals	282,454	21.91%	1.38	0.302	2.58	0.586
Business	317,548	23.80%	1.82	0.433	3.58	0.653
Golf Course	94,242	7.08%	6.36	0.449	23.84	1.683
Hotels	37,627	2.82%	1.83	0.052	3.77	0.106
Colleges	220,739	16.54%	2.05	0.339	7.13	1.179
Private Schools	<u>35,994</u>	2.70%	2.37	<u>0.084</u>	6.47	<u>0.175</u>
Total Commercial and Public	<u>1,334,502</u>	<u>1.0000</u>		<u>1.991</u>		<u>5.197</u>
Total Excluding Golf Course				1.627		3.781
<b><i>Industrial</i></b>						
Quarterly Industrial	5,573,673	28.73%	1.73	0.46	3.12	0.84
Monthly Industrial	<u>15,278,698</u>	73.27%	1.68	<u>1.23</u>	2.58	<u>1.89</u>
Total Industrial	<u>20,850,371</u>			<u>1.69</u>		<u>2.73</u>

## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- d. Explain thoroughly the methodology employed if the company distinguishes between transmission and distribution or collection mains in its allocation of costs.

## RESPONSE

For cost allocation purposes, mains that are 12-inch and larger are considered to be transmission mains and are allocated using Factor 3, which is based on average and maximum day extra capacity demands plus the daily requirement for fire demand. Mains sized under 12-inch are considered distribution mains and are allocated using Factor 4, which is based on average and maximum hour extra capacity demands plus the hourly requirement for fire demands.

## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- e. Provide a detailed explanation of how storage is utilized to meet base, maximum day and maximum hour demands.

## RESPONSE

Storage is utilized to meet base, maximum day and maximum hour demands.

The Storage tanks play a major role in supplementing the maximum hourly demands. These facilities are located strategically throughout the Company's service territory to provide peak hour and emergency fire flow demands to all areas. Many of the facilities are also supplied with booster pumping stations, which automatically sense low pressures in the system and operate to pump water from the tanks to meet these peak demands.

For maximum day demands, the tanks are intended primarily to supplement demands during peak periods that exceed maximum send-out capacities are maintained at a level below the industry standard of 150% of average day demand. The Company's storage tank capacity is sufficient to meet at least a 30-day period of system demands in excess of plant capacity.

For meeting base day demands, the tanks are mainly relied on to stabilize pressures in the distribution system. They may be filling or emptying over the course of the day depending on local and system-wide demands. It is difficult to identify the extent to which each facility meets daily or hourly demands because their use varies continuously depending on the location and extent of the demands. Also, the storage facilities often serve areas beyond their actual pressure zones.

## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- f. Provide workpapers, calculations and supporting documentation which develop the equivalent meters and equivalent service line weights reflected in the company's cost of service study.

## RESPONSE

The 5/8-inch dollar equivalent was developed using recent price quotations by meter size, received by the Company, as follows:

<u>5/8 Inch Meter Equivalents</u>		
<u>Meter Size</u>	<u>Unit Price</u>	<u>5/8-Inch Dollar Equivalent</u>
5/8"	\$ 233.90	1.00
3/4"	249.35	1.07
1"	273.04	1.17
1-1/2"	422.39	1.81
2"	555.26	2.37
3"	1,311.28	5.61
4"	1,965.33	8.40
6"	3,274.46	14.00
8"	4,634.06	19.81
10"	5,052.24	21.60

## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1f., cont.

<u>3/4 Inch Meter Equivalents</u>		
<u>Meter Size</u>	<u>Installed Cost</u>	<u>3/4-Inch Dollar Equivalent</u>
3/4"	\$1,809.19	1.00
1"	2,783.78	1.54
1-1/2"	3,044.50	1.68
2"	3,223.02	1.78
over 2"	5,588.00	3.09

## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- g. Provide all workpapers and supporting documentation for the fire flow requirement and duration utilized in the cost of service study.

## RESPONSE

The source for the estimated fire protection demand of 20,000 gpm is published fire flow criteria for the population served. The 20,000 gpm estimate is the maximum fire flow requirement generally accepted by published authorities, regardless of population size. This maximum has been established by the National Board of Fire Underwrites (now the American Insurance Association).

General fire-fighting requirements, based on population established by the National Board of Fire Underwrites, are as follows:

- a) For populations of 200,000 or less,

$$Q = 1020\sqrt{P} (1-0.01 \sqrt{P})$$

Where Q is the fire draft in gpm and P is the population in thousands.

- b) For populations in excess of 200,000

Q = 12,000 gpm plus 2,000 to 8,000 gpm for a potential second fire.

Inasmuch as AQUA Pennsylvania serves a population of over 1,000,000, the maximum fire flow of 12,000 gpm would apply. Also, in consideration of the population being well over 200,000, the maximum of the additional allowance to provide for a second fire was selected for a maximum fire flow of 20,000 gpm.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1g. cont.

The foregoing requirements were published in Volume I, "Water and Wastewater Engineering," by Fair, Geyer & Okon, published in 1966 by John Wiley & Sons, Inc.

The required 10 hour fire duration is based on the Insurance Services Office, "Grading Schedule for the Municipal Fire Protection" dated 1974.



## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- h. Provide a breakdown of the number and size of private fire services according to the general water service class of customer.

## RESPONSE

Please refer to Schedule G of Exhibit 5-A, Part I for a breakdown of the number of private fire lines by size. A breakdown of private fire lines by general water service classification is not available.

## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- i. Provide a calculation of the company's base cost of water or wastewater per unit of consumption or usage.

## RESPONSE

The calculation of the base cost of water per thousand gallons is as follows:

Base Cost of Water (See attached Functional Allocation)	\$215,376,996
Pro Forma Water Consumption (excludes Contract Sales)	31,495,950
Base Cost per Thousand Gallons	\$ 6.838

AQUA PENNSYLVANIA, INC.  
ALLOCATION OF COST OF SERVICE TO COST FUNCTIONS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Account Number (1)	Account Descriptor (2)	Factor Ref. (2)	Total Company Test Year (3)	Base (4)	Max Day (5)	Extra Capacity (6)	Customer Facilities Meters (7)	Customer Accounting Billing and Coll (9)	Meter Reading (10)	Private Fire (11)	Fire Service Public Fire (12)	Residential Fire (13)
<b>OPERATION AND MAINTENANCE EXPENSES</b>												
<b>Source of Supply</b>												
<b>---Operation---</b>												
601.1	Operation Labor											
	Treatment Plants & Wells	2	215,578	152,953	0	0	0	0	0	0	290	744
	Booster Stations	3	12,184	8,053	3,242	0	0	0	0	0	301	574
620.1	Materials and Supplies											
	Treatment Plants & Wells	2	48,883	34,683	13,966	0	0	0	0	0	66	169
	Booster Stations	3	2,763	1,826	735	0	0	0	0	0	68	130
631.1	Contract Services - Engineering	2	167	118	48	0	0	0	0	0	0	1
636.1	Contract Services - Other	2	219,070	155,430	62,588	0	0	0	0	0	295	756
641.1	Building Rental											
	Treatment Plants & Wells	2	498,095	353,400	142,306	0	0	0	0	0	670	1,719
	Booster Stations	3	28,452	18,607	7,491	0	0	0	0	0	695	1,327
650.1	Transportation											
	Treatment Plants & Wells	2	0	0	0	0	0	0	0	0	0	0
	Booster Stations	3	0	0	0	0	0	0	0	0	0	0
675.1	Miscellaneous											
	Treatment Plants & Wells	2	2,144	1,521	613	0	0	0	0	0	3	7
	Booster Stations	3	123	81	33	0	0	0	0	0	3	6
	<b>Total Operation</b>		1,027,159	726,672	292,613	0	0	0	0	0	2,391	5,433
<b>---Maintenance---</b>												
601.2	Maintenance Labor											
	Treatment Plants & Wells	2	477,606	338,863	136,452	0	0	0	0	0	643	1,649
	Booster Stations	3	177,547	117,346	47,245	0	0	0	0	0	4,386	8,371
620.2	Materials and Supplies											
	Treatment Plants & Wells	2	21,620	15,339	6,177	0	0	0	0	0	29	75
	Booster Stations	3	8,037	5,312	2,139	0	0	0	0	0	199	379
631.2	Contractor Services											
	Treatment Plants & Wells	2	0	0	0	0	0	0	0	0	0	0
	Booster Stations	3	0	0	0	0	0	0	0	0	0	0
636.2	Contractor Services - other	2	231,570	164,299	66,159	0	0	0	0	0	312	799
642.2	Equipment Rental											
	Treatment Plants & Wells	2	0	0	0	0	0	0	0	0	0	0
	Booster Stations	3	0	0	0	0	0	0	0	0	0	0
650.2	Transportation											
	Treatment Plants & Wells	2	837	584	239	0	0	0	0	0	1	3
	Booster Stations	3	311	206	83	0	0	0	0	0	8	15
675.2	Miscellaneous											
	Treatment Plants & Wells	2	46	32	13	0	0	0	0	0	0	0
	Booster Stations	3	17	11	5	0	0	0	0	0	0	1
	<b>Total Maintenance</b>		917,592	642,002	258,512	0	0	0	0	0	5,578	11,292
<b>---Miscellaneous---</b>												
610.1	Water Purchased for Resale	1	4,811,052	4,778,736	0	0	0	0	0	0	9,064	23,252
615.1	Power Purchased	1	8,586,154	8,498,682	0	0	0	0	0	0	16,120	41,382
616.1	Power Purchased	1	261,702	258,945	0	0	0	0	0	0	485	1,265
	<b>Total Miscellaneous</b>		13,628,908	13,537,363	-	-	-	-	-	25,677	65,869	-
	<b>Total Source of Supply Expenses</b>		15,573,658	14,906,037	551,125	0	0	0	0	0	33,646	82,594
<b>Water Treatment Expenses</b>												
<b>---Operation---</b>												
601.3	Operating Labor											
	Purchased Power	1	9,787,702	6,944,394	2,796,346	0	0	0	0	0	13,174	33,787
	Chemicals	1	21,735	20,330	0	0	0	0	0	0	410	1,053
	Materials and Supplies	1	5,365,628	3,845,459	0	0	0	0	0	0	87	217
	Contractor Services	2	414,956	337,485	135,889	0	0	0	0	0	10,416	25,951
	Contractor Services - Testing	2	353,943	251,123	101,121	0	0	0	0	0	640	1,642
	Contractor Services - other	2	724,900	514,382	207,130	0	0	0	0	0	478	1,222
	Equipment Rental	2	4,168	2,957	1,191	0	0	0	0	0	6	14
	Transportation	2	25,780	18,291	7,365	0	0	0	0	0	35	89
	Miscellaneous											
	<b>Total Operation</b>		17,002,828	13,657,157	3,253,316	0	0	0	0	0	25,906	66,450

AQUA PENNSYLVANIA, INC.  
ALLOCATION OF COST OF SERVICE TO COST FUNCTIONS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Account Number (1)	Account Descriptor (2)	Factor Ref. (2)	Total Company Test Year (3)	Base (4)	Max Day (5)	Extra Capacity (6)	Max Hour (6)	Meters (7)	Customer Facilities Services (8)	Customer Accounting		Fire Service		
										Billing and Coll (9)	Meter Reading (10)	Private Fire (11)	Public Fire (12)	Residential Fire (13)
<b>----Maintenance----</b>														
601.4	Maintenance Labor	2	219,058	155,422	62,585	0	0	0	0	0	0	295	756	0
620.4	Materials and Supplies	2	85,592	60,728	24,454	0	0	0	0	0	0	115	295	0
631.4	Contractor Services - Eng	2	531	377	152	0	0	0	0	0	0	0	0	0
635.4	Contractor Services - Testing	2	3,146,206	2,232,239	898,871	0	0	0	0	0	0	4,235	10,861	0
636.4	Contractor Services - Other	2	0	0	0	0	0	0	0	0	0	0	0	0
642.4	Equipment Rental	2	0	0	0	0	0	0	0	0	0	0	0	0
650.4	Transportation	2	0	0	0	0	0	0	0	0	0	0	0	0
675.4	Miscellaneous	2	28,755	20,402	8,215	0	0	0	0	0	0	39	99	0
<b>Total Maintenance</b>														
			3,480,141	2,469,168	994,277	0	0	0	0	0	0	4,685	12,013	0
<b>Total Water Treatment Expenses</b>														
			20,482,970	16,126,325	4,247,593	0	0	0	0	0	0	30,591	78,463	0
<b>---Transmission &amp; Distribution Expense---</b>														
<b>----Operation----</b>														
601.5	Operating Labor	12	471,087	66,046	3,533	57,284	282,322	26,522	0	0	0	10,788	24,402	188
	Supervision & Engineering	12	904,593	126,824	6,784	109,989	542,123	50,929	0	0	0	20,715	46,858	362
	Maps & Records	5	614,696	288,920	0	290,874	0	0	0	0	0	11,827	22,536	539
	Storage Facilities	3	149,647	98,906	39,821	0	0	0	0	0	0	3,697	7,055	168
	12 inch and Over Mains	4	809,302	380,139	0	357,720	0	0	0	0	0	31,153	58,832	1,458
	Under 12 inch Mains	6	206,688	0	0	0	0	0	0	0	0	18,829	187,859	0
	Hydrants	7	3,087,628	0	0	0	0	0	0	0	0	42,468	0	0
	Removing and Resetting Meters	7	144,278	0	0	0	0	0	0	0	0	1,978	0	0
	Miscellaneous Meter Expense	7	312,715	0	0	0	0	0	0	0	0	12,378	0	0
	Services on Customer's Premises	8	687,739	186,790	14,649	149,583	35,075	0	0	0	0	29,504	108,113	688
6502.2	Operating Labor	13	1,242,197	1,233,853	0	0	0	0	0	0	0	2,340	6,004	0
615.6	Purchased Power	1	1,396	1,387	0	0	0	0	0	0	0	3	7	0
620.5	Materials and Supplies	12	927,576	130,046	6,957	112,793	555,896	52,223	0	0	0	21,241	48,048	371
631.5	Contractor Services - Eng	12	1,543	216	12	188	925	87	0	0	0	35	80	1
636.5	Contractor Services - Other	12	550,911	77,238	4,132	66,991	330,161	31,016	0	0	0	12,616	28,537	220
641.5	Property Rental	12	2,109	2,957	158	2,565	12,639	1,187	0	0	0	483	1,092	8
642.5	Property & Equipment Rental	12	0	0	0	0	0	0	0	0	0	0	0	0
650.5	Transportation	12	1,088,572	148,412	7,939	128,722	634,402	59,598	0	0	0	24,241	54,834	423
675.5	Miscellaneous	12	2,748	385	21	334	1,647	155	0	0	0	63	142	1
<b>Total Operation</b>														
			11,204,406	2,725,119	84,006	1,277,053	5,592,650	685,392	0	0	0	244,359	594,389	4,427
<b>----Maintenance----</b>														
601.6	Maintenance Labor	13	151,715	41,206	3,252	32,988	7,737	36,032	0	0	0	6,509	23,850	152
	Supervision & Engineering	5	37,987	17,855	0	17,975	0	0	0	0	0	731	1,933	33
	Structures & Improvements	3	174,087	115,059	46,325	0	0	0	0	0	0	4,300	8,208	195
	Under 12 inch Mains	4	1,031,473	458,005	0	455,921	0	0	0	0	0	39,706	74,983	1,888
	Services	8	538,808	0	0	0	0	0	0	0	0	21,327	0	0
	Meters	7	112,563	0	0	0	111,020	0	0	0	0	1,543	0	0
	Hydrants	6	283,853	0	0	0	0	0	0	0	0	25,659	257,994	0
	Materials and Supplies	13	486,337	127,200	9,976	101,863	23,885	111,230	0	0	0	20,092	73,623	468
631.6	Contractor Services - Eng	13	0	0	0	0	0	0	0	0	0	0	0	0
635.6	Contractor Services - Other	13	5,486,545	1,484,713	116,437	1,188,973	278,794	1,298,304	0	0	0	234,515	859,341	5,467
641.6	Equipment Rental	13	0	0	0	0	0	0	0	0	0	0	0	0
650.6	Transportation	13	0	0	0	0	0	0	0	0	0	0	0	0
675.6	Miscellaneous	13	6,742	1,821	144	1,466	344	1,601	0	0	0	289	1,060	7
<b>Total Maintenance</b>														
			8,272,107	2,246,869	176,114	1,799,196	421,780	1,964,648	0	0	0	354,871	1,300,452	8,180
<b>Total Transmission and Distributor Expenses</b>														
			19,476,513	4,968,988	260,120	3,076,249	6,014,430	2,650,040	0	0	0	599,230	1,894,851	12,607
<b>Customer Accounting and Collecting Expense</b>														
601.7	Labor	11	484,987	0	0	0	0	0	0	0	0	6,984	145	0
616.7	Purchased Power	9	10,465	10,395	0	0	0	0	0	0	0	20	51	0
620.7	Materials and Supplies	9	459	0	0	0	0	0	0	0	0	7	0	0
636.7	Contractor Services - Billing	9	6,857,078	0	0	0	0	0	0	0	0	452	0	0
637.7	Contractor Services - Meter Reading	10	2,869,205	0	0	0	0	0	0	0	0	6,558,467	2,976	0
650.7	Transportation	9	0	0	0	0	0	0	0	0	0	2,857,538	0	0
670.7	Bad Debt Expense	9	2,484,353	0	0	0	0	0	0	0	0	0	0	0
675.7	Miscellaneous	9	52	0	0	0	0	0	0	0	0	2,457,405	1,115	0
<b>Total Customer Accounting and Collecting Expenses</b>														
			12,546,580	10,395	0	0	0	0	0	0	0	9,379,227	2,972,524	4,287

AQUA PENNSYLVANIA, INC.  
ALLOCATION OF COST OF SERVICE TO COST FUNCTIONS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Account Number (1)	Account Descriptor (2)	Factor Ref. (2)	Total Company Test Year (3)	Base (4)	Extra Capacity			Customer Facilities			Customer Accounting			Fire Service			Residential Fire (13)
					Max.Day (5)	Max.Hour (6)	Meters (7)	Meters (7)	Services (8)	Billing and Coll (9)	Meter Reading (10)	Private Fire (11)	Public Fire (12)				
<b>Administrative and General Expense</b>																	
601.8	Labor	14	9,912,009	3,261,051	640,316	1,252,878	552,099	1,953,657	619,501	167,513	408,375	2,974					
603.8	Employee Labor	14	2,633,872	866,544	1,70,148	332,921	146,707	519,136	146,617	44,512	108,516	790					
604.8	Employee Health Plans	16	19,919,646	8,109,288	1,288,801	3,460,043	986,022	1,713,090	543,806	296,803	770,890	5,976					
615.8	Purchased Power	1	364,240	361,794	0	0	0	0	0	0	1,760	0					
616.8	Materials and Supplies	1	133,368	132,472	0	0	0	0	0	0	645	0					
620.8	Contractor Services - Engineering	14	80,741	26,564	5,216	10,206	4,497	15,914	5,046	1,365	3,327	24					
631.8	Contractor Services - Accounting	14	220,326	72,487	14,233	27,849	12,272	43,426	13,770	3,724	9,077	66					
632.8	Contractor Services - Legal	14	713,868	234,863	46,116	90,233	39,762	140,703	44,617	12,064	29,411	214					
633.8	Contractor Services - Mgmt Fee	14	310,858	130,858	42,280	50,275	22,154	78,395	24,859	6,722	16,387	119					
634.8	Contractor Services - Testing	14	24,149,865	7,945,306	1,560,081	3,052,543	1,345,147	4,759,938	1,509,367	408,133	984,974	7,245					
635.8	Contractor Services - Other	14	0	0	0	0	0	0	0	0	0	0					
636.8	Contractor Services - Other	14	1,621,477	533,466	104,747	204,955	90,316	319,593	101,342	27,403	66,805	486					
641.8	Rent - Building	14	26,843	8,831	1,734	3,393	1,495	5,291	1,678	454	1,106	8					
642.8	Rent - Equipment	14	75,937	24,983	8,072	9,598	4,230	14,967	4,746	1,283	3,129	23					
650.8	Transportation	14	71,235	23,436	4,602	9,004	3,968	14,040	4,452	1,204	2,935	21					
656.8	Vehicle Insurance	14	306,936	100,982	32,627	38,797	17,096	60,497	19,184	5,187	12,646	92					
657.8	General Liability Insurance	14	2,624,066	863,318	169,515	331,682	146,160	517,203	164,004	44,347	108,112	767					
658.8	A&G Workers Comp Insurance	16	1,952,157	794,723	269,007	339,090	96,632	167,886	53,284	29,087	75,548	566					
659.8	A&G General Liability Insurance	14	1,128,114	371,150	119,919	142,594	62,836	222,351	70,507	19,065	46,478	338					
660.8	Advertising	14	201,843	66,406	13,039	25,513	11,243	39,783	12,615	3,411	8,316	61					
666.8	Rate Case Amortization	19	630,420	282,554	58,062	107,171	50,686	33,160	10,528	15,571	8,322	504					
676.21	Labor (Transfer?)	15	-1,887,159	-835,823	-103,416	-63,862	-87,187	-281,753	-89,263	-26,986	-66,617	-377					
676.22	Employee Benefits (Transfer?)	15	-8,402,049	-3,721,267	-799,035	-962,875	-388,175	-1,254,426	-397,417	-120,149	-296,592	-1,660					
676.24	Other (Transfer?)	15	-1,856,281	-822,147	-176,532	-101,724	-88,760	-277,143	-87,802	-26,545	-65,527	-371					
406.0	Amortization of UPAA	15	198,491	87,912	18,876	22,747	9,170	29,635	9,389	2,838	7,007	40					
404.8	Employee Benefits (Transfer?)	15	-83,406	-36,940	-7,932	-9,558	-3,853	-12,452	-3,945	-1,193	-2,944	-17					
675.8	A & G Miscellaneous	14	2,686,104	883,728	173,522	339,524	149,616	529,431	167,881	45,395	110,667	806					
Subtotal Administrative and General																	
			57,820,408	19,766,539	3,889,584	8,406,276	3,187,133	9,352,322	2,966,776	962,145	2,362,753	18,715					
			125,900,129	55,776,284	6,965,833	14,420,706	5,637,173	18,731,549	5,939,300	1,805,761	4,422,948	31,579					
<b>Total Operation &amp; Maintenance Expense:</b>																	
<b>DEPRECIATION EXPENSE</b>																	
503.00	Power and Pumping Structures	2	222,340	157,751	63,523	0	0	0	0	0	289	0					
304.20	Major Treatment Plants	3	1,027,760	679,277	273,487	0	0	0	0	0	25,389	1,152					
304.30	Purification Buildings	2	4,022,345	2,653,862	1,149,184	0	0	0	0	0	5,414	0					
304.61	Other Structures	2	691,681	632,649	254,753	0	0	0	0	0	13,885	0					
304.62	Stores, Shop and Garage Bldgs.	14	2,699,168	874,673	171,794	336,121	148,117	524,126	166,199	44,940	109,539	788					
305.63	Misc. Structures and Imp.	14	1,257,465	671,986	28,452	33,608	14,888	17,278	16,717	4,520	11,020	80					
306.00	Collecting & Impounding Res.	14	44,317	468,300	137,479	163,475	72,038	294,912	80,832	21,857	93,285	388					
306.00	Canals, River and Other Inlets	2	41,147	960,578	0	0	0	0	0	1,843	4,462	0					
307.00	Weirs, Sluiceway and Springs	2	40,637	344,578	137,545	0	0	0	0	1,633	4,158	0					
310.40	Other Pumping Equipment	2	1,204,618	854,679	344,159	0	0	0	0	1,623	4,158	0					
311.00	Electric Pumping Equipment	3	1,378,340	910,986	366,776	0	0	0	0	34,049	64,983	1,545					
320.00	Purification System	3	2,759,331	1,823,725	734,258	0	0	0	0	68,164	130,091	3,093					
	Structures	2	2,231,799	1,583,466	637,625	0	0	0	0	3,004	7,704	0					
	Wells and Boosters	2	392,341	278,367	112,092	0	0	0	0	1,354	1,354	0					
	Equipment	2	3,836,962	2,722,332	1,096,220	0	0	0	0	5,165	13,245	0					
	Computers	2	0	0	0	0	0	0	0	0	0	0					
	Painting	2	1,766	1,253	505	0	0	0	0	2	6	0					
	Filter Media	2	10,250	7,272	2,928	0	0	0	0	14	35	0					
330.00	Dstr. Reservoirs & Standpipes	5	1,535,416	721,678	0	726,559	0	0	0	29,541	56,291	1,347					
	Tanks	5	4,529,440	2,126,932	0	2,143,331	0	0	0	87,146	160,058	3,972					
331.00	Mains and Accessories	3	5,993,713	3,961,425	1,594,927	0	0	0	0	148,063	282,580	6,719					
	12 Inch and Over	4	29,171,001	12,981,095	0	0	0	0	0	1,122,909	2,120,566	52,557					
333.00	Meters	8	7,304,332	0	0	12,893,874	0	0	0	2,891,120	0	0					
334.00	Meters	7	4,096,844	0	0	0	0	0	0	56,168	0	0					
	Private	7A	2,060,255	0	0	0	0	0	0	0	0	0					
	ERTS	6	1,607,600	0	0	0	0	0	0	146,452	1,461,148	0					
335.00	Fire Hydrants	7	11,896	0	0	11,733	0	0	0	163	0	0					
	Back Flow Prevention Devices	14	33,351	10,972	3,545	2,154	1,858	6,573	2,084	564	1,374	10					
339.00	Other Plant and Miscellaneous	14	350,111	115,187	37,217	44,254	19,501	69,007	21,862	5,917	14,425	105					
340.00	Office Furniture and Equipment	14	243,596	80,143	25,884	30,791	13,568	48,013	15,225	4,117	10,036	73					
	Mechanical Equipment	14	13,172,136	4,333,633	1,400,198	1,664,958	733,688	2,596,228	823,259	222,609	542,692	3,952					

**AQUA PENNSYLVANIA, INC.**  
**ALLOCATION OF COST OF SERVICE TO COST FUNCTIONS**  
**FOR THE TWELVE MONTHS ENDED MARCH 31, 2020**

Account Number	Account Descriptor	Factor Ref.	Total Company Test Year	Base	Extra Capacity		Meters	Customer Facilities		Customer Accounting		Fire Service		
					Max Day	Max Hour		Meters	Services	Billing and Coll	Meter Reading	Private Fire	Public Fire	Residential Fire
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
341.00	Transportation Equipment	14	2,405,278	791,336	255,681	155,381	133,974	474,080	150,330	40,649	99,097	722		
	Vehicles	14	24,839	76,878	15,095	13,016	39,497	14,605	3,949	9,627	70			
342.00	Stores Equipment	14	233,672	54,964	17,759	10,792	9,305	32,928	10,441	2,823	6,883	50		
343.10	Shop Equipment	14	64,701	21,287	8,178	3,604	12,753	4,044	1,093	2,666	19			
343.20	Tools & Work Equipment - General	14	1,041,314	342,592	110,692	67,269	58,001	205,243	65,082	17,598	42,902	312		
344.00	Laboratory Equipment	0	0	0	0	0	0	0	0	0	0	0		
	Conventional	2	42,673	30,277	12,192	0	0	0	0	0	57	147		
	Electronic	2	201,190	142,745	57,440	0	0	0	0	271	695	0		
346.00	Communication Equipment	14	251,120	82,618	26,694	16,222	13,987	49,496	15,695	4,244	10,346	75		
	SCADA Equipment	3	2,597,139	1,716,527	691,099	0	0	0	0	64,157	122,445	2,911		
347	Miscellaneous Equipment	14	99,624	32,776	10,590	6,436	5,549	19,636	6,227	1,684	4,105	30		
348	Other Tangible Plant	14	1,631	537	173	105	91	321	102	28	67	0		
	<b>Total Depreciation Expense</b>		100,767,946	42,727,228	9,897,496	17,203,281	8,929,307	4,392,090	1,392,724	2,467,779	5,421,672	79,960		
	<b>TAXES OTHER THAN INCOME TAXES</b>													
	Federal and State Payroll Taxes	16	2,821,353	1,148,573	388,783	182,542	490,069	139,657	77,023	42,038	109,186	846		
	State Capital Stock Tax	18	0	0	0	0	0	0	0	0	0	0		
	PUC Assessment	19	2,075,142	930,079	191,121	352,774	166,841	109,152	34,655	51,256	27,392	1,660		
	OCA and SBA Assessments	19	390,314	174,939	35,948	66,353	39,539	31,381	20,530	6,518	5,152	312		
	Local Property Taxes	18	917,726	422,246	81,035	207,131	88,561	21,842	2,661	27,440	57,450	1,009		
	Public Utility Realty Taxes	18	4,200,000	1,932,420	370,860	947,940	99,960	405,300	12,180	125,580	262,920	4,620		
	<b>Total Taxes Other Than Income Tax:</b>		10,404,635	4,608,257	1,067,747	1,756,740	831,740	418,889	133,037	255,955	462,100	8,447		
	<b>INCOME TAXES</b>													
	Federal Income Taxes	18	10,790,740	4,964,819	952,822	2,435,470	1,041,306	98,196	31,283	322,643	675,500	11,870		
	State Income Taxes	18	4,708,283	2,166,281	415,741	1,062,660	454,349	42,845	13,654	140,778	294,739	5,179		
	Deferred Taxes	18	-16,354,887	-7,524,883	-1,444,136	-3,091,298	-1,578,247	-148,829	-47,429	-489,011	-1,023,816	-17,990		
	ITC-Amortized	18	-253,413	-116,595	-22,376	-57,195	-24,454	-2,306	-735	-7,577	-15,864	-279		
	<b>Total Income Taxes</b>		-1,109,276	-510,378	-97,949	-250,363	-107,046	-10,094	-3,217	-33,167	-69,441	-1,220		
	<b>UTILITY OPERATING INCOME</b>													
		18	253,704,069	116,729,242	22,402,069	57,261,008	6,038,157	2,308,707	735,742	7,585,752	15,881,875	279,074		
	<b>Total Cost of Service</b>		489,687,403	219,332,633	45,236,365	82,936,499	30,223,392	25,841,141	8,197,586	12,082,080	26,119,154	397,840		
	<b>Less:</b>													
	Other Water Revenues	19	-1,159,716	-519,785	-106,810	-197,152	-117,479	-83,241	-61,001	-28,645	-15,308	-928		
	Revenues from Contract Sales	19	-7,665,891	-3,435,852	-706,029	-1,303,201	-776,555	-616,338	-403,226	-189,347	-101,190	-6,133		
	Unrecovered Public Fire	20	0	0	0	0	0	0	0	0	0	0		
	Reallocate Unrecovered Public Fire	21	0	0	0	0	19,565,501	0	0	0	-19,565,501	0		
	<b>Total Cost of Service Related to Sales</b>		480,841,796	215,376,996	44,423,526	81,436,146	48,894,859	25,376,914	8,050,199	11,864,088	6,437,155	390,779		
	<b>Act 11</b>		8,073,988	3,762,744	776,101	1,422,730	674,206	443,347	140,641					
	<b>Total Cost of Service</b>		488,915,784	219,139,740	45,199,627	82,858,876	49,749,077	25,820,261	8,190,840	11,864,088	6,437,155	390,779		

AQUA PENNSYLVANIA, INC.

FACTOR 18. ORIGINAL COST MEASURE OF VALUE RATE BASE ALLOCATED TO FUNCTIONAL CLASSIFICATIONS

Account (1)	Factor Ref. (2)	Measure of Value (3)	Base (5)	Extra Capacity Maximum Day (6)	Maximum Hour (7)	Customer Facilities		Customer Accounting		Fire Service		
						Meters (8)	Services (9)	Billing and Coll (10)	Meter Reading (11)	Private Fire (12)	Public Fire (13)	Residential Fire (14)
NONDEPRECIABLE PLANT												
301	17	Organization	6,621,061	583,978	1,495,036	157,581	638,932	59,590	18,539	197,970	414,478	7,283
302	17	Franchise and Consents	2,883,289	254,306	651,047	68,622	278,237	25,950	8,073	86,210	180,494	3,172
303	17	Miscellaneous Intangible Plant	2,626,891	231,682	593,152	62,520	253,495	23,642	7,355	78,544	164,443	2,890
303	1	Water Rights	3,559,184	-	-	-	-	-	-	6,706	17,202	-
303	1	Reservoir Land	2,856,843	-	-	-	-	-	-	5,382	13,807	-
303	2	Other Sources of Supply Land	6,878,759	1,965,262	-	-	-	-	-	23,745	23,745	-
303	3	Power and Pumping Land	792,141	318,928	-	-	-	-	-	9,259	9,259	-
303	3	Purification Land	1,179,465	474,943	-	-	-	-	-	29,607	56,506	1,344
303	3	T&D Right of Way	1,711,221	455,356	-	-	-	-	-	2,238	5,739	-
304	5	Dist. Reservoir & Standpipe Land	1,314,949	-	622,234	-	-	-	-	42,272	80,677	1,918
304	14	Office Land	3,173,180	337,309	204,987	401,090	176,746	625,434	198,324	25,300	48,209	1,153
304	14	Stores, Shop and Garage Land	1,002,955	106,614	64,791	126,773	55,865	197,682	62,685	16,950	130,735	952
304	14	Miscellaneous Land	1,236,302	131,419	79,865	156,269	68,862	243,675	77,269	20,894	50,936	371
		Total Nondepreciable Plant	36,725,544	4,859,807	3,711,112	972,855	1,472,137	1,175,973	372,245	574,959	1,228,293	19,384
DEPRECIABLE PLANT												
304	2	Power and Pumping Structures	7,822,452	2,234,875	-	-	-	-	-	10,529	27,003	-
	3	Other Structures	40,574,833	10,796,963	-	-	-	-	-	1,002,320	1,912,941	45,484
304	2	Purification Buildings	129,873,256	37,104,789	-	-	-	-	-	174,809	448,322	-
	2	Major Treatment Plants	37,432,908	10,694,582	-	-	-	-	-	50,385	129,218	-
	2	Other Structures	59,996,348	6,377,612	3,875,764	7,583,538	3,341,797	11,825,280	3,749,772	1,013,938	2,471,850	17,989
305	14	Office Buildings	3,747,885	398,400	242,113	473,733	208,757	738,708	234,243	63,339	154,413	1,124
305	14	Stores, Shop and Garage Bldgs.	25,226,983	2,681,628	1,629,663	3,188,691	1,405,143	4,972,238	1,576,686	428,336	1,039,352	7,568
305	1	Misc Structures and Impr.	30,647,621	-	-	-	-	-	-	57,740	148,120	-
305	2	Collecting & Impounding Res.	8,742,840	3,520,539	-	-	-	-	-	16,586	42,537	-
306	2	Lake, Rive and Other Intakes	12,322,502	14,107,997	-	-	-	-	-	66,466	170,461	-
307	2	Wells and Springs	49,380,460	35,035,535	-	-	-	-	-	600,939	1,146,899	27,270
310	3	Other Power Producing Equipment	24,326,543	6,473,293	-	-	-	-	-	1,385,687	2,644,601	62,881
320	3	Pumping Equipment	56,093,858	14,926,576	-	-	-	-	-	-	-	-
	2	Purification System	60,285,397	17,223,538	-	-	-	-	-	81,144	208,105	-
	2	Structures	12,476,901	3,564,651	-	-	-	-	-	16,794	43,070	-
	2	Wells & Boosters	124,057,977	35,443,364	-	-	-	-	-	166,982	428,248	-
	2	Equipment	0	-	-	-	-	-	-	-	-	-
	2	Computers	0	-	-	-	-	-	-	-	-	-
	2	Painting	7,505	2,144	-	-	-	-	-	10	26	-
	2	Filter Media	55,053	15,729	-	-	-	-	-	74	190	-
330	5	Dist. Reservoirs & Standpipes	66,544,823	31,277,464	-	-	-	-	-	1,280,322	2,439,666	58,960
	5	Tanks	25,738,565	12,097,666	31,489,010	-	-	-	-	495,210	943,627	22,573
	5	Tank Painting	-	-	-	-	-	-	-	-	-	-
331	3	Mains & Accessories	500,871,975	133,282,033	-	-	-	-	-	12,373,040	23,614,110	561,477
	4	Under 12 Inch	1,705,246,483	758,834,685	-	-	-	-	-	65,641,758	123,962,893	3,071,149
333	8	Services	350,247,240	-	753,735,998	-	-	-	-	13,863,486	-	-
334	7	Meters	47,471,862	-	-	46,821,023	-	-	-	650,839	-	-
	7A	Remote	15,726,623	-	-	15,726,623	-	-	-	-	-	-
335	6	ERTS	63,960,247	-	-	-	-	-	-	5,826,779	58,133,468	-
336	7	Fire Hydrants	349,708	-	-	-	-	-	-	4,794	-	-
336	7	Back Flow Prevention Devices	-	-	-	344,914	-	-	-	-	-	-
339	14	Other Plant and Misc.	671,357	220,876	43,370	84,860	37,395	132,324	41,960	11,346	27,660	201

AQUA PENNSYLVANIA, INC.

FACTOR 18. ORIGINAL COST MEASURE OF VALUE RATE BASE ALLOCATED TO FUNCTIONAL CLASSIFICATIONS

Account (1)	Factor Ref. (2)	Measure of Value (3)	Base (5)	Extra Capacity Maximum Day (6)	Maximum Hour (7)	Customer Facilities Services (9)		Customer Accounting Billing and Coll (10)		Meter Reading (11)	Fire Service Public Fire (13)		Residential Fire (14)
						Meters (8)	Services (9)	Billing and Coll (10)	Meter Reading (11)		Private Fire (12)	Public Fire (13)	
340													
Office Furniture & Equipment													
Furniture	14	4,026,080	1,324,580	427,972	260,085	508,897	224,253	793,540	251,630	66,041	165,874	1,208	
Mechanical Equipment	15	1,490,730	660,244	141,768	81,692	170,838	68,872	222,566	70,512	21,317	52,623	298	
Computers	15	48,595,198	21,522,813	4,621,403	2,663,017	5,569,010	2,245,098	7,255,263	2,298,563	694,911	1,715,410	9,719	
341													
Transportation Equipment													
Vehicles	15	10,079,628	4,464,267	958,573	552,364	1,155,125	465,679	1,504,888	476,766	144,139	355,811	2,016	
Other	15	3,563,761	1,576,390	338,914	195,294	408,407	164,646	532,070	168,566	50,962	125,801	713	
Stores Equipment	15	2,575,775	1,140,811	244,956	141,152	295,194	119,001	384,563	121,834	36,834	90,925	515	
Shop Equipment	15	861,002	381,338	81,881	47,183	98,671	39,778	128,548	40,725	12,312	30,393	172	
Tools & Work Equipment - General	15	13,539,451	5,996,623	1,287,602	741,962	1,551,621	625,523	2,021,440	640,416	193,614	477,943	2,708	
344													
Laboratory Equipment													
Conventional	2	1,010,861	717,208	288,803	-	-	-	-	-	1,361	3,489	-	
Electronic	2	2,744,363	1,947,131	784,065	-	-	-	-	-	3,694	9,474	-	
346													
Communication Equipment	15	2,836,599	1,256,330	269,761	155,446	325,074	131,051	423,504	134,171	40,563	100,132	567	
SCADA Equipment	3	14,756,231	9,752,836	3,926,633	-	-	-	-	-	364,523	695,697	16,542	
Miscellaneous Equipment	15	1,110,458	491,822	105,605	60,853	127,258	51,303	165,791	52,525	15,880	39,199	222	
Other Intangible Plant	15	26,509	11,741	2,521	1,453	3,038	1,225	3,958	1,254	379	936	5	
Total Depreciable Plant		3,558,374,011	1,632,122,051	312,400,535	808,095,908	84,436,505	345,513,275	31,104,681	9,859,613	106,930,182	224,000,487	3,910,771	
Total Utility Plant		3,595,099,555	1,654,460,833	317,260,342	811,807,020	85,409,360	346,985,412	32,280,654	10,231,858	107,505,141	225,228,780	3,930,155	
OTHER RATE BASE ELEMENTS													
Materials and Supplies	17	6,954,190	3,201,014	613,360	1,570,256	165,510	671,079	62,588	19,472	207,930	435,332	7,650	
Cash Working Capital - Expenses	15	2,286,000	1,012,469	217,399	125,273	261,976	105,613	341,300	108,128	32,690	80,696	457	
Cash Working Capital - Taxes	17	-	-	-	-	-	-	-	-	-	-	-	
Cash Working Capital - P/R Tax	16	-	-	-	-	-	-	-	-	-	-	-	
Acquisition Adjustments	17	5,407,913	2,489,262	476,978	1,221,107	128,708	521,864	48,671	15,142	161,697	338,535	5,949	
Previously Approved Rate Base Item	2	-	-	-	-	-	-	-	-	-	-	-	
Hubbard Contract Adjustment	17	-	-	-	-	-	-	-	-	-	-	-	
Deferred Income Taxes	17	(344,507,090)	(158,576,613)	(30,385,525)	(77,789,701)	(8,199,269)	(33,244,934)	(3,100,564)	(964,620)	(10,300,762)	(21,566,144)	(378,958)	
Accrued Interest	17	-	-	-	-	-	-	-	-	-	-	-	
Total Other Rate Base Elements		(329,858,986)	-151,873,868	-29,077,788	-74,873,065	-7,643,075	-31,946,378	-2,648,005	-821,878	-9,898,445	-20,711,581	-364,902	
Total Original Cost Measure of Value		3,265,240,569	1,502,586,965	288,182,554	736,933,955	77,766,285	315,039,034	29,632,649	9,409,980	97,606,696	204,517,199	3,565,253	



AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- j. Provide a detailed cost analysis that supports the company's customer charges, by meter size, showing all direct and indirect costs included.

RESPONSE

Please refer to the attached schedule.

AQUA PENNSYLVANIA, INC.  
CALCULATION OF CUSTOMER COST PER MONTH FOR A 5/8-INCH METER

<u>Cost Function</u> (1)	<u>Cost of Service</u> (2)	<u>Total Units</u> (3)	<u>Cost Per 5/8-inch Meter</u> (4)	<u>Cost Per 5/8-inch Meter Monthly Bill</u> (5)
Meters	29,329,358	419,920 5/8-inch Equivalents	\$ 69.85	\$ 5.82
Services	38,591,138	412,313 3/4-inch Equivalents	93.60	7.80
Billing and Collecting	25,376,914	4,803,064 Bills	5.28	5.28
Meter Reading	<u>8,050,199</u>	4,803,064 Readings	1.68	<u>1.68</u>
Subtotal Customer Costs	\$101,347,609			20.58
Unrecovered Public Fire	<u>19,565,501</u>	419,920 5/8-inch Equivalents	46.59	<u>3.88</u>
Total Customer Costs and Public Fire	<u>\$120,913,110</u>			<u>\$ 24.46</u>

AQUA PENNSYLVANIA, INC.  
CALCULATION OF CUSTOMER COST PER MONTH FOR A 5/8-INCH METER  
DIRECT CUSTOMER COSTS ONLY

<u>Cost Function</u> (1)	<u>Cost of Service</u> (2)	<u>Total Units</u> (3)	<u>Cost Per 5/8-inch Meter</u> (4)	<u>Cost Per 5/8-inch Meter Monthly Bill</u> (5)
Meters	22,442,818	419,920 5/8-inch Equivalents	\$ 53.45	\$ 4.45
Services	34,877,991	412,313 3/4-inch Equivalents	84.59	7.05
Billing and Collecting	14,648,405	4,803,064 Bills	3.05	3.05
Meter Reading	<u>4,644,446</u>	4,803,064 Readings	0.97	<u>0.97</u>
Subtotal Customer Costs	\$76,613,661			15.52
Unrecovered Public Fire	<u>19,565,501</u>	419,920 5/8-inch Equivalents	46.59	<u>3.88</u>
Total Customer Costs and Public Fire	<u>\$96,179,162</u>			<u>\$ 19.40</u>

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS2. Provide a listing of negotiated special rate contracts which includes a comparison of revenues under special rate contracts and under tariff rates. Provide the cost of service treatment of any deficiency in revenues resulting from the negotiated special rate contracts. Special rates are defined as rates not contained in the currently effective tariff.

RESPONSE

Please refer to the attached schedules for the comparison of the present and proposed tariff revenues with contract revenues for the contract customers.

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<b><u>Industrial Contract - Mt. Carmel</u></b>						
<b>TARIFF RATES</b>						
Customer Charge						
1 1/2"	6	-	\$ 89.90	\$ 539	\$ 103.90	\$ 623
6"	15	-	862.00	12,930	997.00	14,955
Subtotal	21	-		\$ 13,469		\$ 15,578
Consumption						
1st block		1,200	1.0000	\$ 1,200	1.2490	\$ 1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
4th block		360,000	0.6668	240,048	0.8330	299,880
5th block		800,004	0.6052	484,162	0.7868	629,443
6th block		1,552,480	0.4842	751,711	0.6293	976,976
Subtotal Consumption		2,752,480		\$ 1,505,814		\$ 1,943,640
Total Tariff Revenue	21	2,752,480		\$ 1,519,283		\$ 1,959,218
<b>CONTRACT RATES</b>						
Customer Charge						
Total Contract	21	2,752,480	\$ 0.2960	\$ 814,734	\$ 0.3080	\$ 847,764
<b><u>Industrial Contract - Covanta</u></b>						
<b>TARIFF RATES</b>						
Customer Charge						
6"	12	-	\$ 862.00	\$ 10,344	\$ 997.00	\$ 11,964
Consumption						
1st block		1,200	1.0000	\$ 1,200	1.2490	\$ 1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
4th block		360,000	0.6668	240,048	0.8330	299,880
5th block		800,004	0.6052	484,162	0.7868	629,443
6th block		862,700	0.4842	417,719	0.6293	542,897
Subtotal Consumption		2,062,700		\$ 1,171,822		\$ 1,509,561
Total Tariff Revenue	12	2,062,700		\$ 1,182,166		\$ 1,521,525
<b>CONTRACT RATES</b>						
Customer Charge						
6" April '17 to December '17	9	1,100,000	\$ 35,160.00	\$ 316,440	\$ 38,327.00	344,943
6" Jan '18 to March '18	3	360,000	36,480.00	\$ 109,440	38,327.00	114,981
Allowance 120,000						
1st block		602,700	0.2930	\$ 176,591	\$ 0.3080	\$ 185,632
Total Contract		2,062,700		\$ 602,471		\$ 645,556

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<b><u>Industrial Contract - Liberty Power</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 10"	12	-	\$ 2,229.00	\$ 26,748	\$ 2,577.00	\$ 30,924
Consumption						
1st block		1,200	1.0000	\$ 1,200	1.2490	\$ 1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
4th block		360,000	0.6668	240,048	0.8330	299,880
5th block		800,004	0.6052	484,162	0.7868	629,443
6th block		8,185,100	0.4842	3,963,225	0.6293	5,150,883
Subtotal Consumption		9,385,100		\$ 4,717,328		\$ 6,117,547
Total Industrial	12	9,385,100		\$ 4,744,076		\$ 6,148,471
<b>CONTRACT RATES</b>						
Customer Charge 10"	12	-	\$ 90,702.15	\$ 1,088,426	\$ 95,294.00	\$ 1,143,528
1st block		9,385,100	0.0970	\$ 910,355	0.1020	\$ 957,280
Total Contract		9,385,100		\$ 1,998,781		\$ 2,100,808
<b><u>Woodloch Pines - Commercial Contract</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 2"	12	-	\$ 127.90	\$ 1,535	\$ 147.90	1,775
1st block		1,200	\$ 1.0000	1,200	\$ 1.2490	1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
Over		29,004	0.6668	19,340	0.8330	24,160
Total Contract		69,000		\$ 50,768		\$ 63,276
<b>CONTRACT RATES</b>						
Customer Charge 2"	12	-	\$ 127.90	\$ 1,535	\$ 148.00	1,776
1st block		1,200	\$ 1.0000	1,200	\$ 1.2490	1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
Over		29,004	0.6668	19,340	0.8330	24,160
Total Contract		69,000		\$ 50,768		\$ 63,278

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<b><u>Public Contract - Canaan Federal Prison</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 10"	12	-	\$ 2,229.00	\$ 26,748	\$ 2,577.00	30,924
1st block		1,200	\$ 1.0000	1,200	\$ 1.2490	1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
Over		953,754	0.6668	635,963	0.8330	794,477
Total Contract		993,750		\$ 692,604		\$ 862,742
<b>CONTRACT RATES</b>						
Customer Charge 10"	12	540,000	\$ 22,375.00	\$ 268,500	\$ 22,934.00	\$275,208
Allowance 45,000 1st block		453,750	0.1250	\$ 56,719	0.1281	58,125.38
Total Contract	12	993,750		\$ 325,219		\$ 333,333
<b><u>Public Contract - SCI Forest County Prison</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 4"	24	-	\$ 418.00	\$ 10,032	\$ 483.00	11,592
1st block		1,200	\$ 1.0000	1,200	\$ 1.2490	1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
Over		910,702	0.6668	607,256	0.8330	758,615
Total Contract		950,698		\$ 647,181		\$ 807,548
<b>CONTRACT RATES</b>						
Customer Charge 4"	12	1,092,000	\$ 418.00	\$ 5,016	\$ 483.00	\$ 5,796.00
Contract Adjustment	12		6,670.53	80,046	6,670.53	80,046
Subtotal	24			85,062		85,842
1st block		1,200	\$ 1.0000	1,200	\$ 1.2490	1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
Over		910,702	0.6668	607,256	0.8330	758,615
Total Contract		950,698		\$ 637,149		\$ 795,956
Total SCI Forest Adj Contract	24	950,698		\$ 722,211		\$ 881,798

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<b><u>Public Contract - SCI Waymart</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 8"	12	-	\$ 1,508.00	\$ 18,096	\$ 1,744.00	20,928
1st block		1,200	\$ 1.0000	1,200	\$ 1.2490	1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
Over		789,134	0.6668	526,195	0.8330	657,349
Total Contract		829,130		\$ 574,184		\$ 715,618
<b>CONTRACT RATES</b>						
Customer Charge 8"	12	593,600	\$ 4,662.30	\$ 55,948	\$ 4,898.00	\$58,776
Allowance 52,800						
1st block		235,530	\$ 0.1690	39,805	\$ 0.1780	41,924.34
2nd block		-	\$ 0.1690	-	\$ 0.1780	-
Total Contract		829,130		\$ 95,753		\$ 100,700
<b><u>Sales for Resale Contract - United Water PA</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 1-1/2"	12	-	\$ 89.90	\$ 1,079	\$ 103.90	\$ 1,247
1st block		121,810	\$ 0.8833	107,595	\$ 1.2490	152,141
Total Contract	12	121,810		\$ 108,674		\$ 153,387
<b>CONTRACT RATE</b>						
Customer Charge 1-1/2"	12	121,080	\$ 4,027.90	\$ 48,335	\$ 4,906.00	\$ 58,872
1st block	-	730	\$ 0.2500	\$ 183	\$ 0.3050	\$ 223
2nd block	-	-	0.2500	-	0.3050	-
	-	730		\$ 183		\$ 223
Total Contract	12	121,810		48,518		59,095
<b><u>Sales for Resale Contract - Chemung</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 10"	12	-	\$ 2,229.00	\$ 26,748	\$ 2,577.00	\$ 30,924
1st block		16,060	\$ 0.8833	14,186	\$ 1.2490	20,059
Total Contract	12	16,060		\$ 40,934		\$ 50,983
<b>CONTRACT RATE</b>						
Customer Charge 10"	12		\$ 510.00	\$ 6,120	\$ 621.00	\$ 7,452
1st block		16,060	0.5660	\$ 9,090	\$ 0.689	\$ 11,065
Total Contract	12	16,060		\$ 15,210		\$ 18,517

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<b><u>Sales for Resale Contract - New Wilmington</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 4"	13	-	\$ 418.00	\$ 5,434	\$ 483.00	\$ 6,279
1st block		536,600	\$ 0.8833	473,979	\$ 1.2490	670,213
Total Contract	13	536,600		\$ 479,413		\$ 676,492
<b>CONTRACT RATE</b>						
Customer Charge 4"	13		\$ 209.00	\$ 2,717	\$ 255.00	\$ 3,315
1st block		536,600	0.5170	\$ 277,422	\$ 0.630	\$ 338,058
Total Contract	13	536,600		\$ 280,139		\$ 341,373
<b><u>Sales for Resale Contract - Warwick</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 8"	13	-	\$ 1,508.00	\$ 19,604	\$ 1,744.00	\$ 22,672
1st block		2,596,240	\$ 0.8833	2,293,259	\$ 1.2490	3,242,704
Total Contract	13	2,596,240		\$ 2,312,863		\$ 3,265,376
<b>CONTRACT RATE</b>						
Customer Charge 8"	13	2,268,250	\$ 45,149.03	\$ 586,937	\$ 47,435.00	\$ 616,655
Allowance 180,000 Gallons						
1st block		327,990	0.2190	71,830	\$ 0.230	75,438
2nd block		-	0.2190	-	\$ 0.230	-
		327,990	0.4380	\$ 71,830		\$ 75,438
Total Contract	13	2,596,240		\$ 658,767		\$ 692,093
<b><u>Sales for Resale Contract - Borough of Sharpsville</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 8"	23	-	\$ 1,508.00	\$ 34,684	\$ 1,744.00	\$ 40,112
1st block		1,572,750	\$ 0.8833	1,389,210	\$ 1.2490	1,964,365
Total Contract	23	1,572,750		\$ 1,423,894		\$ 2,004,477
<b>CONTRACT RATE</b>						
Customer Charge 8"	23	-	\$ 1,508.00	\$ 34,684	\$ 1,744.00	40,112
All Sharpsville Consumption		1,572,750	0.2270	\$ 357,014	0.2380	374,314.50
Total Contract	23	1,572,750		\$ 391,698		\$ 414,427



AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<b><u>Sales for Resale Contract - Hubbard Township</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 6"	12	-	\$ 862.00	\$ 10,344	\$ 997.00	\$ 11,964
1st block		2,655,650	\$ 0.8833	2,345,736	\$ 1.2490	3,316,907
Total Contract	12	2,655,650		\$ 2,356,080		\$ 3,328,871
<b>CONTRACT RATE</b>						
Customer Charge 6"	12	2,655,650	0.1998	\$ 530,599	0.2100	\$ 557,687
Total OWU-Hubbard	12	2,655,650		\$ 530,599		\$ 557,687
<b><u>Sales for Resale Contract - Bucks County</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 8"	1	-	\$ 1,508.00	\$ 1,508	\$ 1,744.00	\$ 1,744
1st block		730	\$ 0.8833	645	\$ 1.2490	912
Total Contract	1	730		\$ 2,153		\$ 2,656
<b>CONTRACT RATE</b>						
Customer Charge 8"	1	-	\$ -	\$ -	\$ -	\$ -
1st block		730	0.6210	\$ 453	0.6520	\$ 476
Total Contract	1	730		\$ 453		\$ 476
<b><u>Sales for Resale Contract - Horsham</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 3"	12	-	\$ 257.00	\$ 3,084	\$ 297.00	\$ 3,564
1st block		966,260	\$ 0.8833	853,497	\$ 1.2490	1,206,859
Total Contract	12	966,260		\$ 856,581		\$ 1,210,423
<b>CONTRACT RATE</b>						
Customer Charge 3"	12	821,250	\$ 21,763.13	\$ 261,158	\$ 22,865.00	\$ 274,380
Allowance 63,000 1st block		145,010	0.2450	\$ 35,527	0.2570	\$ 37,268
Total Contract	12	966,260		\$ 296,685		\$ 311,648

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<b><u>Sales for Resale Contract - Schwenksville</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 3"	12	-	\$ 257.00	\$ 3,084	\$ 297.00	\$ 3,564
1st block		522,250	\$ 0.8833	461,303	\$ 1.2490	652,290
Total Contract	12	522,250		\$ 464,387		\$ 655,854
<b>CONTRACT RATE</b>						
Customer Charge 3"	12	305,484	\$ 9,437.00	\$ 113,244	\$ 9,437.00	\$ 113,244
Allowance 51,000 1st block		216,766	0.3600	\$ 78,036	0.3780	\$ 81,938
Total Contract	12	522,250		\$ 191,280		\$ 195,182
<b><u>Sales for Resale Contract - Downingtown</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 3"	12	-	\$ 257.00	\$ 3,084	\$ 297.00	\$ 3,564
1st block		210	\$ 0.8833	185	\$ 1.2490	262
Total Contract	12	210		\$ 3,269		\$ 3,826
<b>CONTRACT RATE</b>						
Customer Charge 3"	9	-	\$ -	\$ -	\$ -	\$ -
1st block		210	0.0986	\$ 21	0.1040	\$ 22
Total Contract	9	210		\$ 21		\$ 22
<b><u>Sales for Resale Contract - Masury Water Company</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 6"	12	-	\$ 862.00	\$ 10,344	\$ 997.00	\$ 11,964
1st block		687,634	\$ 0.8833	607,387	\$ 1.2490	858,855
Total Contract	12	687,634		\$ 617,731		\$ 870,819
<b>CONTRACT RATE</b>						
Customer Charge 6"	12		\$ 862.00	\$ 10,344	\$ 997.00	\$ 11,964
April '17 to June '17		165,017	\$ 0.1795	\$ 29,618	\$ 0.1910	\$ 31,518
July '17 to April '18		522,617	\$ 0.1818	94,991	\$ 0.1910	99,820
		687,634		\$ 124,609		\$ 131,338
Total Contract	12	687,634		\$ 134,953		\$ 143,302

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<b><u>Sales for Resale Contract - Bristol</u></b>						
<b>TARIFF RATES</b>						
Customer Charge 3"	8	-	\$ 257.00	\$ 2,056	\$ 297.00	\$ 2,376
1st block		21,619	\$ 0.8833	19,096	\$ 1.2490	27,002
Total Contract	8	21,619		\$ 21,152		\$ 29,378
<b>CONTRACT RATE</b>						
Customer Charge 3"	8	-	\$ -	\$ -	\$ -	\$ -
1st block		21,619	0.6550	\$ 14,160	0.6550	\$ 14,160
Total Contract	8	21,619		\$ 14,160		\$ 14,160

Exhibit No. 5-A, Part II  
Docket No. R-2018-3003068  
Witness: P. R. Herbert

# AQUA PENNSYLVANIA, INC.

BRYN MAWR, PENNSYLVANIA

OPERATING REVENUE FROM SALES OF WATER  
FOR THE TWELVE MONTHS  
ENDED MARCH 31, 2020



*Excellence Delivered **As Promised***

Exhibit No. 5-A, Part II  
Docket No. R-2018-3003068  
Witness: P. R. Herbert

AQUA PENNSYLVANIA, INC.  
BRYN MAWR, PENNSYLVANIA

OPERATING REVENUE FROM SALES OF WATER  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Harrisburg, Pennsylvania

PART II

TABLE OF CONTENTS

OPERATING REVENUE FROM SALES OF WATER

	<u>Page</u>
Plan of Exhibit .....	1
Schedule 1. Summary of Proforma Revenues Under Proposed Rates for the Twelve Months Ended March 31, 2018 and 2020 and the Calculation of the Revenue Increase Under Proposed Rates.....	3
Schedule 2. Summary of Application of Proposed Rates to Customer Bill Analysis and Pro Forma Adjustments for the Twelve Months Ending March 31, 2018 and 2020.....	4
Schedule 3. Summary of Revenue Under Present Rates and Pro Forma Revenues under Present Rates for the Twelve Months Ended March 31, 2018 and 2020.....	5
Schedule 4. Summary of Application of Present Rates to Customer Bill Analysis and Pro Forma Adjustments for the Twelve Months Ending March 31, 2018 and 2020.....	6
Schedule 5. Application of Present and Proposed Rates to Consumption Analysis for the Twelve Months Ended March 31, 2018:	
Contracts .....	8
Main Division.....	12
Superior Division.....	15
Western, Eagle Rock, Fawn Lake, Tanglewood, Thornhurst, Woodledge Village and Pinecrest Divisions.....	17
Bensalem Division.....	18
Chalfont Division .....	20
Oakland & Lakeside Division.....	22
CS Water (Masthope) Division .....	24
Country Club Gardens Division .....	25
Clarendon Division .....	26
Kratzerville Division .....	27
Honesdale Division .....	28
Sand Springs Division .....	30
Mifflin Township Division .....	31
Beech Mountain Division.....	34
Treasure Lake Division.....	35
Concord Park Division.....	36
Bristol Division.....	37
Mt. Jewett Division .....	38
Bunker Hill Division .....	39
Robin Hood Lakes Division .....	40
East Cameron Division.....	41
Sun Valley Division .....	42

TABLE OF CONTENTS, cont.

Schedule 6. Application of Present and Proposed Rates to Proforma Adjustments for the Twelve Months Ended March 31, 2018:	
Main Division Declining Usage and Customer Growth.....	43
Availability Charge.....	48
Sun Valley.....	49
Schedule 7A. Application of Proposed Rates to Metered Private Fire Customers and Private Fire Hydrants as of March 31, 2018 .....	50
Schedule 7B. Application of Present and Proposed Rates to Public Fire Hydrants as of March 31, 2018.....	52
Schedule 8. Comparison of Present and Composed Rates	
Main Division.....	53
Superior Division.....	57
Western, Eagle Rock, Fawn Lake, Tanglewood, Thornhurst, Woodledge Village and Pinecrest Divisions .....	58
Bensalem Division.....	59
Chalfont Division .....	60
Oakland & Lakeside Division.....	61
CS Water (Masthope) Division .....	62
Country Club Gardens Division .....	63
Clarendon Division .....	64
Kratzerville Division .....	65
Honesdale Division .....	66
Sand Springs Division .....	67
Mifflin Township Division .....	68
Beech Mountain Division.....	69
Treasure Lake Division.....	70
Concord Park Division.....	71
Bristol Division.....	72
Mt. Jewett Division .....	73
Bunker Hill Division .....	74
Robin Hood Lakes Division .....	75
East Cameron Division.....	76
Sun Valley Division .....	77

AQUA PENNSYLVANIA, INC.

OPERATING REVENUE FROM SALES OF WATER  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

PLAN OF EXHIBIT

Exhibit 5-A sets forth the summaries of the results of applying the proposed rates for sales of water to a detailed analysis of water customers' consumption, and the application of proposed rates to the consumption analysis.

Schedule 1 on page 3 presents a summary of the pro forma revenues for the consolidated divisions under proposed rates, for the twelve months ending March 31, 2020. The revenues under proposed rates are developed in Schedule 2 for the several divisions. Schedule 3 on page 5 presents a summary of the proforma revenues for the consolidated divisions under present rates, for the twelve months ending March 31, 2018. The revenues under present rates are developed in Schedule 4 for the several divisions. The application of proposed rates to the consumption analysis for each division are presented on Schedule 5. Schedule 6 presents adjustments to the application of proposed rates to divisions that experienced customer growth, declining usage, revenue from Availability Lots, or were acquired during the middle of the historic test year. The application of proposed rates to metered private fire customers, private hydrants and public fire hydrants are shown in Schedules 7A and 7B, respectively.

The results of the application of proposed rates are summarized in Schedule 2 of Exhibit No. 5-A are brought forward to columns 4 and 5 of Schedule 1. Schedule 4 sets forth the application of proposed rates to the detailed analysis of bill and consumption by meter size and customer classification for each rate division, in a similar manner



presented in Exhibit No. 5-A Part I. The revenues in column 5 of Schedule 1 are adjusted for changes during the twelve months ended March 31, 2020 (column 7), to develop the total revenues projected for the twelve months ended March 31, 2020, under proposed, in column 8 of Schedule 1. Exhibit No. 5-A, Part II, presents a more detailed explanation of the application of present rates to the consumption analysis.

A comparison of the present and proposed rates for sales of water for each division is provided in the response to Standard Data Request No. OR-3. The response also provides a comparison of the billing for various levels of consumption under present (including DSIC surcharge) and proposed rates for 5/8-inch Residential customers in each division and also for the average Commercial and Industrial customers.

AQUA PENNSYLVANIA, INC

SUMMARY OF PRO FORMA REVENUES UNDER PROPOSED RATES FOR THE TWELVE MONTHS ENDED MARCH 31, 2018 AND 2020  
AND THE CALCULATION OF THE REVENUE INCREASE UNDER PROPOSED RATES

Customer Classification (1)	Pro Forma Revenues, Present Rates (Schedule 4)	Bill Analysis Revenues, Proposed Rates (Schedule 3)	Adjustment Factor (Sch. 4, col 4)	Revenues, Proposed Rates (5)=(4)X(3)	Pro Forma Adjustments Proposed Rates (Schedules 3 and 7)	Total Pro Forma Revenue Proposed Rates (7)=(5)+(6)	Proposed Increase (8)=(7)-(2)	Percent Increase (9)
	(2)	(3)	(4)	(5)=(4)X(3)	(6)	(7)=(5)+(6)	(8)=(7)-(2)	(9)
<b>METERED SALES</b>								
Residential	\$ 278,814,363	\$ 322,361,521	1.00108482	\$ 322,711,226	\$ 1,598,464	\$ 324,309,690	\$ 45,495,327	16.3%
Commercial	101,595,579	115,072,431	0.99945606	115,009,838	1,979,808	116,989,646	15,394,068	15.2%
Industrial	14,794,252	17,475,820	0.99822882	17,444,867	(146,709)	17,298,158	2,503,907	16.9%
Public	7,497,388	8,535,530	1.00373755	8,567,432		8,567,432	1,070,044	14.3%
Sales for Resale	11,647	13,443	0.98040555	13,180		13,180	1,532	13.2%
Total Sales of Water	402,713,229	463,458,745		463,746,543	3,431,563	467,178,106	64,464,877	16.0%
Unmetered Sales Availability	22,657	11,846	1.00144064	11,863	14,430	26,293	3,636	
Private Fire	14,388,843	14,848,229	1.00412338	14,909,454	547,915	15,457,369	1,068,526	7.4%
Public Fire	5,963,794	6,254,838	0.99983598	6,253,812		6,253,812	290,019	4.9%
Contract Revenues Commercial	50,740	63,278	0.99945606	63,243		63,243	12,503	24.6%
Contract Revenues Industrial	3,409,936	3,594,128	0.99822882	3,587,762		3,587,762	177,826	5.2%
Contract Revenues Public	1,147,456	1,315,832	1.00373755	1,320,750		1,320,750	173,294	15.1%
Contract Revenues Sales for Resale	2,512,273	2,747,981	0.98040555	2,694,136		2,694,136	181,863	7.2%
Subtotal	430,208,927	492,294,876		492,587,562	3,993,908	496,581,470	66,372,543	
Other Operating Revenues	1,159,716	1,159,716		1,159,716		1,159,716	-	0.0%
Total Water Revenue	\$ 431,368,643	\$ 493,454,592		\$ 493,747,279	\$ 3,993,908	\$ 497,741,187	\$ 66,372,543	15.4%

AQUA PENNSYLVANIA, INC.

SUMMARY OF APPLICATION OF PROPOSED RATES IN EFFECT DURING THE TEST YEAR  
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Division (1)	Div. Ref.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Other Water Utilities (6)	Total Metered Sales (7)	Residential Availability or Unmetered (8)	Total Sales (9)
Main	1	\$ 297,048,196	\$ 104,411,135	\$ 16,893,691	\$ 8,158,514	\$ 13,443	\$ 426,524,979	7,558	\$ 426,532,537
Superior	5	3,433,968	130,884		16,238		3,581,090		3,581,090
Western, et Al	6	1,849,975	136,312				1,986,287	1,402	1,987,689
Bensalem	7	12,770,670	8,829,914	521,202	280,740		22,402,526		22,402,526
Chalfont	8	1,751,502	195,726	25,706	20,880		1,993,814		1,993,814
Oakland & Lakeside	13	612,994	36,717	9,645			659,356		659,356
CS Water	14	681,226	27,681				708,907		708,907
Country Club Gardens	15	295,313	3,822				299,135		299,135
Clarendon	17	198,039	35,835				233,874		233,874
Kratzerville	17A	98,842	2,568				101,410		101,410
Honesdale	17C	1,108,802	639,608	24,104	58,577		1,831,091		1,831,091
Sand Springs	17I	242,573	6,533				249,106		249,106
Mifflin Township	17K	245,192	71,170		74		316,436		316,436
Beech Mountain	17L	359,764	21,664				381,428		381,428
Treasure Lake	17M	934,548	97,831				1,032,379		1,032,379
Concord Park	17O	87,476	42,122		507		130,105		130,105
Bristol	17P	208,588	362,821				571,409		571,409
Mt. Jewett	17Q	280,707	19,077	1,472			301,256		301,256
Bunker Hill	17R	21,361					21,361		21,361
Robin Hood Lakes	17S	104,994					104,994		104,994
East Cameron	17T	26,791	1,011				27,802		27,802
Sun Valley	17U							2,886	2,886
<b>Total</b>		<b>\$ 322,361,521</b>	<b>\$ 115,072,431</b>	<b>\$ 17,475,820</b>	<b>\$ 8,535,530</b>	<b>\$ 13,443</b>	<b>\$ 463,458,745</b>	<b>\$ 11,846</b>	<b>\$ 463,470,591</b>
Contract Sales			63,278	3,594,128	1,315,832	2,747,981	7,721,218		7,721,218
<b>Total Proposed Water Revenue</b>		<b>\$ 322,361,521</b>	<b>\$ 115,135,708</b>	<b>\$ 21,069,948</b>	<b>\$ 9,851,362</b>	<b>\$ 2,761,424</b>	<b>\$ 471,179,963</b>	<b>\$</b>	<b>\$ 471,191,809</b>
<u>Pro Forma Adjustments</u>									
Main		1,598,464	1,979,808	(146,709)			3,431,563	0	3,431,563
Sun Valley		-	-				-	14,430	14,430
Subtotal HTY Adjs.		<u>1,598,464</u>	<u>1,979,808</u>	<u>(146,709)</u>	<u>-</u>	<u>-</u>	<u>3,431,563</u>	<u>14,430</u>	<u>3,445,993</u>
<b>Total Pro Forma Revenues Under Proposed Rates</b>		<b>\$323,959,985</b>	<b>\$117,115,516</b>	<b>\$20,923,239</b>	<b>\$9,851,362</b>	<b>\$2,761,424</b>	<b>\$474,611,526</b>	<b>\$14,430</b>	<b>\$474,637,802</b>

AQUA PENNSYLVANIA INC.

SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018 AND 2020

Customer Classification (1)	Revenues, Per Books Present Rates 3/31/2018 (a) (2)	Adjustment to Per Books Revenue 3/31/2018 (3)	Adjusted Revenues, Per Books Present Rates 3/31/2018 (a) (4)	Bill Analysis Revenues Present Rates (Schedule 5) (5)	Ref. (6)=(4)/(5)	Adjustment Factor (6)=(4)/(5)	Revenues Under Present Rates (7)=(6)X(5) (7)	Pro Forma Adjustments Present Rates (Schedule 5 and 7) (8)	Add Back Annualized DSIC Revenue (9)	Total Pro Forma Revenue Present Rates (10)=(7)+(8)+(9)
<b>METERED SALES</b>										
Residential	\$ 258,404,028		\$ 258,404,028	\$ 258,124,010	Sch. 4	1.00108482	\$ 258,404,028	\$ 1,323,954	\$ 19,086,381	\$ 278,814,363
Commercial	93,063,483		93,063,483	93,114,132	Sch. 4	0.99945606	93,063,483	1,590,361	6,941,734	101,595,579
Industrial	13,869,742		13,869,742	13,894,351	Sch. 4	0.99822882	13,869,742	(117,526)	1,042,036	14,794,252
Public Authority	6,976,712		6,976,712	6,950,733	Sch. 4	1.00373755	6,976,712		520,677	7,497,388
Sales for Resale	10,820		10,820	11,036	Sch. 4	0.98040555	10,820		828	11,647
Total Sales of Water	\$ 372,324,784		\$ 372,324,784	\$ 372,094,262			\$ 372,324,785	\$ 2,796,789	\$ 27,591,655	\$ 402,713,229
Unmetered Sales Availability	10,907		10,907	10,891		1.00144064	10,907	11,100	650	22,657
	84,406		84,406	85,682		0.98510201	84,406	(84,406)		-
Private Fire	\$ 12,959,081		\$ 12,959,081	\$ 12,905,865	Sch. 7A	1.00412338	12,959,081	\$ 476,448	\$ 963,314	14,388,843
Public Fire	6,044,692	\$ (80,898) (b)	5,963,794	5,964,772	Sch. 7B	0.99983598	5,963,794			5,963,794
Contract Revenues Commercial	50,740		50,740	50,768		0.99945606	50,740			50,740
Contract Revenues Industrial	3,409,936		3,409,936	3,415,986		0.99822882	3,409,936			3,409,936
Contract Revenues Public	1,147,456		1,147,456	1,143,183		1.00373755	1,147,456			1,147,456
Contract Revenues Sales for Resale	2,512,273		2,512,273	2,562,483		0.98040555	2,512,273			2,512,273
Subtotal	398,544,274	(80,898)	398,463,376	398,233,892			398,463,376	3,199,931	28,545,620	430,208,927
Other Operating Revenues	1,159,716		1,159,716	1,159,716			1,159,716			1,159,716
Total Water Revenue	\$ 399,703,990	\$ (80,898)	\$ 399,623,092	\$ 399,393,608			\$ 399,623,092	\$ 3,199,931	\$ 28,545,620	\$ 431,368,643

(a) Excludes DSIC and Unbilled Revenue.

(b) Unbilled Public Fire Revenue.

(c) See Schedule 4.

(d) See Schedule 7A & 7B.

AQUA PENNSYLVANIA, INC.

SUMMARY OF APPLICATION OF PRESENT RATES  
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Division (1)	Div. Ref.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Sales for Resale (6)	Total Metered Sales (7)		Residential Availability or Unmetered (8)	Total Sales (9)
							Metered Sales	Unmetered		
Main	1	\$ 239,312,397	\$ 84,732,136	\$ 13,434,842	\$ 6,659,384	\$ 11,036	\$ 344,149,795		7,558	\$344,157,353
Superior	5	2,741,181	108,643		11,464		2,861,288			2,861,288
Western, et Al	6	1,528,529	121,133				1,649,662		1,113	1,650,775
Bensalem	7	9,515,019	7,056,214	416,688	226,259		17,214,180			17,214,180
Chalfont	8	1,113,403	122,899	18,480	14,599		1,269,381			1,269,381
Oakland & Lakeside	13	466,850	29,314	7,714			503,878			503,878
CS Water	14	522,744	22,436				545,180			545,180
Country Club Gardens	15	199,631	2,773				202,404			202,404
Clarendon	17	138,735	23,839				162,574			162,574
Kratzerville	17A	74,931	1,739				76,670			76,670
Honesdale	17C	781,828	421,019	16,089	38,415		1,257,351			1,257,351
Sand Springs	17I	182,541	3,720				186,261			186,261
Mifflin Township	17K	194,539	39,734		112		234,385			234,385
Beech Mountain	17L	226,174	15,430				241,604			241,604
Treasure Lake	17M	594,806	57,267				652,073	85,682		737,755
Concord Park	17O	59,374	26,723		500		86,597			86,597
Bristol	17P	159,850	313,134	538			472,984			472,984
Mt. Jewett	17Q	193,161	14,576				208,275			208,275
Bunker Hill	17R	10,056					10,056			10,056
Robin Hood Lakes	17S	76,573					76,573			76,573
East Cameron	17T	31,688	1,403				33,091			33,091
Sun Valley	17U						-	2,220		2,220
Subtotal		\$ 258,124,010	\$ 93,114,132	\$ 13,894,351	\$ 6,950,733	\$ 11,036	\$ 372,094,262	\$ 96,573		\$372,190,835
Contract Sales			50,768	3,415,986	1,143,183	2,562,483	7,172,420			7,172,420
Total Sales with Contract		258,124,010	93,164,900	17,310,337	8,093,916	2,573,519	379,266,682			379,363,255
Plus 7.5% DSIC excluding contracts		19,086,381	6,941,734	1,042,036	520,677	828	27,591,655	650		27,592,306
Total Present Water Revenue		277,210,391	100,106,634	18,352,373	8,614,593	2,574,347	406,858,337			406,955,561

AQUA PENNSYLVANIA, INC.

SUMMARY OF APPLICATION OF PRESENT RATES  
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Division (1)	Div. Ref.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Sales for Resale (6)	Total Metered Sales (7)	Residential Availability or Unmetered (8)	Total Sales (9)
<u>Pro Forma Adjustments</u>									
Main		1,323,954	1,590,361	(117,526)			2,796,789	(84,406)	2,712,383
Sun Valley								11,100	11,100
Subtotal HTY Adj.		<u>1,323,954</u>	<u>1,590,361</u>	<u>(117,526)</u>	<u>-</u>	<u>-</u>	<u>2,796,789</u>	<u>(73,306)</u>	<u>2,723,483</u>
Total Pro Forma Revenues Under Present Rates		<u>\$278,534,345</u>	<u>\$101,696,995</u>	<u>\$18,234,847</u>	<u>\$8,614,593</u>	<u>\$2,574,347</u>	<u>\$409,655,126</u>	<u>-\$73,306</u>	<u>\$409,679,044</u>
<u>Pro Forma Adjustments</u>									
Private Fire		476,448							

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Industrial Contract - Mt. Carmel</u>						
Customer Charge						
Total Contract	21	2,752,480	\$ 0.2960	\$ 814,734	\$ 0.3080	\$ 847,764
<u>Industrial Contract - Covanta</u>						
Customer Charge						
6" April '17 to Dec. '17	9	1,100,000	\$ 35,160.00	\$ 316,440	\$ 38,327.00	344,943
6" Jan. '18 to March '18	3	360,000	36,480.00	\$ 109,440	38,327.00	114,981
Allowance 120,000						
1st block		602,700	0.2930	\$ 176,591	0.3080	\$ 185,632
Total Contract		1,702,700		\$ 602,471		\$ 645,556
<u>Industrial Contract - Liberty Power</u>						
Customer Charge						
10	12	-	\$ 90,702.15	\$ 1,088,426	\$ 95,294.00	\$ 1,143,528
1st block		9,385,100	0.0970	\$ 910,355	0.1020	\$ 957,280
Total Contract		9,385,100		\$ 1,998,781		\$ 2,100,808
<b>Total Industrial Contract</b>	<b>42</b>	<b>13,840,280</b>		<b>\$ 3,415,986</b>		<b>\$ 3,594,128</b>
<u>Woodloch Pines - Commercial Contract</u>						
Customer Charge						
2	12	-	\$ 127.90	\$ 1,535	\$ 148.00	\$ 1,776
1st block		1,200	1.0000	\$ 1,200	1.2490	\$ 1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
Over		29,004	0.6668	19,340	0.8330	24,160
Total Contract		69,000		\$ 50,768		\$ 63,278
<b>Total Commercial Contract</b>		<b>69,000</b>		<b>\$ 50,768</b>		<b>\$ 63,278</b>
<u>Public Contract - Canaan Federal Prison</u>						
Customer Charge						
10	12	540,000	\$ 22,375.00	\$ 268,500	\$ 22,934.00	\$275,208
Allowance 45,000						
1st block		453,750	0.1250	\$ 56,719	0.1281	58,125.38
Total Contract	12	993,750		\$ 325,219		\$ 333,333

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Public Contract - SCI Forest County Prison</u>						
Customer Charge 4	12	1,092,000	\$ 418.00	\$ 5,016	\$ 483.00	\$ 5,796.00
Contract Adjustment	12		6,670.53	80,046	6,670.53	80,046
Subtotal	24			85,062		85,842
1st block		1,200	1.0000	\$ 1,200	1.2490	\$ 1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		36,000	0.7288	26,237	0.9104	32,774
Over		910,702	0.6668	607,256	0.8330	758,615
Total Contract		950,698		\$ 637,149		\$ 795,956
Total SCI Forest Adj Contract	24	950,698		\$ 722,211		\$ 881,798
<u>Public Contract - SCI Waymart</u>						
Customer Charge 8	12	593,600	\$ 4,662.30	\$ 55,948	\$ 4,898.00	\$ 58,776
Allowance 52,800						
1st block		235,530	0.1690	\$ 39,805	0.1780	\$ 41,924
2nd block		-	0.1690	-	0.1780	-
Total Contract		829,130		\$ 95,753		\$ 100,700
<b>Total Public</b>	<b>\$ 48</b>	<b>\$ 2,773,578</b>		<b>\$ 1,143,183</b>		<b>\$ 1,315,832</b>
<u>Sales for Resale Contract - United Water PA</u>						
Customer Charge 1-1/2	12	121,080	\$ 4,027.90	\$ 48,335	\$ 4,906.00	\$ 58,872
1st block	-	730	0.2500	\$ 183	0.3050	\$ 223
2nd block	-	-	0.2500	-	0.3050	-
	-	730		\$ 183		\$ 223
Total Contract	12	121,810		48,518		59,095
<u>Sales for Resale Contract - Chemung</u>						
Customer Charge 10	12		\$ 510.00	\$ 6,120	\$ 621.00	\$ 7,452
1st block		16,060	0.5660	\$ 9,090	0.6890	\$ 11,065
Total Contract	12	16,060		\$ 15,210		\$ 18,517
<u>Sales for Resale Contract - New Wilmington</u>						
Customer Charge 4	13		\$ 209.00	\$ 2,717	\$ 255.00	\$ 3,315
1st block		536,600	0.5170	\$ 277,422	0.6300	\$ 338,058
Total Contract	13	536,600		\$ 280,139		\$ 341,373



AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Sales for Resale Contract - Warwick</u>						
Customer Charge 8	13	2,268,250	\$ 45,149.03	\$ 586,937	\$ 47,435.00	\$ 616,655
Allowance 180,000 Gallons						
1st block		327,990	0.2190	71,830	0.2300	75,438
2nd block		-	0.2190	-	0.2300	-
		327,990	0.4380	\$ 71,830		\$ 75,438
Total Contract	13	2,596,240		\$ 658,767		\$ 692,093
<u>Sales for Resale Contract - Borough of Sharpville</u>						
Customer Charge 8	23	-	\$ 1,508.00	\$ 34,684	\$ 1,744.00	40,112
All Sharpville Consumption		1,572,750	0.2270	\$ 357,014	0.2380	374,314.50
Total Contract	23	1,572,750		\$ 391,698		\$ 414,427
<u>Sales for Resale Contract - Hubbard Township</u>						
Customer Charge						
All Hubbard Consumption	12	2,655,650	0.1998	\$ 530,599	0.2100	\$ 557,687
Total OWU-Hubbard	12	2,655,650		\$ 530,599		\$ 557,687
<u>Sales for Resale Contract - Bucks County</u>						
Customer Charge 8	1	-	\$ -	\$ -	\$ -	\$ -
1st block		730	0.6210	\$ 453	0.6520	\$ 476
Total Contract	1	730		\$ 453		\$ 476

AQUA PENNSYLVANIA, INC.

CONTRACTS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Sales for Resale Contract - Horsham</u>						
Customer Charge 3	12	821,250	\$ 21,763.13	\$ 261,158	\$ 22,865.00	\$ 274,380
Allowance 63,000 1st block		145,010	0.2450	\$ 35,527	0.2570	\$ 37,268
Total Contract	12	966,260		\$ 296,685		\$ 311,648
<u>Sales for Resale Contract - Schwenksville</u>						
Customer Charge 3	12	305,484	\$ 9,437.00	\$ 113,244	\$ 9,437.00	\$ 113,244
Allowance 51,000 1st block		216,766	0.3600	\$ 78,036	0.3780	\$ 81,938
Total Contract	12	522,250		\$ 191,280		\$ 195,182
<u>Sales for Resale Contract - Downingtown</u>						
Customer Charge 3	9	-	\$ -	\$ -	\$ -	\$ -
1st block		210	0.0986	\$ 21	0.1040	\$ 22
Total Contract	9	210		\$ 21		\$ 22
<u>Sales for Resale Contract - Masury Water Company</u>						
Customer Charge 6	12		\$ 862.00	\$ 10,344	\$ 997.00	\$ 11,964
April '17 to June '17		165,017	0.1795	\$ 29,618	0.1910	\$ 31,518
July '17 to April '18		522,617	0.1818	94,991	0.1910	99,820
		<u>687,634</u>		<u>\$ 124,609</u>		<u>\$ 131,338</u>
Total Contract	12	687,634		\$ 134,953		\$ 143,302
<u>Sales for Resale Contract - Bristol</u>						
Customer Charge 3	8	-	\$ -	\$ -	\$ -	\$ -
1st block		21,619	0.6550	\$ 14,160	0.6550	\$ 14,160
Total Contract	8	21,619		\$ 14,160		\$ 14,160
<b>Total Sales for Resale</b>	<b>139</b>	<b>9,697,813</b>		<b>2,562,483</b>		<b>2,747,981</b>

AQUA PENNSYLVANIA, INC.

MAIN DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	3,889,613	-	\$ 16.00	\$ 62,233,802	\$ 18.50	\$ 71,957,833
3/4	119,924	-	27.50	3,297,913	31.80	3,813,586
1	60,529	-	46.70	2,826,714	54.00	3,268,577
1-1/2	1,654	-	89.90	148,692	103.90	171,847
2	635	-	127.90	81,268	147.90	93,976
4	4	-	418.00	1,672	483.00	1,932
5/8,3/4	557	-	18.21	10,143	20.71	11,535
5/8,1	74,498	-	18.56	1,382,681	21.06	1,568,926
5/8,1-1/2	19,794	-	21.89	433,282	24.39	482,766
5/8,2	384	-	24.00	9,218	26.50	10,179
3/4,1	1,177	-	30.06	35,378	34.36	40,438
3/4,1-1/2	1,896	-	33.39	63,291	37.69	71,441
3/4,2	84	-	35.50	2,982	39.80	3,343
1,1	612	-	49.26	30,162	56.56	34,632
1,1-1/2	1,569	-	52.59	82,514	59.89	93,967
1,2	349	-	54.70	19,079	62.00	21,626
1-1/2,1-1/2	12	-	95.29	1,143	102.59	1,231
1-1/2,2	13	-	97.40	1,266	104.70	1,361
2,1-1/2	23	-	130.79	3,008	138.09	3,176
2,2	12	-	132.90	1,595	140.20	1,682
Subtotal	4,173,338	-		\$ 70,665,803		\$ 81,646,604
1st block	20	74,692,380	0.9071	\$ 67,753,458	1.1330	\$ 84,626,467
2nd block	Over 20	97,462,458	1.0352	100,893,136	1.3418	130,775,125
Subtotal Consumption		172,154,838		\$ 168,646,594		\$ 215,401,592
Total Residential	4,173,338	172,154,838		\$ 239,312,397		\$ 297,048,196

AQUA PENNSYLVANIA, INC.

MAIN DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	113,910	-	\$ 16.00	\$ 1,822,556	\$ 18.50	\$ 2,107,331
3/4	20,853	-	27.50	573,456	31.80	663,123
1	34,976	-	46.70	1,633,365	54.00	1,888,688
1-1/2	24,357	-	89.90	2,189,709	103.90	2,530,709
2	29,258	-	127.90	3,742,086	147.90	4,327,244
3	6,596	-	257.00	1,695,052	297.00	1,958,873
4	4,466	-	418.00	1,866,634	483.00	2,156,900
6	1,428	-	862.00	1,230,822	997.00	1,423,584
8	336	-	1,508.00	506,839	1,744.00	586,158
10	54	-	2,229.00	120,366	2,577.00	139,158
Subtotal	236,233	-		\$ 15,380,885		\$ 17,781,768
1st block		12,755,559	1.0000	\$ 12,755,559	1.2490	\$ 15,931,693
2nd block		13,948,446	0.8785	12,253,710	1.0973	15,305,630
3rd block		40,827,104	0.7288	29,754,793	0.9104	37,168,996
4th block		21,876,408	0.6668	14,587,189	0.8330	18,223,048
Subtotal Consumption		89,407,517		\$ 69,351,251		\$ 86,629,367
Total Commercial	236,233	89,407,517		\$ 84,732,136		\$ 104,411,135
<u>Industrial - Monthly</u>						
Customer Charge						
5/8	2,297	-	\$ 16.00	\$ 36,747	\$ 18.50	\$ 42,489
3/4	551	-	27.50	15,142	31.80	17,509
1	1,817	-	46.70	84,852	54.00	98,116
1-1/2	640	-	89.90	57,491	103.90	66,444
2	1,573	-	127.90	201,157	147.90	232,612
3	343	-	257.00	88,151	297.00	101,871
4	600	-	418.00	250,744	483.00	289,736
6	302	-	862.00	260,669	997.00	301,493
8	84	-	1,508.00	126,823	1,744.00	146,670
10	48	-	2,229.00	106,992	2,577.00	123,696
Subtotal	8,254	-		\$ 1,228,768		\$ 1,420,636
1st block		495,701	1.0000	\$ 495,701	1.2490	\$ 619,131
2nd block		602,847	0.8785	529,602	1.0973	661,505
3rd block		2,869,431	0.7288	2,091,241	0.9104	2,612,330
4th block		6,967,920	0.6668	4,646,209	0.8330	5,804,277
5th block		4,012,327	0.6052	2,428,261	0.7868	3,156,899
6th block		4,161,628	0.4842	2,015,060	0.6293	2,618,913
Subtotal Consumption		19,109,855		\$ 12,206,074		\$ 15,473,055
Total Industrial	8,254	19,109,855		\$ 13,434,842		\$ 16,893,691

AQUA PENNSYLVANIA, INC.

MAIN DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Public - Monthly</u>						
Customer Charge						
5/8	3,885	-	\$ 16.00	\$ 62,163	\$ 18.50	\$ 71,876
3/4	1,111	-	27.50	30,543	31.80	35,319
1	2,465	-	46.70	115,111	54.00	133,105
1-1/2	1,119	-	89.90	100,595	103.90	116,261
2	2,418	-	127.90	309,211	147.90	357,563
3	1,435	-	257.00	368,769	297.00	426,165
4	997	-	418.00	416,802	483.00	481,615
6	170	-	862.00	146,799	997.00	169,789
8	94	-	1,508.00	141,903	1,744.00	164,110
10	12	-	2,229.00	26,748	2,577.00	30,924
Subtotal	13,706	-		\$ 1,718,644		\$ 1,986,727
1st block		669,977	1.0000	\$ 669,977	1.2490	\$ 836,802
2nd block		831,669	0.8785	730,621	1.0973	912,591
3rd block		2,400,986	0.7288	1,749,839	0.9104	2,185,858
4th block		2,684,918	0.6668	1,790,303	0.8330	2,236,536
Subtotal Consumption		6,587,550		\$ 4,940,740		\$ 6,171,787
Total Public	13,706	6,587,550		\$ 6,659,384		\$ 8,158,514
<u>Unmetered - Monthly</u>						
Customer Charge						
Flat Rate	138	-	\$ 54.85	\$ 7,558	\$ 54.85	\$ 7,558
Total Unmetered				\$ 7,558		\$ 7,558
<u>Sales For Resale - Monthly</u>						
Customer Charge						
5/8	33	-	\$ 16.00	\$ 533	\$ 18.50	\$ 616
4	20	-	418.00	8,360	483.00	9,660
Subtotal	53	-		\$ 8,360		\$ 9,660
1st block		3,029	0.8833	2,676	1.2490	\$ 3,783
Subtotal Consumption		3,029		2,676		\$ 3,783
Total Sales For Resale	53	3,029		\$ 11,036		\$ 13,443
MAIN SUBTOTAL	4,431,584	287,262,790		\$ 344,149,795		\$ 426,524,979

AQUA PENNSYLVANIA, INC.

SUPERIOR DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	46,599	-	\$ 16.80	\$ 782,858	18.50	\$ 862,076
1	71	-	26.25	1,872	40.10	2,859
5/8,3/4	348	-	22.98	7,999	20.71	7,209
Subtotal	47,018	-		\$ 792,729		\$ 872,144
1st block		872,786	0.9528	\$ 831,556	1.1330	\$ 988,867
2nd block		1,172,274	0.9528	1,116,896	1.3418	1,572,957
Subtotal Consumption		2,045,060		\$ 1,948,452		\$ 2,561,824
Total Residential	47,018	2,045,060		\$ 2,741,181		\$ 3,433,968
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	705	-	\$ 16.80	\$ 11,849	\$ 18.50	\$ 13,048
1	252	-	26.25	6,612	40.10	10,101
1-1/2	12	-	26.25	315	65.10	781
2	96	-	35.00	3,360	91.50	8,784
3	12	-	43.75	525	170.40	2,045
Subtotal	1,077	-		\$ 22,661		\$ 32,714
1st block		38,879	0.9528	\$ 37,042	1.2490	\$ 48,560
2nd block		22,507	0.9528	21,444	1.0973	24,697
3rd block		11,276	0.9528	10,743	0.9104	10,266
4th block		17,584	0.9528	16,753	0.8330	14,647
Subtotal Consumption		90,246		85,982		98,170
Total Commercial	1,077	90,246		\$ 108,643		\$ 130,884

AQUA PENNSYLVANIA, INC.

SUPERIOR DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Public - Monthly</u>						
Customer Charge						
1	52	-	\$ 26.25	\$ 1,352	\$ 40.10	\$ 2,065
1 1/2	4	-	26.25	105	\$ 65.10	260
2	12	-	35.00	420	91.50	1,098
4	12	-	105.00	1,260	294.00	3,528
Subtotal	80	-		\$ 3,137		\$ 6,951
1st block		2,525	0.9528	\$ 2,406	1.2490	\$ 3,154
2nd block		2,547	0.9528	2,427	1.0973	2,795
3rd block		3,667	0.9528	3,494	0.9104	3,338
4th block		-	0.9528	-	0.8330	-
Subtotal Consumption		8,739		\$ 8,327		\$ 9,287
Total Public	80	8,739		\$ 11,464		\$ 16,238
TOTAL DIVISION	<u>48,175</u>	<u>2,144,045</u>		<u>\$ 2,861,288</u>		<u>\$ 3,581,090</u>

AQUA PENNSYLVANIA, INC.

EAGLE ROCK, FAWN LAKE, TANGLEWOOD, THORNHURST, WOODLEDGE VILLAGE, WESTERN, AND PINECREST DIVISIONS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	36,404	-	\$ 26.00	\$ 946,514	\$ 30.10	\$ 1,095,772
3/4	24	-	26.00	624	30.10	722
1	73	-	46.70	3,409	54.00	3,942
2	15	-	127.90	1,919	147.90	2,219
Subtotal	<u>36,516</u>	<u>-</u>		<u>\$ 952,466</u>		
1st block		597,194	0.7212	\$ 430,696	0.9474	\$ 565,782
2nd block		140,424	1.0352	145,367	1.3418	188,421
Subtotal Consumption		<u>737,618</u>		<u>576,063</u>		<u>754,203</u>
Total Residential	36,516	737,618		\$ 1,528,529		\$ 1,849,975
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	325	-	\$ 26.00	\$ 8,460	\$ 30.10	\$ 9,795
1	115	-	46.70	5,361	30.10	3,455
1-1/2	48	-	89.90	4,342	103.90	
2	165	-	127.90	21,065	147.90	24,359
3	12	-	257.00	3,084	297.00	
Subtotal	<u>665</u>	<u>-</u>		<u>\$ 42,312</u>		<u>\$ 37,609</u>
1st block		30,755	1.0000	\$ 30,755	1.2490	\$ 38,413
2nd block		25,979	0.8785	22,822	1.0973	28,506
3rd block		31,699	0.7288	23,102	0.9104	28,859
4th block		3,213	0.6668	2,142	0.9104	2,925
Subtotal Consumption		<u>91,646</u>		<u>\$ 78,821</u>		<u>\$ 98,703</u>
Total Commercial	665	91,646		\$ 121,133		\$ 136,312
<u>Unmetered - Monthly</u>						
Customer Charge						
Flat Rate	20	-	\$ 54.85	\$ 1,113	69.07	\$ 1,402
Total Contract				\$ 1,113		\$ 1,402
TOTAL DIVISION	<u>37,090</u>	<u>829,264</u>		<u>\$ 1,650,775</u>		<u>\$ 1,987,689</u>



AQUA PENNSYLVANIA, INC.

BENSALEM DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	175,012	-	\$ 16.00	\$ 2,800,195	18.50	\$ 3,237,726
3/4	219	-	27.50	6,014	31.80	6,955
1	125	-	46.70	5,822	54.00	6,732
1-1/2	12	-	89.90	1,079	103.90	1,247
2	12	-	127.90	1,535	147.90	1,775
5/8,1	3,741	-	18.56	69,427	21.06	78,779
5/8,1-1/2	22	-	21.89	473	24.39	527
5/8,2	5	-	24.00	125	26.50	138
Subtotal	179,147	-		\$ 2,884,670		\$ 3,333,879
1st block		3,223,100	0.8800	\$ 2,836,328	1.1330	\$ 3,651,772
2nd block		4,311,387	0.8800	3,794,021	1.3418	5,785,019
Subtotal Consumption		7,534,487		\$ 6,630,349		\$ 9,436,791
Total Residential	179,147	7,534,487		\$ 9,515,019		\$ 12,770,670
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	7,877	-	\$ 16.00	\$ 126,033	\$ 18.50	\$ 145,725
3/4	736	-	27.50	20,240	31.80	23,405
1	1,752	-	46.70	81,829	54.00	94,621
1-1/2	2,073	-	89.90	186,333	103.90	215,350
2	1,869	-	127.90	239,032	147.90	276,410
3	404	-	257.00	103,845	297.00	120,008
4	225	-	418.00	93,883	483.00	108,482
6	265	-	862.00	228,258	997.00	264,006
8	77	-	1,508.00	115,765	1,744.00	133,882
10	12	-	2,229.00	26,748	2,577.00	30,924
Subtotal	15,289	-		\$ 1,221,966		\$ 1,412,813
1st block		876,712	0.8800	\$ 771,506	1.2490	\$ 1,095,013
2nd block		1,149,337	0.8800	1,011,416	1.0973	1,261,167
3rd block		3,706,318	0.7288	2,701,165	0.9104	3,374,232
4th block		2,024,837	0.6668	1,350,161	0.8330	1,686,689
Subtotal Consumption		7,757,203		\$ 5,834,248		\$ 7,417,101
Total Commercial	15,289	7,757,203		\$ 7,056,214		\$ 8,829,914

AQUA PENNSYLVANIA, INC.

BENSALEM DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Industrial - Monthly</u>						
Customer Charge						
5/8	228	-	\$ 16.00	\$ 3,650	\$ 18.50	\$ 4,220
3/4	99	-	27.50	2,717	31.80	3,142
1	249	-	46.70	11,642	54.00	13,462
1-1/2	84	-	89.90	7,552	103.90	8,728
2	85	-	127.90	10,820	147.90	12,512
3	72	-	257.00	18,504	297.00	21,384
4	24	-	418.00	10,032	483.00	11,592
6	12	-	862.00	10,344	997.00	11,964
Subtotal	853	-		\$ 75,261		\$ 87,004
1st block		52,168	0.8800	\$ 45,908	1.2490	\$ 65,157
2nd block		62,233	0.8800	54,765	1.0973	68,289
3rd block		204,943	0.7288	149,362	0.9104	186,580
4th block		137,061	0.6668	91,392	0.8330	114,172
5th block		0	0.6052	-	0.7868	-
6th block		0	0.4842	-	0.6293	-
Subtotal Consumption		456,405		\$ 341,427		\$ 434,198
Total Industrial	853	456,405		\$ 416,688		\$ 521,202
::						
<u>Public - Monthly</u>						
Customer Charge						
5/8	359	-	\$ 16.00	\$ 5,751	\$ 18.50	\$ 6,650
3/4	12	-	27.50	330	31.80	382
1	55	-	46.70	2,590	54.00	2,995
1-1/2	36	-	89.90	3,236	103.90	3,740
2	144	-	127.90	18,418	147.90	21,298
3	108	-	257.00	27,807	297.00	32,135
4	84	-	418.00	35,112	483.00	40,572
Subtotal	799	-		\$ 93,244		\$ 107,772
1st block		46,130	0.8800	\$ 40,594	1.2490	\$ 57,616
2nd block		49,347	0.8800	43,426	1.0973	54,149
3rd block		64,222	0.7288	46,805	0.9104	58,467
4th block		3,284	0.6668	2,190	0.8330	2,736
Subtotal Consumption		162,983		\$ 133,015		\$ 172,968
Total Public	799	162,983		\$ 226,259		\$ 280,740
TOTAL DIVISION	196,088	15,911,078		\$ 17,214,180		\$ 22,402,526

AQUA PENNSYLVANIA, INC.

CHALFONT DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	25,736	-	\$ 15.00	\$ 386,042	18.50	\$ 476,118
3/4	25	-	15.00	375	18.50	463
1	36	-	21.40	770	40.10	1,444
2	12	-	71.00	852	91.50	1,098
5/8,1-1/2	12	-	21.89	263	24.39	293
Subtotal	25,821	-		\$ 388,302		\$ 479,416
1st block		470,564	0.7100	\$ 334,100	1.1330	\$ 533,149
2nd block		550,706	0.7100	391,001	1.3418	738,937
Subtotal Consumption		1,021,270		\$ 725,101		\$ 1,272,086
Total Residential	25,821	1,021,270		\$ 1,113,403		\$ 1,751,502
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	1,038	-	\$ 15.00	\$ 15,567	\$ 18.50	\$ 19,199
3/4	24	-	15.00	360	24.30	583
1	450	-	21.40	9,630	40.10	18,045
1-1/2	72	-	35.50	2,556	65.10	4,687
2	70	-	71.00	4,970	91.50	6,405
3	12	-	213.10	2,557	170.40	2,045
4	12	-	227.50	2,730	294.00	3,528
Subtotal	1,678	-		\$ 38,370		\$ 54,492
1st block		79,075	0.7100	\$ 56,143	1.2490	\$ 98,765
2nd block		32,479	0.7100	23,060	1.0973	35,639
3rd block		7,502	0.7100	5,326	0.9104	6,830
4th block		-	0.7100	-	0.8330	-
Subtotal Consumption		119,056		\$ 84,529		\$ 141,234
Total Commercial	1,678	119,056		\$ 122,899		\$ 195,726

AQUA PENNSYLVANIA, INC.

CHALFONT DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Industrial - Monthly</u>						
Customer Charge						
1	11	-	\$ 21.40	\$ 235	\$ 40.10	\$ 441
2	46	-	71.00	3,266	91.50	4,209
Subtotal	57	-		\$ 3,501		\$ 4,650
1st block		3,904	0.7100	\$ 2,772	1.2490	\$ 4,876
2nd block		2,825	0.7100	2,006	1.0973	3,100
3rd block		14,367	0.7100	10,201	0.9104	13,080
4th block			0.7100	-	0.8330	-
5th block			0.7100	-	0.7868	-
6th block			0.7100	-	0.6293	-
Subtotal Consumption		21,096		\$ 14,979		\$ 21,056
Total Industrial	57	21,096		\$ 18,480		\$ 25,706
<u>Public - Monthly</u>						
Customer Charge						
5/8	22	-	\$ 15.00	\$ 330	\$ 18.50	\$ 407
2	12	-	71.00	852	91.50	1,098
4	24	-	227.50	5,460	294.00	7,056
Subtotal	58	-		\$ 6,642		\$ 8,561
1st block		3,495	0.7100	\$ 2,481	1.2490	\$ 4,365
2nd block		4,991	0.7100	3,544	1.0973	5,477
3rd block		2,721	0.7100	1,932	0.9104	2,477
4th block		-	0.7100	-	0.8330	-
Subtotal Consumption		11,207		7,957		12,319
Total Public	58	11,207		\$ 14,599		\$ 20,880
TOTAL DIVISION	27,614	1,172,629		\$ 1,269,381		\$ 1,993,814

AQUA PENNSYLVANIA, INC.

OAKLAND BEACH AND LAKESIDE ACRES  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	11,159	-	\$ 23.50	\$ 262,237	\$ 30.10	\$ 335,886
3/4	108	-	23.50	2,538	30.10	3,251
1	77	-	46.70	3,596	54.00	4,158
Subtotal	11,344	-		\$ 268,371		\$ 343,295
1st block		207,462	0.7212	\$ 149,622	0.9474	\$ 196,550
2nd block		54,516	0.8962	48,857	1.3418	73,149
3rd block		-		-		-
Subtotal Consumption		261,978		\$ 198,479		\$ 269,699
Total Residential	11,344	261,978		\$ 466,850		\$ 612,994
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	321	93	\$ 23.50	\$ 7,534	\$ 30.10	\$ 9,650
3/4	24	-	23.50	564	30.10	722
1	36	-	46.70	1,681	54.00	1,944
Subtotal	381	93		\$ 9,779		\$ 12,316
1st block		12,435	1.0000	\$ 12,435	1.2490	\$ 15,531
2nd block		5,998	0.8785	5,269	1.0973	6,582
3rd block		2,513	0.7288	1,831	0.9104	2,288
4th block		-	0.6668	-	0.8330	-
Subtotal Consumption		20,946		\$ 19,535		\$ 24,401
Total Commercial	381	21,039		\$ 29,314		\$ 36,717

AQUA PENNSYLVANIA, INC.

OAKLAND BEACH AND LAKESIDE ACRES  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Industrial - Monthly</u>						
Customer Charge 5/8	12	-	\$ 23.50	\$ 282	\$ 30.10	\$ 361
1st block		1,200	1.0000	\$ 1,200	1.2490	\$ 1,499
2nd block		2,796	0.8785	2,456	1.0973	3,068
3rd block		5,181	0.7288	3,776	0.9104	4,717
4th block		-	0.6668	-	0.8330	-
5th block		-	0.6052	-	0.7868	-
6th block		-	0.4842	-	0.6293	-
Subtotal Consumption		<u>9,177</u>		<u>\$ 7,432</u>		<u>\$ 9,284</u>
Total Industrial	12	9,177		\$ 7,714		\$ 9,645
TOTAL DIVISION	<u>11,737</u>	<u>292,194</u>		<u>\$ 503,878</u>		<u>\$ 659,356</u>

AQUA PENNSYLVANIA, INC.

CS WATER (MASTHOPE)  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	15,603	-	\$ 26.00	\$ 405,681	\$ 30.10	\$ 469,653
1	12	-	46.70	560	54.00	648
Subtotal	15,615	-		\$ 406,241		\$ 470,301
1st block		159,556	0.4800	\$ 76,587	0.9474	\$ 151,163
2nd block		44,539	0.8962	39,916	1.3418	59,762
Subtotal Consumption		204,095		\$ 116,503		\$ 210,925
Total Residential	15,615	204,095		\$ 522,744		\$ 681,226
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	21	-	\$ 26.00	\$ 546	\$ 30.10	\$ 632
1	12	-	46.70	560	54.00	648
1-1/2	12	-	89.90	1,079	103.90	1,247
2	12	-	127.90	1,535	147.90	1,775
Subtotal	57	-		\$ 3,720		\$ 4,302
1st block		2,701	1.0000	\$ 2,701	1.2490	\$ 3,374
2nd block		2,843	0.8785	2,498	1.0973	3,120
3rd block		18,547	0.7288	13,517	0.9104	16,885
4th block		-	0.6668	0	0.8330	-
Subtotal Consumption		24,091		\$ 18,716		\$ 23,379
Total Commercial	57	24,091		\$ 22,436		\$ 27,681
TOTAL DIVISION	15,672	228,186		\$ 545,180		\$ 708,907

AQUA PENNSYLVANIA, INC.

COUNTRY CLUB GARDENS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	4,955	-	\$ 15.00	\$ 74,318	\$ 18.50	\$ 91,658
1	24	-	30.00	720	54.00	1,296
Subtotal	4,979	-		\$ 75,038		\$ 92,954
1st block		92,887	0.5000	\$ 46,444	0.8170	\$ 75,889
2nd block		130,248	0.6000	78,149	0.9710	126,470
Subtotal Consumption		223,135		\$ 124,593		\$ 202,359
Total Residential	4,979	223,135		\$ 199,631		\$ 295,313
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	11	1	\$ 15.00	\$ 165	\$ 18.50	\$ 204
1st block		3,726	0.7000	\$ 2,608	0.9710	\$ 3,618
Subtotal Consumption		3,726		\$ 2,608		\$ 3,618
Total Commercial	11	3,727		\$ 2,773		\$ 3,822
TOTAL DIVISION	4,990	226,862		\$ 202,404		\$ 299,135



AQUA PENNSYLVANIA, INC.

CLARENDON  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	3,395	-	\$ 16.00	\$ 54,314	18.50	\$ 62,800
1	12	-	40.00	480	54.00	648
Subtotal	<u>3,407</u>	<u>0</u>		<u>\$ 54,794</u>		<u>\$ 63,448</u>
1st block		58,087	0.7208	\$ 41,869	1.1330	\$ 65,813
2nd block		51,258	0.8208	42,072	1.3418	68,778
Subtotal Consumption		<u>109,345</u>		<u>\$ 83,941</u>		<u>\$ 134,591</u>
Total Residential	3,407	109,345		\$ 138,735		\$ 198,039
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	192	-	\$ 16.00	\$ 3,072	\$ 18.50	\$ 3,552
1	36	-	40.00	1,440	54.00	1,944
1-1/2	12	-	40.00	480	103.90	1,247
3	12	-	70.00	840	297.00	3,564
Subtotal	<u>252</u>	<u>0</u>		<u>\$ 5,832</u>		<u>\$ 10,307</u>
1st block		6,633	0.7208	\$ 4,781	1.2490	\$ 8,285
2nd block		2,875	0.7208	2,072	1.0973	3,155
3rd block		15,474	0.7208	11,154	0.9104	14,088
4th block		-	0.6668	-	0.8330	-
Subtotal Consumption		<u>24,982</u>		<u>\$ 18,007</u>		<u>\$ 25,528</u>
Total Commercial	252	24,982		\$ 23,839		\$ 35,835
TOTAL DIVISION	<u>3,659</u>	<u>134,327</u>		<u>\$ 162,574</u>		<u>\$ 233,874</u>

AQUA PENNSYLVANIA, INC.

KRATZERVILLE  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	1,715	-	\$ 16.00	\$ 27,434	\$ 18.50	\$ 31,720
1	12	-	46.70	560	54.00	648
Subtotal	<u>1,727</u>	<u>-</u>		<u>27,994</u>		<u>\$ 32,368</u>
1st block		58,671	0.8000	\$ 46,937	1.1330	\$ 66,474
2nd block		-	0.8000	-	1.3418	-
Subtotal Consumption		<u>58,671</u>		<u>46,937</u>		<u>\$ 66,474</u>
Total Residential	1,727	58,671		\$ 74,931		\$ 98,842
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	23	-	\$ 16.00	\$ 362	\$ 18.50	\$ 418
1st block		1,721	0.8000	\$ 1,377	1.2490	\$ 2,150
Total Commercial	23	1,721		\$ 1,739		\$ 2,568
TOTAL DIVISION	<u>1,749</u>	<u>60,392</u>		<u>\$ 76,670</u>		<u>\$ 101,410</u>

AQUA PENNSYLVANIA, INC.

HONESDALE  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	17,224	-	\$ 16.00	\$ 275,581	\$ 18.50	\$ 318,640
3/4	48	-	27.50	1,320	31.80	1,526
Subtotal	17,272	-		276,901		320,166
1st block		289,157	0.7980	\$ 230,747	1.1330	\$ 327,615
2nd block		343,584	0.7980	274,180	1.3418	461,021
Subtotal Consumption		632,741		\$ 504,927		\$ 788,636
Total Single Family Residential	17,272	632,741		\$ 781,828		\$ 1,108,802
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	2,542	-	\$ 16.00	\$ 40,672	\$ 18.50	\$ 47,027
3/4	600	-	27.50	16,500	31.80	19,080
1	359	-	46.70	16,775	54.00	19,397
1-1/2	72	-	89.90	6,464	103.90	7,470
2	192	-	127.90	24,582	147.90	28,426
4	24	-	418.00	10,032	483.00	11,592
Subtotal	3,789	-		\$ 115,025		\$ 132,992
1st block		166,041	0.8833	\$ 146,664	1.2490	\$ 207,385
2nd block		107,357	0.7760	83,309	1.0973	117,803
3rd block		148,077	0.4000	59,231	0.9104	134,809
4th block		55,965	0.3000	16,790	0.8330	46,619
Subtotal Consumption		477,439		\$ 305,994		\$ 506,616
Total Commercial - Single Unit	3,789	477,439		\$ 421,019		\$ 639,608
<u>Industrial - Monthly</u>						
Customer Charge						
5/8	36	-	\$ 16.00	\$ 576	\$ 18.50	\$ 666
1	12	-	46.70	560	54.00	648
2	12	-	127.90	1,535	147.90	1,775
3	12	-	257.00	3,084	297.00	3,564
Subtotal Minimums	72	-		\$ 5,755		\$ 6,653
1st block		4,304	0.8833	\$ 3,802	1.2490	\$ 5,376
2nd block		4,173	0.7760	3,238	1.0973	4,579
3rd block		8,234	0.4000	3,294	0.9104	7,496
4th block		-	0.3000	-	0.8330	-
Subtotal Consumption		16,711		\$ 10,334		\$ 17,451
Total Industrial	72	16,711		\$ 16,089		\$ 24,104

AQUA PENNSYLVANIA, INC.

HONESDALE  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Public - Monthly</u>						
Customer Charge						
5/8	105	-	\$ 16.00	\$ 1,685	\$ 18.50	\$ 1,948
3/4	24	-	27.50	660	31.80	763
1	24	-	46.70	1,121	54.00	1,296
1-1/2	24	-	89.90	2,158	103.90	2,494
2	24	-	127.90	3,070	147.90	3,550
3	12	-	257.00	3,084	297.00	3,564
Subtotal Minimums	213	-		\$ 11,778		\$ 13,615
1st block		11,300	0.8833	\$ 9,981	1.2490	\$ 14,114
2nd block		10,555	0.7760	8,191	1.0973	11,582
3rd block		21,162	0.4000	8,465	0.9104	19,266
4th block		-	0.3000	-	0.8330	-
Subtotal Consumption		43,017		\$ 26,637		\$ 44,962
Total Public	213	43,017		\$ 38,415		\$ 58,577
TOTAL DIVISION	<u>21,346</u>	<u>1,169,908</u>		<u>\$ 1,257,351</u>		<u>\$ 1,831,091</u>

AQUA PENNSYLVANIA, INC.

SAND SPRINGS  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	5,023	0	\$ 16.25	\$ 81,622	\$ 18.50	\$ 92,924
1st block		88,782	0.6000	\$ 53,269	0.8170	\$ 72,535
2nd block		79,417	0.6000	47,650	0.9710	77,114
Subtotal Consumption		<u>168,199</u>		<u>100,919</u>		<u>149,649</u>
Total Residential	5,023	168,199		\$ 182,541		\$ 242,573
<u>Commercial - Monthly</u>						
Customer Charge						
2	12	0	\$ 65.00	\$ 780	\$ 147.90	\$ 1,775
1st block		1,200	0.6000	\$ 720	0.9710	\$ 1,165
2nd block		2,687	0.6000	1,612	0.9710	2,609
3rd block		1,013	0.6000	608	0.9710	984
4th block			0.6000	-	-	-
Subtotal Consumption		<u>4,900</u>		<u>\$ 2,940</u>		<u>\$ 4,758</u>
Total Commercial	12	4,900		\$ 3,720		\$ 6,533
TOTAL DIVISION	<u>5,035</u>	<u>173,099</u>		<u>\$ 186,261</u>		<u>\$ 249,106</u>

AQUA PENNSYLVANIA, INC.

MIFFLIN TOWNSHIP  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge 5/8	371	24,884	\$ 41.67	\$ 15,476	18.50	\$ 6,871
Allowance 3,000 Gallons Over	-		0.3500	\$ -	-	\$ -
Allowance 6,667 Gallons Over	-	12,431	0.4500	\$ 5,594	0.8000	\$ 29,852
Total \$41.67 Residential	<u>371</u>	<u>37,315</u>		<u>21,070</u>		<u>\$ 36,723</u>
<u>Residential - Monthly</u>						
Customer Charge 5/8	2,010	56,295	\$ 33.33	\$ 66,993	18.50	\$ 37,185
Allowance 3,000 Gallons Over	-	27,904	0.3500	\$ 9,766	0.8000	\$ 67,359
Total \$33.33 Residential	2,010	84,199		\$ 76,759		\$ 104,544
<u>Residential - Monthly</u>						
Customer Charge 5/8	1,284	32,572	\$ 33.00	\$ 42,385	18.50	\$ 23,761
3/4	2	95	33.00	66	31.80	\$ 64
Subtotal	<u>1,286</u>	<u>32,667</u>		<u>42,451</u>		<u>23,825</u>
					0.8000	26,134
Total \$33.00 Residential	1,286	32,667		\$ 42,451		\$ 49,959

AQUA PENNSYLVANIA, INC.

MIFFLIN TOWNSHIP  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	1,928	22,560	\$ 28.00	\$ 53,979	18.50	\$ 35,665
3/4	10	86	28.00	280	18.50	\$ 185
Subtotal	1,938	22,646		54,259		35,850
					0.8000	18,117
Total \$28.00 Residential	1,938	22,646		\$ 54,259		\$ 53,967
Total Residential	5,606	176,827		\$ 194,539		\$ 245,192
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	59	3,953	\$ 41.67	\$ 2,459	\$ 18.50	\$ 1,092
1	12	804	41.67	500	54.00	648
1-1/2	24	1,608	41.67	1,000	103.90	2,494
2	14	938	41.67	583	147.90	2,071
Subtotal	109	7,303		\$ 4,542		\$ 6,305
Allowance 3,000 Gallons Over	-	-	0.3500	\$ -	-	\$ -
Allowance 6,667 Gallons Over	-	59,899	0.4500	\$ 26,955	0.8000	\$ 53,762
Total \$41.67 Commercial	109	67,202		\$ 31,497		\$ 60,067
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	70	2,100	\$ 33.33	\$ 2,333	\$ 18.50	\$ 1,295
Allowance 3,000 Gallons Over		1,319	0.3500	\$ 462	0.8000	\$ 2,735
Total \$33.33 Commercial	70	3,419		\$ 2,795		\$ 4,030

AQUA PENNSYLVANIA, INC.

MIFFLIN TOWNSHIP  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	26	672	\$ 33.00	\$ 858	\$ 18.50	\$ 481
					\$ 0.8000	<u>\$ 538</u>
Total \$33.00 Commercial	26	672		\$ 858		\$ 1,019
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	131	974	\$ 28.00	\$ 3,660	\$ 18.50	\$ 2,418
1	23	170	28.00	644	54.00	1,242
2	10	0	28.00	280	147.90	1,479
Subtotal	<u>164</u>	<u>1,144</u>		<u>\$ 4,584</u>		<u>\$ 5,139</u>
					\$ 0.8000	\$ 915
Total \$28.00 Commercial	164	1,144		\$ 4,584		\$ 6,054
Total Commercial	<u>369</u>	<u>72,437</u>		<u>\$ 39,734</u>		<u>\$ 71,170</u>
<u>Public - Monthly</u>						
Customer Charge						
5/8	4	2	\$ 28.00	\$ 112	\$ 18.50	\$ 74
					\$ 0.8000	<u>\$ 2</u>
Total Public	4	2		112		76
TOTAL DIVISION	<u>5,978</u>	<u>249,266</u>		<u>\$ 234,385</u>		<u>\$ 316,438</u>



AQUA PENNSYLVANIA, INC.

BEECH MOUNTAIN  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	11,187	-	\$ 15.00	\$ 167,811	\$ 18.50	\$ 206,967
All Consumption		369,388	0.1580	\$ 58,363	0.4136	\$ 152,797
Total Residential	11,187	369,388		\$ 226,174		\$ 359,764
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	24	-	\$ 15.00	\$ 360	\$ 18.50	\$ 444
2	24	-	130.20	3,125	147.90	3,550
6	12	-	813.75	9,765	997.00	11,964
Subtotal	<u>60</u>	<u>0</u>		<u>13,250</u>		<u>15,958</u>
All Consumption		13,795	0.1580	\$ 2,180	0.4136	\$ 5,706
Total Commercial	60	13,795		\$ 15,430		\$ 21,664
TOTAL DIVISION	<u>11,247</u>	<u>383,183</u>		<u>\$ 241,604</u>		<u>\$ 381,428</u>

AQUA PENNSYLVANIA, INC.

TREASURE LAKE  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	25,275	-	\$ 12.84	\$ 324,525	\$ 18.50	\$ 467,579
3/4	12	-	12.84	154	24.30	292
1	24	-	23.87	573	40.10	962
Subtotal	25,311	-		325,252		468,833
All Consumption		765,777	0.3520	\$ 269,554	0.6082	\$ 465,715
Total Residential	25,311	765,777		\$ 594,806		\$ 934,548
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	273	-	\$ 12.84	\$ 3,509	\$ 18.50	\$ 5,056
1	15	-	23.87	360	40.10	606
2	44	-	47.50	2,090	91.50	4,026
3	27	-	79.17	2,161	170.40	4,652
4	33	-	194.87	6,489	294.00	9,790
Subtotal	393	-		14,609		24,130
All Consumption		121,187	0.3520	\$ 42,658	0.6082	\$ 73,701
Total Commercial	393	121,187		\$ 57,267		\$ 97,831
<u>Availability Residential - Semi Annual</u>						
Customer Charge						
Flat Rate	4,698	-	\$ 18.24	\$ 85,682	\$ -	\$ -
Total Unmetered	4,698	-		\$ 85,682		\$ -
TOTAL DIVISION	30,401	886,964		\$ 737,755		\$ 1,032,379

AQUA PENNSYLVANIA, INC.

CONCORD PARK  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
Residential Charge	1,980	-	\$ 11.70	\$ 23,170	\$ 18.50	\$ 36,636
Subtotal	<u>1,980</u>	<u>-</u>		<u>\$ 23,170</u>		<u>\$ 36,636</u>
1st block	0	77,030	0.4700	\$ 36,204	0.6600	\$ 50,840
Total Residential	1,980	77,030		\$ 59,374		\$ 87,476
<u>Commercial - Monthly</u>						
Customer Charge						
Commercial Charge	12	-	\$ 53.56	\$ 643	\$ 294.00	\$ 3,528
Subtotal	<u>12</u>	<u>-</u>		<u>\$ 643</u>		<u>\$ 3,528</u>
1st block		58,475	0.4460	\$ 26,080	0.6600	\$ 38,594
Total Commercial	12	58,475		\$ 26,723		\$ 42,122
<u>Public - Monthly</u>						
Customer Charge						
Public Charge	12	-	\$ 23.21	\$ 279	\$ 18.50	\$ 222
Subtotal	<u>12</u>	<u>-</u>		<u>\$ 279</u>		<u>\$ 222</u>
1st block		432	0.5120	\$ 221	0.6600	\$ 285
Total Commercial	12	432		\$ 500		\$ 507
TOTAL DIVISION	<u>2,004</u>	<u>135,937</u>		<u>\$ 86,597</u>		<u>\$ 130,105</u>

AQUA PENNSYLVANIA, INC.

BRISTOL TOWNSHIP DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	5,052	160,708	\$ 24.24	\$ 122,472	\$ 18.50	\$ 93,458
3/4	12	184	24.24	291	31.80	382
1	25	642	24.24	606	54.00	1,350
Subtotal	5,089	161,534		\$ 123,369		\$ 95,190
1st block		65,261	0.5590	36,481	0.5000	113,398
Subtotal Consumption		65,261		36,481		113,398
Total Residential	5,089	226,795		\$ 159,850		\$ 208,588
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	623	10,534	\$ 58.65	\$ 36,539	\$ 18.50	\$ 11,526
3/4	168	4,914	58.65	9,853	31.80	5,342
1	431	13,459	81.30	35,040	54.00	23,274
1-1/2	180	19,613	143.25	25,785	103.90	18,702
2	299	38,701	217.79	65,118	147.90	44,222
3	60	14,710	319.47	19,168	297.00	17,820
4	24	6,239	455.05	10,921	483.00	11,592
Subtotal	1,785	108,170		\$ 202,424		\$ 132,478
1st block		156,592	0.7070	110,710	0.8700	230,343
Total Commercial	1,785	264,762		\$ 313,134		\$ 362,821
TOTAL DIVISION	6,874	491,557		\$ 472,984		\$ 571,409

AQUA PENNSYLVANIA, INC.

MT. JEWETT  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8"	4,832	-	\$ 18.00	\$ 86,981	\$ 18.50	\$ 89,398
1st block		79,885	0.6850	\$ 54,721	1.1330	\$ 90,510
2nd block		75,122	0.6850	51,459	1.3418	100,799
Subtotal Consumption		155,007		106,180		191,309
Total Commercial	4,832	155,007		\$ 193,161		\$ 280,707
<u>Commercial - Monthly</u>						
Customer Charge						
5/8"	444	-	\$ 18.00	\$ 7,992	\$ 18.50	\$ 8,214
1st block		8,870	0.6850	\$ 6,076	1.1330	\$ 10,050
2nd block		741	0.6850	508	1.0973	813
3rd block		-	0.6850	-	0.9104	-
4th block		-	0.6850	-	0.8330	-
Subtotal Consumption		9,611		\$ 6,584		\$ 10,863
Total Commercial	444	9,611		\$ 14,576		\$ 19,077
<u>Industrial - Monthly</u>						
Customer Charge						
1"	24	-	\$ 18.00	\$ 432	\$ 54.00	\$ 1,296
1st block		155	0.6850	\$ 106	1.1330	\$ 176
2nd block		-	0.6850	-	1.0973	-
3rd block		-	0.6850	-	0.9104	-
4th block		-	0.6850	-	0.8330	-
5th block		-	0.6850	-	0.7868	-
6th block		-	0.6850	-	0.6293	-
Subtotal Consumption		155		\$ 106		\$ 176
Total Industrial	24	155		\$ 538		\$ 1,472
TOTAL DIVISION	5,300	164,773		\$ 208,275		\$ 280,707

AQUA PENNSYLVANIA, INC.

BUNKER HILL  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Unmetered</u>						
Customer Charge 5/8"	779	0	\$ 4.19	\$ 3,262	\$ 9.00	\$ 7,007
All Consumption		31,897	0.2130	\$ 6,794	0.4500	\$ 14,354
TOTAL DIVISION	<u>779</u>	<u>31,897</u>		<u>\$ 10,056</u>		<u>21,361</u>

AQUA PENNSYLVANIA, INC.

ROBIN HOOD LAKES  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge 5/8	2,397	0	\$ 13.40	\$ 32,125	\$ 18.50	\$ 44,352
All Consumption		67,756	0.6560	\$ 44,448	0.8950	\$ 60,642
TOTAL DIVISION	<u>2,397</u>	<u>67,756</u>		<u>76,573</u>		<u>104,994</u>

AQUA PENNSYLVANIA, INC.

EAST CAMERON  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Present Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Consumption, 100 Gallons	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<u>Residential - Monthly</u>							
Customer Charge							
5/8	546	9,320	\$ 50.00	\$ 27,315		\$ 18.50	\$ 10,107
3/4	63	875	\$ 50.00	\$ 3,150		\$ 31.80	\$ 2,003
Subtotal	609	10,195		\$ 30,465			\$ 12,110
Present Consumption	-	1,881	0.6500	\$ 1,223			
Proposed Blocks							
1st block					7,292	1.1330	\$ 8,262
2nd block					4,784	1.3418	\$ 6,419
Subtotal Proposed Consumption					12,076		\$ 14,681
Total Residential	609	12,076		\$ 31,688	12,076		\$ 26,791
<u>Commercial - Monthly</u>							
Customer Charge							
3/4	28	92	\$ 50.00	\$ 1,400		\$ 31.80	\$ 890
All Consumption	-	5	0.6500	\$ 3			
Proposed Blocks							
1st block					97	1.2490	\$ 121
2nd block					-	1.0973	-
3rd block					-	0.9104	-
4th block					-	0.8330	-
Subtotal Proposed Consumption					97		\$ 121
Total Commercial	28	97		\$ 1,403	97		\$ 1,011
TOTAL DIVISION	637	12,173		\$ 33,091	12,173		\$ 27,802



AQUA PENNSYLVANIA, INC.

SUN VALLEY WATER  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	148	0	\$ 15.00	\$ 2,220	\$ 19.50	\$ 2,886
TOTAL DIVISION	<u>148</u>	<u>0</u>		<u>2,220</u>		<u>2,886</u>

AQUA PENNSYLVANIA, INC.

MAIN DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge 5/8	38,013		\$ 16.00	\$ 608,206	18.50	\$ 703,238
Subtotal	38,013	-		\$ 608,206		\$ 703,238
1st block	20	760,258	0.9071	\$ 689,630	1.1330	\$ 861,372
2nd block	Over 20	777,423	1.0352	804,788	1.3418	1,043,146
Subtotal Customer Growth Consumption		1,537,680		\$ 1,494,418		\$ 1,904,518
1st block	20		0.9071	\$ -	1.1330	\$ -
2nd block	Over 20	(752,193)	1.0352	(778,670)	1.3418	(1,009,292)
Subtotal Declining Usage Consumption		(752,193)		\$ (778,670)		\$ (1,009,292)
Total Residential	38,013	785,487		1,323,954		1,598,464
<u>Commercial - Monthly</u>						
Customer Charge 5/8	4,473		\$ 16.00	\$ 71,570	\$ 18.50	\$ 82,753
Subtotal	4,473	-		\$ 71,570		\$ 82,753
Growth Adjustment Consumption						
1st block		447,312	1.0000	\$ 447,312	1.2490	\$ 558,693
2nd block		1,042,237	0.8785	915,605	1.0973	1,143,647
3rd block		213,878	0.7288	155,874	0.9104	194,715
4th block		-	0.6668	-	0.8330	-
Subtotal Customer Growth Consumption		1,703,427		\$ 1,518,791		\$ 1,897,055
Total Commercial	4,473	1,703,427		\$ 1,590,361		\$ 1,979,808
<u>Industrial - Monthly</u>						
Customer Charge 5/8	(66)		\$ 16.00	\$ (1,056)	\$ 18.50	\$ (1,221)
Subtotal Minimums	(66)	-		\$ (1,056)		\$ (1,221)
1st block		(6,600)	1.0000	\$ (6,600)	1.2490	\$ (8,243)
2nd block		(15,378)	0.8785	(13,510)	1.0973	(16,874)
3rd block		(132,218)	0.7288	(96,360)	0.9104	(120,371)
4th block		-	0.6668	-	0.8330	-
5th block		-	0.6052	-	0.7868	-
6th block		-	0.4842	-	0.6293	-
Subtotal Growth Adjustment Consumption		(154,196)		\$ (116,470)		\$ (145,488)
Total Industrial	-66	(154,196)		\$ (117,526)		\$ (146,709)

AQUA PENNSYLVANIA, INC.

MAIN DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
Private Fire <b>Metered Service</b>						
Main Division 6"	2,482		\$ 192.00	\$ 476,448	\$ 220.80	\$ 547,915
Consumption	_____	-	1.0000	\$ -	1.2490	\$ -
Total Private Fire Growth	<u>2,482</u>	<u>-</u>		<u>\$ 476,448</u>		<u>\$ 547,915</u>

AQUA PENNSYLVANIA, INC.  
ADJUSTMENT 1 - CUSTOMER GROWTH REVENUE ADJUSTMENT UNDER PRESENT RATES  
FOR THE TEST YEARS ENDING MARCH 31, 2018, 2019 AND 2020

	Residential	Commercial	Industrial	Private Fire	Total
<u>Historic TY Customer Growth Calculation</u>					
1 Number of Customers as of 3/31/18	350,718	19,935	697	5,010	376,360
2 Number of Customer as of 3/31/17	349,307	19,743	696	4,919	374,665
3 Projected Daily Usage in gallons (a)	132.85	1,261.57	7,717.50	-	9,112
4 Monthly Volumes per Normalization (Gallons) Line 3 X (365 Days/12 Mont	4,040.85	37,847.24	231,525.13	-	273,413
5 HTY Customer Annualized Growth Bills (Line 2-Line 1) X 12 Divided by 2	8,466	1,152	6	46	9,670
6 HTY Customer Annualized Growth Volumes (Line 4 X Line 5 / 100)	342,098	436,000	13,892	-	791,990
Priced At First Block	169,320	115,200	600	-	285,120
Priced At Second Block	172,778	268,416	1,398	-	442,592
Priced At Third Block	-	52,384	11,894	-	64,278
Priced At Fourth Block	-	-	-	-	-
Priced At Fifth Block	-	-	-	-	-
Priced At Sixth Block	-	-	-	-	-
<u>Future Test Year Customer Growth Calculation</u>					
7 Forecasted Customer Growth	1,231	138	(3)	102	1,468
8 Annualized Bills (Line 7 X 12)	14,773	1,661	(36)	1,218	17,616
9 HTY Customer Annualized Growth Volumes (Line 4 X Line 8)	596,973	628,476	(83,349)	-	1,142,100
10 Average Volumes Per Normalization					
Priced At First Block	295,469	166,056	(3,600)	-	457,925
Priced At Second Block	301,504	386,910	(8,388)	-	680,026
Priced At Third Block	-	75,510	(71,361)	-	4,149
Priced At Fourth Block	-	-	-	-	-
Priced At Fifth Block	-	-	-	-	-
Priced At Sixth Block	-	-	-	-	-
<u>Fully Projected Future Test Year Customer Growth Calculation</u>					
11 Monthly Volumes per Normalization (Gallons) Line 3 X (366 Days/12 Mont	4,051.93	38,478.03	235,383.89	-	277,914
12 Forecasted Customer Growth	1,231	138	(3)	102	1,468
13 Annualized Bills (Line 12 X 12)	14,773	1,661	(36)	1,218	17,616
14 HTY Customer Annualized Growth Volumes (Line 11 X Line 12)	598,609	638,951	(84,738)	-	1,152,822
15 Average Volumes Per Normalization					
16 Priced At First Block	295,469	166,056	(3,600)	-	457,925
17 Priced At Second Block	303,141	386,910	(8,388)	-	681,663
18 Priced At Third Block	-	85,984	(72,750)	-	13,234
19 Priced At Fourth Block	-	-	-	-	-
20 Priced At Fifth Block	-	-	-	-	-
21 Priced At Sixth Block	-	-	-	-	-
22 Total Bills	38,013	4,473	(66)	2,482	44,901
23 Priced At First Block	760,258	447,312	(6,600)	-	1,200,970
24 Priced At Second Block	777,423	1,042,237	(15,378)	-	1,804,282
25 Priced At Third Block	-	213,878	(132,218)	-	81,660
26 Priced At Fourth Block	-	-	-	-	-
27 Priced At Fifth Block	-	-	-	-	-
28 Priced At Sixth Block	-	-	-	-	-

(a) For residential and commercial, see declining usage workpaper. For Industrial and Public, based on 2017 usage.

AQUA PENNSYLVANIA, INC.  
ADJUSTMENT 1 - CUSTOMER GROWTH REVENUE ADJUSTMENT UNDER PRESENT RATES  
FOR THE TEST YEARS ENDING MARCH 31, 2018, 2019 AND 2020

Number of Customers	Residential	Commercial	Industrial	Private Fire Protection
29 Period Ending 3/31/16	348,256.0	19,658.0	703.0	4,807.0
30 Period Ending 3/31/17	349,307.2	19,742.8	696.0	4,919.0
31 Historic Test Year Period Ending 3/31/18	350,718.2	19,934.8	697.0	5,010.0
32 Increase 2016-2017	1,051.2	84.8	(7.0)	112.0
33 Increase 2017-2018	1,411.0	192.0	1.0	91.0
34 Average Growth/(Decline)	1,231.1	138.4	(3.0)	101.5

Acquisitions Removed from Main Division	Residential	Commercial
Bunker Hill - (8/12/15)	67	
Robin Hood Lakes - (10/15/15)	214	
East Cameron - (12/20/16)	54	2
Sun Valley - (1/1/18)	83	

AQUA PENNSYLVANIA, INC.  
MAIN DIVISION  
ADJUSTMENT 2 - DECLINING USAGE REVENUE ADJUSTMENT - PRESENT RATES  
FOR THE TEST YEAR ENDING MARCH 31, 2018

	<u>Residential</u>
1 Actual Bills	4,173,338
2 Actual 2017 Daily Usage (Gallons)	133.45
3 Projected Daily Usage in gallons - 2020	132.85
4 Difference in Daily Usage - Line 3 - Line 2	(0.60)
5 Difference in 100 gallon Monthly Usage - Line 4 X 30 divided by 100	(0.18)
6 Annual Declining Usage Adjustment - Line 1 X Line 5	(752,193)

AQUA PENNSYLVANIA, INC.

TREASURE LAKE AVAILABILITY ADJUSTMENT  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Availability Residential - Semi Annual</u>						
Customer Charge						
Flat Rate	<u>(4,628)</u>	<u>-</u>	\$ 18.24	<u>\$ (84,406)</u>	\$ -	<u>\$ -</u>
Total Unmetered	<u><u>(4,628)</u></u>	<u><u>-</u></u>		<u><u>\$ (84,406)</u></u>		<u><u>\$ -</u></u>

AQUA PENNSYLVANIA, INC.

SUN VALLEY WATER  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Unmetered</u>						
Customer Charge Unmetered	<u>740</u>	<u>0</u>	\$ 15.00	<u>\$ 11,100</u>	19.50	<u>\$ 14,430</u>
TOTAL DIVISION	<u><u>740</u></u>	<u><u>0</u></u>		<u><u>11,100</u></u>		<u><u>14,430</u></u>



AQUA PENNSYLVANIA INC.

APPLICATION OF PRESENT AND PROPOSED RATES TO PRIVATE FIRE CONNECTIONS AS OF MARCH 31, 2018

Rate Zone, Connection Size (1)	Number (2)	Usage (3)	Present Rates		Number (6)	Usage (7)	Proposed Rates	
			Rate (4)	Revenue (5)			Rate (8)	Revenue (9)
<b>Private Fire Metered Service</b>								
<b>Main Division</b>								
1" or A or F1	725		\$ 5.60	\$ 4,060	725		\$ 6.40	\$ 4,640
1 1/2" or B	1,776		12.80	22,733	1,776		14.70	26,107
2" or C or F2	3,499		31.70	110,918	3,499		36.50	127,714
3" or D or F3	24		51.50	1,236	24		59.20	1,421
4" or E or F4	20,934		87.20	1,825,445	20,934		100.30	2,099,680
6" or G or F6	25,812		192.00	4,955,904	25,812		220.80	5,699,290
8" or K or F8	9,601		335.00	3,216,335	9,601		385.30	3,699,265
10" or L or F10	480		510.00	244,800	480		586.50	281,520
12" or F12	12		1,413.00	16,956	12		1,625.00	19,500
Subtotal	62,863			10,398,387	62,863			11,959,137
Usage		590,114	1.0000	590,114		590,114	1.2490	737,052
Total Main Division	62,863	590,114		\$10,988,501	62,863	590,114		\$ 12,696,189
<b>Superior</b>								
1"	2,436		15.25	37,149	2,436		15.25	37,149
2" or C	24		15.25	366	24		15.25	366
4" or E	108		57.81	6,243	108		57.81	6,243
6" or G or F6	156		80.00	12,480	156		90.20	14,071
8" or K or F8	36		80.00	2,880	36		232.70	8,377
Subtotal	2,760			59,118	2,760			66,207
Total Superior	2,760			\$ 59,118	2,760			\$ 66,207
<b>Western et al</b>								
2"	11		31.70	349	11		36.50	402
6" or F6	24		192.00	4,608	24		220.80	5,299
Subtotal	35			4,957	35			5,701
Total Western et al	35			4,957	35			5,701
<b>Bensalem</b>								
1"	24		5.60	134	24		6.40	154
2" or C	317		31.70	10,049	317		36.50	11,571
4" or E	422		67.90	28,620	422		84.10	35,448
6" or G or F6	1,614		120.00	193,680	1,614		170.40	275,026
8" or K or F8	810		180.00	145,800	810		282.70	228,987
10" or L	48		260.00	12,480	48		423.30	20,318
Subtotal	3,235			390,763	3,235			571,503
Usage		6,272	0.8800	5,519		6,272	1.2490	7,834
Total Bensalem	3,235	6,272		396,283	3,235	6,272		579,337
<b>Chalfont</b>								
2" or C	9		31.70	285	9		36.50	329
4" or E	60		87.20	5,232	60		100.30	6,018
6" or G	108		192.00	20,736	108		220.80	23,846
Subtotal	177			26,253	177			30,193
Usage		87	1.0000	87		87	1.2490	109
Total Chalfont	177	87		26,340	177	87		30,302
<b>Honesdale</b>								
4" or E or F4	60		67.90	4,074	60		84.10	5,046
6" or G or F6	144		120.00	17,280	144		170.40	24,538
8" or K or F8	60		180.00	10,800	60		282.70	16,962
Subtotal	264			32,154	264			46,546
			-	0.8833	-		1.2490	-
Total Honesdale	264	-		32,154	264	-		46,546

AQUA PENNSYLVANIA INC.

APPLICATION OF PRESENT AND PROPOSED RATES TO PRIVATE FIRE CONNECTIONS AS OF MARCH 31, 2018

Rate Zone, Connection Size (1)	Number (2)	Usage (3)	Present Rates		Number (6)	Usage (7)	Proposed Rates	
			Rate (4)	Revenue (5)			Rate (8)	Revenue (9)
<b>Sand Springs</b>								
1"	12		5.60	67	12		6.40	77
4"	12		87.20	1,046	12		100.30	1,204
Subtotal	24			1,114	24			1,280
Total Sand Springs	24			1,114	24			1,280
<b>Bristol Township</b>								
3"	12		39.09	469	12		59.20	710
4" or E or F4	60		75.07	4,504	60		84.10	5,046
6" or G or F6	336		117.30	39,413	336		170.40	57,254
8" or K or F8	216		250.43	54,092	216		282.70	61,063
10" or F10	48		516.03	24,769	48		423.30	20,318
Subtotal	672			123,248	672			144,392
		38	0.4930	19		38	0.8700	33
Total Bristol Township	672	38		123,266	672	38		144,425
<b>Liberty Power Contract</b>								
10"	9	50	0.97	49	9	50	0.97	49
<b>Total Metered Private Fire</b>	<b>70,039</b>	<b>596,561</b>		<b>11,631,781</b>	<b>70,039</b>	<b>596,561</b>		<b>13,570,035</b>
<b>Private Hydrants</b>								
Main Division	168		25.25	4,242	168		29.00	4,872
Main Division (Waymart)	36		46.20	1,663	36		53.10	1,912
Main Division (Hawley)	21,277		54.60	1,161,724	21,277		54.60	1,161,724
Superior	336		80.00	26,880	336		54.60	18,346
Western et al	2,040		19.80	40,392	2,040		22.80	46,512
Bensalem	390		48.00	18,720	390		54.60	21,294
Honesdale	264		30.60	8,078	264		35.20	9,293
Sand Springs	516		24.00	12,384	516		27.60	14,242
Total Private Hydrants	25,027			\$ 1,274,084	25,027			\$ 1,278,194
<b>Total Private Fire Revenue</b>	<b>95,066</b>			<b>\$12,905,865</b>				<b>\$ 14,848,229</b>

AQUA PENNSYLVANIA INC.

APPLICATION OF PRESENT AND PROPOSED RATES TO  
THE NUMBER OF PUBLIC FIRE HYDRANTS AS OF MARCH 31, 2018

Service Area (1)	Pro Forma Number of Bills (2)	Present Monthly Rate (3)	Pro Forma Present Revenue (4)	Proposed Monthly Rate (5)	Pro Forma Proposed Revenue (6)
Main Division	6,288	\$ 19.00	\$ 119,472	\$ 21.30	\$ 133,934
Main Division	61,544	22.00	1,353,968	25.86	1,591,528
Main Division	2,388	22.50	53,730	25.86	61,754
Main Division	4,968	22.92	113,867	25.86	128,472
Main Division	136,946	25.25	3,457,887	25.86	3,541,424
Main Division	828	29.06	24,062	25.86	21,412
Main Division	9,132	42.25	385,827	25.86	236,154
Superior	2,928	23.75	69,540	25.86	75,718
Western et al Division	1,536	22.00	33,792	25.86	39,721
Bensalem	16,887	14.73	248,746	17.80	300,589
Chalfont	2,268	19.00	43,092	21.30	48,308
Chalfont	84	22.00	1,848	25.86	2,172
Chalfont	192	25.25	4,848	25.86	4,965
CS Division (Masthope)	168	22.00	3,696	25.86	4,344
Clarendon	144	22.00	3,168	25.86	3,724
Kratzerville	216	19.00	4,104	21.30	4,601
Honesdale	1,056	22.00	23,232	25.86	27,308
Mifflin Township	348	10.91	3,797	13.90	4,837
Beech Mountain	98	22.00	2,156	25.86	2,534
Concord Park	48	8.64	415	12.10	581
Bristol Township	1,056	10.91	11,521	15.90	16,790
Mount Jewett	456	4.40	2,006	8.70	3,967
<b>Total</b>	<b>249,579</b>		<b>\$ 5,964,772</b>		<b>\$ 6,254,838</b>

AQUA PENNSYLVANIA INC.  
MAIN DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 17.20	\$ 18.50	\$ 1.30	7.56%
1,000	\$ 26.95	\$ 29.83	\$ 2.88	10.68%
2,000	\$ 36.70	\$ 41.16	\$ 4.46	12.14%
3,000	\$ 47.83	\$ 54.58	\$ 6.75	14.11%
4,000	\$ 58.96	\$ 68.00	\$ 9.04	15.33%
4,080	\$ 59.85	\$ 69.07	\$ 9.22	15.40%
5,000	\$ 70.09	\$ 81.41	\$ 11.33	16.16%
6,000	\$ 81.22	\$ 94.83	\$ 13.62	16.76%
7,000	\$ 92.34	\$ 108.25	\$ 15.91	17.22%
8,000	\$ 103.47	\$ 121.67	\$ 18.19	17.58%
9,000	\$ 114.60	\$ 135.09	\$ 20.48	17.87%
10,000	\$ 125.73	\$ 148.50	\$ 22.77	18.11%
11,000	\$ 136.86	\$ 161.92	\$ 25.06	18.31%
12,000	\$ 147.99	\$ 175.34	\$ 27.35	18.48%
13,000	\$ 159.12	\$ 188.76	\$ 29.64	18.63%
14,000	\$ 170.24	\$ 202.18	\$ 31.93	18.76%
15,000	\$ 181.37	\$ 215.59	\$ 34.22	18.87%
16,000	\$ 192.50	\$ 229.01	\$ 36.51	18.97%
17,000	\$ 203.63	\$ 242.43	\$ 38.80	19.05%
18,000	\$ 214.76	\$ 255.85	\$ 41.09	19.13%
19,000	\$ 225.89	\$ 269.27	\$ 43.38	19.20%
20,000	\$ 237.01	\$ 282.68	\$ 45.67	19.27%
25,000	\$ 292.66	\$ 349.77	\$ 57.12	19.52%
30,000	\$ 348.30	\$ 416.86	\$ 68.57	19.69%
35,000	\$ 403.94	\$ 483.95	\$ 80.01	19.81%
40,000	\$ 459.58	\$ 551.04	\$ 91.46	19.90%
45,000	\$ 515.22	\$ 618.13	\$ 102.91	19.97%
50,000	\$ 570.87	\$ 685.22	\$ 114.36	20.03%
60,000	\$ 682.15	\$ 819.40	\$ 137.25	20.12%
70,000	\$ 793.43	\$ 953.58	\$ 160.15	20.18%
80,000	\$ 904.72	\$ 1,087.76	\$ 183.05	20.23%
90,000	\$ 1,016.00	\$ 1,221.94	\$ 205.94	20.27%
100,000	\$ 1,127.29	\$ 1,356.12	\$ 228.84	20.30%
110,000	\$ 1,238.57	\$ 1,490.30	\$ 251.73	20.32%
120,000	\$ 1,349.85	\$ 1,624.48	\$ 274.63	20.35%
130,000	\$ 1,461.14	\$ 1,758.66	\$ 297.53	20.36%
140,000	\$ 1,572.42	\$ 1,892.84	\$ 320.42	20.38%
150,000	\$ 1,683.71	\$ 2,027.02	\$ 343.32	20.39%
160,000	\$ 1,794.99	\$ 2,161.20	\$ 366.21	20.40%
170,000	\$ 1,906.27	\$ 2,295.38	\$ 389.11	20.41%
180,000	\$ 2,017.56	\$ 2,429.56	\$ 412.01	20.42%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
MAIN DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
COMMERCIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 17.20	\$ 18.50	\$ 1.30	7.56%
1,000	\$ 27.95	\$ 30.99	\$ 3.04	10.88%
2,000	\$ 38.70	\$ 43.48	\$ 4.78	12.35%
5,000	\$ 70.95	\$ 80.95	\$ 10.00	14.09%
6,000	\$ 81.70	\$ 93.44	\$ 11.74	14.37%
7,000	\$ 92.45	\$ 105.93	\$ 13.48	14.58%
8,000	\$ 103.20	\$ 118.42	\$ 15.22	14.75%
9,000	\$ 113.95	\$ 130.91	\$ 16.96	14.88%
10,000	\$ 124.70	\$ 143.40	\$ 18.70	15.00%
11,000	\$ 134.14	\$ 154.37	\$ 20.23	15.08%
12,000	\$ 143.59	\$ 165.35	\$ 21.76	15.15%
13,000	\$ 153.03	\$ 176.32	\$ 23.29	15.22%
14,000	\$ 162.48	\$ 187.29	\$ 24.82	15.27%
15,000	\$ 171.92	\$ 198.27	\$ 26.35	15.32%
20,000	\$ 219.14	\$ 253.13	\$ 33.99	15.51%
25,000	\$ 266.36	\$ 308.00	\$ 41.64	15.63%
30,000	\$ 313.58	\$ 362.86	\$ 49.28	15.72%
35,000	\$ 358.06	\$ 414.55	\$ 56.49	15.78%
40,000	\$ 397.23	\$ 460.07	\$ 62.83	15.82%
45,000	\$ 436.41	\$ 505.59	\$ 69.18	15.85%
50,000	\$ 475.58	\$ 551.11	\$ 75.53	15.88%
60,000	\$ 553.93	\$ 642.15	\$ 88.22	15.93%
70,000	\$ 632.27	\$ 733.19	\$ 100.92	15.96%
80,000	\$ 710.62	\$ 824.23	\$ 113.61	15.99%
90,000	\$ 788.96	\$ 915.27	\$ 126.30	16.01%
100,000	\$ 867.31	\$ 1,006.31	\$ 139.00	16.03%
200,000	\$ 1,650.77	\$ 1,916.71	\$ 265.94	16.11%
250,000	\$ 2,042.50	\$ 2,371.91	\$ 329.41	16.13%
300,000	\$ 2,434.23	\$ 2,827.11	\$ 392.88	16.14%
350,000	\$ 2,814.63	\$ 3,269.38	\$ 454.75	16.16%
360,000	\$ 2,886.31	\$ 3,352.68	\$ 466.37	16.16%
370,000	\$ 2,957.99	\$ 3,435.98	\$ 477.99	16.16%
380,000	\$ 3,029.67	\$ 3,519.28	\$ 489.61	16.16%
390,000	\$ 3,101.35	\$ 3,602.58	\$ 501.23	16.16%
400,000	\$ 3,173.03	\$ 3,685.88	\$ 512.85	16.16%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
MAIN DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
INDUSTRIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 17.20	\$ 18.50	\$ 1.30	7.56%
1,000	\$ 27.95	\$ 30.99	\$ 3.04	10.88%
2,000	\$ 38.70	\$ 43.48	\$ 4.78	12.35%
3,000	\$ 49.45	\$ 55.97	\$ 6.52	13.19%
4,000	\$ 60.20	\$ 68.46	\$ 8.26	13.72%
5,000	\$ 70.95	\$ 80.95	\$ 10.00	14.09%
10,000	\$ 124.70	\$ 143.40	\$ 18.70	15.00%
50,000	\$ 475.58	\$ 551.11	\$ 75.53	15.88%
100,000	\$ 867.31	\$ 1,006.31	\$ 139.00	16.03%
200,000	\$ 1,650.77	\$ 1,916.71	\$ 265.94	16.11%
300,000	\$ 2,434.23	\$ 2,827.11	\$ 392.88	16.14%
400,000	\$ 3,173.03	\$ 3,685.88	\$ 512.85	16.16%
500,000	\$ 3,889.84	\$ 4,518.88	\$ 629.04	16.17%
750,000	\$ 5,681.87	\$ 6,601.38	\$ 919.51	16.18%
1,000,000	\$ 7,473.89	\$ 8,683.88	\$ 1,209.99	16.19%
1,500,000	\$ 11,057.94	\$ 12,848.88	\$ 1,790.94	16.20%
2,000,000	\$ 14,641.99	\$ 17,013.88	\$ 2,371.89	16.20%
2,500,000	\$ 18,226.04	\$ 21,178.88	\$ 2,952.84	16.20%
3,000,000	\$ 21,810.09	\$ 25,343.88	\$ 3,533.79	16.20%
3,350,000	\$ 24,307.87	\$ 28,251.67	\$ 3,943.80	16.22%
3,500,000	\$ 25,283.76	\$ 29,431.87	\$ 4,148.11	16.41%
4,000,000	\$ 28,536.71	\$ 33,365.87	\$ 4,829.16	16.92%
4,500,000	\$ 31,789.66	\$ 37,299.87	\$ 5,510.21	17.33%
5,000,000	\$ 35,042.61	\$ 41,233.87	\$ 6,191.26	17.67%
5,500,000	\$ 38,295.56	\$ 45,167.87	\$ 6,872.31	17.95%
6,000,000	\$ 41,548.51	\$ 49,101.87	\$ 7,553.36	18.18%
6,500,000	\$ 44,801.46	\$ 53,035.87	\$ 8,234.41	18.38%
7,000,000	\$ 48,054.41	\$ 56,969.87	\$ 8,915.46	18.55%
8,000,000	\$ 54,560.31	\$ 64,837.87	\$ 10,277.56	18.84%
9,000,000	\$ 61,066.21	\$ 72,705.87	\$ 11,639.66	19.06%
10,000,000	\$ 67,572.11	\$ 80,573.87	\$ 13,001.76	19.24%
10,050,000	\$ 67,832.36	\$ 80,888.52	\$ 13,056.15	19.25%
10,100,000	\$ 68,092.62	\$ 81,203.17	\$ 13,110.55	19.25%
10,500,000	\$ 70,174.68	\$ 83,720.37	\$ 13,545.69	19.30%
11,000,000	\$ 72,777.26	\$ 86,866.87	\$ 14,089.61	19.36%

AQUA PENNSYLVANIA INC.  
MAIN DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
PUBLIC - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 17.20	\$ 18.50	\$ 1.30	7.56%
1,000	\$ 27.95	\$ 30.99	\$ 3.04	10.88%
2,000	\$ 38.70	\$ 43.48	\$ 4.78	12.35%
5,000	\$ 70.95	\$ 80.95	\$ 10.00	14.09%
6,000	\$ 81.70	\$ 93.44	\$ 11.74	14.37%
7,000	\$ 92.45	\$ 105.93	\$ 13.48	14.58%
8,000	\$ 103.20	\$ 118.42	\$ 15.22	14.75%
9,000	\$ 113.95	\$ 130.91	\$ 16.96	14.88%
10,000	\$ 124.70	\$ 143.40	\$ 18.70	15.00%
11,000	\$ 134.14	\$ 154.37	\$ 20.23	15.08%
12,000	\$ 143.59	\$ 165.35	\$ 21.76	15.15%
13,000	\$ 153.03	\$ 176.32	\$ 23.29	15.22%
14,000	\$ 162.48	\$ 187.29	\$ 24.82	15.27%
15,000	\$ 171.92	\$ 198.27	\$ 26.35	15.32%
20,000	\$ 219.14	\$ 253.13	\$ 33.99	15.51%
25,000	\$ 266.36	\$ 308.00	\$ 41.64	15.63%
30,000	\$ 313.58	\$ 362.86	\$ 49.28	15.72%
35,000	\$ 358.06	\$ 414.55	\$ 56.49	15.78%
40,000	\$ 397.23	\$ 460.07	\$ 62.83	15.82%
45,000	\$ 436.41	\$ 505.59	\$ 69.18	15.85%
50,000	\$ 475.58	\$ 551.11	\$ 75.53	15.88%
60,000	\$ 553.93	\$ 642.15	\$ 88.22	15.93%
70,000	\$ 632.27	\$ 733.19	\$ 100.92	15.96%
80,000	\$ 710.62	\$ 824.23	\$ 113.61	15.99%
90,000	\$ 788.96	\$ 915.27	\$ 126.30	16.01%
100,000	\$ 867.31	\$ 1,006.31	\$ 139.00	16.03%
200,000	\$ 1,650.77	\$ 1,916.71	\$ 265.94	16.11%
250,000	\$ 2,042.50	\$ 2,371.91	\$ 329.41	16.13%
300,000	\$ 2,434.23	\$ 2,827.11	\$ 392.88	16.14%
350,000	\$ 2,814.63	\$ 3,269.38	\$ 454.75	16.16%
360,000	\$ 2,886.31	\$ 3,352.68	\$ 466.37	16.16%
370,000	\$ 2,957.99	\$ 3,435.98	\$ 477.99	16.16%
380,000	\$ 3,029.67	\$ 3,519.28	\$ 489.61	16.16%
390,000	\$ 3,101.35	\$ 3,602.58	\$ 501.23	16.16%
400,000	\$ 3,173.03	\$ 3,685.88	\$ 512.85	16.16%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
SUPERIOR  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 17.21	\$ 18.50	\$ 1.29	7.52%
1,000	\$ 26.96	\$ 29.83	\$ 2.87	10.63%
2,000	\$ 36.72	\$ 41.16	\$ 4.44	12.08%
3,000	\$ 46.48	\$ 54.58	\$ 8.10	17.42%
4,000	\$ 56.24	\$ 68.00	\$ 11.76	20.90%
4,080	\$ 57.02	\$ 69.07	\$ 12.05	21.13%
5,000	\$ 66.00	\$ 81.41	\$ 15.42	23.36%
6,000	\$ 75.76	\$ 94.83	\$ 19.08	25.18%
7,000	\$ 85.51	\$ 108.25	\$ 22.74	26.59%
8,000	\$ 95.27	\$ 121.67	\$ 26.40	27.71%
9,000	\$ 105.03	\$ 135.09	\$ 30.06	28.62%
10,000	\$ 114.79	\$ 148.50	\$ 33.72	29.37%
11,000	\$ 124.55	\$ 161.92	\$ 37.38	30.01%
12,000	\$ 134.30	\$ 175.34	\$ 41.04	30.55%
13,000	\$ 144.06	\$ 188.76	\$ 44.70	31.02%
14,000	\$ 153.82	\$ 202.18	\$ 48.36	31.44%
15,000	\$ 163.58	\$ 215.59	\$ 52.01	31.80%
16,000	\$ 173.34	\$ 229.01	\$ 55.67	32.12%
17,000	\$ 183.10	\$ 242.43	\$ 59.33	32.41%
18,000	\$ 192.85	\$ 255.85	\$ 62.99	32.66%
19,000	\$ 202.61	\$ 269.27	\$ 66.65	32.90%
20,000	\$ 212.37	\$ 282.68	\$ 70.31	33.11%
25,000	\$ 261.16	\$ 349.77	\$ 88.61	33.93%
30,000	\$ 309.95	\$ 416.86	\$ 106.91	34.49%
35,000	\$ 358.74	\$ 483.95	\$ 125.21	34.90%
40,000	\$ 407.53	\$ 551.04	\$ 143.51	35.21%
45,000	\$ 456.32	\$ 618.13	\$ 161.81	35.46%
50,000	\$ 505.11	\$ 685.22	\$ 180.11	35.66%
60,000	\$ 602.70	\$ 819.40	\$ 216.71	35.96%
70,000	\$ 700.28	\$ 953.58	\$ 253.31	36.17%
80,000	\$ 797.86	\$ 1,087.76	\$ 289.90	36.34%
90,000	\$ 895.44	\$ 1,221.94	\$ 326.50	36.46%
100,000	\$ 993.02	\$ 1,356.12	\$ 363.10	36.57%
110,000	\$ 1,090.61	\$ 1,490.30	\$ 399.70	36.65%
120,000	\$ 1,188.19	\$ 1,624.48	\$ 436.30	36.72%
130,000	\$ 1,285.77	\$ 1,758.66	\$ 472.90	36.78%
140,000	\$ 1,383.35	\$ 1,892.84	\$ 509.49	36.83%
150,000	\$ 1,480.93	\$ 2,027.02	\$ 546.09	36.87%
160,000	\$ 1,578.51	\$ 2,161.20	\$ 582.69	36.91%
170,000	\$ 1,676.10	\$ 2,295.38	\$ 619.29	36.95%
180,000	\$ 1,773.68	\$ 2,429.56	\$ 655.89	36.98%

\*\* Present rates include 2.42% DSIC.



AQUA PENNSYLVANIA INC.  
EAGLE ROCK, FAWN LAKE, TANGLEWOOD, THORNHURST,  
WOODLEDGE VILLAGE, WESTERN, AND PINECREST DIVISIONS  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 27.95	\$ 30.10	\$ 2.15	7.69%
1,000	\$ 35.70	\$ 39.57	\$ 3.87	10.84%
2,000	\$ 43.46	\$ 49.05	\$ 5.59	12.87%
3,000	\$ 51.21	\$ 70.35	\$ 19.15	37.39%
4,000	\$ 58.96	\$ 83.77	\$ 24.81	42.08%
4,080	\$ 59.85	\$ 69.07	\$ 9.22	15.40%
5,000	\$ 70.09	\$ 81.41	\$ 11.32	16.16%
6,000	\$ 81.22	\$ 94.83	\$ 13.61	16.76%
7,000	\$ 92.35	\$ 108.25	\$ 15.90	17.22%
8,000	\$ 103.48	\$ 121.67	\$ 18.19	17.58%
9,000	\$ 114.60	\$ 135.09	\$ 20.48	17.87%
10,000	\$ 125.73	\$ 148.50	\$ 22.77	18.11%
11,000	\$ 136.86	\$ 161.92	\$ 25.06	18.31%
12,000	\$ 147.99	\$ 175.34	\$ 27.35	18.48%
13,000	\$ 159.12	\$ 188.76	\$ 29.64	18.63%
14,000	\$ 170.25	\$ 202.18	\$ 31.93	18.76%
15,000	\$ 181.37	\$ 215.59	\$ 34.22	18.87%
16,000	\$ 192.50	\$ 229.01	\$ 36.51	18.97%
17,000	\$ 203.63	\$ 242.43	\$ 38.80	19.05%
18,000	\$ 214.76	\$ 255.85	\$ 41.09	19.13%
19,000	\$ 225.89	\$ 269.27	\$ 43.38	19.20%
20,000	\$ 237.02	\$ 282.68	\$ 45.67	19.27%
25,000	\$ 292.66	\$ 349.77	\$ 57.12	19.52%
30,000	\$ 348.30	\$ 416.86	\$ 68.56	19.69%
35,000	\$ 403.94	\$ 483.95	\$ 80.01	19.81%
40,000	\$ 459.58	\$ 551.04	\$ 91.46	19.90%
45,000	\$ 515.23	\$ 618.13	\$ 102.91	19.97%
50,000	\$ 570.87	\$ 685.22	\$ 114.36	20.03%
60,000	\$ 682.15	\$ 819.40	\$ 137.25	20.12%
70,000	\$ 793.44	\$ 953.58	\$ 160.15	20.18%
80,000	\$ 904.72	\$ 1,087.76	\$ 183.04	20.23%
90,000	\$ 1,016.00	\$ 1,221.94	\$ 205.94	20.27%
100,000	\$ 1,127.29	\$ 1,356.12	\$ 228.84	20.30%
110,000	\$ 1,238.57	\$ 1,490.30	\$ 251.73	20.32%
120,000	\$ 1,349.86	\$ 1,624.48	\$ 274.63	20.34%
130,000	\$ 1,461.14	\$ 1,758.66	\$ 297.52	20.36%
140,000	\$ 1,572.42	\$ 1,892.84	\$ 320.42	20.38%
150,000	\$ 1,683.71	\$ 2,027.02	\$ 343.32	20.39%
160,000	\$ 1,794.99	\$ 2,161.20	\$ 366.21	20.40%
170,000	\$ 1,906.28	\$ 2,295.38	\$ 389.11	20.41%
180,000	\$ 2,017.56	\$ 2,429.56	\$ 412.00	20.42%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
BENSALEM DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 17.20	\$ 18.50	\$ 1.30	7.56%
1,000	\$ 26.66	\$ 29.83	\$ 3.17	11.89%
2,000	\$ 36.12	\$ 41.16	\$ 5.04	13.95%
3,000	\$ 45.58	\$ 54.58	\$ 9.00	19.74%
4,000	\$ 55.04	\$ 68.00	\$ 12.96	23.54%
4,080	\$ 55.80	\$ 69.07	\$ 13.27	23.79%
5,000	\$ 64.50	\$ 81.41	\$ 16.91	26.22%
6,000	\$ 73.96	\$ 94.83	\$ 20.87	28.22%
7,000	\$ 83.42	\$ 108.25	\$ 24.83	29.77%
8,000	\$ 92.88	\$ 121.67	\$ 28.79	30.99%
9,000	\$ 102.34	\$ 135.09	\$ 32.75	32.00%
10,000	\$ 111.80	\$ 148.50	\$ 36.70	32.83%
11,000	\$ 121.26	\$ 161.92	\$ 40.66	33.53%
12,000	\$ 130.72	\$ 175.34	\$ 44.62	34.13%
13,000	\$ 140.18	\$ 188.76	\$ 48.58	34.65%
14,000	\$ 149.64	\$ 202.18	\$ 52.54	35.11%
15,000	\$ 159.10	\$ 215.59	\$ 56.49	35.51%
16,000	\$ 168.56	\$ 229.01	\$ 60.45	35.86%
17,000	\$ 178.02	\$ 242.43	\$ 64.41	36.18%
18,000	\$ 187.48	\$ 255.85	\$ 68.37	36.47%
19,000	\$ 196.94	\$ 269.27	\$ 72.33	36.72%
20,000	\$ 206.40	\$ 282.68	\$ 76.28	36.96%
25,000	\$ 253.70	\$ 349.77	\$ 96.07	37.87%
30,000	\$ 301.00	\$ 416.86	\$ 115.86	38.49%
35,000	\$ 348.30	\$ 483.95	\$ 135.65	38.95%
40,000	\$ 395.60	\$ 551.04	\$ 155.44	39.29%
45,000	\$ 442.90	\$ 618.13	\$ 175.23	39.57%
50,000	\$ 490.20	\$ 685.22	\$ 195.02	39.78%
60,000	\$ 584.80	\$ 819.40	\$ 234.60	40.12%
70,000	\$ 679.40	\$ 953.58	\$ 274.18	40.36%
80,000	\$ 774.00	\$ 1,087.76	\$ 313.76	40.54%
90,000	\$ 868.60	\$ 1,221.94	\$ 353.34	40.68%
100,000	\$ 963.20	\$ 1,356.12	\$ 392.92	40.79%
110,000	\$ 1,057.80	\$ 1,490.30	\$ 432.50	40.89%
120,000	\$ 1,152.40	\$ 1,624.48	\$ 472.08	40.97%
130,000	\$ 1,247.00	\$ 1,758.66	\$ 511.66	41.03%
140,000	\$ 1,341.60	\$ 1,892.84	\$ 551.24	41.09%
150,000	\$ 1,436.20	\$ 2,027.02	\$ 590.82	41.14%
160,000	\$ 1,530.80	\$ 2,161.20	\$ 630.40	41.18%
170,000	\$ 1,625.40	\$ 2,295.38	\$ 669.98	41.22%
180,000	\$ 1,720.00	\$ 2,429.56	\$ 709.56	41.25%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
CHALFONT DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 16.13	\$ 18.50	\$ 2.38	14.73%
1,000	\$ 23.76	\$ 29.83	\$ 6.07	25.56%
2,000	\$ 31.39	\$ 41.16	\$ 9.77	31.12%
3,000	\$ 39.02	\$ 54.58	\$ 15.56	39.86%
4,000	\$ 46.66	\$ 68.00	\$ 21.34	45.74%
4,080	\$ 47.27	\$ 69.07	\$ 21.80	46.13%
5,000	\$ 54.29	\$ 81.41	\$ 27.13	49.97%
6,000	\$ 61.92	\$ 94.83	\$ 32.91	53.15%
7,000	\$ 69.55	\$ 108.25	\$ 38.70	55.64%
8,000	\$ 77.19	\$ 121.67	\$ 44.48	57.63%
9,000	\$ 84.82	\$ 135.09	\$ 50.27	59.27%
10,000	\$ 92.45	\$ 148.50	\$ 56.05	60.63%
11,000	\$ 100.08	\$ 161.92	\$ 61.84	61.79%
12,000	\$ 107.72	\$ 175.34	\$ 67.63	62.78%
13,000	\$ 115.35	\$ 188.76	\$ 73.41	63.64%
14,000	\$ 122.98	\$ 202.18	\$ 79.20	64.40%
15,000	\$ 130.61	\$ 215.59	\$ 84.98	65.06%
16,000	\$ 138.25	\$ 229.01	\$ 90.77	65.66%
17,000	\$ 145.88	\$ 242.43	\$ 96.55	66.19%
18,000	\$ 153.51	\$ 255.85	\$ 102.34	66.67%
19,000	\$ 161.14	\$ 269.27	\$ 108.12	67.10%
20,000	\$ 168.78	\$ 282.68	\$ 113.91	67.49%
25,000	\$ 206.94	\$ 349.77	\$ 142.84	69.02%
30,000	\$ 245.10	\$ 416.86	\$ 171.76	70.08%
35,000	\$ 283.26	\$ 483.95	\$ 200.69	70.85%
40,000	\$ 321.43	\$ 551.04	\$ 229.62	71.44%
45,000	\$ 359.59	\$ 618.13	\$ 258.55	71.90%
50,000	\$ 397.75	\$ 685.22	\$ 287.47	72.28%
60,000	\$ 474.08	\$ 819.40	\$ 345.33	72.84%
70,000	\$ 550.40	\$ 953.58	\$ 403.18	73.25%
80,000	\$ 626.73	\$ 1,087.76	\$ 461.04	73.56%
90,000	\$ 703.05	\$ 1,221.94	\$ 518.89	73.81%
100,000	\$ 779.38	\$ 1,356.12	\$ 576.75	74.00%
110,000	\$ 855.70	\$ 1,490.30	\$ 634.60	74.16%
120,000	\$ 932.03	\$ 1,624.48	\$ 692.46	74.30%
130,000	\$ 1,008.35	\$ 1,758.66	\$ 750.31	74.41%
140,000	\$ 1,084.68	\$ 1,892.84	\$ 808.17	74.51%
150,000	\$ 1,161.00	\$ 2,027.02	\$ 866.02	74.59%
160,000	\$ 1,237.33	\$ 2,161.20	\$ 923.88	74.67%
170,000	\$ 1,313.65	\$ 2,295.38	\$ 981.73	74.73%
180,000	\$ 1,389.98	\$ 2,429.56	\$ 1,039.59	74.79%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
OAKLAND BEACH AND LAKESIDE ACRES DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 25.26	\$ 30.10	\$ 4.84	19.15%
1,000	\$ 33.02	\$ 39.57	\$ 6.56	19.87%
2,000	\$ 40.77	\$ 49.05	\$ 8.28	20.31%
3,000	\$ 48.52	\$ 58.52	\$ 10.00	20.61%
4,000	\$ 56.27	\$ 68.00	\$ 11.72	20.83%
4,080	\$ 57.04	\$ 69.07	\$ 12.02	21.08%
5,000	\$ 65.91	\$ 81.41	\$ 15.51	23.53%
6,000	\$ 75.54	\$ 94.83	\$ 19.29	25.53%
7,000	\$ 85.18	\$ 108.25	\$ 23.07	27.09%
8,000	\$ 94.81	\$ 121.67	\$ 26.86	28.33%
9,000	\$ 104.44	\$ 135.09	\$ 30.64	29.34%
10,000	\$ 114.08	\$ 148.50	\$ 34.43	30.18%
11,000	\$ 123.71	\$ 161.92	\$ 38.21	30.89%
12,000	\$ 133.35	\$ 175.34	\$ 41.99	31.49%
13,000	\$ 142.98	\$ 188.76	\$ 45.78	32.02%
14,000	\$ 152.62	\$ 202.18	\$ 49.56	32.47%
15,000	\$ 162.25	\$ 215.59	\$ 53.34	32.88%
16,000	\$ 171.88	\$ 229.01	\$ 57.13	33.24%
17,000	\$ 181.52	\$ 242.43	\$ 60.91	33.56%
18,000	\$ 191.15	\$ 255.85	\$ 64.70	33.85%
19,000	\$ 200.79	\$ 269.27	\$ 68.48	34.11%
20,000	\$ 210.42	\$ 282.68	\$ 72.26	34.34%
25,000	\$ 258.59	\$ 349.77	\$ 91.18	35.26%
30,000	\$ 306.76	\$ 416.86	\$ 110.10	35.89%
35,000	\$ 354.93	\$ 483.95	\$ 129.02	36.35%
40,000	\$ 403.10	\$ 551.04	\$ 147.94	36.70%
45,000	\$ 451.27	\$ 618.13	\$ 166.86	36.98%
50,000	\$ 499.45	\$ 685.22	\$ 185.78	37.20%
60,000	\$ 595.79	\$ 819.40	\$ 223.62	37.53%
70,000	\$ 692.13	\$ 953.58	\$ 261.46	37.78%
80,000	\$ 788.47	\$ 1,087.76	\$ 299.29	37.96%
90,000	\$ 884.81	\$ 1,221.94	\$ 337.13	38.10%
100,000	\$ 981.15	\$ 1,356.12	\$ 374.97	38.22%
110,000	\$ 1,077.49	\$ 1,490.30	\$ 412.81	38.31%
120,000	\$ 1,173.84	\$ 1,624.48	\$ 450.65	38.39%
130,000	\$ 1,270.18	\$ 1,758.66	\$ 488.49	38.46%
140,000	\$ 1,366.52	\$ 1,892.84	\$ 526.33	38.52%
150,000	\$ 1,462.86	\$ 2,027.02	\$ 564.16	38.57%
160,000	\$ 1,559.20	\$ 2,161.20	\$ 602.00	38.61%
170,000	\$ 1,655.54	\$ 2,295.38	\$ 639.84	38.65%
180,000	\$ 1,751.88	\$ 2,429.56	\$ 677.68	38.68%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
CS WATER, MASTHOPE DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 27.95	\$ 30.10	\$ 2.15	7.69%
1,000	\$ 33.11	\$ 39.57	\$ 6.46	19.52%
2,000	\$ 38.27	\$ 49.05	\$ 10.78	28.16%
3,000	\$ 43.43	\$ 58.52	\$ 15.09	34.75%
4,000	\$ 48.59	\$ 68.00	\$ 19.41	39.94%
4,080	\$ 49.36	\$ 69.07	\$ 19.71	39.93%
5,000	\$ 58.22	\$ 81.41	\$ 23.19	39.83%
6,000	\$ 67.86	\$ 94.83	\$ 26.97	39.75%
7,000	\$ 77.49	\$ 108.25	\$ 30.76	39.69%
8,000	\$ 87.13	\$ 121.67	\$ 34.54	39.65%
9,000	\$ 96.76	\$ 135.09	\$ 38.33	39.61%
10,000	\$ 106.39	\$ 148.50	\$ 42.11	39.58%
11,000	\$ 116.03	\$ 161.92	\$ 45.89	39.55%
12,000	\$ 125.66	\$ 175.34	\$ 49.68	39.53%
13,000	\$ 135.30	\$ 188.76	\$ 53.46	39.51%
14,000	\$ 144.93	\$ 202.18	\$ 57.24	39.50%
15,000	\$ 154.57	\$ 215.59	\$ 61.03	39.48%
16,000	\$ 164.20	\$ 229.01	\$ 64.81	39.47%
17,000	\$ 173.83	\$ 242.43	\$ 68.60	39.46%
18,000	\$ 183.47	\$ 255.85	\$ 72.38	39.45%
19,000	\$ 193.10	\$ 269.27	\$ 76.16	39.44%
20,000	\$ 202.74	\$ 282.68	\$ 79.95	39.43%
25,000	\$ 250.91	\$ 349.77	\$ 98.87	39.40%
30,000	\$ 299.08	\$ 416.86	\$ 117.79	39.38%
35,000	\$ 347.25	\$ 483.95	\$ 136.71	39.37%
40,000	\$ 395.42	\$ 551.04	\$ 155.62	39.36%
45,000	\$ 443.59	\$ 618.13	\$ 174.54	39.35%
50,000	\$ 491.76	\$ 685.22	\$ 193.46	39.34%
60,000	\$ 588.10	\$ 819.40	\$ 231.30	39.33%
70,000	\$ 684.44	\$ 953.58	\$ 269.14	39.32%
80,000	\$ 780.79	\$ 1,087.76	\$ 306.98	39.32%
90,000	\$ 877.13	\$ 1,221.94	\$ 344.82	39.31%
100,000	\$ 973.47	\$ 1,356.12	\$ 382.66	39.31%
110,000	\$ 1,069.81	\$ 1,490.30	\$ 420.49	39.31%
120,000	\$ 1,166.15	\$ 1,624.48	\$ 458.33	39.30%
130,000	\$ 1,262.49	\$ 1,758.66	\$ 496.17	39.30%
140,000	\$ 1,358.83	\$ 1,892.84	\$ 534.01	39.30%
150,000	\$ 1,455.18	\$ 2,027.02	\$ 571.85	39.30%
160,000	\$ 1,551.52	\$ 2,161.20	\$ 609.69	39.30%
170,000	\$ 1,647.86	\$ 2,295.38	\$ 647.53	39.29%
180,000	\$ 1,744.20	\$ 2,429.56	\$ 685.36	39.29%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
COUNTRY CLUB GARDENS DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 16.13	\$ 18.50	\$ 2.38	14.73%
1,000	\$ 21.50	\$ 26.67	\$ 5.17	24.05%
2,000	\$ 26.88	\$ 34.84	\$ 7.97	29.64%
3,000	\$ 33.33	\$ 44.55	\$ 11.23	33.68%
4,000	\$ 39.78	\$ 54.26	\$ 14.49	36.42%
4,080	\$ 40.29	\$ 55.04	\$ 14.75	36.60%
5,000	\$ 46.23	\$ 63.97	\$ 17.75	38.39%
6,000	\$ 52.68	\$ 73.68	\$ 21.01	39.88%
7,000	\$ 59.13	\$ 83.39	\$ 24.27	41.04%
8,000	\$ 65.58	\$ 93.10	\$ 27.53	41.97%
9,000	\$ 72.03	\$ 102.81	\$ 30.79	42.74%
10,000	\$ 78.48	\$ 112.52	\$ 34.05	43.38%
11,000	\$ 84.93	\$ 122.23	\$ 37.31	43.93%
12,000	\$ 91.38	\$ 131.94	\$ 40.57	44.39%
13,000	\$ 97.83	\$ 141.65	\$ 43.83	44.80%
14,000	\$ 104.28	\$ 151.36	\$ 47.09	45.15%
15,000	\$ 110.73	\$ 161.07	\$ 50.35	45.47%
16,000	\$ 117.18	\$ 170.78	\$ 53.61	45.75%
17,000	\$ 123.63	\$ 180.49	\$ 56.87	46.00%
18,000	\$ 130.08	\$ 190.20	\$ 60.13	46.22%
19,000	\$ 136.53	\$ 199.91	\$ 63.39	46.43%
20,000	\$ 142.98	\$ 209.62	\$ 66.65	46.61%
25,000	\$ 175.23	\$ 258.17	\$ 82.95	47.34%
30,000	\$ 207.48	\$ 306.72	\$ 99.25	47.83%
35,000	\$ 239.73	\$ 355.27	\$ 115.55	48.20%
40,000	\$ 271.98	\$ 403.82	\$ 131.85	48.48%
45,000	\$ 304.23	\$ 452.37	\$ 148.15	48.70%
50,000	\$ 336.48	\$ 500.92	\$ 164.45	48.87%
60,000	\$ 400.98	\$ 598.02	\$ 197.05	49.14%
70,000	\$ 465.48	\$ 695.12	\$ 229.65	49.34%
80,000	\$ 529.98	\$ 792.22	\$ 262.25	49.48%
90,000	\$ 594.48	\$ 889.32	\$ 294.85	49.60%
100,000	\$ 658.98	\$ 986.42	\$ 327.45	49.69%
110,000	\$ 723.48	\$ 1,083.52	\$ 360.05	49.77%
120,000	\$ 787.98	\$ 1,180.62	\$ 392.65	49.83%
130,000	\$ 852.48	\$ 1,277.72	\$ 425.25	49.88%
140,000	\$ 916.98	\$ 1,374.82	\$ 457.85	49.93%
150,000	\$ 981.48	\$ 1,471.92	\$ 490.45	49.97%
160,000	\$ 1,045.98	\$ 1,569.02	\$ 523.05	50.01%
170,000	\$ 1,110.48	\$ 1,666.12	\$ 555.65	50.04%
180,000	\$ 1,174.98	\$ 1,763.22	\$ 588.25	50.06%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
CLARENDON DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 17.20	\$ 18.50	\$ 1.30	7.56%
1,000	\$ 24.95	\$ 29.83	\$ 4.88	19.57%
2,000	\$ 32.70	\$ 41.16	\$ 8.46	25.88%
3,000	\$ 41.52	\$ 54.58	\$ 13.06	31.45%
4,000	\$ 50.34	\$ 68.00	\$ 17.65	35.06%
4,080	\$ 51.05	\$ 69.07	\$ 18.02	35.30%
5,000	\$ 59.17	\$ 81.41	\$ 22.25	37.60%
6,000	\$ 67.99	\$ 94.83	\$ 26.84	39.48%
7,000	\$ 76.82	\$ 108.25	\$ 31.43	40.92%
8,000	\$ 85.64	\$ 121.67	\$ 36.03	42.07%
9,000	\$ 94.46	\$ 135.09	\$ 40.62	43.01%
10,000	\$ 103.29	\$ 148.50	\$ 45.22	43.78%
11,000	\$ 112.11	\$ 161.92	\$ 49.81	44.43%
12,000	\$ 120.93	\$ 175.34	\$ 54.41	44.99%
13,000	\$ 129.76	\$ 188.76	\$ 59.00	45.47%
14,000	\$ 138.58	\$ 202.18	\$ 63.60	45.89%
15,000	\$ 147.40	\$ 215.59	\$ 68.19	46.26%
16,000	\$ 156.23	\$ 229.01	\$ 72.78	46.59%
17,000	\$ 165.05	\$ 242.43	\$ 77.38	46.88%
18,000	\$ 173.87	\$ 255.85	\$ 81.97	47.14%
19,000	\$ 182.70	\$ 269.27	\$ 86.57	47.38%
20,000	\$ 191.52	\$ 282.68	\$ 91.16	47.60%
25,000	\$ 235.64	\$ 349.77	\$ 114.13	48.44%
30,000	\$ 279.76	\$ 416.86	\$ 137.11	49.01%
35,000	\$ 323.88	\$ 483.95	\$ 160.08	49.43%
40,000	\$ 367.99	\$ 551.04	\$ 183.05	49.74%
45,000	\$ 412.11	\$ 618.13	\$ 206.02	49.99%
50,000	\$ 456.23	\$ 685.22	\$ 228.99	50.19%
60,000	\$ 544.47	\$ 819.40	\$ 274.94	50.50%
70,000	\$ 632.70	\$ 953.58	\$ 320.88	50.72%
80,000	\$ 720.94	\$ 1,087.76	\$ 366.83	50.88%
90,000	\$ 809.17	\$ 1,221.94	\$ 412.77	51.01%
100,000	\$ 897.41	\$ 1,356.12	\$ 458.71	51.12%
110,000	\$ 985.65	\$ 1,490.30	\$ 504.66	51.20%
120,000	\$ 1,073.88	\$ 1,624.48	\$ 550.60	51.27%
130,000	\$ 1,162.12	\$ 1,758.66	\$ 596.55	51.33%
140,000	\$ 1,250.35	\$ 1,892.84	\$ 642.49	51.38%
150,000	\$ 1,338.59	\$ 2,027.02	\$ 688.43	51.43%
160,000	\$ 1,426.83	\$ 2,161.20	\$ 734.38	51.47%
170,000	\$ 1,515.06	\$ 2,295.38	\$ 780.32	51.50%
180,000	\$ 1,603.30	\$ 2,429.56	\$ 826.27	51.54%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
KRATZERVILLE DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 17.20	\$ 18.50	\$ 1.30	7.56%
1,000	\$ 25.80	\$ 29.83	\$ 4.03	15.62%
2,000	\$ 34.40	\$ 41.16	\$ 6.76	19.65%
3,000	\$ 43.00	\$ 54.58	\$ 11.58	26.93%
4,000	\$ 51.60	\$ 68.00	\$ 16.40	31.78%
4,080	\$ 52.29	\$ 69.07	\$ 16.78	32.09%
5,000	\$ 60.20	\$ 81.41	\$ 21.21	35.24%
6,000	\$ 68.80	\$ 94.83	\$ 26.03	37.84%
7,000	\$ 77.40	\$ 108.25	\$ 30.85	39.86%
8,000	\$ 86.00	\$ 121.67	\$ 35.67	41.47%
9,000	\$ 94.60	\$ 135.09	\$ 40.49	42.80%
10,000	\$ 103.20	\$ 148.50	\$ 45.30	43.90%
11,000	\$ 111.80	\$ 161.92	\$ 50.12	44.83%
12,000	\$ 120.40	\$ 175.34	\$ 54.94	45.63%
13,000	\$ 129.00	\$ 188.76	\$ 59.76	46.32%
14,000	\$ 137.60	\$ 202.18	\$ 64.58	46.93%
15,000	\$ 146.20	\$ 215.59	\$ 69.39	47.47%
16,000	\$ 154.80	\$ 229.01	\$ 74.21	47.94%
17,000	\$ 163.40	\$ 242.43	\$ 79.03	48.37%
18,000	\$ 172.00	\$ 255.85	\$ 83.85	48.75%
19,000	\$ 180.60	\$ 269.27	\$ 88.67	49.10%
20,000	\$ 189.20	\$ 282.68	\$ 93.48	49.41%
25,000	\$ 232.20	\$ 349.77	\$ 117.57	50.63%
30,000	\$ 275.20	\$ 416.86	\$ 141.66	51.48%
35,000	\$ 318.20	\$ 483.95	\$ 165.75	52.09%
40,000	\$ 361.20	\$ 551.04	\$ 189.84	52.56%
45,000	\$ 404.20	\$ 618.13	\$ 213.93	52.93%
50,000	\$ 447.20	\$ 685.22	\$ 238.02	53.23%
60,000	\$ 533.20	\$ 819.40	\$ 286.20	53.68%
70,000	\$ 619.20	\$ 953.58	\$ 334.38	54.00%
80,000	\$ 705.20	\$ 1,087.76	\$ 382.56	54.25%
90,000	\$ 791.20	\$ 1,221.94	\$ 430.74	54.44%
100,000	\$ 877.20	\$ 1,356.12	\$ 478.92	54.60%
110,000	\$ 963.20	\$ 1,490.30	\$ 527.10	54.72%
120,000	\$ 1,049.20	\$ 1,624.48	\$ 575.28	54.83%
130,000	\$ 1,135.20	\$ 1,758.66	\$ 623.46	54.92%
140,000	\$ 1,221.20	\$ 1,892.84	\$ 671.64	55.00%
150,000	\$ 1,307.20	\$ 2,027.02	\$ 719.82	55.07%
160,000	\$ 1,393.20	\$ 2,161.20	\$ 768.00	55.13%
170,000	\$ 1,479.20	\$ 2,295.38	\$ 816.18	55.18%
180,000	\$ 1,565.20	\$ 2,429.56	\$ 864.36	55.22%

\*\* Present rates include 7.50% DSIC.



AQUA PENNSYLVANIA INC.  
HONESDALE DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 17.20	\$ 18.50	\$ 1.30	7.56%
1,000	\$ 25.78	\$ 29.83	\$ 4.05	15.72%
2,000	\$ 34.36	\$ 41.16	\$ 6.80	19.80%
3,000	\$ 42.94	\$ 54.58	\$ 11.64	27.12%
4,000	\$ 51.51	\$ 68.00	\$ 16.48	32.00%
4,080	\$ 52.20	\$ 69.07	\$ 16.87	32.32%
5,000	\$ 60.09	\$ 81.41	\$ 21.32	35.48%
6,000	\$ 68.67	\$ 94.83	\$ 26.16	38.10%
7,000	\$ 77.25	\$ 108.25	\$ 31.00	40.13%
8,000	\$ 85.83	\$ 121.67	\$ 35.84	41.76%
9,000	\$ 94.41	\$ 135.09	\$ 40.68	43.09%
10,000	\$ 102.99	\$ 148.50	\$ 45.52	44.20%
11,000	\$ 111.56	\$ 161.92	\$ 50.36	45.14%
12,000	\$ 120.14	\$ 175.34	\$ 55.20	45.94%
13,000	\$ 128.72	\$ 188.76	\$ 60.04	46.64%
14,000	\$ 137.30	\$ 202.18	\$ 64.88	47.25%
15,000	\$ 145.88	\$ 215.59	\$ 69.72	47.79%
16,000	\$ 154.46	\$ 229.01	\$ 74.56	48.27%
17,000	\$ 163.03	\$ 242.43	\$ 79.40	48.70%
18,000	\$ 171.61	\$ 255.85	\$ 84.24	49.08%
19,000	\$ 180.19	\$ 269.27	\$ 89.07	49.43%
20,000	\$ 188.77	\$ 282.68	\$ 93.91	49.75%
25,000	\$ 231.66	\$ 349.77	\$ 118.11	50.98%
30,000	\$ 274.56	\$ 416.86	\$ 142.31	51.83%
35,000	\$ 317.45	\$ 483.95	\$ 166.51	52.45%
40,000	\$ 360.34	\$ 551.04	\$ 190.70	52.92%
45,000	\$ 403.23	\$ 618.13	\$ 214.90	53.29%
50,000	\$ 446.13	\$ 685.22	\$ 239.10	53.59%
60,000	\$ 531.91	\$ 819.40	\$ 287.49	54.05%
70,000	\$ 617.70	\$ 953.58	\$ 335.89	54.38%
80,000	\$ 703.48	\$ 1,087.76	\$ 384.28	54.63%
90,000	\$ 789.27	\$ 1,221.94	\$ 432.68	54.82%
100,000	\$ 875.05	\$ 1,356.12	\$ 481.07	54.98%
110,000	\$ 960.84	\$ 1,490.30	\$ 529.47	55.11%
120,000	\$ 1,046.62	\$ 1,624.48	\$ 577.86	55.21%
130,000	\$ 1,132.41	\$ 1,758.66	\$ 626.26	55.30%
140,000	\$ 1,218.19	\$ 1,892.84	\$ 674.65	55.38%
150,000	\$ 1,303.98	\$ 2,027.02	\$ 723.05	55.45%
160,000	\$ 1,389.76	\$ 2,161.20	\$ 771.44	55.51%
170,000	\$ 1,475.55	\$ 2,295.38	\$ 819.84	55.56%
180,000	\$ 1,561.33	\$ 2,429.56	\$ 868.23	55.61%

\*\* Present rates include 7.50% DSIC.

AQUA PENNSYLVANIA INC.  
SAND SPRINGS DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 16.25	\$ 18.50	\$ 2.25	13.85%
1,000	\$ 22.25	\$ 26.67	\$ 4.42	19.87%
2,000	\$ 28.25	\$ 34.84	\$ 6.59	23.33%
3,000	\$ 34.25	\$ 44.55	\$ 10.30	30.07%
4,000	\$ 40.25	\$ 54.26	\$ 14.01	34.81%
4,080	\$ 40.73	\$ 55.04	\$ 14.31	35.13%
5,000	\$ 46.25	\$ 63.97	\$ 17.72	38.31%
6,000	\$ 52.25	\$ 73.68	\$ 21.43	41.01%
7,000	\$ 58.25	\$ 83.39	\$ 25.14	43.16%
8,000	\$ 64.25	\$ 93.10	\$ 28.85	44.90%
9,000	\$ 70.25	\$ 102.81	\$ 32.56	46.35%
10,000	\$ 76.25	\$ 112.52	\$ 36.27	47.57%
11,000	\$ 82.25	\$ 122.23	\$ 39.98	48.61%
12,000	\$ 88.25	\$ 131.94	\$ 43.69	49.51%
13,000	\$ 94.25	\$ 141.65	\$ 47.40	50.29%
14,000	\$ 100.25	\$ 151.36	\$ 51.11	50.98%
15,000	\$ 106.25	\$ 161.07	\$ 54.82	51.60%
16,000	\$ 112.25	\$ 170.78	\$ 58.53	52.14%
17,000	\$ 118.25	\$ 180.49	\$ 62.24	52.63%
18,000	\$ 124.25	\$ 190.20	\$ 65.95	53.08%
19,000	\$ 130.25	\$ 199.91	\$ 69.66	53.48%
20,000	\$ 136.25	\$ 209.62	\$ 73.37	53.85%
25,000	\$ 166.25	\$ 258.17	\$ 91.92	55.29%
30,000	\$ 196.25	\$ 306.72	\$ 110.47	56.29%
35,000	\$ 226.25	\$ 355.27	\$ 129.02	57.03%
40,000	\$ 256.25	\$ 403.82	\$ 147.57	57.59%
45,000	\$ 286.25	\$ 452.37	\$ 166.12	58.03%
50,000	\$ 316.25	\$ 500.92	\$ 184.67	58.39%
60,000	\$ 376.25	\$ 598.02	\$ 221.77	58.94%
70,000	\$ 436.25	\$ 695.12	\$ 258.87	59.34%
80,000	\$ 496.25	\$ 792.22	\$ 295.97	59.64%
90,000	\$ 556.25	\$ 889.32	\$ 333.07	59.88%
100,000	\$ 616.25	\$ 986.42	\$ 370.17	60.07%
110,000	\$ 676.25	\$ 1,083.52	\$ 407.27	60.22%
120,000	\$ 736.25	\$ 1,180.62	\$ 444.37	60.36%
130,000	\$ 796.25	\$ 1,277.72	\$ 481.47	60.47%
140,000	\$ 856.25	\$ 1,374.82	\$ 518.57	60.56%
150,000	\$ 916.25	\$ 1,471.92	\$ 555.67	60.65%
160,000	\$ 976.25	\$ 1,569.02	\$ 592.77	60.72%
170,000	\$ 1,036.25	\$ 1,666.12	\$ 629.87	60.78%
180,000	\$ 1,096.25	\$ 1,763.22	\$ 666.97	60.84%

AQUA PENNSYLVANIA INC.  
MIFFLIN TOWNSHIP DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 28.00	\$ 18.50	\$ (9.50)	-33.93%
1,000	\$ 28.00	\$ 26.50	\$ (1.50)	-5.36%
2,000	\$ 28.00	\$ 34.50	\$ 6.50	23.21%
3,000	\$ 33.00	\$ 42.50	\$ 9.50	28.79%
4,000	\$ 36.83	\$ 50.50	\$ 13.67	37.12%
4,080	\$ 37.11	\$ 51.14	\$ 14.03	37.81%
5,000	\$ 40.33	\$ 58.50	\$ 18.17	45.05%
6,000	\$ 43.83	\$ 66.50	\$ 22.67	51.72%
7,000	\$ 42.84	\$ 74.50	\$ 31.66	73.92%
8,000	\$ 46.34	\$ 82.50	\$ 36.16	78.05%
9,000	\$ 49.84	\$ 90.50	\$ 40.66	81.60%
10,000	\$ 53.34	\$ 98.50	\$ 45.16	84.68%
11,000	\$ 56.84	\$ 106.50	\$ 49.66	87.38%
12,000	\$ 60.34	\$ 114.50	\$ 54.16	89.77%
13,000	\$ 63.84	\$ 122.50	\$ 58.66	91.90%
14,000	\$ 67.34	\$ 130.50	\$ 63.16	93.81%
15,000	\$ 70.84	\$ 138.50	\$ 67.66	95.52%
16,000	\$ 74.34	\$ 146.50	\$ 72.16	97.08%
17,000	\$ 77.84	\$ 154.50	\$ 76.66	98.50%
18,000	\$ 81.34	\$ 162.50	\$ 81.16	99.79%
19,000	\$ 84.84	\$ 170.50	\$ 85.66	100.98%
20,000	\$ 88.34	\$ 178.50	\$ 90.16	102.07%
25,000	\$ 105.84	\$ 218.50	\$ 112.66	106.45%
30,000	\$ 123.34	\$ 258.50	\$ 135.16	109.59%
35,000	\$ 140.84	\$ 298.50	\$ 157.66	111.95%
40,000	\$ 158.34	\$ 338.50	\$ 180.16	113.79%
45,000	\$ 175.84	\$ 378.50	\$ 202.66	115.26%
50,000	\$ 193.34	\$ 418.50	\$ 225.16	116.46%
60,000	\$ 228.34	\$ 498.50	\$ 270.16	118.32%
70,000	\$ 263.34	\$ 578.50	\$ 315.16	119.68%
80,000	\$ 298.34	\$ 658.50	\$ 360.16	120.72%
90,000	\$ 333.34	\$ 738.50	\$ 405.16	121.55%
100,000	\$ 368.34	\$ 818.50	\$ 450.16	122.22%
110,000	\$ 403.34	\$ 898.50	\$ 495.16	122.77%
120,000	\$ 438.34	\$ 978.50	\$ 540.16	123.23%
130,000	\$ 473.34	\$ 1,058.50	\$ 585.16	123.63%
140,000	\$ 508.34	\$ 1,138.50	\$ 630.16	123.97%
150,000	\$ 543.34	\$ 1,218.50	\$ 675.16	124.26%
160,000	\$ 578.34	\$ 1,298.50	\$ 720.16	124.52%
170,000	\$ 613.34	\$ 1,378.50	\$ 765.16	124.75%
180,000	\$ 648.34	\$ 1,458.50	\$ 810.16	124.96%

AQUA PENNSYLVANIA INC.  
BEECH MOUNTAIN DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 15.00	\$ 18.50	\$ 3.50	23.33%
1,000	\$ 16.58	\$ 22.64	\$ 6.06	36.53%
2,000	\$ 18.16	\$ 26.77	\$ 8.61	47.43%
3,000	\$ 19.74	\$ 30.91	\$ 11.17	56.58%
4,000	\$ 21.32	\$ 35.05	\$ 13.73	64.38%
4,080	\$ 21.45	\$ 35.38	\$ 13.93	64.95%
5,000	\$ 22.90	\$ 39.18	\$ 16.28	71.10%
6,000	\$ 24.48	\$ 43.32	\$ 18.84	76.96%
7,000	\$ 26.06	\$ 47.46	\$ 21.40	82.10%
8,000	\$ 27.64	\$ 51.59	\$ 23.95	86.66%
9,000	\$ 29.22	\$ 55.73	\$ 26.51	90.72%
10,000	\$ 30.80	\$ 59.86	\$ 29.06	94.37%
11,000	\$ 32.38	\$ 64.00	\$ 31.62	97.66%
12,000	\$ 33.96	\$ 68.14	\$ 34.18	100.64%
13,000	\$ 35.54	\$ 72.27	\$ 36.73	103.36%
14,000	\$ 37.12	\$ 76.41	\$ 39.29	105.85%
15,000	\$ 38.70	\$ 80.55	\$ 41.85	108.13%
16,000	\$ 40.28	\$ 84.68	\$ 44.40	110.24%
17,000	\$ 41.86	\$ 88.82	\$ 46.96	112.18%
18,000	\$ 43.44	\$ 92.96	\$ 49.52	113.99%
19,000	\$ 45.02	\$ 97.09	\$ 52.07	115.67%
20,000	\$ 46.60	\$ 101.23	\$ 54.63	117.23%
25,000	\$ 54.50	\$ 121.91	\$ 67.41	123.69%
30,000	\$ 62.40	\$ 142.59	\$ 80.19	128.52%
35,000	\$ 70.30	\$ 163.28	\$ 92.98	132.26%
40,000	\$ 78.20	\$ 183.96	\$ 105.76	135.24%
45,000	\$ 86.10	\$ 204.64	\$ 118.54	137.68%
50,000	\$ 94.00	\$ 225.32	\$ 131.32	139.71%
60,000	\$ 109.80	\$ 266.69	\$ 156.89	142.89%
70,000	\$ 125.60	\$ 308.05	\$ 182.45	145.27%
80,000	\$ 141.40	\$ 349.42	\$ 208.02	147.11%
90,000	\$ 157.20	\$ 390.78	\$ 233.58	148.59%
100,000	\$ 173.00	\$ 432.15	\$ 259.15	149.80%
110,000	\$ 188.80	\$ 473.51	\$ 284.71	150.80%
120,000	\$ 204.60	\$ 514.88	\$ 310.28	151.65%
130,000	\$ 220.40	\$ 556.24	\$ 335.84	152.38%
140,000	\$ 236.20	\$ 597.61	\$ 361.41	153.01%
150,000	\$ 252.00	\$ 638.97	\$ 386.97	153.56%
160,000	\$ 267.80	\$ 680.34	\$ 412.54	154.05%
170,000	\$ 283.60	\$ 721.70	\$ 438.10	154.48%
180,000	\$ 299.40	\$ 763.07	\$ 463.67	154.87%

AQUA PENNSYLVANIA INC.  
TREASURE LAKE DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 12.84	\$ 18.50	\$ 5.66	44.08%
1,000	\$ 16.36	\$ 24.58	\$ 8.22	50.25%
2,000	\$ 19.88	\$ 30.66	\$ 10.78	54.24%
3,000	\$ 23.40	\$ 36.74	\$ 13.34	57.03%
4,000	\$ 26.92	\$ 42.83	\$ 15.91	59.09%
4,080	\$ 27.20	\$ 43.31	\$ 16.11	59.23%
5,000	\$ 30.44	\$ 48.91	\$ 18.47	60.67%
6,000	\$ 33.96	\$ 54.99	\$ 21.03	61.92%
7,000	\$ 37.48	\$ 61.07	\$ 23.59	62.94%
8,000	\$ 41.00	\$ 67.15	\$ 26.15	63.79%
9,000	\$ 44.52	\$ 73.23	\$ 28.71	64.50%
10,000	\$ 48.04	\$ 79.32	\$ 31.28	65.10%
11,000	\$ 51.56	\$ 85.40	\$ 33.84	65.63%
12,000	\$ 55.08	\$ 91.48	\$ 36.40	66.08%
13,000	\$ 58.60	\$ 97.56	\$ 38.96	66.49%
14,000	\$ 62.12	\$ 103.64	\$ 41.52	66.84%
15,000	\$ 65.64	\$ 109.72	\$ 44.08	67.16%
16,000	\$ 69.16	\$ 115.81	\$ 46.65	67.45%
17,000	\$ 72.68	\$ 121.89	\$ 49.21	67.70%
18,000	\$ 76.20	\$ 127.97	\$ 51.77	67.94%
19,000	\$ 79.72	\$ 134.05	\$ 54.33	68.15%
20,000	\$ 83.24	\$ 140.13	\$ 56.89	68.35%
25,000	\$ 100.84	\$ 170.54	\$ 69.70	69.12%
30,000	\$ 118.44	\$ 200.95	\$ 82.51	69.66%
35,000	\$ 136.04	\$ 231.36	\$ 95.32	70.06%
40,000	\$ 153.64	\$ 261.76	\$ 108.12	70.37%
45,000	\$ 171.24	\$ 292.17	\$ 120.93	70.62%
50,000	\$ 188.84	\$ 322.58	\$ 133.74	70.82%
60,000	\$ 224.04	\$ 383.40	\$ 159.36	71.13%
70,000	\$ 259.24	\$ 444.21	\$ 184.97	71.35%
80,000	\$ 294.44	\$ 505.03	\$ 210.59	71.52%
90,000	\$ 329.64	\$ 565.84	\$ 236.20	71.66%
100,000	\$ 364.84	\$ 626.66	\$ 261.82	71.76%
110,000	\$ 400.04	\$ 687.48	\$ 287.44	71.85%
120,000	\$ 435.24	\$ 748.29	\$ 313.05	71.93%
130,000	\$ 470.44	\$ 809.11	\$ 338.67	71.99%
140,000	\$ 505.64	\$ 869.92	\$ 364.28	72.04%
150,000	\$ 540.84	\$ 930.74	\$ 389.90	72.09%
160,000	\$ 576.04	\$ 991.56	\$ 415.52	72.13%
170,000	\$ 611.24	\$ 1,052.37	\$ 441.13	72.17%
180,000	\$ 646.44	\$ 1,113.19	\$ 466.75	72.20%

AQUA PENNSYLVANIA INC.  
CONCORD PARK DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 11.70	\$ 18.50	\$ 6.80	58.12%
1,000	\$ 16.40	\$ 25.10	\$ 8.70	53.05%
2,000	\$ 21.10	\$ 31.70	\$ 10.60	50.24%
3,000	\$ 25.80	\$ 38.30	\$ 12.50	48.45%
4,000	\$ 30.50	\$ 44.90	\$ 14.40	47.21%
4,080	\$ 30.88	\$ 45.43	\$ 14.55	47.13%
5,000	\$ 35.20	\$ 51.50	\$ 16.30	46.31%
6,000	\$ 39.90	\$ 58.10	\$ 18.20	45.61%
7,000	\$ 44.60	\$ 64.70	\$ 20.10	45.07%
8,000	\$ 49.30	\$ 71.30	\$ 22.00	44.62%
9,000	\$ 54.00	\$ 77.90	\$ 23.90	44.26%
10,000	\$ 58.70	\$ 84.50	\$ 25.80	43.95%
11,000	\$ 63.40	\$ 91.10	\$ 27.70	43.69%
12,000	\$ 68.10	\$ 97.70	\$ 29.60	43.47%
13,000	\$ 72.80	\$ 104.30	\$ 31.50	43.27%
14,000	\$ 77.50	\$ 110.90	\$ 33.40	43.10%
15,000	\$ 82.20	\$ 117.50	\$ 35.30	42.94%
16,000	\$ 86.90	\$ 124.10	\$ 37.20	42.81%
17,000	\$ 91.60	\$ 130.70	\$ 39.10	42.69%
18,000	\$ 96.30	\$ 137.30	\$ 41.00	42.58%
19,000	\$ 101.00	\$ 143.90	\$ 42.90	42.48%
20,000	\$ 105.70	\$ 150.50	\$ 44.80	42.38%
25,000	\$ 129.20	\$ 183.50	\$ 54.30	42.03%
30,000	\$ 152.70	\$ 216.50	\$ 63.80	41.78%
35,000	\$ 176.20	\$ 249.50	\$ 73.30	41.60%
40,000	\$ 199.70	\$ 282.50	\$ 82.80	41.46%
45,000	\$ 223.20	\$ 315.50	\$ 92.30	41.35%
50,000	\$ 246.70	\$ 348.50	\$ 101.80	41.26%
60,000	\$ 293.70	\$ 414.50	\$ 120.80	41.13%
70,000	\$ 340.70	\$ 480.50	\$ 139.80	41.03%
80,000	\$ 387.70	\$ 546.50	\$ 158.80	40.96%
90,000	\$ 434.70	\$ 612.50	\$ 177.80	40.90%
100,000	\$ 481.70	\$ 678.50	\$ 196.80	40.86%
110,000	\$ 528.70	\$ 744.50	\$ 215.80	40.82%
120,000	\$ 575.70	\$ 810.50	\$ 234.80	40.79%
130,000	\$ 622.70	\$ 876.50	\$ 253.80	40.76%
140,000	\$ 669.70	\$ 942.50	\$ 272.80	40.73%
150,000	\$ 716.70	\$ 1,008.50	\$ 291.80	40.71%
160,000	\$ 763.70	\$ 1,074.50	\$ 310.80	40.70%
170,000	\$ 810.70	\$ 1,140.50	\$ 329.80	40.68%
180,000	\$ 857.70	\$ 1,206.50	\$ 348.80	40.67%

AQUA PENNSYLVANIA INC.  
BRISTOL DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 24.24	\$ 18.50	\$ (5.74)	-23.69%
1,000	\$ 24.24	\$ 23.50	\$ (0.74)	-3.07%
2,000	\$ 24.24	\$ 28.50	\$ 4.26	17.56%
3,000	\$ 24.24	\$ 33.50	\$ 9.26	38.18%
4,000	\$ 24.24	\$ 38.50	\$ 14.26	58.81%
4,080	\$ 24.24	\$ 38.90	\$ 14.66	60.46%
5,000	\$ 28.16	\$ 43.50	\$ 15.34	54.49%
6,000	\$ 33.75	\$ 48.50	\$ 14.75	43.72%
7,000	\$ 39.34	\$ 53.50	\$ 14.16	36.01%
8,000	\$ 44.93	\$ 58.50	\$ 13.57	30.21%
9,000	\$ 50.52	\$ 63.50	\$ 12.98	25.70%
10,000	\$ 56.11	\$ 68.50	\$ 12.39	22.09%
11,000	\$ 61.70	\$ 73.50	\$ 11.80	19.13%
12,000	\$ 67.29	\$ 78.50	\$ 11.21	16.67%
13,000	\$ 72.88	\$ 83.50	\$ 10.62	14.58%
14,000	\$ 78.47	\$ 88.50	\$ 10.03	12.79%
15,000	\$ 84.06	\$ 93.50	\$ 9.44	11.23%
16,000	\$ 89.65	\$ 98.50	\$ 8.85	9.88%
17,000	\$ 95.24	\$ 103.50	\$ 8.26	8.68%
18,000	\$ 100.83	\$ 108.50	\$ 7.67	7.61%
19,000	\$ 106.42	\$ 113.50	\$ 7.08	6.66%
20,000	\$ 112.01	\$ 118.50	\$ 6.49	5.80%
25,000	\$ 139.96	\$ 143.50	\$ 3.54	2.53%
30,000	\$ 167.91	\$ 168.50	\$ 0.59	0.35%
35,000	\$ 195.86	\$ 193.50	\$ (2.36)	-1.20%
40,000	\$ 223.81	\$ 218.50	\$ (5.31)	-2.37%
45,000	\$ 251.76	\$ 243.50	\$ (8.26)	-3.28%
50,000	\$ 279.71	\$ 268.50	\$ (11.21)	-4.01%
60,000	\$ 335.61	\$ 318.50	\$ (17.11)	-5.10%
70,000	\$ 391.51	\$ 368.50	\$ (23.01)	-5.88%
80,000	\$ 447.41	\$ 418.50	\$ (28.91)	-6.46%
90,000	\$ 503.31	\$ 468.50	\$ (34.81)	-6.92%
100,000	\$ 559.21	\$ 518.50	\$ (40.71)	-7.28%
110,000	\$ 615.11	\$ 568.50	\$ (46.61)	-7.58%
120,000	\$ 671.01	\$ 618.50	\$ (52.51)	-7.83%
130,000	\$ 726.91	\$ 668.50	\$ (58.41)	-8.03%
140,000	\$ 782.81	\$ 718.50	\$ (64.31)	-8.21%
150,000	\$ 838.71	\$ 768.50	\$ (70.21)	-8.37%
160,000	\$ 894.61	\$ 818.50	\$ (76.11)	-8.51%
170,000	\$ 950.51	\$ 868.50	\$ (82.01)	-8.63%
180,000	\$ 1,006.41	\$ 918.50	\$ (87.91)	-8.73%

AQUA PENNSYLVANIA INC.  
MT. JEWETT DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 18.00	\$ 18.50	\$ 0.50	2.78%
1,000	\$ 24.85	\$ 29.83	\$ 4.98	20.04%
2,000	\$ 31.70	\$ 41.16	\$ 9.46	29.84%
3,000	\$ 38.55	\$ 54.58	\$ 16.03	41.58%
4,000	\$ 45.40	\$ 68.00	\$ 22.60	49.77%
4,080	\$ 45.95	\$ 69.07	\$ 23.12	50.32%
5,000	\$ 52.25	\$ 81.41	\$ 29.16	55.82%
6,000	\$ 59.10	\$ 94.83	\$ 35.73	60.46%
7,000	\$ 65.95	\$ 108.25	\$ 42.30	64.14%
8,000	\$ 72.80	\$ 121.67	\$ 48.87	67.13%
9,000	\$ 79.65	\$ 135.09	\$ 55.44	69.60%
10,000	\$ 86.50	\$ 148.50	\$ 62.00	71.68%
11,000	\$ 93.35	\$ 161.92	\$ 68.57	73.46%
12,000	\$ 100.20	\$ 175.34	\$ 75.14	74.99%
13,000	\$ 107.05	\$ 188.76	\$ 81.71	76.33%
14,000	\$ 113.90	\$ 202.18	\$ 88.28	77.50%
15,000	\$ 120.75	\$ 215.59	\$ 94.84	78.55%
16,000	\$ 127.60	\$ 229.01	\$ 101.41	79.48%
17,000	\$ 134.45	\$ 242.43	\$ 107.98	80.31%
18,000	\$ 141.30	\$ 255.85	\$ 114.55	81.07%
19,000	\$ 148.15	\$ 269.27	\$ 121.12	81.75%
20,000	\$ 155.00	\$ 282.68	\$ 127.68	82.38%
25,000	\$ 189.25	\$ 349.77	\$ 160.52	84.82%
30,000	\$ 223.50	\$ 416.86	\$ 193.36	86.52%
35,000	\$ 257.75	\$ 483.95	\$ 226.20	87.76%
40,000	\$ 292.00	\$ 551.04	\$ 259.04	88.71%
45,000	\$ 326.25	\$ 618.13	\$ 291.88	89.47%
50,000	\$ 360.50	\$ 685.22	\$ 324.72	90.08%
60,000	\$ 429.00	\$ 819.40	\$ 390.40	91.00%
70,000	\$ 497.50	\$ 953.58	\$ 456.08	91.68%
80,000	\$ 566.00	\$ 1,087.76	\$ 521.76	92.18%
90,000	\$ 634.50	\$ 1,221.94	\$ 587.44	92.58%
100,000	\$ 703.00	\$ 1,356.12	\$ 653.12	92.91%
110,000	\$ 771.50	\$ 1,490.30	\$ 718.80	93.17%
120,000	\$ 840.00	\$ 1,624.48	\$ 784.48	93.39%
130,000	\$ 908.50	\$ 1,758.66	\$ 850.16	93.58%
140,000	\$ 977.00	\$ 1,892.84	\$ 915.84	93.74%
150,000	\$ 1,045.50	\$ 2,027.02	\$ 981.52	93.88%
160,000	\$ 1,114.00	\$ 2,161.20	\$ 1,047.20	94.00%
170,000	\$ 1,182.50	\$ 2,295.38	\$ 1,112.88	94.11%
180,000	\$ 1,251.00	\$ 2,429.56	\$ 1,178.56	94.21%



AQUA PENNSYLVANIA INC.  
BUNKER HILL DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 4.19	\$ 9.00	\$ 4.81	114.80%
1,000	\$ 6.32	\$ 13.50	\$ 7.18	113.61%
2,000	\$ 8.45	\$ 18.00	\$ 9.55	113.02%
3,000	\$ 10.58	\$ 22.50	\$ 11.92	112.67%
4,000	\$ 12.71	\$ 27.00	\$ 14.29	112.43%
4,080	\$ 12.88	\$ 27.36	\$ 14.48	112.42%
5,000	\$ 14.84	\$ 31.50	\$ 16.66	112.26%
6,000	\$ 16.97	\$ 36.00	\$ 19.03	112.14%
7,000	\$ 19.10	\$ 40.50	\$ 21.40	112.04%
8,000	\$ 21.23	\$ 45.00	\$ 23.77	111.96%
9,000	\$ 23.36	\$ 49.50	\$ 26.14	111.90%
10,000	\$ 25.49	\$ 54.00	\$ 28.51	111.85%
11,000	\$ 27.62	\$ 58.50	\$ 30.88	111.80%
12,000	\$ 29.75	\$ 63.00	\$ 33.25	111.76%
13,000	\$ 31.88	\$ 67.50	\$ 35.62	111.73%
14,000	\$ 34.01	\$ 72.00	\$ 37.99	111.70%
15,000	\$ 36.14	\$ 76.50	\$ 40.36	111.68%
16,000	\$ 38.27	\$ 81.00	\$ 42.73	111.65%
17,000	\$ 40.40	\$ 85.50	\$ 45.10	111.63%
18,000	\$ 42.53	\$ 90.00	\$ 47.47	111.62%
19,000	\$ 44.66	\$ 94.50	\$ 49.84	111.60%
20,000	\$ 46.79	\$ 99.00	\$ 52.21	111.58%
25,000	\$ 57.44	\$ 121.50	\$ 64.06	111.53%
30,000	\$ 68.09	\$ 144.00	\$ 75.91	111.48%
35,000	\$ 78.74	\$ 166.50	\$ 87.76	111.46%
40,000	\$ 89.39	\$ 189.00	\$ 99.61	111.43%
45,000	\$ 100.04	\$ 211.50	\$ 111.46	111.42%
50,000	\$ 110.69	\$ 234.00	\$ 123.31	111.40%
60,000	\$ 131.99	\$ 279.00	\$ 147.01	111.38%
70,000	\$ 153.29	\$ 324.00	\$ 170.71	111.36%
80,000	\$ 174.59	\$ 369.00	\$ 194.41	111.35%
90,000	\$ 195.89	\$ 414.00	\$ 218.11	111.34%
100,000	\$ 217.19	\$ 459.00	\$ 241.81	111.34%
110,000	\$ 238.49	\$ 504.00	\$ 265.51	111.33%
120,000	\$ 259.79	\$ 549.00	\$ 289.21	111.32%
130,000	\$ 281.09	\$ 594.00	\$ 312.91	111.32%
140,000	\$ 302.39	\$ 639.00	\$ 336.61	111.32%
150,000	\$ 323.69	\$ 684.00	\$ 360.31	111.31%
160,000	\$ 344.99	\$ 729.00	\$ 384.01	111.31%
170,000	\$ 366.29	\$ 774.00	\$ 407.71	111.31%
180,000	\$ 387.59	\$ 819.00	\$ 431.41	111.31%

AQUA PENNSYLVANIA INC.  
ROBIN HOOD DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 13.40	\$ 18.50	\$ 5.10	38.06%
1,000	\$ 19.96	\$ 27.45	\$ 7.49	37.53%
2,000	\$ 26.52	\$ 36.40	\$ 9.88	37.25%
3,000	\$ 33.08	\$ 45.35	\$ 12.27	37.09%
4,000	\$ 39.64	\$ 54.30	\$ 14.66	36.98%
4,080	\$ 40.16	\$ 55.02	\$ 14.85	36.98%
5,000	\$ 46.20	\$ 63.25	\$ 17.05	36.90%
6,000	\$ 52.76	\$ 72.20	\$ 19.44	36.85%
7,000	\$ 59.32	\$ 81.15	\$ 21.83	36.80%
8,000	\$ 65.88	\$ 90.10	\$ 24.22	36.76%
9,000	\$ 72.44	\$ 99.05	\$ 26.61	36.73%
10,000	\$ 79.00	\$ 108.00	\$ 29.00	36.71%
11,000	\$ 85.56	\$ 116.95	\$ 31.39	36.69%
12,000	\$ 92.12	\$ 125.90	\$ 33.78	36.67%
13,000	\$ 98.68	\$ 134.85	\$ 36.17	36.65%
14,000	\$ 105.24	\$ 143.80	\$ 38.56	36.64%
15,000	\$ 111.80	\$ 152.75	\$ 40.95	36.63%
16,000	\$ 118.36	\$ 161.70	\$ 43.34	36.62%
17,000	\$ 124.92	\$ 170.65	\$ 45.73	36.61%
18,000	\$ 131.48	\$ 179.60	\$ 48.12	36.60%
19,000	\$ 138.04	\$ 188.55	\$ 50.51	36.59%
20,000	\$ 144.60	\$ 197.50	\$ 52.90	36.58%
25,000	\$ 177.40	\$ 242.25	\$ 64.85	36.56%
30,000	\$ 210.20	\$ 287.00	\$ 76.80	36.54%
35,000	\$ 243.00	\$ 331.75	\$ 88.75	36.52%
40,000	\$ 275.80	\$ 376.50	\$ 100.70	36.51%
45,000	\$ 308.60	\$ 421.25	\$ 112.65	36.50%
50,000	\$ 341.40	\$ 466.00	\$ 124.60	36.50%
60,000	\$ 407.00	\$ 555.50	\$ 148.50	36.49%
70,000	\$ 472.60	\$ 645.00	\$ 172.40	36.48%
80,000	\$ 538.20	\$ 734.50	\$ 196.30	36.47%
90,000	\$ 603.80	\$ 824.00	\$ 220.20	36.47%
100,000	\$ 669.40	\$ 913.50	\$ 244.10	36.47%
110,000	\$ 735.00	\$ 1,003.00	\$ 268.00	36.46%
120,000	\$ 800.60	\$ 1,092.50	\$ 291.90	36.46%
130,000	\$ 866.20	\$ 1,182.00	\$ 315.80	36.46%
140,000	\$ 931.80	\$ 1,271.50	\$ 339.70	36.46%
150,000	\$ 997.40	\$ 1,361.00	\$ 363.60	36.45%
160,000	\$ 1,063.00	\$ 1,450.50	\$ 387.50	36.45%
170,000	\$ 1,128.60	\$ 1,540.00	\$ 411.40	36.45%
180,000	\$ 1,194.20	\$ 1,629.50	\$ 435.30	36.45%

AQUA PENNSYLVANIA INC.  
EAST CAMERON DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 50.00	\$ 18.50	\$ (31.50)	-63.00%
1,000	\$ 50.00	\$ 29.83	\$ (20.17)	-40.34%
2,000	\$ 50.00	\$ 41.16	\$ (8.84)	-17.68%
3,000	\$ 50.00	\$ 54.58	\$ 4.58	9.16%
4,000	\$ 56.50	\$ 68.00	\$ 11.50	20.35%
4,080	\$ 57.02	\$ 69.07	\$ 12.05	21.13%
5,000	\$ 63.00	\$ 81.41	\$ 18.41	29.23%
6,000	\$ 69.50	\$ 94.83	\$ 25.33	36.45%
7,000	\$ 76.00	\$ 108.25	\$ 32.25	42.43%
8,000	\$ 82.50	\$ 121.67	\$ 39.17	47.48%
9,000	\$ 89.00	\$ 135.09	\$ 46.09	51.78%
10,000	\$ 95.50	\$ 148.50	\$ 53.00	55.50%
11,000	\$ 102.00	\$ 161.92	\$ 59.92	58.75%
12,000	\$ 108.50	\$ 175.34	\$ 66.84	61.60%
13,000	\$ 115.00	\$ 188.76	\$ 73.76	64.14%
14,000	\$ 121.50	\$ 202.18	\$ 80.68	66.40%
15,000	\$ 128.00	\$ 215.59	\$ 87.59	68.43%
16,000	\$ 134.50	\$ 229.01	\$ 94.51	70.27%
17,000	\$ 141.00	\$ 242.43	\$ 101.43	71.94%
18,000	\$ 147.50	\$ 255.85	\$ 108.35	73.46%
19,000	\$ 154.00	\$ 269.27	\$ 115.27	74.85%
20,000	\$ 160.50	\$ 282.68	\$ 122.18	76.13%
25,000	\$ 193.00	\$ 349.77	\$ 156.77	81.23%
30,000	\$ 225.50	\$ 416.86	\$ 191.36	84.86%
35,000	\$ 258.00	\$ 483.95	\$ 225.95	87.58%
40,000	\$ 290.50	\$ 551.04	\$ 260.54	89.69%
45,000	\$ 323.00	\$ 618.13	\$ 295.13	91.37%
50,000	\$ 355.50	\$ 685.22	\$ 329.72	92.75%
60,000	\$ 420.50	\$ 819.40	\$ 398.90	94.86%
70,000	\$ 485.50	\$ 953.58	\$ 468.08	96.41%
80,000	\$ 550.50	\$ 1,087.76	\$ 537.26	97.60%
90,000	\$ 615.50	\$ 1,221.94	\$ 606.44	98.53%
100,000	\$ 680.50	\$ 1,356.12	\$ 675.62	99.28%
110,000	\$ 745.50	\$ 1,490.30	\$ 744.80	99.91%
120,000	\$ 810.50	\$ 1,624.48	\$ 813.98	100.43%
130,000	\$ 875.50	\$ 1,758.66	\$ 883.16	100.88%
140,000	\$ 940.50	\$ 1,892.84	\$ 952.34	101.26%
150,000	\$ 1,005.50	\$ 2,027.02	\$ 1,021.52	101.59%
160,000	\$ 1,070.50	\$ 2,161.20	\$ 1,090.70	101.89%
170,000	\$ 1,135.50	\$ 2,295.38	\$ 1,159.88	102.15%
180,000	\$ 1,200.50	\$ 2,429.56	\$ 1,229.06	102.38%

AQUA PENNSYLVANIA INC.  
SUN VALLEY DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
UNMETERED

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
1,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
2,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
3,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
4,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
4,080	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
5,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
6,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
7,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
8,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
9,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
10,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
11,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
12,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
13,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
14,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
15,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
16,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
17,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
18,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
19,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
20,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
25,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
30,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
35,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
40,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
45,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
50,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
60,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
70,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
80,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
90,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
100,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
110,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
120,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
130,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
140,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
150,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
160,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
170,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%
180,000	\$ 15.00	\$ 19.50	\$ 4.50	30.00%

Exhibit No. 5-B, Part I  
Docket No. R-2018-3003068  
Witness: P. R. Herbert

AQUA PENNSYLVANIA, INC.  
BRYN MAWR, PENNSYLVANIA

WASTEWATER OPERATIONS  
COST OF SERVICE ALLOCATION STUDY  
AS OF MARCH 31, 2020



*Excellence Delivered **As Promised***

Exhibit No. 5-B, Part I  
Docket No. R-2018-3003068  
Witness: P. R. Herbert

AQUA PENNSYLVANIA, INC.  
Bryn Mawr, Pennsylvania

WASTEWATER OPERATIONS  
COST OF SERVICE ALLOCATION STUDY  
AS OF MARCH 31, 2020

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Harrisburg, Pennsylvania

PART I

TABLE OF CONTENTS

COST OF SERVICE ALLOCATION STUDY

	<u>Page</u>
Plan of Report .....	2
Basis of Study .....	2
Schedule A. Comparison of Cost of Service with Revenues Under Present and Proposed Rates for the Twelve Months Ending March 31, 2020 .....	4
Schedule B. Allocation of Cost of Service by Function to Customer Classification .....	5
Schedule C. Factors for Allocating Costs by Function to Customer Classification .....	6
Schedule D. Cost of Service Allocated to Cost Functions for the Twelve Months Ending March 31, 2020 .....	8
Schedule E. Factors for Allocating Cost of Service to Cost Functions .....	14
Schedule F. Comparative Schedule of Present and Proposed Rates Wastewater Operations .....	15

APPENDIX

RESPONSES TO RATE STRUCTURE AND  
COST OF SERVICE FILING REQUIREMENTS

RS1a. ....	A-2
RS1b. ....	A-3
RS1c. ....	A-4
RS1d. ....	A-5
RS1e. ....	A-6
RS1f. ....	A-7
RS1g. ....	A-8
RS1h. ....	A-9
RS1i. ....	A-10
RS1j. ....	A-17
RS2. ....	A-19

PART I

COST OF SERVICE ALLOCATION STUDY



AQUA PENNSYLVANIA, INC.

WASTEWATER OPERATION

WATER COST OF SERVICE ALLOCATION STUDY  
AS OF MARCH 31, 2020  
AND PROPOSED CUSTOMER RATES

PLAN OF REPORT

The report sets forth the results of the cost of service allocation study for the Wastewater Operations based on pro forma costs as of March 31, 2020, for Aqua Pennsylvania, Inc. The introduction, contains statements with respect to the basis of the study, the procedures employed, and a summary of the results of the study. Schedule WW-A, on page 4, summarizes the cost allocation for the wastewater operations and total revenues under present and proposed rates. Cost of Service by Customer Classification - Wastewater Operations, presents detailed schedules of the allocation of costs to customer classifications, as well as the basis for the allocations. Schedule WW-F, Comparisons of Present and Proposed Customer Rates, sets forth the proposed rate schedules for wastewater service.

BASIS OF STUDY

The method used for the allocation of wastewater cost of service incorporates the functional cost allocation methodology described in the text "Financing and Charges for Wastewater Systems", Manual of Practice No. 27, published by the Water Environment

Federation. This method is recognized for allocating the cost of providing wastewater service to customer classifications in proportion to the classifications' use of the commodity, facilities, and services. It is generally accepted as a sound method for allocating the cost of wastewater service. Under the functional cost method, costs are assigned to cost components using predominant operational purposes as cost-causative factors.

Each element of the cost of service is allocated to customer classifications according to the functional categories. The cost functions are flow, infiltration and inflow (I&I), customer facilities and customer accounting. The functional costs are allocated to customer classifications based on the amount of flow contributed to the system, the amount of I&I allocated to each class, and the number and relative size of customers.

The results of the allocation of wastewater cost of service is summarized on Schedule WW-A, column 4. The cost allocation results can be compared with revenues under present and proposed rates in columns 6 and 8 of Schedule WW-A. The proposed increase and percentage increase in revenues are shown in columns 10 and 11.

The cost of service by customer classification is developed in Schedule WW-D. The allocation factors referenced in column 2 are applied to the costs by account in column 3. The allocation factors are set forth in Schedule WW-E.

The comparison of present and proposed wastewater rates by wastewater service areas are shown in Schedule WW-F.

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES - WASTEWATER  
FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Customer Classification (1)	Cost of Service		Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase		
	Amount (2)	Act 11 (3)	Revised COS (4)	Amount (6)	Percent (7)	Amount (8)	Percent (9)	Amount (10)	Percent Increase (11)
Residential	\$ 17,787,709	\$ (5,768,033)	\$ 12,019,676	\$ 9,030,911	70.2%	\$ 13,038,774	71.5%	\$ 4,007,863	44.4%
Non-Residential	7,111,203	\$ (2,305,955)	\$ 4,805,248	2,796,921	21.7%	3,862,265	21.2%	1,065,344	38.1%
Bulk	1,415,694		\$ 1,415,694	1,040,092	8.1%	1,340,081	7.3%	299,988	28.8%
Total Sales	26,314,606	(8,073,988)	18,240,618	12,867,925	100.0%	18,241,120	100.0%	5,373,196	41.8%
Other Revenues*	598,684		598,684	575,381		598,684		23,304	4.1%
Total	\$ 26,913,290		\$ 18,839,303	\$ 13,443,305		\$ 18,839,805		\$ 5,396,499	40.1%

\* Includes Contract Revenue.

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS

ALLOCATION OF COST OF SERVICE BY FUNCTION TO CUSTOMER CLASSIFICATIONS

Description (1)	Flow		Infiltration & Inflow	Customer Facilities (5)	Customer Accounting (6)	Total (7)
	Collection (2)	Treatment				
Total Cost of Service	\$ 7,168,526	\$ 8,933,474	\$ 8,040,165	\$ 678,426	\$ 1,494,017	\$ 26,314,608
Factor Reference	A	A1	C	B	B	
Residential						
Factor	0.6182	0.5402	0.8144	0.9125	0.9125	
Cost of Service	\$ 4,431,583	\$ 4,825,862	\$ 6,547,910	619,064	1,363,290	17,787,709
Non-Residential						
Factor	0.3657	0.3195	0.1799	0.0870	0.0870	
Cost of Service	\$ 2,621,530	\$ 2,854,245	\$ 1,446,426	59,023	129,979	\$ 7,111,203
Bulk						
Factor	0.0161	0.1403	0.0057	0.0005	0.0005	
Cost of Service	\$ 115,413	\$ 1,253,366	\$ 45,829	339	747	\$ 1,415,694
Total	7,168,526	8,933,473	8,040,165	678,426	1,494,016	26,314,606

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR A. ALLOCATION OF FLOW COLLECTION COSTS.

Factors are based on the pro forma test year average daily consumption for each customer classification.

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	16,523	0.6182
Non-Residential	9,775	0.3657
Bulk*	429	0.0161
	<hr/>	<hr/>
Total	<u>26,727</u>	<u>1.0000</u>

\* 10% of Bulk Flow to recognize limited use of the collection system.

FACTOR A1. ALLOCATION OF FLOW TREATMENT COSTS.

Factors are based on the pro forma test year average daily consumption for each customer

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	16,523	0.5402
Non-Residential	9,775	0.3195
Bulk	4,293	0.1403
	<hr/>	<hr/>
Total	<u>30,591</u>	<u>1.0000</u>

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR B. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification (1)	Number of Customers (2)	Allocation Factor (3)
Residential	14,468	0.9125
Non-Residential	1,380	0.0870
Bulk	8	0.0005
	<hr/>	<hr/>
Total	<u>15,856</u>	<u>1.0000</u>

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

Factors are based on a 1/3-2/3 weighting of flow and number of customers.

Customer Classification (1)	Average Daily Flow		Number of Bills		Allocation Factor (6)=(3)+(5)
	Factor A (2)	Weight (3)=(2) x 0.3333	Factor C (4)	Weight (5)=(4) x 0.6667	
Residential	0.6182	0.2060	0.9125	0.6084	0.8144
Non-Residential	0.3657	0.1219	0.0870	0.0580	0.1799
Bulk	0.0161	0.0054	0.0005	0.0003	0.0057
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	<u>1.0000</u>	<u>0.3333</u>	<u>1.0000</u>	<u>0.6667</u>	<u>1.0000</u>

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)		Flow Treatment (5)		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
		Collection (4)		Collection (4)				
<b>OPERATION AND MAINTENANCE EXPENSES</b>								
<b>COLLECTION</b>								
Labor	1		0		0	0		0
Purchased Power	1	982,234	655,150	0	0	327,084	0	0
OS Other	1	151,578	101,102	0	0	50,475	0	0
<b>TOTAL COLLECTION EXPENSE - OPERATION</b>		<b>1,133,811</b>	<b>756,252</b>	<b>0</b>	<b>0</b>	<b>377,559</b>	<b>0</b>	<b>0</b>
<b>PUMPING</b>								
Labor	1	145,806	97,252	0	0	48,553	0	0
Purchased Power	1	8,027	5,354	0	0	2,673	0	0
Supplies	1	96,022	64,047	0	0	31,975	0	0
OS Other	1	473,583	315,880	0	0	157,703	0	0
		<b>723,438</b>	<b>482,533</b>	<b>0</b>	<b>0</b>	<b>240,905</b>	<b>0</b>	<b>0</b>
<b>SEWAGE TREATMENT</b>								
Salary and Wages	1A	34,687	0	23,136	11,551	0	0	0
Purchased Wastewater	1A	665,819	0	444,101	221,718	0	0	0
Chemicals	1A	502,741	0	335,328	167,413	0	0	0
Sludge Disposal	1A	1,094,750	0	730,198	364,552	0	0	0
Lab Testing	1A	245,749	0	163,914	81,834	0	0	0
Transportation	1A	96,463	0	64,341	32,122	0	0	0
OS Other	1A	546,305	0	364,385	181,920	0	0	0
		<b>3,186,514</b>	<b>0</b>	<b>2,125,405</b>	<b>1,061,109</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL SEWAGE TREATMENT EXPENSE</b>								





AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
Power Operating Equipment							
Collection	1	4,600	3,068	-	1,532	-	-
Pumping	1	43,545	29,045	-	14,500	-	-
Treatment and Disposal	1A	125,417	-	83,653	41,764	-	-
Collection Mains - Gravity	1	280,645	187,190	-	93,455	-	-
Collection Mains - Force	1	594,905	396,802	-	198,103	-	-
Special Collecting Structures	1	5,019	3,348	-	1,671	-	-
Services	2	123,594	-	-	-	123,594	-
Meters	2	21,091	-	-	-	21,091	-
Receiving Wells	1	16,054	10,708	-	5,346	-	-
Pumping Equipment	1	663,644	442,651	-	220,993	-	-
RWT Pumping Equipment	1A	8,087	-	5,394	2,693	-	-
Treatment and Disposal Equipment	1A	2,122,503	-	1,415,710	706,793	-	-
Plant Sewers							
Treatment and Disposal	1A	3,805	-	2,538	1,267	-	-
Reclaimed Water Treatment Equipment	1A	201	-	134	67	-	-
Outfall Lines	1	4,692	3,130	-	1,562	-	-
Other Plant and Misc. Equipment							
Collection	1	43,077	28,732	-	14,345	-	-
Pumping	1	3,937	2,626	-	1,311	-	-
Treatment and Disposal	1A	480	-	320	160	-	-
Office Furniture	4	256	71	55	63	-	67
Office Equipment	4	102,454	28,267	22,099	25,152	-	26,935
Computer Hardware	4	133,720	36,893	28,843	32,828	-	35,155
Computer Software	4	3,541	977	764	869	-	931
Transportation Equipment	4	26,546	7,324	5,726	6,517	-	6,979
Stores Equipment	4	421	116	91	103	-	111
Tools, Shop and Garage Equipment	4	20,312	5,604	4,381	4,987	-	5,340
Laboratory Equipment	1A	25,314	-	16,884	8,430	-	-
Power Operated Equipment	4	7,146	1,972	1,541	1,754	-	1,879
Communication Equipment							
General	4	79,008	21,798	17,042	19,396	-	20,771

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS

COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account	Factor Ref.	Cost of Service	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting
			Collection	Treatment			
SCADA	(2)	(3)	(4)	(5)	(7)	(8)	(8)
Miscellaneous Equipment	4	56,118	15,483	12,105	13,777	-	14,753
Other Tangible Plant	4	1,392	384	300	342	-	366
	4	9,428	2,601	2,034	2,315	-	2,479
<b>Total Depreciation Expense</b>		<b>5,349,158</b>	<b>1,373,833</b>	<b>2,018,466</b>	<b>1,693,637</b>	<b>144,685</b>	<b>118,537</b>
<b>Taxes Other Than Income</b>							
PUC Assessment	7	114,055	34,102	38,208	36,110	4,813	821
OCA, OSBA Assessment	7	21,453	6,414	7,187	6,792	905	154
Local Property Tax	7	152,852	45,703	51,205	48,393	6,450	1,101
<b>Total Taxes, Other Than Income</b>		<b>288,359</b>	<b>86,219</b>	<b>96,600</b>	<b>91,294</b>	<b>12,169</b>	<b>2,076</b>
<b>Total Operating Expense</b>		<b>14,204,794</b>	<b>3,531,767</b>	<b>4,879,380</b>	<b>4,199,552</b>	<b>157,574</b>	<b>1,436,521</b>
<b>Income Taxes</b>	7	<b>1,531,015</b>	<b>457,774</b>	<b>512,890</b>	<b>484,719</b>	<b>64,609</b>	<b>11,023</b>
<b>Utility Income Available for Return</b>	7	<b>11,177,483</b>	<b>3,342,067</b>	<b>3,744,457</b>	<b>3,538,791</b>	<b>471,690</b>	<b>80,478</b>
<b>Total Cost of Service</b>		<b>26,913,292</b>	<b>7,331,608</b>	<b>9,136,727</b>	<b>8,223,063</b>	<b>693,873</b>	<b>1,528,022</b>
<b>Less: Other Revenues</b>							
Contract Revenue	8	298,761	81,383	101,430	91,272	7,708	16,970
Other Operating Revenues	8	299,923	81,699	101,824	91,626	7,738	17,036
<b>Total Cost of Service Related to Sales of Wastewater Services</b>		<b>26,314,608</b>	<b>7,168,526</b>	<b>8,933,474</b>	<b>8,040,165</b>	<b>678,426</b>	<b>1,494,017</b>

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS

COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
<b>RATE BASE</b>							
Organization	1	1,559,913	1,040,462	0	519,451	0	0
Land and Land Rights - Collection	1	42,731	28,502	0	14,230	0	0
Land and Land Rights - Pumping	1	573,592	382,586	0	191,006	0	0
Land and Land Rights - Treatment and Disp. Structures and Improvements	1A	690,952	0	460,865	230,087	0	0
Collection	1	3,667,555	2,446,259	0	1,221,296	0	0
Pumping	1	4,299,750	2,867,933	0	1,431,817	0	0
Treatment and Disposal	1A	17,837,372	0	11,897,527	5,939,845	0	0
Reclaimed Water Treatment	1A	24,817	0	16,553	8,264	0	0
General	4	284,604	78,522	61,389	69,870	0	74,822
Power Operating Equipment							
Collection	1	61,117	40,765	0	20,352	0	0
Pumping	1	679,126	452,977	0	226,149	0	0
Treatment and Disposal	1A	2,111,033	0	1,408,059	702,974	0	0
Collection Mains - Gravity	1	11,702,272	7,805,415	0	3,896,857	0	0
Collection Mains - Force	1	31,153,734	20,779,541	0	10,374,193	0	0
Special Collecting Structures	1	157,767	105,231	0	52,536	0	0
Services	2	5,810,058	0	0	0	5,810,058	0
Meters	2	335,829	0	0	0	335,829	0
Receiving Wells	1	303,442	202,396	0	101,046	0	0
Pumping Equipment	1	8,885,892	5,926,890	0	2,959,002	0	0
RWT Pumping Equipment	1A	92,355	0	61,601	30,754	0	0
Treatment and Disposal Equipment	1A	50,361,797	0	33,591,319	16,770,478	0	0
Plant Sewers							
Treatment and Disposal	1A	92,075	0	61,414	30,661	0	0
Reclaimed Water Treatment Equipment	1A	4,959	0	3,308	1,651	0	0
Outfall Lines	1	124,851	83,276	0	41,575	0	0
Other Plant and Misc. Equipment							
Collection	1	331,338	221,002	0	110,336	0	0
Pumping	1	39,480	26,333	0	13,147	0	0
Treatment and Disposal	1A	6,077	0	4,053	2,024	0	0

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS

COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)		Flow (4)		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
		Service	Collection	Collection	Treatment				
Office Furniture	4	3,233	892	697	794	0	850		
Office Equipment	4	641,795	177,071	138,435	157,561	0	168,728		
Computer Hardware	4	365,804	100,925	78,904	89,805	0	96,170		
Computer Software	4	26,534	7,321	5,723	6,514	0	6,976		
Transportation Equipment	4	274,726	75,797	59,258	67,445	0	72,225		
Stores Equipment	4	3,318	915	716	815	0	872		
Tools, Shop and Gargage Equipment	4	276,823	76,375	59,711	67,960	0	72,777		
Laboratory Equipment	1A	459,433	0	306,442	152,991	0	0		
Power Operated Equipment	4	55,163	15,219	11,899	13,543	0	14,502		
Communication Equipment									
General	4	939,127	259,105	202,570	230,556	0	246,896		
SCADA	4	439,077	121,141	94,709	107,793	0	115,433		
Miscellaneous Equipment	4	25,947	7,159	5,597	6,370	0	6,821		
Other Tangible Plant	4	223,864	61,764	48,287	54,959	0	58,854		
<b>TOTAL UTILITY PLANT IN SERVICE SEWER</b>		<b>\$ 144,969,333</b>	<b>\$ 43,391,776</b>	<b>\$ 48,579,036</b>	<b>\$ 45,916,706</b>	<b>\$ 6,145,887</b>	<b>\$ 935,928</b>		
Other Rate Base Items:									
Deferred Taxes	6	(5,378,712)	(1,609,848)	(1,802,406)	(1,703,438)	(228,057)	(34,962)		
Working Capital	9	691,000	167,015	222,917	194,724	0	106,345		
Acquisition Adjustment	6	3,575,629	1,070,186	1,198,193	1,132,402	151,607	23,242		
Total Other Rate Base Elements		<u>(1,112,083)</u>	<u>(372,648)</u>	<u>(381,296)</u>	<u>(376,312)</u>	<u>(76,451)</u>	<u>94,625</u>		
<b>Total Original Cost Measure of Value</b>		<u>143,857,250</u>	<u>43,019,128</u>	<u>48,197,739</u>	<u>45,540,394</u>	<u>6,069,436</u>	<u>1,030,553</u>		

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO COST FUNCTIONS

Reference	Flow	Infiltration & Inflow	Customer Facilities	Customer Accounting	Total
Factor 1 - Flow and I&I	0.6670	0.3330			1.0000
Factor 2 - Customer Facilities			1.0000		1.0000
Factor 3 - Customer Accounting				1.0000	1.0000
Factor 4 - O&M Exp less Power and Chemicals					
Cost	578,282	514,300	0	550,829	2,095,274
Factor	0.2759	0.2455	0.0000	0.2629	1.0000
Factor 5 - Labor Expense					
Cost	488,283	408,049	0	388,493	1,613,670
Factor	0.3025	0.2529	0.0000	0.2408	1.0000
Factor 6 - Rate Base less Allocated Costs					
Cost	43,391,776	45,916,706	6,145,887	935,928	144,969,333
Factor	0.2993	0.3167	0.0424	0.0065	1.0000
Factor 7 - Rate Base					
Cost	43,019,128	45,540,394	6,069,436	1,030,553	143,857,250
Factor	0.2990	0.3166	0.0422	0.0072	1.0000
Factor 8 - Total Cost of Service					
Cost	7,324,004	8,214,535	693,152	1,526,437	26,885,379
Factor	0.2724	0.3055	0.0258	0.0568	1.0000
Factor 9 - O&M Exp					
Cost	2,064,111	2,406,093	0	1,314,323	8,539,364
Factor	0.2417	0.2818	0.0000	0.1539	1.0000





AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES WASTEWATER OPERATIONS

	Plumstock Division		Media Division		White Haven & Kidder Township		Bridlewood Division		Eagle Rock Division	
	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates

**INDUSTRIAL**

**Customer Charges:**

5/8			15.95	31.00						94.4%
3/4										
1										
1-1/2										
2										
3										
4										
6										
8										
10										
12										

**Customer Charge**

**Consumption Charges:**

1st block	0.5770	0.7600								31.7%
2nd block										
3rd block										
4th block										
5th block										
6th block										

First  
Next  
Next  
Next  
Next  
Over

**Public**

**Customer Charges:**

5/8			15.95	31.00						94.4%
3/4			25.00	46.50						86.0%
1			38.00	77.50						103.9%
1-1/2			89.00	155.00						74.2%
2			165.00	248.00						50.3%
3			364.00	465.00						27.7%
4			594.00	775.00						30.5%
6										
8										
5/8,1-1/2										

**Customer Charge**

**Consumption Charges:**

1st block	0.5770	0.7600								31.7%
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**AQUA PENNSYLVANIA, INC.**  
**COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES WASTEWATER OPERATIONS**

	Thomhurst Division			Rivercrest, Cove Village, and Washington Park Systems			Little Washington			Laurel Lakes Division			Deerfield Knoll Division		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
<b>RESIDENTIAL</b>															
<b>Customer Charges:</b>															
5/8	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
3/4															
1	36.00	80.00	122.2%	45.00	80.00	77.8%	74.00	112.40	51.9%	44.00	80.00	81.8%	45.00	46.00	2.2%
1-1/2															
2															
3															
4															
6															
8															
10															
<b>Consumption Charges:</b>															
1st block	0.1200	0.8500	608.3%	0.5020	0.8500	69.3%	0.5700	0.9600	68.4%	0.1200	0.8500	608.3%	0.3370	0.8500	152.2%
2nd block															
3rd block															
Block Size (100 gallons)															
First															
Over															

	Thomhurst Division			Rivercrest, Cove Village, and Washington Park Systems			Little Washington			Laurel Lakes Division			Deerfield Knoll Division		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
<b>COMMERCIAL</b>															
<b>Customer Charges:</b>															
5/8	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
3/4															
1	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
1-1/2															
2	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
3	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
4	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
6	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
8	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
10	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
12	46.75	46.00	-1.6%	27.00	46.00	70.4%	74.00	74.00	0.0%	44.00	46.00	4.5%	45.00	46.00	2.2%
<b>Consumption Charges:</b>															
1st block	0.1200	0.8500	608.3%	0.5020	0.8500	69.3%	0.5700	0.9600	68.4%	0.1200	0.8500	608.3%	0.3370	0.8500	152.2%
2nd block															

COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES AND PROPOSED RATES WASTEWATER OPERATIONS

	CS Water Division, Masthope			Peddlers View			The Greens at Penn Oaks Division			Newlin Green Division			Woodloch Springs Division		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
<b>RESIDENTIAL</b>															
<b>Customer Charges:</b>															
5/8	26.96	31.00	15.0%	54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%	47.00	46.00	-2.1%
3/4				54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%			
1	26.96	61.40	127.7%	54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%			
1-1/2				54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%			
2				54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%			
3				54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%			
4	6.00	-	-100.0%	54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%			
6				54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%			
8				54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%			
10				54.00	62.00	14.8%	93.25	74.00	-20.6%	110.00	110.00	0.0%			
<b>Consumption Charges:</b>															
1st block	0.0500	0.7600	1420.0%	0.5050	0.9500	88.1%	0.3750	0.9600	156.0%	0.7500	0.7500	0.0%	0.1200	0.8500	608.3%
2nd block															
3rd block															
Block Size (100 gallons)															
First Over															
<b>COMMERCIAL</b>															
<b>Customer Charges:</b>															
5/8	26.96	31.00	15.0%				466.25	370.00	-20.6%				47.00	46.00	-2.1%
3/4													3807.00	3,726.00	-2.1%
1	26.96	61.40	127.7%												
1-1/2															
2															
3															
4															
6															
8															
10															
12															
<b>Consumption Charges:</b>															
1st block	0.0500	0.0550	10.0%	0.0500	0.0550	10.0%	0.3750	0.4125	10.0%	0.7500	0.8500	113.3%	0.1200	0.8500	608.3%

AQUA PENNSYLVANIA, INC.

COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES WASTEWATER OPERATIONS

	Stony Creek Division			New Daleville Division			Village at Valley Forge			Beech Mountain Lakes Division			Lake Harmony Division		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
<b>RESIDENTIAL</b>															
<b>Customer Charges:</b>															
5/8	45.00	46.00	2.2%	70.64	100.00	41.6%	Commercial Only	53.37	80.00	49.9%	62.50	100.00	60.0%		
3/4	45.00	46.00	2.2%				Wegman's - 3" Meter	53.37	80.00	49.9%					
1	45.00	46.00	2.2%				CHOP - 4" Meter								
1-1/2	45.00	46.00	2.2%												
2	45.00	46.00	2.2%												
3	45.00	46.00	2.2%												
4	45.00	46.00	2.2%												
6	45.00	46.00	2.2%												
8	45.00	46.00	2.2%												
10	45.00	46.00	2.2%												
<b>Consumption Charges:</b>															
1st block	0.2900	0.8500	193.1%												
2nd block															
3rd block															
Block Size (100 gallons)															
First Over															
<b>COMMERCIAL</b>															
<b>Customer Charges:</b>															
5/8	45.00	46.00	2.2%				Meter Charges	66.42	80.00	20.4%	62.50	100.00	60.0%		
3/4	45.00	46.00	2.2%				12.00	31.00							
1							18.81	31.00							
1-1/2							31.89	31.00							
2							74.69	62.00							
3							138.46	99.20							
4							305.45	186.00							
6							498.46	310.00							
8															
10															
12															
<b>Consumption Charges:</b>															
1st block	0.2900	0.3190	10.0%				0.3500	0.7600							

Name	EDUs
Westwood	90
Willowbrook	128
Galleria & Water Park	145
Split Rock CC	14
Remaining	53

COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES WASTEWATER OPERATIONS

	Treasure Lake Division			Penn Township Division			Bunker Hill Division			Honeycroft Village Division			Emlenton Division		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
<b>RESIDENTIAL</b>															
<b>Customer Charges:</b>															
5/8	20.61	31.00	50.4%	67.50	138.00	104.4%	31.92	61.40	92.4%	66.67	100.00	50.0%	45.00	80.00	77.8%
3/4	20.61	31.00	50.4%	67.50	138.00	104.4%									
1	38.93	58.60	50.5%	67.50	138.00	104.4%									
1-1/2	48.35	72.70	50.4%	67.50	138.00	104.4%									
2	64.45	96.90	50.3%	67.50	138.00	104.4%									
3	134.28	202.00	50.4%	67.50	138.00	104.4%									
4	268.56	403.90	50.4%	67.50	138.00	104.4%									
6	537.10	807.90	50.4%	67.50	138.00	104.4%									
8				67.50	138.00	104.4%									
10				67.50	138.00	104.4%									
	<b>Fiat Rate - Unmetered</b>	33.70	61.40	82.2%	1.0500	0.8500	-19.0%								
<b>Consumption Charges:</b>															
1st block															
2nd block															
3rd block	4.53	-	-100.0%	50	50										
Block Size (100 gallons)	0.3750	0.7600	102.7%												
	First														
	Over														
<b>COMMERCIAL</b>															
<b>Customer Charges:</b>															
5/8	20.61	31.00	50.4%	67.50	46.00	-31.9%									
3/4	38.93	58.60	50.5%	50.50	80.00	58.4%									
1	48.35	72.70	50.4%												
1-1/2	64.45	96.90	50.3%												
2	134.28	202.00	50.4%												
3	268.56	403.90	50.4%												
4	537.10	807.90	50.4%												
6															
8															
10															
12															
	<b>Fiat Rate - Unmetered</b>	33.70	61.40	82.2%											
<b>Consumption Charges:</b>															
1st block	0.3750	0.7600	102.7%	0.9500	0.8500	-10.5%									
2nd block				40	40										
3rd block															
4th block															

AQUA PENNSYLVANIA, INC.  
COMPARATIVE SCHEDULE OF PRESENT AND PROPOSED RATES WASTEWATER OPERATIONS

	Tobyhanna Division		Avon Grove School District		Sage Hill	
	Current Rates	Proposed Rates	Current Rates	Proposed Rates	Current Rates	Proposed Rates
<b>RESIDENTIAL</b>						
<b>Customer Charges:</b>						
5/8	66.67	100.00	6625.00	8,281.30	180.00	180.00
3/4						
1						
1-1/2	200.00	300.00				
2						
3						
4						
6						
8						
10						
<b>Flat Rate-Quarterly</b>		50.0%	<b>Customer Charge</b>		<b>Flat Rate</b>	
				8,281.30		180.00
		50.0%				180.00
						0.0%
<b>Flat Rate - Quarterly</b>		50.0%				
<b>Consumption Charges:</b>						
1st block			0.2900	0.9500		
2nd block						
3rd block						
Monthly Allow 7,667 gals			230			
Quarterly Allow 23,000 gals			230			
Block Size (100 gallons)						
First Over						
<b>COMMERCIAL</b>						
<b>Customer Charges:</b>						
5/8	66.67	186.00				
3/4						
1						
1-1/2	200.00	300.00				
2						
3						
4						
6						
8						
10						
12						
<b>Customer Charge-Quarterly</b>		179.0%				
<b>Flat Rate - Quarterly</b>		50.0%				
<b>Consumption Charges:</b>						
1st block	1.0000	0.9500				
2nd block						
3rd block						
4th block						
Monthly Allow 7,667 gals						
Quarterly Allow 23,000 gals						

## APPENDIX

## AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- a. A description of the allocation methods used. A comparison of the allocated cost of service by class with the present and proposed revenues. A cost of service schedule showing the rate of return produced by present and proposed rates by class of service.

## RESPONSE

A description of the methods used for the cost of service study is provided in Exhibit No. 5-B, Part I and in APA Statement No. 5. A comparison of the allocated cost of service by class with the present and proposed revenues is provided on Schedule WW-A of Exhibit No. 5-B.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- b. Indicate if the method used for establishing the allocation factors in the cost of service study deviates from the previous study submitted in the last rate case. If yes, indicate which allocation factors were changed and discuss the reason for the changes.

RESPONSE

Not applicable as this is the first rate case for the Company's wastewater systems.



AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- c. Supply the average day, the maximum day and the maximum hour deliveries to the system adjusted for storage for the historic test year and 2 prior years. Also provide workpapers, analyses, comparative data or other documentation supporting the estimated maximum day and peak hour demands by customer class reflected in the company's cost of service study.

RESPONSE

Not applicable.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- d. Explain thoroughly the methodology employed if the company distinguishes between transmission and distribution or collection mains in its allocation of costs.

RESPONSE

Not applicable.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- e. Provide a detailed explanation of how storage is utilized to meet base, maximum day and maximum hour demands.

RESPONSE

There is no storage for the wastewater system.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- f. Provide workpapers, calculations and supporting documentation which develop the equivalent meters and equivalent service line weights reflected in the company's cost of service study.

RESPONSE

There are no meter or service equivalents calculated for this study.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- g. Provide all workpapers and supporting documentation for the fire flow requirement and duration utilized in the cost of service study.

RESPONSE

Because this is a wastewater operation, there is no fire flow requirement.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- h. Provide a breakdown of the number and size of private fire services according to the general water service class of customer.

RESPONSE

Not applicable.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- h. Provide a calculation of the company’s base cost of water or wastewater per unit of consumption or usage.

RESPONSE

Please refer to the functional allocation schedule attached. The calculation of the average flow cost per hundred gallons is as follows:

<u>Average Flow Cost (hundred gallons)</u>	
Total Flow Cost (Includes collection and treatment expenses) (Includes 1/3 I&I expenses) (See attached Functional Allocation)	\$ 18,782,055
<u>Pro Forma Usage (hundred gallons)</u>	
(Includes estimated unmetered)	11,165,763
Flow Cost (per hundred gallons)	\$ 1.6821

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)		Flow (5)		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
		Collection (4)	Treatment (5)					
<b>OPERATION AND MAINTENANCE EXPENSES</b>								
<b>COLLECTION</b>								
Labor	1		0	0	0	0	0	0
Purchased Power	1	982,234	0	0	327,084	0	0	0
OS Other	1	151,578	0	0	50,475	0	0	0
<b>TOTAL COLLECTION EXPENSE - OPERATION</b>		<b>1,133,811</b>	<b>0</b>	<b>0</b>	<b>377,559</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>PUMPING</b>								
Labor	1	145,806	0	0	48,553	0	0	0
Purchased Power	1	8,027	0	0	2,673	0	0	0
Supplies	1	96,022	0	0	31,975	0	0	0
OS Other	1	473,583	0	0	157,703	0	0	0
		<b>723,438</b>	<b>0</b>	<b>0</b>	<b>240,905</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SEWAGE TREATMENT</b>								
Salary and Wages	1A	34,687	0	23,136	11,551	0	0	0
Purchased Wastewater	1A	665,819	0	444,101	221,718	0	0	0
Chemicals	1A	502,741	0	335,328	167,413	0	0	0
Sludge Disposal	1A	1,094,750	0	730,198	364,552	0	0	0
Lab Testing	1A	245,749	0	163,914	81,834	0	0	0
Transportation	1A	96,463	0	64,341	32,122	0	0	0
OS Other	1A	546,305	0	364,385	181,920	0	0	0
		<b>3,186,514</b>	<b>0</b>	<b>2,125,405</b>	<b>1,061,109</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL SEWAGE TREATMENT EXPENSE</b>								



AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS

COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
<b>CUSTOMER ACCOUNTS</b>							
Salary and Wages	3	15,887	0	0	0	0	15,887
Uncollectible Accounts	3	311,513	0	0	0	0	311,513
Other	3	223,428	0	0	0	0	223,428
<b>TOTAL CUSTOMER ACCOUNTING EXPENSE</b>		<b>550,829</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>550,829</b>
<b>ADMINISTRATIVE AND GENERAL EXPENSES</b>							
Salaries and Wages	4	1,417,290	391,030	305,710	347,945	0	372,606
Employee Benefits	5	483,571	146,280	98,552	122,295	0	116,444
Purchased Power	4	1,588	438	342	390	0	417
Supplies	4	838	231	181	206	0	220
Accounting	4	19,591	5,405	4,226	4,810	0	5,150
Management Fees	4	502,445	138,624	108,377	123,350	0	132,093
Leases	4	107,165	29,567	23,115	26,309	0	28,174
Transportation	4	3,502	966	755	860	0	921
Insurance other than Group	4	63,409	17,494	13,677	15,567	0	16,670
Amortization of Rate Case Expense	8	27,913	7,604	9,477	8,528	720	1,585
Other	4	345,374	95,289	74,497	84,789	0	90,799
<b>TOTAL A &amp; G EXPENSE</b>		<b>2,972,685</b>	<b>832,929</b>	<b>638,909</b>	<b>735,047</b>	<b>720</b>	<b>765,079</b>
<b>Total Operation &amp; Maintenance Expenses</b>		<b>8,567,278</b>	<b>2,071,714</b>	<b>2,764,314</b>	<b>2,414,621</b>	<b>720</b>	<b>1,315,908</b>
<b>DEPRECIATION EXPENSE</b>							
Structures and Improvements	1	106,775	71,219	-	35,556	-	-
Collection	1	106,323	70,917	-	35,406	-	-
Pumping	1A	593,949	-	396,164	197,785	-	-
Treatment and Disposal	1A	620	-	414	206	-	-
Reclaimed Water Treatment	4	10,539	2,908	2,273	2,587	-	2,771
General							

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
Power Operating Equipment							
Collection	1	4,600	3,068	-	1,532	-	-
Pumping	1	43,545	29,045	-	14,500	-	-
Treatment and Disposal	1A	125,417	-	83,653	41,764	-	-
Collection Mains - Gravity	1	280,645	187,190	-	93,455	-	-
Collection Mains - Force	1	594,905	396,802	-	198,103	-	-
Special Collecting Structures	1	5,019	3,348	-	1,671	-	-
Services	2	123,594	-	-	-	123,594	-
Meters	2	21,091	-	-	-	21,091	-
Receiving Wells	1	16,054	10,708	-	5,346	-	-
Pumping Equipment	1	663,644	442,651	-	220,993	-	-
RWT Pumping Equipment	1A	8,087	-	5,394	2,693	-	-
Treatment and Disposal Equipment	1A	2,122,503	-	1,415,710	706,793	-	-
Plant Sewers							
Treatment and Disposal	1A	3,805	-	2,538	1,267	-	-
Reclaimed Water Treatment Equipment	1A	201	-	134	67	-	-
Outfall Lines	1	4,692	3,130	-	1,562	-	-
Other Plant and Misc. Equipment							
Collection	1	43,077	28,732	-	14,345	-	-
Pumping	1	3,937	2,626	-	1,311	-	-
Treatment and Disposal	1A	480	-	320	160	-	-
Office Furniture	4	256	71	55	63	-	67
Office Equipment	4	102,454	28,267	22,099	25,152	-	26,935
Computer Hardware	4	133,720	36,893	28,843	32,828	-	35,155
Computer Software	4	3,541	977	764	869	-	931
Transportation Equipment	4	26,546	7,324	5,726	6,517	-	6,979
Stores Equipment	4	421	116	91	103	-	111
Tools, Shop and Garage Equipment	4	20,312	5,604	4,381	4,987	-	5,340
Laboratory Equipment	1A	25,314	-	16,884	8,430	-	-
Power Operated Equipment	4	7,146	1,972	1,541	1,754	-	1,879
Communication Equipment							
General	4	79,008	21,798	17,042	19,396	-	20,771

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account	Factor Ref.	Cost of Service	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting
			Collection	Treatment			
SCADA	(2)	(3)	(4)	(5)	(7)	(8)	(8)
Miscellaneous Equipment	4	56,118	15,483	12,105	13,777	-	14,753
Other Tangible Plant	4	1,392	384	300	342	-	366
	4	9,428	2,601	2,034	2,315	-	2,479
<b>Total Depreciation Expense</b>		<b>5,349,158</b>	<b>1,373,833</b>	<b>2,018,466</b>	<b>1,693,637</b>	<b>144,685</b>	<b>118,537</b>
<b>Taxes Other Than Income</b>							
PUC Assessment	7	114,055	34,102	38,208	36,110	4,813	821
OCA, OSBA Assessment	7	21,453	6,414	7,187	6,792	905	154
Local Property Tax	7	152,852	45,703	51,205	48,393	6,450	1,101
<b>Total Taxes, Other Than Income</b>		<b>288,359</b>	<b>86,219</b>	<b>96,600</b>	<b>91,294</b>	<b>12,169</b>	<b>2,076</b>
<b>Total Operating Expense</b>		<b>14,204,794</b>	<b>3,531,767</b>	<b>4,879,380</b>	<b>4,199,552</b>	<b>157,574</b>	<b>1,436,521</b>
<b>Income Taxes</b>	7	<b>1,531,015</b>	<b>457,774</b>	<b>512,890</b>	<b>484,719</b>	<b>64,609</b>	<b>11,023</b>
<b>Utility Income Available for Return</b>	7	<b>11,177,483</b>	<b>3,342,067</b>	<b>3,744,457</b>	<b>3,538,791</b>	<b>471,690</b>	<b>80,478</b>
<b>Total Cost of Service</b>		<b>26,913,292</b>	<b>7,331,608</b>	<b>9,136,727</b>	<b>8,223,063</b>	<b>693,873</b>	<b>1,528,022</b>
<b>Less: Other Revenues</b>							
Contract Revenue	8	298,761	81,383	101,430	91,272	7,708	16,970
Other Operating Revenues	8	299,923	81,699	101,824	91,626	7,738	17,036
<b>Total Cost of Service Related to Sales of Wastewater Services</b>		<b>26,314,608</b>	<b>7,168,526</b>	<b>8,933,474</b>	<b>8,040,165</b>	<b>678,426</b>	<b>1,494,017</b>

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
<b>RATE BASE</b>							
Organization	1	1,559,913	1,040,462	0	519,451	0	0
Land and Land Rights - Collection	1	42,731	28,502	0	14,230	0	0
Land and Land Rights - Pumping	1	573,592	382,586	0	191,006	0	0
Land and Land Rights - Treatment and Disp. Structures and Improvements	1A	690,952	0	460,865	230,087	0	0
Collection	1	3,667,555	2,446,259	0	1,221,296	0	0
Pumping	1	4,299,750	2,867,933	0	1,431,817	0	0
Treatment and Disposal	1A	17,837,372	0	11,897,527	5,939,845	0	0
Reclaimed Water Treatment	1A	24,817	0	16,553	8,264	0	0
General	4	284,604	78,522	61,389	69,870	0	74,822
Power Operating Equipment							
Collection	1	61,117	40,765	0	20,352	0	0
Pumping	1	679,126	452,977	0	226,149	0	0
Treatment and Disposal	1A	2,111,033	0	1,408,059	702,974	0	0
Collection Mains - Gravity	1	11,702,272	7,805,415	0	3,896,857	0	0
Collection Mains - Force	1	31,153,734	20,779,541	0	10,374,193	0	0
Special Collecting Structures	1	157,767	105,231	0	52,536	0	0
Services	2	5,810,058	0	0	0	5,810,058	0
Meters	2	335,829	0	0	0	335,829	0
Receiving Wells	1	303,442	202,396	0	101,046	0	0
Pumping Equipment	1	8,885,892	5,926,890	0	2,959,002	0	0
RWT Pumping Equipment	1A	92,355	0	61,601	30,754	0	0
Treatment and Disposal Equipment	1A	50,361,797	0	33,591,319	16,770,478	0	0
Plant Sewers							
Treatment and Disposal	1A	92,075	0	61,414	30,661	0	0
Reclaimed Water Treatment Equipment	1A	4,959	0	3,308	1,651	0	0
Outfall Lines	1	124,851	83,276	0	41,575	0	0
Other Plant and Misc. Equipment							
Collection	1	331,338	221,002	0	110,336	0	0
Pumping	1	39,480	26,333	0	13,147	0	0
Treatment and Disposal	1A	6,077	0	4,053	2,024	0	0

AQUA PENNSYLVANIA, INC  
WASTEWATER OPERATIONS  
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
Office Furniture	4	3,233	892	697	794	0	850
Office Equipment	4	641,795	177,071	138,435	157,561	0	168,728
Computer Hardware	4	365,804	100,925	78,904	89,805	0	96,170
Computer Software	4	26,534	7,321	5,723	6,514	0	6,976
Transportation Equipment	4	274,726	75,797	59,258	67,445	0	72,225
Stores Equipment	4	3,318	915	716	815	0	872
Tools, Shop and Gargage Equipment	4	276,823	76,375	59,711	67,960	0	72,777
Laboratory Equipment	1A	459,433	0	306,442	152,991	0	0
Power Operated Equipment	4	55,163	15,219	11,899	13,543	0	14,502
Communication Equipment							
General	4	939,127	259,105	202,570	230,556	0	246,896
SCADA	4	439,077	121,141	94,709	107,793	0	115,433
Miscellaneous Equipment	4	25,947	7,159	5,597	6,370	0	6,821
Other Tangible Plant	4	223,864	61,764	48,287	54,959	0	58,854
<b>TOTAL UTILITY PLANT IN SERVICE SEWER</b>		<b>\$ 144,969,333</b>	<b>\$ 43,391,776</b>	<b>\$ 48,579,036</b>	<b>\$ 45,916,706</b>	<b>\$ 6,145,887</b>	<b>\$ 935,928</b>
Other Rate Base Items:							
Deferred Taxes	6	(5,378,712)	(1,609,848)	(1,802,406)	(1,703,438)	(228,057)	(34,962)
Working Capital	9	691,000	167,015	222,917	194,724	0	106,345
Acquisition Adjustment	6	3,575,629	1,070,186	1,198,193	1,132,402	151,607	23,242
Total Other Rate Base Elements		<u>(1,112,083)</u>	<u>(372,648)</u>	<u>(381,296)</u>	<u>(376,312)</u>	<u>(76,451)</u>	<u>94,625</u>
<b>Total Original Cost Measure of Value</b>		<u>143,857,250</u>	<u>43,019,128</u>	<u>48,197,739</u>	<u>45,540,394</u>	<u>6,069,436</u>	<u>1,030,553</u>

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- h. Provide a detailed cost analysis that supports the company's customer charges, by meter size, showing all direct and indirect costs included.

RESPONSE

Please refer to attached schedule.

AQUA PENNSYLVANIA INC.  
WASTEWATER OPERATIONS

CALCULATION OF CUSTOMER COST PER MONTH

		<u>Per Month</u>
(1) Cost Related to Customer Facilities	\$ 678,426	
(2) Service Equivalents X 12	190,272	
(3) Cost per Bill - Meter related		\$ 3.57
(4) Cost Related to Customer Accounting	\$ 1,494,017	
(5) Number of Bills	190,272	
(6) Cost per Bill		\$ 7.85
(7) Cost Related to I&I	\$ 8,040,165	
(8) Percentage of I&I Cost to to be recoverd in Customer Charge	66.67%	
(9) Net Cost Related to I&I to be recovered in Customer Charge	\$ 5,360,378	
(10) Service Equivalents X 12	190,272	
(11) Cost per Bill - I&I Related		\$ 28.17
(12) Total Customer Costs (3)+(6)+(11)		\$ 39.59

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE  
AND COST OF SERVICE FILING REQUIREMENTS

RS2. Provide a listing of negotiated special rate contracts which includes a comparison of revenues under special rate contracts and under tariff rates. Provide the cost of service treatment of any deficiency in revenues resulting from the negotiated special rate contracts. Special rates are defined as rates not contained in the currently effective tariff.

RESPONSE

Please refer to attached schedule.



AQUA PENNSYLVANIA, INC.  
WASTEWATER  
CONTRACT SALES  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Woodloch Pines - Monthly</u>						
<b>TARIFF RATES</b>						
Customer Charge						
Zone Three Rates (220 EDU) (a)	12	-	\$ 46.00	\$ 121,440	\$ 80.00	\$ 211,200
1st block	-	69,000 (b)	0.1200	\$ 8,280	\$ 0.8500	\$ 58,650
Total Tariff Rate	12	69,000		\$ 129,720		\$ 269,850
<b>CONTRACT RATE</b>						
Flat Rate						
April '17 to December '17	9	-	\$ 23,383.51	\$ 210,452	\$ 25,552.00	\$ 229,968
January '18 to March '18	3	-	\$ 24,085.02	72,255	\$ 25,552.00	76,656
	<u>12</u>	<u>-</u>		<u>282,707</u>		<u>306,624</u>
<b>TOTAL DIVISION</b>	<u>12</u>	<u>-</u>		<u>\$ 282,707</u>		<u>\$ 306,624</u>

(a) Tariff rates projected under Zone Three or Woodloch Springs Division Rates  
(b) Consumption is provided by the Woodloch Pines, Aqua PA water contract.

AQUA PENNSYLVANIA, INC.  
BRYN MAWR, PENNSYLVANIA

WASTEWATER OPERATIONS

OPERATING REVENUE FROM SALES OF  
WASTEWATER FOR THE TWELVE MONTHS  
ENDED MARCH 31, 2020



*Excellence Delivered **As Promised***

AQUA PENNSYLVANIA, INC.  
Bryn Mawr, Pennsylvania

WASTEWATER OPERATIONS

OPERATING REVENUE FROM SALES OF WASTEWATER  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Harrisburg, Pennsylvania

PART II

TABLE OF CONTENTS

WASTEWATER OPERATIONS

	<u>Page</u>
Introduction .....	2
Present Rate Application.....	2
Proposed Rate Application.....	3
Comparison of Bills Under Present and Proposed Rates.....	4
Schedule 1. Summary of Proforma Revenues Under Proposed Rates for the Twelve Months Ended March 31, 2018 and 2020 and the Calculation of the Revenue Increase Under Proposed Rates .....	5
Schedule 2. Summary of Application of Proposed Rates to Customer Bill Analysis and Pro Forma Adjustments for the Twelve Months Ending March 31, 2018 and 2020 .....	6
Schedule 3. Summary of Revenue Under Present Rates and Pro Forma Revenues under Present Rates for the Twelve Months Ended March 31, 2018 and 2020 .....	8
Schedule 4. Summary of Application of Present Rates to Customer Bill Analysis and Pro Forma Adjustments for the Twelve Months Ending March 31, 2018 and 2020 .....	9
Schedule 5. Application of Present Rates and Proposed Rates to Consumption Analysis Year Ended March 31, 2018 .....	11
Schedule 6. Application of Present Rates and Proposed Rates to Proforma Adjustments Year Ended March 31, 2018, 2019, and 2020.....	48
Schedule 7. Comparison of Bills Under Present and Proposed Rates .....	51

PART II  
WASTEWATER OPERATIONS

AQUA PENNSYLVANIA, INC.

OPERATING REVENUE FROM SALES OF  
WASTEWATER FOR THE TWELVE MONTHS  
ENDED MARCH 31, 2020

WASTEWATER OPERATIONS

INTRODUCTION

Wastewater Operations is organized into seven schedules. Schedules WW-1 and WW-2 summarize the application of proposed rates to the consumption analysis for the twelve months ended March 31, 2018, and the pro forma revenues under proposed rates for the twelve months ended March 31, 2020. Schedules WW-3 and WW-4 summarize the application of present rates to the consumption analysis and the pro forma adjustments under present rates for the twelve months ended March 31, 2018 and 2020. Schedules WW-5 through WW-6 set forth the application of present and proposed rates to the detailed consumption analysis and billing determinants. Schedule WW-7 sets forth the comparison of customer bills under present and proposed rates, for all divisions.

PRESENT RATE APPLICATION

Schedule WW-3 summarizes the pro forma revenues under present rates. Column 4 presents the revenues per books adjusted for the removal of DSIC surcharge revenues. Column 5 presents the revenues from the application of base rates in effect during the test year for each division to the detailed consumption analysis for the twelve months ended March 31, 2018. The application of rates for the various divisions and customer classifications are summarized in Schedule WW-4, from the application of present rates in Schedule WW-5. The adjustment factor in column 6 is calculated by dividing column

4 by column 5.

Column 7 of Schedule WW-3 is the result of applying the adjustment factor in column 6 to the revenues in column 5. The application of present base rates to the pro forma historic and future test year adjustments of number of bills and consumption is presented in Schedule WW-4 and brought forward to column 8 of Schedule WW-3. Column 9 shows the amount of DSIC revenue annualized for the test year and is added to columns 7 and 8 to arrive at the total pro forma revenues under present rates in column 10.

#### PROPOSED RATE APPLICATION

Schedule WW-1 summarizes the pro forma revenues under proposed rates for the twelve months ended March 31, 2020 and determines the revenue increase by customer classification under proposed rates. Column 3 of Schedule WW-1 sets forth the pro forma revenues under present rates brought forward from column 10 of Schedule WW-3. Column 5 is the result of applying proposed rates to the detailed consumption analysis presented in Schedule WW-5 and summarized in Schedule 2. The adjustment factor is applied to the revenues in column 4 to determine the proposed revenues in column 5. Column 7 shows the results of applying proposed rates to the pro forma adjustments brought forward from Schedule WW-2 and 6.

Column 7 is the sum of columns 5 and 6 and is the total pro forma revenues under proposed rates. The proposed increase in revenues is shown in column 8 by subtracting the pro forma revenues under present rates in column 2 from the pro forma revenues under proposed rates in column 7. The percent increase is shown in column 9.

## COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES

Schedule WW-7 presents a comparison of customers' bills under present and proposed rates at various consumption levels for each rate zone for the residential classification. For the purposes of this comparison, the bills under present rates include the DSIC surcharge at 5.00%.



AQUA PENNSYLVANIA INC.  
WASTEWATER  
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018 AND 2020

(1) Customer Classification	(2) Adjusted Revenues, Per Books Present Rates 3/31/2017 (a)	(3) Bill Analysis Revenues, Proposed Rates (Schedule 2)	Ref.	(4)=(2)/(3) Adjustment Factor	(5)=(4)X(3) Revenues Under Proposed Rates	(6) Pro Forma Adjustments Proposed Rates (Schedule 2 and 6)	(7)=(5)+(6) Total Pro Forma Revenue Proposed Rates	(8)=(7)-(2) Proposed Increase	(9) Percent Increase
<b>METERED SALES</b>									
Residential	\$ 9,030,911	\$ 12,881,484	Sch. 2	0.99718130	\$ 12,845,174	\$ 193,600	\$ 13,038,774	\$ 4,007,863	44.4%
Commercial	2,675,008	3,581,078	Sch. 2	1.00813606	3,610,214	91,787	3,702,001	1,026,993	38.4%
Industrial	437	668	Sch. 2	1.00332530	670	-	670	233	53.3%
Public Authority	121,476	158,874	Sch. 2	1.00453287	159,594	-	159,594	38,118	31.4%
Bulk Sales	1,040,092	1,342,540	Sch. 2	0.99816805	1,340,081	-	1,340,081	299,988	28.8%
Total Sales Related to Wastewater	<u>\$ 12,867,925</u>	<u>\$ 17,964,643</u>			<u>\$ 17,955,733</u>	<u>\$ 285,387</u>	<u>\$ 18,241,120</u>	<u>\$ 5,373,196</u>	41.8%
Contract Revenues	275,458	306,624		0.97435773	298,761	-	298,761	23,304	8.5%
Availability Lots	-	-			-	-	-	-	
Other Operating Revenues	299,923	299,923			299,923	-	299,923	-	0.0%
Total Wastewater Revenue	<u>\$ 13,443,305</u>	<u>\$ 18,571,190</u>			<u>\$ 18,554,418</u>	<u>\$ 285,387</u>	<u>\$ 18,839,805</u>	<u>\$ 5,396,499</u>	40.1%

(a) Excludes DSIC and Unbilled Revenue.

AQUA PENNSYLVANIA, INC.  
WASTEWATER

SUMMARY OF APPLICATION OF PROPOSED RATES  
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Division (1)	Div. Ref.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Bulk Sales (6)	Total Sales (7)	Availability Lots (8)	Total Sales (9)
Pinecrest Division	4	\$ 273,737	\$ 149,637				\$ 423,374		\$ 423,374
Willistown Woods Division	4A	644,216	104,466				748,682		748,682
Links at Gettysburg	5	179,832	7,555				187,387		187,387
East Bradford Division	6	121,895					121,895		121,895
Twin Hills Division	7	401,922					401,922		401,922
Plumstock Division	8	56,823					56,823		56,823
Media Division	9	1,377,087	633,838	668	158,874		2,170,467		2,170,467
White Haven & Kidder Township	10	404,446	552,756				957,202		957,202
Bridlewood Division	10A	270,891	183,264				454,155		454,155
Eagle Rock Division	10B	606,647	48,528				655,175		655,175
Thomhurst Division	10C	243,289					243,289		243,289
Rivercrest, Cove Village, and Wast	10D	428,772	16,157				444,929		444,929
Little Washington	10E	444,389					444,389		444,389
Laurel Lakes Division	10F	194,280	2,880				197,160		197,160
Deerfield Knoll Division	10G	102,194					102,194		102,194
CS Water Division, Masthope	10H	639,189	6,632				645,821		645,821
Peddlers View	10I	258,366					258,366		258,366
The Greens at Penn Oaks Division	10J	90,378	13,473				103,851		103,851
Newlin Green Division	10K	93,127					93,127		93,127
Woodloch Springs Division	10L	314,394	94,240				408,634		408,634
Stony Creek Division	10M	171,908					171,908		171,908
New Daleville	10N	127,230					127,230		127,230
Village at Valley Forge	10O		303,902				303,902		303,902
Beech Mountain Lakes Division	10P	898,680	71,040				969,720		969,720
Lake Harmony Division	10Q	1,301,700	517,200				1,818,900		1,818,900
Treasure Lake Division	10S	1,385,514	128,353				1,513,867		1,513,867
Penn Township Division	10U	697,780	422,175				1,119,955		1,119,955
Bunker Hill Division	10V	48,506					48,506		48,506
Honeycroft Village Division	10W	125,000	8,400				133,400		133,400
Eminton Division	10X	353,312	107,472				460,784		460,784
Tobyhanna Division	10Y	580,800	151,141				731,941		731,941
Avon Grove School District	10Z		57,969				57,969		57,969
Sage Hill		45,180					45,180		45,180
Total Sales Related to Wastewater		\$ 12,881,484	\$ 3,581,078	\$ 668	\$ 158,874	\$ -	\$ 16,622,103	\$ -	\$ 16,622,103
Contract Sales			306,624				306,624		306,624
Total Sales with Contract		\$ 12,881,484	\$ 3,887,702	\$ 668	\$ 158,874	\$ -	\$ 16,928,727	\$ -	\$ 16,928,727

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
SUMMARY OF APPLICATION OF PROPOSED RATES  
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Division (1)	Div. Ref.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Bulk Sales (6)	Total Sales (7)	Availability Lots (8)	Total Sales (9)
<u>Third Party Revenues</u>									
Southdown Homes						54,712			
East Brandywine						1,404			
Dennison						39,900			
Upper Providence						674,900			
Elwyn						122,492			
Foster Township						195,600			
East Side						73,691			
Penn Lake						179,841			
Total Third Party Revenues						<u>1,342,540</u>			1,342,540
Total Sales with Contract and Third Party		12,881,484	3,887,702	668	158,874	1,342,540	18,271,267	-	\$ 18,271,267
<u>Pro Forma Adjustments</u>									
Tobyhanna Division		193,600	50,380				243,980		243,980
Avon Grove School District			41,407				41,407		41,407
Subtotal HTY Adjs.		<u>193,600</u>	<u>91,787</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>285,387</u>		<u>285,387</u>
Total Pro Forma Revenues Under Proposed Rates		<u>\$13,075,084</u>	<u>\$3,979,489</u>	<u>\$668</u>	<u>\$158,874</u>	<u>\$1,342,540</u>	<u>\$18,556,654</u>	<u>\$-</u>	<u>\$ 18,556,654</u>

AQUA PENNSYLVANIA INC.  
WASTEWATER  
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018 AND 2020

Customer Classification (1)	Revenues, Per Books Present Rates 3/31/2018 (a) (2)	Adjustment to Per Books Revenue 3/31/2018 (3)	Adjusted Revenues, Per Books Present Rates 3/31/2018 (a) (4)	Bill Analysis Revenues, Present Rates (Schedule 4) (5)	Ref. (6)=(4)/(5)	Adjustment Factor (6)=(4)/(5)	Revenues Under Present Rates (7)=(6)X(5)	Pro Forma Adjustments Present Rates (Schedule 4 and 6) (8)	Add Back Annualized DSIC Revenue (9)	Total Pro Forma Revenue Present Rates (10)=(7)+(8)+(9)
<b>METERED SALES</b>										
Residential	\$ 8,543,172	\$ (14,917)	\$ 8,528,255	\$ 8,552,362	Sch. 4	0.99718130	\$ 8,528,255	\$ 129,067	\$ 373,589	\$ 9,030,911
Commercial	2,570,121	(55,626)	2,514,495	2,494,202	Sch. 4	1.00813606	2,514,495	70,124	90,389	2,675,008
Industrial	416		416	415	Sch. 4	1.00332530	416		21	437
Public Authority	115,716		115,716	115,194	Sch. 4	1.00453287	115,716		5,760	121,476
Bulk Sales	1,040,092		1,040,092	1,042,001	Sch. 4	0.99816805	1,040,092			1,040,092
<b>Total Sales Related to Wastewater</b>	<b>\$ 12,269,518</b>	<b>\$ (70,543)</b>	<b>\$ 12,198,975</b>	<b>\$ 12,204,174</b>			<b>\$ 12,198,975</b>	<b>\$ 199,191</b>	<b>\$ 469,758</b>	<b>\$ 12,867,925</b>
Contract Revenues	275,458		275,458	282,707		0.97435773	275,458			275,458
Availability Lots	157,930		157,930	157,926		1.00002824	157,930	(157,930)		-
<b>Other Operating Revenues</b>	<b>299,923</b>		<b>299,923</b>	<b>299,923</b>			<b>299,923</b>			<b>299,923</b>
<b>Total Wastewater Revenue</b>	<b>\$ 13,002,830</b>	<b>\$ (70,543)</b>	<b>\$ 12,932,287</b>	<b>\$ 12,944,730</b>			<b>\$ 12,932,287</b>	<b>\$ 41,261</b>	<b>\$ 469,758</b>	<b>\$ 13,443,305</b>

(a) Excludes DSIC and Unbilled Revenue.  
(b) Adjusted for North Heidelberg Division  
(c) Adjusted for backfills.

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
SUMMARY OF APPLICATION OF PRESENT RATES  
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Div. Ref.	Rate Division (1)	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Bulk Sales (6)	Total Sales ex Availability (7)	Availability (8)	Total Sales (9)
4	Pinecrest Division	\$ 168,746	\$ 147,770				\$ 316,516		\$ 316,516
4A	Willistown Woods Division	465,263	75,090				540,353		540,353
5	Links at Gettysburg	122,884	4,972				127,856		127,856
6	East Bradford Division	98,190					98,190		98,190
7	Twin Hills Division	263,617					263,617		263,617
8	Plumstock Division	46,376					46,376		46,376
9	Media Division	877,078	442,591	415	115,194		1,435,278		1,435,278
10	White Haven & Kidder Township	269,559	284,207				553,766		553,766
10A	Birdlewood Division	152,647	103,272				255,919		255,919
10B	Eagle Rock Division	443,249	25,984				469,233		469,233
10C	Thornhurst Division	177,662					177,662		177,662
10D	Rivercrest, Cove Village, and Washington	252,122	9,524				261,646		261,646
10E	Little Washington	388,763					388,763		388,763
10F	Laurel Lakes Division	116,277	1,584				117,861		117,861
10G	Deerfield Knoll Division	78,680					78,680		78,680
10H	CS Water Division, Masthope	430,143	4,105			32,064	434,248		466,312
10I	Peddlers View	191,294					191,294		191,294
10J	The Greens at Penn Oaks Division	89,225	9,123				98,348		98,348
10K	Newlin Green Division	93,127					93,127		93,127
10L	Woodloch Springs Division	246,004	69,135				315,139		315,139
10M	Stony Creek Division	133,615					133,615		133,615
10N	New Daleville	89,875					89,875		89,875
10O	Village at Valley Forge		179,045				179,045		179,045
10P	Beech Mountain Lakes Division	599,532	58,980				658,512		658,512
10Q	Lake Harmony Division	813,563	323,250				1,136,813		1,136,813
10S	Treasure Lake Division	819,107	69,150				888,257	125,862	1,014,119
10U	Penn Township Division	386,091	462,997				849,088		849,088
10V	Bunker Hill Division	25,217					25,217		25,217
10W	Honeycroft Village Division	83,338	5,600				88,938		88,938
10X	Emlenton Division	198,738	60,453				259,191		259,191
10Y	Tobyhanna Division	387,200	110,995				498,195		498,195
10Z	Avon Grove School District		46,375				46,375		46,375
	Sage Hill	45,180					45,180		45,180
	<b>Total</b>	<b>\$ 8,552,362</b>	<b>\$ 2,494,202</b>	<b>\$ 415</b>	<b>\$ 115,194</b>	<b>\$ -</b>	<b>\$ 11,162,173</b>	<b>\$ 157,926</b>	<b>\$ 11,320,099</b>
	Contract Sales		282,707				282,707		282,707
	<b>Total Sales with Contract</b>	<b>\$ 8,552,362</b>	<b>\$ 2,776,909</b>	<b>\$ 415</b>	<b>\$ 115,194</b>	<b>\$ -</b>	<b>\$ 11,444,880</b>	<b>\$ 157,926</b>	<b>\$ 11,602,806</b>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
SUMMARY OF APPLICATION OF PRESENT RATES  
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Division (1)	Div. Ref.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Bulk Sales (6)	Total Sales ex-Availability (7)	Availability (8)	Total Sales (9)
Third Party Revenues							1,042,001		1,042,001
Southdown Homes						53,921			
East Brandywine						1,404			
Dennison						34,713			
Upper Providence						527,430			
Elwyn						95,729			
Foster Township						170,172			
East Side						73,691			
Penn Lake						84,941			
Total Third Party Revenues						1,042,001	1,042,001		1,042,001
Total Sales with Contract and Third Party		8,552,362	2,776,909	415	115,194	1,042,001	12,486,881	157,926	12,644,807
Plus 5.0% DSIC excluding Ineligible Service Areas		373,589	90,389	21	5,760		469,758		469,758
Total Present Wastewater Revenue		8,925,951	2,867,298	436	120,954	1,042,001	12,956,639	157,926	13,114,565
<u>Pro Forma Adjustments</u>								<u>Availability</u>	
Tobyhanna Division		129,067	36,999				166,066		
Avon Grove School District			33,125				33,125	(157,930)	
Subtotal HTY Adjs.		129,067	70,124	-	-	-	199,191	(157,930)	41,261
Total Pro Forma Revenues Under Present Rates		\$9,055,018	\$2,937,422	\$436	\$120,954	\$1,042,001	\$13,155,830	-\$4	\$13,155,826

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
PINECREST DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Inside Pinecrest Development</u>						
Customer Charge One Unit	3,830	-	\$ 41.95	\$ 160,669	\$ 68.40	\$ 261,972
Total Residential - Inside	3,830	-		\$ 160,669		\$ 261,972
<u>Residential - Unmetered Inside Pinecrest Development</u>						
Customer Charge Unmetered	65	-	\$ 41.95	\$ 2,727	\$ 68.40	\$ 4,446
<u>Residential - Unmetered Outside Pinecrest Development</u>						
Customer Charge Unmetered	107	-	\$ 50.00	\$ 5,350	\$ 68.40	\$ 7,319
TOTAL RESIDENTIAL	<u>4,002</u>	<u>-</u>		<u>\$ 168,746</u>		<u>\$ 273,737</u>
<u>Commercial - Inside Pinecrest Development</u>						
Customer Charge 5/8	24	-	\$ -	\$ -		\$ -
4	24	-	-	-		-
Subtotal	<u>48</u>	<u>-</u>		<u>-</u>		<u>-</u>
1st block	-	47,690	\$ 3.00	\$ 143,070	\$ 3.00	\$ 143,070
Total Commercial Inside	48	47,690		\$ 143,070		\$ 143,070
<u>Commercial - Unmetered Inside Pinecrest Development</u>						
Customer Charge Unmetered	12	-	\$ 41.67	\$ 500	\$ 68.40	\$ 821
<u>Commercial - Unmetered Outside Pinecrest Development</u>						
Customer Charge One Unit	84	-	\$ 50.00	\$ 4,200	\$ 68.40	\$ 5,746
2U	-	-	100.00	-	136.80	-
3U	-	-	150.00	-	205.20	-
Total Commercial - Outside	<u>84</u>	<u>-</u>		<u>4,200</u>		<u>5,746</u>
TOTAL COMMERCIAL	<u>144</u>	<u>47,690</u>		<u>\$ 147,770</u>		<u>\$ 149,637</u>
TOTAL DIVISION	<u>4,146</u>	<u>47,690</u>		<u>\$ 316,516</u>		<u>\$ 423,374</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
WILLISTOWN WOODS DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	8,876	-	\$ 43.00	\$ 381,681	\$ 46.00	\$ 408,310
3/4	12	-	43.00	516	46.00	552
	<u>8,888</u>	<u>-</u>		<u>382,197</u>		<u>408,862</u>
1st block	-	276,887	0.3000	\$ 83,066	\$ 0.85	\$ 235,354
TOTAL RESIDENTIAL	8,888	276,887		\$ 465,263		\$ 644,216
<u>Commercial - Monthly (Multiple Units)</u>						
Customer Charge						
2	972	-	\$ 43.00	\$ 41,796	\$ 46.00	\$ 44,712
3	456	-	43.00	19,608	46.00	20,976
Subtotal	<u>1,428</u>	<u>-</u>		<u>61,404</u>		<u>65,688</u>
1st block	-	45,621	0.3000	\$ 13,686	0.8500	\$ 38,778
TOTAL COMMERCIAL	1,428	45,621		\$ 75,090		\$ 104,466
TOTAL DIVISION	<u>10,316</u>	<u>322,508</u>		<u>\$ 540,353</u>		<u>\$ 748,682</u>



AQUA PENNSYLVANIA, INC.  
WASTEWATER  
THE LINKS AT GETTYSBURG DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge 5/8	1,992	-	\$ 44.00	\$ 87,630	\$ 62.00	\$ 123,479
1st block	-	53,635	0.6130	\$ 32,878	\$ 0.95	\$ 50,953
Total Metered Residential	1,992	53,635		\$ 120,508		\$ 174,432
<u>Residential - Monthly Unmetered</u>						
Customer Charge Unmetered	54	-	\$ 44.00	\$ 2,376	\$ 100.00	\$ 5,400
TOTAL RESIDENTIAL	2,046	53,635		\$ 122,884		\$ 179,832
<u>Commercial - Monthly (Multiple Units)</u>						
Customer Charge 1	24	-	\$ 84.00	\$ 2,033	\$ 124.00	\$ 3,001
1st block	-	4,794	0.6130	\$ 2,939	\$ 0.9500	\$ 4,554
TOTAL COMMERCIAL	24	4,794		\$ 4,972		\$ 7,555
TOTAL DIVISION	<u>2,070</u>	<u>58,429</u>		<u>\$ 127,856</u>		<u>\$ 187,387</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
EAST BRADFORD DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	876	-	\$ 60.00	\$ 52,548	\$ 74.00	\$ 64,809
3/4	60		60.00	3,600	74.00	4,440
1	36		60.00	2,166	74.00	2,671
	<u>972</u>			<u>58,314</u>		<u>71,920</u>
1st block	-	52,057	0.7660	\$ 39,876	0.9600	\$ 49,975
TOTAL DIVISION	<u>972</u>	<u>52,057</u>		<u>\$ 98,190</u>		<u>\$ 121,895</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
TWIN HILLS DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	3,935	-	\$ 54.00	\$ 212,501	\$ 62.00	\$ 243,982
1	<u>12</u>	<u>-</u>	54.00	<u>648</u>	62.00	<u>744</u>
	3,947	-		\$ 213,149		\$ 244,726
1st block	-	165,469	0.3050	\$ 50,468	0.9500	\$ 157,196
TOTAL DIVISION	<u>3,947</u>	<u>165,469</u>		<u>\$ 263,617</u>		<u>\$ 401,922</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
PLUMSTOCK DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Residential - Monthly</u>						
Customer Charge 5/8	456	-	\$ 60.00	\$ 27,366	\$ 74.00	\$ 33,751
1st block	-	24,033	0.7910	\$ 19,010	0.9600	\$ 23,072
TOTAL DIVISION	<u>456</u>	<u>24,033</u>		<u>\$ 46,376</u>		<u>\$ 56,823</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
MEDIA DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	19,922	0	\$ 15.95	\$ 317,756	\$ 31.00	\$ 617,582
3/4	63	0	25.00	1,575	46.50	2,930
1	468	0	38.00	17,784	77.50	36,270
1-1/2	144	0	89.00	12,816	155.00	22,320
2	72	0	165.00	11,880	248.00	17,856
4	24	0	594.00	14,256	775.00	18,600
Subtotal	<u>20,693</u>	<u>0</u>		<u>376,067</u>		<u>715,558</u>
1st block	-	867,194	0.5770	500,371	0.7600	659,067
Subtotal	-	<u>867,194</u>		<u>\$ 500,371</u>		<u>\$ 659,067</u>
Total Metered Residential	20,693	867,194		\$ 876,438		\$ 1,374,625
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	40	-	\$ 15.95	\$ 640	\$ 61.40	\$ 2,462
TOTAL RESIDENTIAL	20,733	867,194		\$ 877,078		\$ 1,377,087
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	2,355	0	\$ 15.95	\$ 37,562	\$ 31.00	\$ 73,005
3/4	49	0	25.00	1,215	46.50	2,260
1	516	0	38.00	19,608	77.50	39,990
1-1/2	264	0	89.00	23,496	155.00	40,920
2	120	0	165.00	19,800	248.00	29,760
3	72	0	364.00	26,208	465.00	33,480
4	12	0	594.00	7,128	775.00	9,300
Subtotal	<u>3,388</u>	<u>0</u>		<u>135,017</u>		<u>228,715</u>
1st block		533,057	0.5770	307,574	0.7600	405,123
Subtotal		<u>533,057</u>		<u>\$ 307,574</u>		<u>\$ 405,123</u>
TOTAL COMMERCIAL	3,388	533,057		\$ 442,591		\$ 633,838
<u>Industrial - Monthly</u>						
Customer Charge						
5/8	12	0	\$ 15.95	\$ 191	31.00	\$ 372
1st block		389	0.5770	\$ 224	0.7600	\$ 296
TOTAL INDUSTRIAL	12	389		\$ 415		\$ 668

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
MEDIA DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Public - Monthly</u>						
Customer Charge						
5/8	180	0	\$ 15.95	\$ 2,871	\$ 31.00	\$ 5,580
3/4	12	0	25.00	300	46.50	558
1	108	0	38.00	4,104	77.50	8,370
1-1/2	48	0	89.00	4,272	155.00	7,440
2	36	0	165.00	5,940	248.00	8,928
3	36	0	364.00	13,104	465.00	16,740
4	24	0	594.00	14,256	775.00	18,600
Subtotal	<u>444</u>	<u>0</u>		<u>\$ 44,847</u>		<u>\$ 66,216</u>
1st block	<u>0</u>	<u>121,919</u>	0.5770	<u>\$ 70,347</u>	0.7600	<u>\$ 92,658</u>
Subtotal Consumption	<u>0</u>	<u>121,919</u>		<u>\$ 70,347</u>		<u>\$ 92,658</u>
TOTAL PUBLIC	444	121,919		\$ 115,194		\$ 158,874
TOTAL DIVISION	<u>24,577</u>	<u>1,522,559</u>		<u>\$ 1,435,278</u>		<u>\$ 2,170,467</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
WHITE HAVEN DIVISION  
APPLICATION OF PRESENT AND PROPOSED SEWER RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	5,021	-	\$ 41.35	\$ 207,618	\$ 46.00	\$ 230,966
1 1/2	12	-	41.35	496	46.00	552
Kidder Township	535	-	62.50	33,425	46.00	24,601
Subtotal	5,568	-		\$ 241,539		\$ 256,119
1st block	-	158,690	0.1200	\$ 19,043	0.8500	\$ 134,887
Total Metered Residential	5,568	158,690		\$ 260,582		\$ 391,006
<u>Residential Kidder Township - Unmetered</u>						
Customer Charge						
Flat Rate	72	-	\$ 41.35	\$ 2,977	80.00	\$ 5,760
Flat Rate	96	-	\$ 62.50	6,000	80.00	7,680
Subtotal	168	0		8,977		13,440
Total Unmetered Residential	168	-		\$ 8,977		\$ 13,440
TOTAL RESIDENTIAL	5,736	158,690		269,559		404,446
<u>Commercial - Monthly</u>						
Customer Charge						
Class A (\$62.50 per EDU)						
5/8	12	-	\$ 62.50	\$ 750	80.00	\$ 960
Class D (\$41.35 per EDU)						
5/8	384	-	\$ 41.35	\$ 15,866	46.00	\$ 17,650
1	44	-	41.35	1,803	46.00	2,006
1 1/2	12	-	41.35	496	46.00	552
2	12	-	41.35	496	46.00	552
Subtotal	463	-		19,411		21,720
Consumption (Class D only)						
1st block	-	26,442	0.1200	\$ 3,173	0.8500	\$ 22,476
Total Metered Commercial	463	26,442		\$ 22,584		\$ 44,196
<u>Commercial - Unmetered</u>						
Customer Charge						
Class C	1,846	-	\$ 25.00	\$ 46,150	\$ 80.00	\$ 147,680
Class B	2,640	-	37.50	99,000	80.00	211,200
Kidder Township	22	-	41.35	910	80.00	1,760
Class A	1,849	-	62.50	115,563	80.00	147,920
Subtotal	6,357	-		261,623		508,560
TOTAL COMMERCIAL	6,820	26,442		\$ 284,207		\$ 552,756
TOTAL DIVISION	12,556	185,132		\$ 553,766		\$ 957,202

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
BRIDLEWOOD DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Single Family Monthly</u>						
Customer Charge						
5/8	1,401	-	\$ 36.00	\$ 50,436	\$ 36.00	\$ 50,436
3/4	12	-	36.00	432	36.00	432
	<u>1,413</u>	-		<u>50,868</u>		<u>50,868</u>
1st block		<u>67,221</u>	0.1520	<u>\$ 10,218</u>	0.8100	<u>\$ 54,449</u>
Subtotal Consumption		<u>67,221</u>		<u>\$ 10,218</u>		<u>\$ 54,449</u>
Total Residential Single Family	1,413	67,221		\$ 61,086		\$ 105,317
<u>Residential - Townhomes Monthly</u>						
Customer Charge						
5/8	2,495	0	\$ 31.00	\$ 77,345	\$ 36.00	\$ 89,820
1st block		<u>93,524</u>	0.1520	<u>\$ 14,216</u>	0.8100	<u>\$ 75,754</u>
Subtotal Consumption		<u>93,524</u>		<u>\$ 14,216</u>		<u>\$ 75,754</u>
Total Townhomes Residential	2,495	93,524		\$ 91,561		\$ 165,574
TOTAL RESIDENTIAL	<u>3,908</u>	<u>160,745</u>		<u>\$ 152,647</u>		<u>\$ 270,891</u>
<u>Commercial - Monthly</u>						
Customer Charge						
Bridlewood Apartment Complex	12	0	\$ 8,344.00	\$ 100,128	\$ 14,807.00	\$ 177,684
Children's World Daycare	12	0	262.00	3,144	465.00	5,580
Subtotal	<u>24</u>	<u>0</u>		<u>\$ 103,272</u>		<u>\$ 183,264</u>
TOTAL COMMERCIAL	<u>24</u>	<u>-</u>		<u>\$ 103,272</u>		<u>\$ 183,264</u>
TOTAL DIVISION	<u>3,932</u>	<u>160,745</u>		<u>\$ 255,919</u>		<u>\$ 454,155</u>



AQUA PENNSYLVANIA, INC.  
WASTEWATER  
EAGLE ROCK DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	11,668	-	\$ 35.50	\$ 414,214	\$ 36.00	\$ 420,048
1	36	-	35.50	1,278	36.00	1,296
Subtotal	11,704	-		415,492		421,344
1st block	-	227,755	0.1200	\$ 27,331	0.8100	\$ 184,482
Total Metered Residential	11,704	227,755		\$ 442,823		\$ 605,826
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	12	-	\$ 35.50	\$ 426	\$ 68.40	\$ 821
TOTAL RESIDENTIAL	11,716	227,755		\$ 443,249		\$ 606,647
<u>Commercial - Monthly</u>						
Customer Charge						
Eagle Rock Inn	16	12	-	\$ 568.00	\$ 576.00	\$ 6,912
Eagle Rock Lodge	5	12	-	177.50	180.00	2,160
Eagle Rock Clubhouse	4	24	-	142.00	144.00	3,456
Other Commercial	275	-	35.50	9,763	36.00	9,900
Subtotal	323	-		\$ 22,117		\$ 22,428
Other Commercial						
1st block	-	32,222	0.1200	\$ 3,867	0.8100	\$ 26,100
Subtotal Consumption	-	32,222		\$ 3,867		\$ 26,100
TOTAL COMMERCIAL	323	32,222		\$ 25,984		\$ 48,528
TOTAL DIVISION	12,039	259,977		\$ 469,233		\$ 655,175

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
THORNHURST DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Residential - Monthly</u>						
Customer Charge One Unit	3,538	-	\$ 46.75	\$ 165,402	\$ 46.00	\$ 162,748
1st block	-	91,366	0.1200	\$ 10,964	0.8500	\$ 77,661
Total Metered	3,538	91,366		\$ 176,366		\$ 240,409
<u>Residential Unmetered - Monthly</u>						
Customer Charge Unmetered	36	-	\$ 36.00	\$ 1,296	\$ 80.00	\$ 2,880
TOTAL DIVISION	<u>3,574</u>	<u>91,366</u>		<u>\$ 177,662</u>		<u>\$ 243,289</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
RIVERCREST, COVE VILLAGE AND WASHINGTON PARK DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	5,773	-	\$ 27.00	\$ 155,871	\$ 46.00	\$ 265,558
1	12	-	27.00	324	46.00	552
	<u>5,785</u>	<u>-</u>		<u>156,195</u>		<u>266,110</u>
1st block	-	183,461	0.5020	\$ 92,097	0.8500	\$ 155,942
Total Metered	5,785	183,461		\$ 248,292		\$ 422,052
<u>Residential Unmetered - Monthly</u>						
Cove Village	60	-	\$ 45.00	\$ 2,700	\$ 80.00	\$ 4,800
Washington Park	24	-	47.08	1,130	80.00	1,920
	<u>84</u>	<u>-</u>		<u>3,830</u>		<u>6,720</u>
TOTAL RESIDENTIAL	5,869	183,461		252,122		428,772
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	24	-	\$ 27.00	\$ 648	\$ 46.00	\$ 1,104
3/4	36	-	27.00	972	46.00	1,656
1	48	-	27.00	1,296	46.00	2,208
	<u>108</u>	<u>-</u>		<u>2,916</u>		<u>4,968</u>
1st block	-	13,164	0.5020	\$ 6,608	0.8500	\$ 11,189
TOTAL COMMERCIAL	108	13,164		\$ 9,524		\$ 16,157
TOTAL RESIDENTIAL	<u>5,977</u>	<u>196,625</u>		<u>\$ 261,646</u>		<u>\$ 444,929</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
LITTLE WASHINGTON DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	4,129	-	\$ 74.00	\$ 305,546	\$ 74.00	\$ 305,546
3/4	12	-	74.00	\$ 888	74.00	888
1	11	-	74.00	\$ 814	74.00	814
	<u>4,152</u>	<u>0</u>		<u>307,248</u>		<u>307,248</u>
1st block	-	141,450	0.5700	\$ 80,627	0.9600	\$ 135,792
Total Metered	4,152	141,450		\$ 387,875		\$ 443,040
<u>Residential Unmetered - Monthly</u>						
Customer Charge Unmetered	12	-	\$ 74.00	\$ 888	\$ 112.40	\$ 1,349
<b>TOTAL RESIDENTIAL</b>	<u><u>4,164</u></u>	<u><u>141,450</u></u>		<u><u>\$ 388,763</u></u>		<u><u>\$ 444,389</u></u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
LAUREL LAKES DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge One Unit	2,348	-	\$ 44.00	\$ 103,312	\$ 46.00	\$ 108,008
1st block	-	99,238	0.1200	\$ 11,909	0.8500	\$ 84,352
Total Metered	2,348	99,238		\$ 115,221		\$ 192,360
<u>Residential - Unmetered Monthly</u>						
Customer Charge One Unit	24	-	\$ 44.00	\$ 1,056	\$ 80.00	\$ 1,920
TOTAL RESIDENTIAL	2,372	99,238		116,277		194,280
<u>Commercial - Unmetered Monthly</u>						
Customer Charge Three Unit	36	-	\$ 44.00	\$ 1,584	\$ 80.00	\$ 2,880
TOTAL COMMERCIAL	36	-		\$ 1,584		\$ 2,880
TOTAL DIVISION	<u>2,408</u>	<u>99,238</u>		<u>\$ 117,861</u>		<u>\$ 197,160</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
DEERFIELD KNOLL DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Residential - Monthly</u>						
Customer Charge One Unit	1,426	-	\$ 45.00	\$ 64,170	\$ 46.00	\$ 65,596
1st block	-	43,056	0.3370	\$ 14,510	0.8500	\$ 36,598
Total Metered	1,426	43,056		\$ 78,680		\$ 102,194
TOTAL DIVISION	<u>1,426</u>	<u>43,056</u>		<u>\$ 78,680</u>		<u>\$ 102,194</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
CS WATER DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	15,505	-	\$ 26.96	\$ 418,015	\$ 31.00	\$ 480,655
1	<u>12</u>	<u>-</u>	26.96	<u>324</u>	31.00	<u>372</u>
	15,517	-		418,339		481,027
1st block	-	203,180	0.0500	\$ 10,159	0.7600	\$ 154,417
Total Metered	15,517	203,180		\$ 428,498		\$ 635,444
<u>Residential - Unmetered</u>						
Customer Charge Unmetered	61	-	\$ 26.96	\$ 1,645	\$ 61.40	\$ 3,745
<u>Residential - Availability</u>						
Customer Charge Availability	5,344	-	\$ 6.00	\$ 32,064	-	-
TOTAL RESIDENTIAL	<u>20,922</u>	<u>203,180</u>		<u>\$ 462,207</u>		<u>\$ 639,189</u>
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 26.96	\$ 324	\$ 61.40	\$ 737
1 1/2	12	-	26.96	324	61.40	737
2	<u>72</u>	<u>-</u>	26.96	<u>1,941</u>	61.40	<u>4,421</u>
Subtotal	96	-		2,589		5,895
1st block	-	23,832	0.0500	\$ 1,192	-	-
Total Metered	96	23,832		\$ 3,781		\$ 5,895
<u>Commercial - Unmetered</u>						
Customer Charge Unmetered	12	-	\$ 26.96	\$ 324	\$ 61.40	\$ 737
TOTAL COMMERCIAL	<u>108</u>	<u>23,832</u>		<u>\$ 4,105</u>		<u>\$ 6,632</u>
TOTAL DIVISION	<u>21,030</u>	<u>227,012</u>		<u>\$ 466,312</u>		<u>\$ 645,821</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
PEDDLERS VIEW DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Residential - Monthly</u>						
Customer Charge One Unit	2,564	-	\$ 54.00	\$ 138,456	\$ 62.00	\$ 158,968
1st block	-	104,629	0.5050	\$ 52,838	0.9500	\$ 99,398
TOTAL DIVISION	<u>2,564</u>	<u>104,629</u>		<u>\$ 191,294</u>		<u>\$ 258,366</u>



AQUA PENNSYLVANIA, INC.  
WASTEWATER  
THE GREENS AT PENN OAKS DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge 5/8	838	-	\$ 93.25	\$ 78,144	\$ 74.00	\$ 62,012
1st block	-	29,548	0.3750	\$ 11,081	0.9600	\$ 28,366
TOTAL RESIDENTIAL	838	29,548		\$ 89,225		\$ 90,378
<u>Commercial - Monthly</u>						
Customer Charge 3	12	-	\$ 466.25	\$ 5,595	\$ 370.00	\$ 4,440
1st block	-	9,409	0.3750	\$ 3,528	0.9600	\$ 9,033
TOTAL COMMERCIAL	12	9,409		\$ 9,123		\$ 13,473
TOTAL DIVISION	<u>850</u>	<u>38,957</u>		<u>\$ 98,348</u>		<u>\$ 103,851</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
NEWLIN GREEN DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	558	-	\$ 110.00	\$ 61,380	\$ 110.00	\$ 61,380
3/4	18	-	110.00	1,980	110.00	1,980
1	12	-	110.00	1,320	110.00	1,320
	<u>588</u>	<u>-</u>		<u>64,680</u>		<u>64,680</u>
1st block	-	37,929	0.7500	\$ 28,447	0.7500	\$ 28,447
TOTAL DIVISION	<u>588</u>	<u>37,929</u>		<u>\$ 93,127</u>		<u>\$ 93,127</u>

AQUA PENNSYLVANIA, INC  
WASTEWATER  
WOODLOCH SPRINGS DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 201

Rate Block 100 Gallons:	Number of Bills	Consumption 100 Gallons:	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	4,836	-	\$ 47.00	\$ 227,246	\$ 46.00	\$ 222,416
1	72	-	47.00	3,384	46.00	3,312
Subtotal	<u>4,907</u>	<u>-</u>		<u>230,626</u>		<u>225,726</u>
All Consumption		96,790	0.1200	\$ 11,616	0.8500	\$ 82,276
Total Metered	4,907	96,790		\$ 242,246		\$ 307,996
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	80	-	\$ 47.00	\$ 3,760	\$ 80.00	\$ 6,400
TOTAL RESIDENTIAL	<u>4,987</u>	<u>96,790</u>		<u>\$ 246,006</u>		<u>\$ 314,396</u>
<u>Commercial - Monthly</u>						
Customer Charge						
The Lodge at Woodloch (81 EDU)	12	0	\$ 3,807.00	\$ 45,684	\$ 6,480.00	\$ 77,760
Woodloch Springs Clubhouse Facilities	24	0	282.21	6,773	480.00	11,520
5/8	50	0	47.00	2,350	80.00	4,000
2	12	-	47.00	564	80.00	960
Subtotal	<u>98</u>	<u>0</u>		<u>\$ 55,371</u>		<u>\$ 94,240</u>
All Consumption	-	114,690	0.1200	\$ 13,764	-	\$ -
Subtotal	<u>-</u>	<u>114,690</u>		<u>\$ 13,764</u>		<u>\$ -</u>
TOTAL COMMERCIAL	<u>98</u>	<u>114,690</u>		<u>\$ 69,135</u>		<u>\$ 94,240</u>
TOTAL DIVISION	<u>5,085</u>	<u>211,480</u>		<u>\$ 315,136</u>		<u>\$ 408,636</u>

\* The number of equivalent dwelling units (EDUs) to be billed for Non-Residential connections is determined by dividing the peak daily usage, based on measurements or reasonable estimates, by 230 g

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
STONY CREEK DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	231	-	\$ 45.00	\$ 10,395	\$ 46.00	\$ 10,626
1	2,315	-	45.00	104,175	46.00	106,490
1 1/2	12	-	45.00	540	46.00	552
	<u>2,558</u>	<u>-</u>		<u>115,110</u>		<u>117,668</u>
1st block	-	63,812	0.2900	\$ 18,505	0.8500	\$ 54,240
TOTAL DIVISION	<u>2,558</u>	<u>63,812</u>		<u>\$ 133,615</u>		<u>\$ 171,908</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
NEW DALEVILLE DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (4)	<u>Present Rate</u> (5)	<u>Present Revenue</u> (6)	<u>Proposed Rate</u> (7)	<u>Proposed Revenue</u> (8)
<u>Residential - Monthly</u>						
Customer Charge One Unit	1,272	-	\$ 70.64	\$ 89,875	\$ 100.00	\$ 127,230
TOTAL DIVISION	<u>1,272</u>	-		<u>\$ 89,875</u>		<u>\$ 127,230</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
VILLAGE AT VALLEY FORGE DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Commercial - Monthly</u>						
Customer Charge						
1	24	-	\$31.89	\$ 765	\$ 31.00	\$ 744
2	143	-	138.46	19,800	99.20	14,186
3	12	-	305.45	3,665	186.00	2,232
4	40	-	498.46	19,938	310.00	12,400
6	24	-	498.46	11,963	310.00	7,440
Subtotal	<u>243</u>	<u>-</u>		<u>\$ 56,131</u>		<u>\$ 37,002</u>
All Consumption		<u>351,184</u>	0.3500	<u>\$122,914</u>	0.7600	<u>\$266,900</u>
Subtotal Consumption		351,184		\$122,914		\$266,900
TOTAL DIVISION	<u>243</u>	<u>351,184</u>		<u>\$179,045</u>		<u>\$303,902</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
BEECH MOUNTAIN LAKES DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge One Unit	11,168	-	\$ 53.37	\$ 596,036	\$ 80.00	\$ 893,440
<u>Residential - Unmetered</u>						
Customer Charge Unmetered	66	-	\$ 53.37	\$ 3,496	\$ 80.00	\$ 5,240
TOTAL RESIDENTIAL	11,234	-		\$ 599,532		\$ 898,680
<u>Commercial - Monthly</u>						
Customer Charge One Unit	12	-	\$ 66.42	\$ 797	\$ 80.00	\$ 960
4U	24	-	\$ 265.68	6,376	\$ 320.00	7,680
11U	12	-	\$ 730.62	8,767	\$ 880.00	10,560
54U	12	-	\$ 3,586.68	43,040	\$ 4,320.00	51,840
Subtotal	60	-		\$ 58,980		\$ 71,040
TOTAL COMMERCIAL	60	-		\$ 58,980		\$ 71,040
TOTAL DIVISION	<u>11,294</u>	<u>-</u>		<u>\$ 658,512</u>		<u>\$ 969,720</u>

\* Treatment Charge: shall be billed each Residential and Commercial usage customer monthly for each EDU as calculated by Butler Township Wastewater Division for the cost of sewage treatment by Butler Township Wastewater Division. The treatment charge shall be revised upward or downward, upon sixty days notice to the Public Utility Commission (PUC), based upon the per EDU charge billed by Butler Township Wastewater Division. The Company will file with the PUC official notification of any change to the treatment charge rate as approved by Butler Township Wastewater Division. The current EDU charge is \$45.00 per month.

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
LAKE HARMONY DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
One Unit	11,853	-	\$ 62.50	\$ 740,813	\$ 100.00	\$ 1,185,300
2U	84	-	\$ 125.00	10,500	\$ 200.00	16,800
3U	12	-	\$ 187.50	2,250	\$ 300.00	3,600
4U	24	-	\$ 250.00	6,000	\$ 400.00	9,600
6U	12	-	\$ 375.00	4,500	\$ 600.00	7,200
7U	12	-	\$ 437.50	5,250	\$ 700.00	8,400
16U	12	-	\$ 1,000.00	12,000	\$ 1,600.00	19,200
18U	12	-	\$ 1,125.00	13,500	\$ 1,800.00	21,600
25U	12	-	\$ 1,562.50	18,750	\$ 2,500.00	30,000
35U	-	-	\$ 2,187.50	-	\$ 3,500.00	-
Subtotal	<u>12,033</u>	<u>-</u>		<u>813,563</u>		<u>1,301,700</u>
TOTAL RESIDENTIAL	12,033	-		\$ 813,563		\$ 1,301,700
<u>Commercial - Monthly</u>						
Customer Charge						
One Unit	12	-	\$ 62.50	\$ 750	\$ 100.00	\$ 1,200
Split Rock Country Club (14U)	12	-	\$ 875.00	10,500	\$ 1,400.00	16,800
Remaining Uses (53U)	12	-	\$ 3,312.50	39,750	\$ 5,300.00	63,600
Westwood Condominium Assoc. (90U)	12	-	\$ 5,625.00	67,500	\$ 9,000.00	108,000
Willowbrook at Lake Harmony (128U)	12	-	\$ 8,000.00	96,000	\$ 12,800.00	153,600
The Galleria and the Water Park (145U)	<u>12</u>	<u>-</u>	<u>\$ 9,062.50</u>	<u>108,750</u>	<u>\$ 14,500.00</u>	<u>174,000</u>
Subtotal	72	-		<u>\$ 323,250</u>		<u>\$ 517,200</u>
TOTAL COMMERCIAL	<u>72</u>	<u>-</u>		<u>\$ 323,250</u>		<u>\$ 517,200</u>
TOTAL DIVISION	<u><u>12,105</u></u>	<u><u>-</u></u>		<u><u>\$ 1,136,813</u></u>		<u><u>\$ 1,818,900</u></u>



AQUA PENNSYLVANIA, INC.  
WASTEWATER  
TREASURE LAKE DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	25,223	0	\$ 20.61	\$ 519,846	\$ 31.00	\$ 781,913
3/4	12	0	20.61	247	31.00	372
1	24	0	38.93	934	58.60	1,406
Subtotal	<u>25,259</u>	<u>0</u>		<u>\$ 521,027</u>		<u>\$ 783,691</u>
1st block		<u>765,132</u>	0.3750	<u>\$ 286,925</u>	0.7600	<u>\$ 581,500</u>
Subtotal Consumption		<u>765,132</u>		<u>\$ 286,925</u>		<u>\$ 581,500</u>
Total Metered	25,259	765,132		\$ 807,952		\$ 1,365,191
<u>Residential - Unmetered</u>						
Customer Charge Unmetered	331	-	\$ 33.70	\$ 11,155	\$ 61.40	\$ 20,323
<u>Residential - Availability</u>						
Customer Charge Unmetered	27,784	-	\$ 4.53	\$ 125,862	\$ -	\$ -
TOTAL RESIDENTIAL	<u>53,374</u>	<u>765,132</u>		<u>\$ 944,969</u>		<u>\$ 1,385,514</u>
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	267	0	\$ 20.61	\$ 5,503	\$ 31.00	\$ 8,277
1	7	0	38.93	273	58.60	410
2	48	0	64.45	3,094	96.90	4,651
3	24	0	134.28	3,223	202.00	4,848
4	36	0	268.56	9,668	403.90	14,540
Subtotal	<u>382</u>	<u>0</u>		<u>\$ 21,761</u>		<u>\$ 32,726</u>
1st block		<u>120,978</u>	0.3750	<u>\$ 45,367</u>	0.7600	<u>\$ 91,943</u>
Subtotal Consumption		<u>120,978</u>		<u>\$ 45,367</u>		<u>\$ 91,943</u>
Total Metered	382	120,978		\$ 67,128		\$ 124,669
<u>Commercial - Unmetered</u>						
Customer Charge Unmetered	60	-	\$ 33.70	\$ 2,022	\$ 61.40	\$ 3,684
TOTAL COMMERCIAL	<u>442</u>	<u>120,978</u>		<u>\$ 69,150</u>		<u>\$ 128,353</u>
TOTAL DIVISION	<u>53,816</u>	<u>886,110</u>		<u>\$ 1,014,119</u>		<u>\$ 1,513,867</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
PENN TOWNSHIP DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Quarterly</u>						
Customer Charge One Unit	3,148	144,496	\$ 67.50	\$ 212,490	\$ 138.00	\$ 434,424
Allowance 5,000 1st block	-	165,334	1.0500	\$ 173,601	0.8500	\$ 263,356
TOTAL RESIDENTIAL	3,148	309,830		\$ 386,091		\$ 697,780
<u>Commercial - Monthly</u>						
Customer Charge One Unit	507	16,915	\$ 67.50	\$ 34,223	\$ 46.00	\$ 23,322
Allowance 4,000 1st block	-	450,065	0.9500	\$ 427,562	0.8500	\$ 396,933
Total Metered Commercial	507	466,980		\$ 461,785		\$ 420,255
<u>Commercial - Unmetered Monthly</u>						
Customer Charge Unmetered	24	-	\$ 50.50	\$ 1,212	\$ 80.00	\$ 1,920
TOTAL COMMERCIAL	531	466,980		\$ 462,997		\$ 422,175
TOTAL DIVISION	<u>3,679</u>	<u>776,810</u>		<u>\$ 849,088</u>		<u>\$ 1,119,955</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
BUNKER HILL DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Residential - Monthly</u>						
Customer Charge One Unit	790	-	\$ 31.92	\$ 25,217	\$ 61.40	\$ 48,506
TOTAL DIVISION	<u>790</u>	<u>-</u>		<u>\$ 25,217</u>		<u>\$ 48,506</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
HONEYCROFT VILLAGE DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Residential - Monthly</u>						
Customer Charge Flat Rate	1,250	-	\$ 66.67	\$83,338	\$100.00	\$125,000
<u>Commercial - Monthly</u>						
Customer Charge Honeycroft Clubhouse (7U)	12	-	\$ 466.69	\$ 5,600	\$700.00	\$ 8,400
TOTAL DIVISION	<u>1,262</u>	<u>-</u>		<u>\$88,938</u>		<u>\$133,400</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
EMLENTON DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge EDUs	4,416	-	\$ 45.00	\$ 198,738	\$ 80.00	\$ 353,312
TOTAL RESIDENTIAL	4,416	-		\$ 198,738		\$ 353,312
<u>Commercial - Monthly</u>						
Customer Charge EDUs	1,007	-	\$ 45.00	\$ 45,333	\$ 80.00	\$ 80,592
Apartment Complex	12		1,260.00	15,120	2,240.00	26,880
TOTAL COMMERCIAL	1,019	-		\$ 60,453		\$ 107,472
TOTAL DIVISION	<u>5436</u>	<u>-</u>		<u>\$ 259,191</u>		<u>\$ 460,784</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
TOBYHANNA DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Quarterly</u>						
Customer Charge Flat Rate	1,936	-	\$ 200.00	\$ 387,200	\$ 300.00	\$ 580,800
<u>Commercial - Quarterly</u>						
Customer Charge 5/8	276	21,565	\$ 200.00	\$ 55,200	\$ 186.00	\$ 51,336
1	45	8,526	200.00	9,000	186.00	8,370
1 1/2	23	4,290	200.00	4,600	186.00	4,278
3	52	10,408	200.00	10,400	186.00	9,672
	<u>396</u>	<u>44,789</u>		<u>\$ 79,200</u>		<u>\$ 73,656</u>
1st block	-	23,195	1.0000	23,195	0.9500	64,585
<u>Commercial Unmetered - Quarterly</u>						
Customer Charge 5/8	43	-	\$ 200.00	\$ 8,600	\$ 300.00	\$ 12,900
TOTAL COMMERCIAL	<u>439</u>	<u>67,984</u>		<u>110,995</u>		<u>151,141</u>
TOTAL DIVISION	<u><u>2,375</u></u>	<u><u>67,984</u></u>		<u><u>\$ 498,195</u></u>		<u><u>\$ 731,941</u></u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
AVON GROVE SCHOOL DISTRICT DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Commercial - Monthly</u>						
Flat Rate 6	<u>7</u>	<u>-</u>	\$ 6,625.00	<u>\$ 46,375</u>	\$ 8,281.30	<u>\$ 57,969</u>
TOTAL DIVISION	<u><u>7</u></u>	<u><u>-</u></u>		<u><u>\$ 46,375</u></u>		<u><u>\$ 57,969</u></u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
SAGE HILL DIVISION  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Sage Hill - Monthly</u>						
Customer Charge Flat Rate	<u>251</u>	<u>-</u>	<u>\$ 180.00</u>	<u>\$45,180</u>	<u>\$180.00</u>	<u>\$45,180</u>
TOTAL DIVISION	<u><u>251</u></u>	<u><u>-</u></u>		<u><u>\$45,180</u></u>		<u><u>\$45,180</u></u>



AQUA PENNSYLVANIA, INC.  
WASTEWATER  
CONTRACT SALES  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Woodloch Pines - Monthly</u>						
Flat Rate						
April '17 to December '17	9	-	\$ 23,383.51	\$ 210,452	\$ 25,552.00	\$ 229,968
January '18 to March '18	3	-	\$ 24,085.02	72,255	\$ 25,552.00	76,656
	<u>12</u>	<u>-</u>		<u>282,707</u>		<u>306,624</u>
TOTAL DIVISION	<u>12</u>	<u>-</u>		<u>\$ 282,707</u>		<u>\$ 306,624</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
THIRD PARTY SALES  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Bulk - Monthly - Southdown Homes</u>						
Customer Charge						
All Usage	12	71,990	\$ 0.75	53,921	\$ 0.76	54,712
Total Southdown Homes	<u>12</u>	<u>71,990</u>		<u>53,921</u>		<u>54,712</u>
<u>Bulk - Quarterly - East Brandywine</u>						
Customer Charge						
Flat Rate	12		\$ 117.00	1,404	\$ 117.00	1,404
Total East Brandywine	<u>12</u>	<u>-</u>		<u>1,404</u>		<u>1,404</u>
<u>Bulk - Quarterly - Dennison</u>						
Customer Charge						
Flat Rate	399	-	\$ 87.00	\$ 34,713	\$ 100.00	\$ 39,900
Total Dennison	<u>399</u>	<u>-</u>		<u>\$ 34,713</u>		<u>\$ 39,900</u>
<u>Bulk - Quarterly - Upper Providence</u>						
Flat Rate						
April '17 to December '17	3	-	\$ 131,569.00	\$ 394,707	\$ 168,725.00	\$ 506,175
January '18 to March '18	1	-	\$ 132,723.00	132,723	\$ 168,725.00	168,725
	<u>4</u>	<u>-</u>		<u>527,430</u>		<u>674,900</u>
Total Upper Providence	<u>4</u>	<u>-</u>		<u>\$ 527,430</u>		<u>\$ 674,900</u>
<u>Bulk - Quarterly - Elwyn</u>						
Flat Rate						
April '17 to December '17	3	-	\$ 23,880.00	\$ 71,640	\$ 30,623.00	\$ 91,869
January '18 to March '18	1	-	\$ 24,089.00	24,089	\$ 30,623.00	30,623
	<u>4</u>	<u>-</u>		<u>95,729</u>		<u>122,492</u>
Total Elwyn	<u>4</u>	<u>-</u>		<u>\$ 95,729</u>		<u>\$ 122,492</u>
<u>Bulk - Quarterly - Foster Township</u>						
Customer Charge (EDUs)						
Hickory Hills Customers	4	338	\$ 87.00	\$ 117,624	\$ 100.00	\$ 135,200
AgMar Customers	4	106	87.00	36,888	100.00	42,400
Valley Gorge Customers	4	35	87.00	12,180	100.00	14,000
Route 940 Customers	4	10	87.00	3,480	100.00	4,000
Subtotal	<u>16</u>	<u>489</u>		<u>170,172</u>		<u>195,600</u>
Total Foster Township	<u>16</u>	<u>489</u>		<u>\$ 170,172</u>		<u>\$ 195,600</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
THIRD PARTY SALES  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Bulk - Quarterly - East Side</u>						
Customer Charge (EDUs)						
Flat Rate	367	-	\$ 115.00	\$ 42,205	\$ 115.00	\$ 42,205
Flat Rate	210	-	115.00	24,150	115.00	24,150
Availability	116	-	28.00	3,248	28.00	3,248
Availability	146	-	28.00	4,088	28.00	4,088
Subtotal	<u>839</u>	-		<u>73,691</u>		<u>73,691</u>
Total East Side	<u><u>839</u></u>	-		<u><u>\$ 73,691</u></u>		<u><u>\$ 73,691</u></u>
<u>Bulk - Monthly - Penn Lake</u>						
Customer Charge						
Flat Rate	<u>2,929</u>	-	\$ 29.00	\$ 84,941	\$ 61.40	\$ 179,841
Total Penn Lake	<u><u>2,929</u></u>	-		<u><u>\$ 84,941</u></u>		<u><u>\$ 179,841</u></u>
TOTAL BULK SALES				\$ 1,042,001		\$ 1,342,540

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
AVAILABILITY LOTS ADJUSTMENT  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>CS Water Division - Availability</u>						
Customer Charge Availability	(5,344)	-	\$ 6.00	\$ (32,064)	\$ -	\$ -
<u>Treasure Lake Residential - Availability</u>						
Customer Charge Availability	<u>(27,785)</u>	<u>-</u>	\$ 4.53	<u>\$ (125,866)</u>	\$ -	<u>\$ -</u>
Total	<u>(33,129)</u>	<u>-</u>		<u>\$ (157,930)</u>		<u>\$ -</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
AVON GROVE SCHOOL DISTRICT DIVISION ADJUSTMENT  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Commercial - Monthly</u>						
Flat Rate 6	5	-	\$ 6,625.00	<u>\$ 33,125</u>	\$ 8,281.30	<u>\$ 41,407</u>
TOTAL DIVISION	<u>5</u>	<u>-</u>		<u>\$ 33,125</u>		<u>\$ 41,407</u>

AQUA PENNSYLVANIA, INC.  
WASTEWATER  
TOBYHANNA DIVISION ADJUSTMENT  
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS  
FOR THE TWELVE MONTHS ENDED MARCH 31, 2018

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Quarterly</u>						
Customer Charge						
Fixed Charge	645	-	\$ 200.00	\$ 129,067	\$ 300.00	\$ 193,600
<u>Commercial - Quarterly</u>						
Customer Charge						
5/8	92	7,188	\$ 200.00	\$ 18,400	\$ 186.00	\$ 17,112
1	15	2,842	200.00	3,000	186.00	2,790
1 1/2	8	1,430	200.00	1,533	186.00	1,426
3	17	3,469	200.00	3,467	186.00	3,224
	<u>132</u>	<u>14,930</u>		<u>\$ 26,400</u>		<u>\$ 24,552</u>
1st block	-	7,732	1.0000	7,732	0.9500	21,528
<u>Commercial Unmetered - Quarterly</u>						
Customer Charge						
5/8	14	-	\$ 200.00	\$ 2,867	\$ 300.00	\$ 4,300
Total Commercial	<u>146</u>	<u>22,661</u>		<u>36,999</u>		<u>50,380</u>
TOTAL DIVISION	<u><u>792</u></u>	<u><u>22,661</u></u>		<u><u>\$ 166,066</u></u>		<u><u>\$ 243,980</u></u>

AQUA PENNSYLVANIA INC.  
INSIDE PINECREST DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
1,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
2,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
3,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
4,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
5,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
6,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
7,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
8,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
9,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
10,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
11,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
12,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
13,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
14,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
15,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
16,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
17,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
18,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
19,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
20,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
25,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
30,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
35,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
40,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
45,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
50,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
60,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
70,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
80,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
90,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
100,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
110,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
120,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
130,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
140,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
150,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
160,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
170,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%
180,000	\$ 44.05	\$ 68.40	\$ 24.35	55.29%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
WILLISTOWN WOODS DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 45.15	\$ 46.00	\$ 0.85	1.88%
1,000	\$ 48.30	\$ 54.50	\$ 6.20	12.84%
2,000	\$ 51.45	\$ 63.00	\$ 11.55	22.45%
3,000	\$ 54.60	\$ 71.50	\$ 16.90	30.95%
4,000	\$ 57.75	\$ 80.00	\$ 22.25	38.53%
5,000	\$ 60.90	\$ 88.50	\$ 27.60	45.32%
6,000	\$ 64.05	\$ 97.00	\$ 32.95	51.44%
7,000	\$ 67.20	\$ 105.50	\$ 38.30	56.99%
8,000	\$ 70.35	\$ 114.00	\$ 43.65	62.05%
9,000	\$ 73.50	\$ 122.50	\$ 49.00	66.67%
10,000	\$ 76.65	\$ 131.00	\$ 54.35	70.91%
11,000	\$ 79.80	\$ 139.50	\$ 59.70	74.81%
12,000	\$ 82.95	\$ 148.00	\$ 65.05	78.42%
13,000	\$ 86.10	\$ 156.50	\$ 70.40	81.77%
14,000	\$ 89.25	\$ 165.00	\$ 75.75	84.87%
15,000	\$ 92.40	\$ 173.50	\$ 81.10	87.77%
16,000	\$ 95.55	\$ 182.00	\$ 86.45	90.48%
17,000	\$ 98.70	\$ 190.50	\$ 91.80	93.01%
18,000	\$ 101.85	\$ 199.00	\$ 97.15	95.39%
19,000	\$ 105.00	\$ 207.50	\$ 102.50	97.62%
20,000	\$ 108.15	\$ 216.00	\$ 107.85	99.72%
25,000	\$ 123.90	\$ 258.50	\$ 134.60	108.64%
30,000	\$ 139.65	\$ 301.00	\$ 161.35	115.54%
35,000	\$ 155.40	\$ 343.50	\$ 188.10	121.04%
40,000	\$ 171.15	\$ 386.00	\$ 214.85	125.53%
45,000	\$ 186.90	\$ 428.50	\$ 241.60	129.27%
50,000	\$ 202.65	\$ 471.00	\$ 268.35	132.42%
60,000	\$ 234.15	\$ 556.00	\$ 321.85	137.45%
70,000	\$ 265.65	\$ 641.00	\$ 375.35	141.29%
80,000	\$ 297.15	\$ 726.00	\$ 428.85	144.32%
90,000	\$ 328.65	\$ 811.00	\$ 482.35	146.77%
100,000	\$ 360.15	\$ 896.00	\$ 535.85	148.79%
110,000	\$ 391.65	\$ 981.00	\$ 589.35	150.48%
120,000	\$ 423.15	\$ 1,066.00	\$ 642.85	151.92%
130,000	\$ 454.65	\$ 1,151.00	\$ 696.35	153.16%
140,000	\$ 486.15	\$ 1,236.00	\$ 749.85	154.24%
150,000	\$ 517.65	\$ 1,321.00	\$ 803.35	155.19%
160,000	\$ 549.15	\$ 1,406.00	\$ 856.85	156.03%
170,000	\$ 580.65	\$ 1,491.00	\$ 910.35	156.78%
180,000	\$ 612.15	\$ 1,576.00	\$ 963.85	157.45%

\*\* Present rates include 5.00% DSIC.



AQUA PENNSYLVANIA INC.  
LINKS AT GETTYSBURG DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 46.20	\$ 62.00	\$ 15.80	34.20%
1,000	\$ 52.64	\$ 71.50	\$ 18.86	35.84%
2,000	\$ 59.07	\$ 81.00	\$ 21.93	37.12%
3,000	\$ 65.51	\$ 90.50	\$ 24.99	38.15%
4,000	\$ 71.95	\$ 100.00	\$ 28.05	38.99%
5,000	\$ 78.38	\$ 109.50	\$ 31.12	39.70%
6,000	\$ 84.82	\$ 119.00	\$ 34.18	40.30%
7,000	\$ 91.26	\$ 128.50	\$ 37.24	40.81%
8,000	\$ 97.69	\$ 138.00	\$ 40.31	41.26%
9,000	\$ 104.13	\$ 147.50	\$ 43.37	41.65%
10,000	\$ 110.57	\$ 157.00	\$ 46.44	42.00%
11,000	\$ 117.00	\$ 166.50	\$ 49.50	42.31%
12,000	\$ 123.44	\$ 176.00	\$ 52.56	42.58%
13,000	\$ 129.87	\$ 185.50	\$ 55.63	42.83%
14,000	\$ 136.31	\$ 195.00	\$ 58.69	43.06%
15,000	\$ 142.75	\$ 204.50	\$ 61.75	43.26%
16,000	\$ 149.18	\$ 214.00	\$ 64.82	43.45%
17,000	\$ 155.62	\$ 223.50	\$ 67.88	43.62%
18,000	\$ 162.06	\$ 233.00	\$ 70.94	43.78%
19,000	\$ 168.49	\$ 242.50	\$ 74.01	43.92%
20,000	\$ 174.93	\$ 252.00	\$ 77.07	44.06%
25,000	\$ 207.11	\$ 299.50	\$ 92.39	44.61%
30,000	\$ 239.30	\$ 347.00	\$ 107.71	45.01%
35,000	\$ 271.48	\$ 394.50	\$ 123.02	45.32%
40,000	\$ 303.66	\$ 442.00	\$ 138.34	45.56%
45,000	\$ 335.84	\$ 489.50	\$ 153.66	45.75%
50,000	\$ 368.03	\$ 537.00	\$ 168.98	45.91%
60,000	\$ 432.39	\$ 632.00	\$ 199.61	46.16%
70,000	\$ 496.76	\$ 727.00	\$ 230.25	46.35%
80,000	\$ 561.12	\$ 822.00	\$ 260.88	46.49%
90,000	\$ 625.49	\$ 917.00	\$ 291.52	46.61%
100,000	\$ 689.85	\$ 1,012.00	\$ 322.15	46.70%
110,000	\$ 754.22	\$ 1,107.00	\$ 352.79	46.78%
120,000	\$ 818.58	\$ 1,202.00	\$ 383.42	46.84%
130,000	\$ 882.95	\$ 1,297.00	\$ 414.06	46.89%
140,000	\$ 947.31	\$ 1,392.00	\$ 444.69	46.94%
150,000	\$ 1,011.68	\$ 1,487.00	\$ 475.33	46.98%
160,000	\$ 1,076.04	\$ 1,582.00	\$ 505.96	47.02%
170,000	\$ 1,140.41	\$ 1,677.00	\$ 536.60	47.05%
180,000	\$ 1,204.77	\$ 1,772.00	\$ 567.23	47.08%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
EAST BRADFORD DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 63.00	\$ 74.00	\$ 11.00	17.46%
1,000	\$ 71.04	\$ 83.60	\$ 12.56	17.68%
2,000	\$ 79.09	\$ 93.20	\$ 14.11	17.85%
3,000	\$ 87.13	\$ 102.80	\$ 15.67	17.99%
4,000	\$ 95.17	\$ 112.40	\$ 17.23	18.10%
5,000	\$ 103.22	\$ 122.00	\$ 18.79	18.20%
6,000	\$ 111.26	\$ 131.60	\$ 20.34	18.28%
7,000	\$ 119.30	\$ 141.20	\$ 21.90	18.36%
8,000	\$ 127.34	\$ 150.80	\$ 23.46	18.42%
9,000	\$ 135.39	\$ 160.40	\$ 25.01	18.48%
10,000	\$ 143.43	\$ 170.00	\$ 26.57	18.52%
11,000	\$ 151.47	\$ 179.60	\$ 28.13	18.57%
12,000	\$ 159.52	\$ 189.20	\$ 29.68	18.61%
13,000	\$ 167.56	\$ 198.80	\$ 31.24	18.64%
14,000	\$ 175.60	\$ 208.40	\$ 32.80	18.68%
15,000	\$ 183.65	\$ 218.00	\$ 34.36	18.71%
16,000	\$ 191.69	\$ 227.60	\$ 35.91	18.73%
17,000	\$ 199.73	\$ 237.20	\$ 37.47	18.76%
18,000	\$ 207.77	\$ 246.80	\$ 39.03	18.78%
19,000	\$ 215.82	\$ 256.40	\$ 40.58	18.80%
20,000	\$ 223.86	\$ 266.00	\$ 42.14	18.82%
25,000	\$ 264.08	\$ 314.00	\$ 49.93	18.91%
30,000	\$ 304.29	\$ 362.00	\$ 57.71	18.97%
35,000	\$ 344.51	\$ 410.00	\$ 65.50	19.01%
40,000	\$ 384.72	\$ 458.00	\$ 73.28	19.05%
45,000	\$ 424.94	\$ 506.00	\$ 81.07	19.08%
50,000	\$ 465.15	\$ 554.00	\$ 88.85	19.10%
60,000	\$ 545.58	\$ 650.00	\$ 104.42	19.14%
70,000	\$ 626.01	\$ 746.00	\$ 119.99	19.17%
80,000	\$ 706.44	\$ 842.00	\$ 135.56	19.19%
90,000	\$ 786.87	\$ 938.00	\$ 151.13	19.21%
100,000	\$ 867.30	\$ 1,034.00	\$ 166.70	19.22%
110,000	\$ 947.73	\$ 1,130.00	\$ 182.27	19.23%
120,000	\$ 1,028.16	\$ 1,226.00	\$ 197.84	19.24%
130,000	\$ 1,108.59	\$ 1,322.00	\$ 213.41	19.25%
140,000	\$ 1,189.02	\$ 1,418.00	\$ 228.98	19.26%
150,000	\$ 1,269.45	\$ 1,514.00	\$ 244.55	19.26%
160,000	\$ 1,349.88	\$ 1,610.00	\$ 260.12	19.27%
170,000	\$ 1,430.31	\$ 1,706.00	\$ 275.69	19.27%
180,000	\$ 1,510.74	\$ 1,802.00	\$ 291.26	19.28%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
TWIN HILLS DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 56.70	\$ 62.00	\$ 5.30	9.35%
1,000	\$ 59.90	\$ 71.50	\$ 11.60	19.36%
2,000	\$ 63.11	\$ 81.00	\$ 17.90	28.36%
3,000	\$ 66.31	\$ 90.50	\$ 24.19	36.49%
4,000	\$ 69.51	\$ 100.00	\$ 30.49	43.86%
5,000	\$ 72.71	\$ 109.50	\$ 36.79	50.59%
6,000	\$ 75.92	\$ 119.00	\$ 43.09	56.75%
7,000	\$ 79.12	\$ 128.50	\$ 49.38	62.42%
8,000	\$ 82.32	\$ 138.00	\$ 55.68	67.64%
9,000	\$ 85.52	\$ 147.50	\$ 61.98	72.47%
10,000	\$ 88.73	\$ 157.00	\$ 68.28	76.95%
11,000	\$ 91.93	\$ 166.50	\$ 74.57	81.12%
12,000	\$ 95.13	\$ 176.00	\$ 80.87	85.01%
13,000	\$ 98.33	\$ 185.50	\$ 87.17	88.65%
14,000	\$ 101.54	\$ 195.00	\$ 93.47	92.05%
15,000	\$ 104.74	\$ 204.50	\$ 99.76	95.25%
16,000	\$ 107.94	\$ 214.00	\$ 106.06	98.26%
17,000	\$ 111.14	\$ 223.50	\$ 112.36	101.09%
18,000	\$ 114.35	\$ 233.00	\$ 118.66	103.77%
19,000	\$ 117.55	\$ 242.50	\$ 124.95	106.30%
20,000	\$ 120.75	\$ 252.00	\$ 131.25	108.70%
25,000	\$ 136.76	\$ 299.50	\$ 162.74	118.99%
30,000	\$ 152.78	\$ 347.00	\$ 194.23	127.13%
35,000	\$ 168.79	\$ 394.50	\$ 225.71	133.73%
40,000	\$ 184.80	\$ 442.00	\$ 257.20	139.18%
45,000	\$ 200.81	\$ 489.50	\$ 288.69	143.76%
50,000	\$ 216.83	\$ 537.00	\$ 320.18	147.67%
60,000	\$ 248.85	\$ 632.00	\$ 383.15	153.97%
70,000	\$ 280.88	\$ 727.00	\$ 446.13	158.83%
80,000	\$ 312.90	\$ 822.00	\$ 509.10	162.70%
90,000	\$ 344.93	\$ 917.00	\$ 572.08	165.85%
100,000	\$ 376.95	\$ 1,012.00	\$ 635.05	168.47%
110,000	\$ 408.98	\$ 1,107.00	\$ 698.03	170.68%
120,000	\$ 441.00	\$ 1,202.00	\$ 761.00	172.56%
130,000	\$ 473.03	\$ 1,297.00	\$ 823.98	174.19%
140,000	\$ 505.05	\$ 1,392.00	\$ 886.95	175.62%
150,000	\$ 537.08	\$ 1,487.00	\$ 949.93	176.87%
160,000	\$ 569.10	\$ 1,582.00	\$ 1,012.90	177.98%
170,000	\$ 601.13	\$ 1,677.00	\$ 1,075.88	178.98%
180,000	\$ 633.15	\$ 1,772.00	\$ 1,138.85	179.87%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
PLUMSTOCK DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 63.00	\$ 74.00	\$ 11.00	17.46%
1,000	\$ 71.31	\$ 83.60	\$ 12.29	17.24%
2,000	\$ 79.61	\$ 93.20	\$ 13.59	17.07%
3,000	\$ 87.92	\$ 102.80	\$ 14.88	16.93%
4,000	\$ 96.22	\$ 112.40	\$ 16.18	16.81%
5,000	\$ 104.53	\$ 122.00	\$ 17.47	16.72%
6,000	\$ 112.83	\$ 131.60	\$ 18.77	16.63%
7,000	\$ 121.14	\$ 141.20	\$ 20.06	16.56%
8,000	\$ 129.44	\$ 150.80	\$ 21.36	16.50%
9,000	\$ 137.75	\$ 160.40	\$ 22.65	16.44%
10,000	\$ 146.06	\$ 170.00	\$ 23.95	16.39%
11,000	\$ 154.36	\$ 179.60	\$ 25.24	16.35%
12,000	\$ 162.67	\$ 189.20	\$ 26.53	16.31%
13,000	\$ 170.97	\$ 198.80	\$ 27.83	16.28%
14,000	\$ 179.28	\$ 208.40	\$ 29.12	16.24%
15,000	\$ 187.58	\$ 218.00	\$ 30.42	16.22%
16,000	\$ 195.89	\$ 227.60	\$ 31.71	16.19%
17,000	\$ 204.19	\$ 237.20	\$ 33.01	16.16%
18,000	\$ 212.50	\$ 246.80	\$ 34.30	16.14%
19,000	\$ 220.80	\$ 256.40	\$ 35.60	16.12%
20,000	\$ 229.11	\$ 266.00	\$ 36.89	16.10%
25,000	\$ 270.64	\$ 314.00	\$ 43.36	16.02%
30,000	\$ 312.17	\$ 362.00	\$ 49.84	15.96%
35,000	\$ 353.69	\$ 410.00	\$ 56.31	15.92%
40,000	\$ 395.22	\$ 458.00	\$ 62.78	15.88%
45,000	\$ 436.75	\$ 506.00	\$ 69.25	15.86%
50,000	\$ 478.28	\$ 554.00	\$ 75.73	15.83%
60,000	\$ 561.33	\$ 650.00	\$ 88.67	15.80%
70,000	\$ 644.39	\$ 746.00	\$ 101.62	15.77%
80,000	\$ 727.44	\$ 842.00	\$ 114.56	15.75%
90,000	\$ 810.50	\$ 938.00	\$ 127.51	15.73%
100,000	\$ 893.55	\$ 1,034.00	\$ 140.45	15.72%
110,000	\$ 976.61	\$ 1,130.00	\$ 153.40	15.71%
120,000	\$ 1,059.66	\$ 1,226.00	\$ 166.34	15.70%
130,000	\$ 1,142.72	\$ 1,322.00	\$ 179.29	15.69%
140,000	\$ 1,225.77	\$ 1,418.00	\$ 192.23	15.68%
150,000	\$ 1,308.83	\$ 1,514.00	\$ 205.18	15.68%
160,000	\$ 1,391.88	\$ 1,610.00	\$ 218.12	15.67%
170,000	\$ 1,474.94	\$ 1,706.00	\$ 231.07	15.67%
180,000	\$ 1,557.99	\$ 1,802.00	\$ 244.01	15.66%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
MEDIA DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 16.75	\$ 31.00	\$ 14.25	85.10%
1,000	\$ 22.81	\$ 38.60	\$ 15.79	69.25%
2,000	\$ 28.86	\$ 46.20	\$ 17.34	60.06%
3,000	\$ 34.92	\$ 53.80	\$ 18.88	54.05%
4,000	\$ 40.98	\$ 61.40	\$ 20.42	49.82%
5,000	\$ 47.04	\$ 69.00	\$ 21.96	46.68%
6,000	\$ 53.10	\$ 76.60	\$ 23.50	44.26%
7,000	\$ 59.16	\$ 84.20	\$ 25.04	42.33%
8,000	\$ 65.22	\$ 91.80	\$ 26.58	40.76%
9,000	\$ 71.27	\$ 99.40	\$ 28.13	39.46%
10,000	\$ 77.33	\$ 107.00	\$ 29.67	38.36%
11,000	\$ 83.39	\$ 114.60	\$ 31.21	37.42%
12,000	\$ 89.45	\$ 122.20	\$ 32.75	36.61%
13,000	\$ 95.51	\$ 129.80	\$ 34.29	35.90%
14,000	\$ 101.57	\$ 137.40	\$ 35.83	35.28%
15,000	\$ 107.63	\$ 145.00	\$ 37.38	34.73%
16,000	\$ 113.68	\$ 152.60	\$ 38.92	34.23%
17,000	\$ 119.74	\$ 160.20	\$ 40.46	33.79%
18,000	\$ 125.80	\$ 167.80	\$ 42.00	33.39%
19,000	\$ 131.86	\$ 175.40	\$ 43.54	33.02%
20,000	\$ 137.92	\$ 183.00	\$ 45.08	32.69%
25,000	\$ 168.21	\$ 221.00	\$ 52.79	31.38%
30,000	\$ 198.50	\$ 259.00	\$ 60.50	30.48%
35,000	\$ 228.80	\$ 297.00	\$ 68.21	29.81%
40,000	\$ 259.09	\$ 335.00	\$ 75.91	29.30%
45,000	\$ 289.38	\$ 373.00	\$ 83.62	28.90%
50,000	\$ 319.67	\$ 411.00	\$ 91.33	28.57%
60,000	\$ 380.26	\$ 487.00	\$ 106.74	28.07%
70,000	\$ 440.84	\$ 563.00	\$ 122.16	27.71%
80,000	\$ 501.43	\$ 639.00	\$ 137.57	27.44%
90,000	\$ 562.01	\$ 715.00	\$ 152.99	27.22%
100,000	\$ 622.60	\$ 791.00	\$ 168.40	27.05%
110,000	\$ 683.18	\$ 867.00	\$ 183.82	26.91%
120,000	\$ 743.77	\$ 943.00	\$ 199.23	26.79%
130,000	\$ 804.35	\$ 1,019.00	\$ 214.65	26.69%
140,000	\$ 864.94	\$ 1,095.00	\$ 230.06	26.60%
150,000	\$ 925.52	\$ 1,171.00	\$ 245.48	26.52%
160,000	\$ 986.11	\$ 1,247.00	\$ 260.89	26.46%
170,000	\$ 1,046.69	\$ 1,323.00	\$ 276.31	26.40%
180,000	\$ 1,107.28	\$ 1,399.00	\$ 291.72	26.35%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
WHITE HAVEN DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 43.42	\$ 46.00	\$ 2.58	5.95%
1,000	\$ 44.68	\$ 54.50	\$ 9.82	21.99%
2,000	\$ 45.94	\$ 63.00	\$ 17.06	37.14%
3,000	\$ 47.20	\$ 71.50	\$ 24.30	51.49%
4,000	\$ 48.46	\$ 80.00	\$ 31.54	65.09%
5,000	\$ 49.72	\$ 88.50	\$ 38.78	78.01%
6,000	\$ 50.98	\$ 97.00	\$ 46.02	90.28%
7,000	\$ 52.24	\$ 105.50	\$ 53.26	101.96%
8,000	\$ 53.50	\$ 114.00	\$ 60.50	113.09%
9,000	\$ 54.76	\$ 122.50	\$ 67.74	123.71%
10,000	\$ 56.02	\$ 131.00	\$ 74.98	133.86%
11,000	\$ 57.28	\$ 139.50	\$ 82.22	143.55%
12,000	\$ 58.54	\$ 148.00	\$ 89.46	152.83%
13,000	\$ 59.80	\$ 156.50	\$ 96.70	161.72%
14,000	\$ 61.06	\$ 165.00	\$ 103.94	170.24%
15,000	\$ 62.32	\$ 173.50	\$ 111.18	178.41%
16,000	\$ 63.58	\$ 182.00	\$ 118.42	186.26%
17,000	\$ 64.84	\$ 190.50	\$ 125.66	193.81%
18,000	\$ 66.10	\$ 199.00	\$ 132.90	201.07%
19,000	\$ 67.36	\$ 207.50	\$ 140.14	208.06%
20,000	\$ 68.62	\$ 216.00	\$ 147.38	214.79%
25,000	\$ 74.92	\$ 258.50	\$ 183.58	245.05%
30,000	\$ 81.22	\$ 301.00	\$ 219.78	270.61%
35,000	\$ 87.52	\$ 343.50	\$ 255.98	292.49%
40,000	\$ 93.82	\$ 386.00	\$ 292.18	311.44%
45,000	\$ 100.12	\$ 428.50	\$ 328.38	328.00%
50,000	\$ 106.42	\$ 471.00	\$ 364.58	342.60%
60,000	\$ 119.02	\$ 556.00	\$ 436.98	367.16%
70,000	\$ 131.62	\$ 641.00	\$ 509.38	387.02%
80,000	\$ 144.22	\$ 726.00	\$ 581.78	403.41%
90,000	\$ 156.82	\$ 811.00	\$ 654.18	417.16%
100,000	\$ 169.42	\$ 896.00	\$ 726.58	428.87%
110,000	\$ 182.02	\$ 981.00	\$ 798.98	438.96%
120,000	\$ 194.62	\$ 1,066.00	\$ 871.38	447.74%
130,000	\$ 207.22	\$ 1,151.00	\$ 943.78	455.46%
140,000	\$ 219.82	\$ 1,236.00	\$ 1,016.18	462.28%
150,000	\$ 232.42	\$ 1,321.00	\$ 1,088.58	468.37%
160,000	\$ 245.02	\$ 1,406.00	\$ 1,160.98	473.84%
170,000	\$ 257.62	\$ 1,491.00	\$ 1,233.38	478.77%
180,000	\$ 270.22	\$ 1,576.00	\$ 1,305.78	483.23%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
WHITE HAVEN DIVISION - KIDDER TOWNSHIP  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 65.63	\$ 46.00	\$ (19.63)	-29.90%
1,000	\$ 66.89	\$ 54.50	\$ (12.39)	-18.52%
2,000	\$ 68.15	\$ 63.00	\$ (5.15)	-7.55%
3,000	\$ 69.41	\$ 71.50	\$ 2.10	3.02%
4,000	\$ 70.67	\$ 80.00	\$ 9.34	13.21%
5,000	\$ 71.93	\$ 88.50	\$ 16.58	23.04%
6,000	\$ 73.19	\$ 97.00	\$ 23.82	32.54%
7,000	\$ 74.45	\$ 105.50	\$ 31.06	41.72%
8,000	\$ 75.71	\$ 114.00	\$ 38.30	50.58%
9,000	\$ 76.97	\$ 122.50	\$ 45.54	59.16%
10,000	\$ 78.23	\$ 131.00	\$ 52.78	67.47%
11,000	\$ 79.49	\$ 139.50	\$ 60.02	75.50%
12,000	\$ 80.75	\$ 148.00	\$ 67.26	83.29%
13,000	\$ 82.01	\$ 156.50	\$ 74.50	90.84%
14,000	\$ 83.27	\$ 165.00	\$ 81.74	98.16%
15,000	\$ 84.53	\$ 173.50	\$ 88.98	105.26%
16,000	\$ 85.79	\$ 182.00	\$ 96.22	112.16%
17,000	\$ 87.05	\$ 190.50	\$ 103.46	118.85%
18,000	\$ 88.31	\$ 199.00	\$ 110.70	125.36%
19,000	\$ 89.57	\$ 207.50	\$ 117.94	131.68%
20,000	\$ 90.83	\$ 216.00	\$ 125.18	137.82%
25,000	\$ 97.13	\$ 258.50	\$ 161.38	166.15%
30,000	\$ 103.43	\$ 301.00	\$ 197.58	191.03%
35,000	\$ 109.73	\$ 343.50	\$ 233.78	213.06%
40,000	\$ 116.03	\$ 386.00	\$ 269.98	232.69%
45,000	\$ 122.33	\$ 428.50	\$ 306.18	250.30%
50,000	\$ 128.63	\$ 471.00	\$ 342.38	266.18%
60,000	\$ 141.23	\$ 556.00	\$ 414.78	293.70%
70,000	\$ 153.83	\$ 641.00	\$ 487.18	316.71%
80,000	\$ 166.43	\$ 726.00	\$ 559.58	336.23%
90,000	\$ 179.03	\$ 811.00	\$ 631.98	353.01%
100,000	\$ 191.63	\$ 896.00	\$ 704.38	367.58%
110,000	\$ 204.23	\$ 981.00	\$ 776.78	380.35%
120,000	\$ 216.83	\$ 1,066.00	\$ 849.18	391.64%
130,000	\$ 229.43	\$ 1,151.00	\$ 921.58	401.69%
140,000	\$ 242.03	\$ 1,236.00	\$ 993.98	410.69%
150,000	\$ 254.63	\$ 1,321.00	\$ 1,066.38	418.80%
160,000	\$ 267.23	\$ 1,406.00	\$ 1,138.78	426.15%
170,000	\$ 279.83	\$ 1,491.00	\$ 1,211.18	432.83%
180,000	\$ 292.43	\$ 1,576.00	\$ 1,283.58	438.94%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
BRIDLEWOOD DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 37.80	\$ 36.00	\$ (1.80)	-4.76%
1,000	\$ 39.40	\$ 44.10	\$ 4.70	11.94%
2,000	\$ 40.99	\$ 52.20	\$ 11.21	27.34%
3,000	\$ 42.59	\$ 60.30	\$ 17.71	41.59%
4,000	\$ 44.18	\$ 68.40	\$ 24.22	54.81%
5,000	\$ 45.78	\$ 76.50	\$ 30.72	67.10%
6,000	\$ 47.38	\$ 84.60	\$ 37.22	78.57%
7,000	\$ 48.97	\$ 92.70	\$ 43.73	89.29%
8,000	\$ 50.57	\$ 100.80	\$ 50.23	99.34%
9,000	\$ 52.16	\$ 108.90	\$ 56.74	108.76%
10,000	\$ 53.76	\$ 117.00	\$ 63.24	117.63%
11,000	\$ 55.36	\$ 125.10	\$ 69.74	125.99%
12,000	\$ 56.95	\$ 133.20	\$ 76.25	133.88%
13,000	\$ 58.55	\$ 141.30	\$ 82.75	141.34%
14,000	\$ 60.14	\$ 149.40	\$ 89.26	148.40%
15,000	\$ 61.74	\$ 157.50	\$ 95.76	155.10%
16,000	\$ 63.34	\$ 165.60	\$ 102.26	161.46%
17,000	\$ 64.93	\$ 173.70	\$ 108.77	167.51%
18,000	\$ 66.53	\$ 181.80	\$ 115.27	173.27%
19,000	\$ 68.12	\$ 189.90	\$ 121.78	178.76%
20,000	\$ 69.72	\$ 198.00	\$ 128.28	183.99%
25,000	\$ 77.70	\$ 238.50	\$ 160.80	206.95%
30,000	\$ 85.68	\$ 279.00	\$ 193.32	225.63%
35,000	\$ 93.66	\$ 319.50	\$ 225.84	241.13%
40,000	\$ 101.64	\$ 360.00	\$ 258.36	254.19%
45,000	\$ 109.62	\$ 400.50	\$ 290.88	265.35%
50,000	\$ 117.60	\$ 441.00	\$ 323.40	275.00%
60,000	\$ 133.56	\$ 522.00	\$ 388.44	290.84%
70,000	\$ 149.52	\$ 603.00	\$ 453.48	303.29%
80,000	\$ 165.48	\$ 684.00	\$ 518.52	313.34%
90,000	\$ 181.44	\$ 765.00	\$ 583.56	321.63%
100,000	\$ 197.40	\$ 846.00	\$ 648.60	328.57%
110,000	\$ 213.36	\$ 927.00	\$ 713.64	334.48%
120,000	\$ 229.32	\$ 1,008.00	\$ 778.68	339.56%
130,000	\$ 245.28	\$ 1,089.00	\$ 843.72	343.98%
140,000	\$ 261.24	\$ 1,170.00	\$ 908.76	347.86%
150,000	\$ 277.20	\$ 1,251.00	\$ 973.80	351.30%
160,000	\$ 293.16	\$ 1,332.00	\$ 1,038.84	354.36%
170,000	\$ 309.12	\$ 1,413.00	\$ 1,103.88	357.10%
180,000	\$ 325.08	\$ 1,494.00	\$ 1,168.92	359.58%

\*\* Present rates include 5.00% DSIC.



AQUA PENNSYLVANIA INC.  
EAGLE ROCK DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 37.28	\$ 36.00	\$ (1.28)	-3.42%
1,000	\$ 38.54	\$ 44.10	\$ 5.57	14.44%
2,000	\$ 39.80	\$ 52.20	\$ 12.41	31.17%
3,000	\$ 41.06	\$ 60.30	\$ 19.25	46.88%
4,000	\$ 42.32	\$ 68.40	\$ 26.09	61.64%
5,000	\$ 43.58	\$ 76.50	\$ 32.93	75.56%
6,000	\$ 44.84	\$ 84.60	\$ 39.77	88.69%
7,000	\$ 46.10	\$ 92.70	\$ 46.61	101.11%
8,000	\$ 47.36	\$ 100.80	\$ 53.45	112.86%
9,000	\$ 48.62	\$ 108.90	\$ 60.29	124.00%
10,000	\$ 49.88	\$ 117.00	\$ 67.13	134.59%
11,000	\$ 51.14	\$ 125.10	\$ 73.97	144.65%
12,000	\$ 52.40	\$ 133.20	\$ 80.81	154.22%
13,000	\$ 53.66	\$ 141.30	\$ 87.65	163.35%
14,000	\$ 54.92	\$ 149.40	\$ 94.49	172.06%
15,000	\$ 56.18	\$ 157.50	\$ 101.33	180.37%
16,000	\$ 57.44	\$ 165.60	\$ 108.17	188.33%
17,000	\$ 58.70	\$ 173.70	\$ 115.01	195.94%
18,000	\$ 59.96	\$ 181.80	\$ 121.85	203.23%
19,000	\$ 61.22	\$ 189.90	\$ 128.69	210.22%
20,000	\$ 62.48	\$ 198.00	\$ 135.53	216.93%
25,000	\$ 68.78	\$ 238.50	\$ 169.73	246.78%
30,000	\$ 75.08	\$ 279.00	\$ 203.93	271.63%
35,000	\$ 81.38	\$ 319.50	\$ 238.13	292.63%
40,000	\$ 87.68	\$ 360.00	\$ 272.33	310.61%
45,000	\$ 93.98	\$ 400.50	\$ 306.53	326.18%
50,000	\$ 100.28	\$ 441.00	\$ 340.73	339.79%
60,000	\$ 112.88	\$ 522.00	\$ 409.13	362.46%
70,000	\$ 125.48	\$ 603.00	\$ 477.53	380.57%
80,000	\$ 138.08	\$ 684.00	\$ 545.93	395.38%
90,000	\$ 150.68	\$ 765.00	\$ 614.33	407.72%
100,000	\$ 163.28	\$ 846.00	\$ 682.73	418.14%
110,000	\$ 175.88	\$ 927.00	\$ 751.13	427.08%
120,000	\$ 188.48	\$ 1,008.00	\$ 819.53	434.82%
130,000	\$ 201.08	\$ 1,089.00	\$ 887.93	441.59%
140,000	\$ 213.68	\$ 1,170.00	\$ 956.33	447.56%
150,000	\$ 226.28	\$ 1,251.00	\$ 1,024.73	452.87%
160,000	\$ 238.88	\$ 1,332.00	\$ 1,093.13	457.61%
170,000	\$ 251.48	\$ 1,413.00	\$ 1,161.53	461.88%
180,000	\$ 264.08	\$ 1,494.00	\$ 1,229.93	465.75%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
THORNHURST DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 49.09	\$ 46.00	\$ (3.09)	-6.29%
1,000	\$ 50.35	\$ 54.50	\$ 4.15	8.25%
2,000	\$ 51.61	\$ 63.00	\$ 11.39	22.08%
3,000	\$ 52.87	\$ 71.50	\$ 18.63	35.24%
4,000	\$ 54.13	\$ 80.00	\$ 25.87	47.80%
5,000	\$ 55.39	\$ 88.50	\$ 33.11	59.78%
6,000	\$ 56.65	\$ 97.00	\$ 40.35	71.23%
7,000	\$ 57.91	\$ 105.50	\$ 47.59	82.19%
8,000	\$ 59.17	\$ 114.00	\$ 54.83	92.67%
9,000	\$ 60.43	\$ 122.50	\$ 62.07	102.72%
10,000	\$ 61.69	\$ 131.00	\$ 69.31	112.36%
11,000	\$ 62.95	\$ 139.50	\$ 76.55	121.61%
12,000	\$ 64.21	\$ 148.00	\$ 83.79	130.50%
13,000	\$ 65.47	\$ 156.50	\$ 91.03	139.05%
14,000	\$ 66.73	\$ 165.00	\$ 98.27	147.27%
15,000	\$ 67.99	\$ 173.50	\$ 105.51	155.19%
16,000	\$ 69.25	\$ 182.00	\$ 112.75	162.83%
17,000	\$ 70.51	\$ 190.50	\$ 119.99	170.18%
18,000	\$ 71.77	\$ 199.00	\$ 127.23	177.28%
19,000	\$ 73.03	\$ 207.50	\$ 134.47	184.14%
20,000	\$ 74.29	\$ 216.00	\$ 141.71	190.76%
25,000	\$ 80.59	\$ 258.50	\$ 177.91	220.77%
30,000	\$ 86.89	\$ 301.00	\$ 214.11	246.42%
35,000	\$ 93.19	\$ 343.50	\$ 250.31	268.61%
40,000	\$ 99.49	\$ 386.00	\$ 286.51	287.99%
45,000	\$ 105.79	\$ 428.50	\$ 322.71	305.06%
50,000	\$ 112.09	\$ 471.00	\$ 358.91	320.21%
60,000	\$ 124.69	\$ 556.00	\$ 431.31	345.91%
70,000	\$ 137.29	\$ 641.00	\$ 503.71	366.90%
80,000	\$ 149.89	\$ 726.00	\$ 576.11	384.36%
90,000	\$ 162.49	\$ 811.00	\$ 648.51	399.12%
100,000	\$ 175.09	\$ 896.00	\$ 720.91	411.74%
110,000	\$ 187.69	\$ 981.00	\$ 793.31	422.68%
120,000	\$ 200.29	\$ 1,066.00	\$ 865.71	432.23%
130,000	\$ 212.89	\$ 1,151.00	\$ 938.11	440.66%
140,000	\$ 225.49	\$ 1,236.00	\$ 1,010.51	448.15%
150,000	\$ 238.09	\$ 1,321.00	\$ 1,082.91	454.84%
160,000	\$ 250.69	\$ 1,406.00	\$ 1,155.31	460.86%
170,000	\$ 263.29	\$ 1,491.00	\$ 1,227.71	466.30%
180,000	\$ 275.89	\$ 1,576.00	\$ 1,300.11	471.25%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
RIVERCREST, COVE VILLAGE AND WASHINGTON PARK DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 28.35	\$ 46.00	\$ 17.65	62.26%
1,000	\$ 33.62	\$ 54.50	\$ 20.88	62.10%
2,000	\$ 38.89	\$ 63.00	\$ 24.11	61.99%
3,000	\$ 44.16	\$ 71.50	\$ 27.34	61.90%
4,000	\$ 49.43	\$ 80.00	\$ 30.57	61.83%
5,000	\$ 54.71	\$ 88.50	\$ 33.80	61.78%
6,000	\$ 59.98	\$ 97.00	\$ 37.02	61.73%
7,000	\$ 65.25	\$ 105.50	\$ 40.25	61.69%
8,000	\$ 70.52	\$ 114.00	\$ 43.48	61.66%
9,000	\$ 75.79	\$ 122.50	\$ 46.71	61.63%
10,000	\$ 81.06	\$ 131.00	\$ 49.94	61.61%
11,000	\$ 86.33	\$ 139.50	\$ 53.17	61.59%
12,000	\$ 91.60	\$ 148.00	\$ 56.40	61.57%
13,000	\$ 96.87	\$ 156.50	\$ 59.63	61.55%
14,000	\$ 102.14	\$ 165.00	\$ 62.86	61.54%
15,000	\$ 107.42	\$ 173.50	\$ 66.09	61.52%
16,000	\$ 112.69	\$ 182.00	\$ 69.31	61.51%
17,000	\$ 117.96	\$ 190.50	\$ 72.54	61.50%
18,000	\$ 123.23	\$ 199.00	\$ 75.77	61.49%
19,000	\$ 128.50	\$ 207.50	\$ 79.00	61.48%
20,000	\$ 133.77	\$ 216.00	\$ 82.23	61.47%
25,000	\$ 160.13	\$ 258.50	\$ 98.38	61.44%
30,000	\$ 186.48	\$ 301.00	\$ 114.52	61.41%
35,000	\$ 212.84	\$ 343.50	\$ 130.67	61.39%
40,000	\$ 239.19	\$ 386.00	\$ 146.81	61.38%
45,000	\$ 265.55	\$ 428.50	\$ 162.96	61.37%
50,000	\$ 291.90	\$ 471.00	\$ 179.10	61.36%
60,000	\$ 344.61	\$ 556.00	\$ 211.39	61.34%
70,000	\$ 397.32	\$ 641.00	\$ 243.68	61.33%
80,000	\$ 450.03	\$ 726.00	\$ 275.97	61.32%
90,000	\$ 502.74	\$ 811.00	\$ 308.26	61.32%
100,000	\$ 555.45	\$ 896.00	\$ 340.55	61.31%
110,000	\$ 608.16	\$ 981.00	\$ 372.84	61.31%
120,000	\$ 660.87	\$ 1,066.00	\$ 405.13	61.30%
130,000	\$ 713.58	\$ 1,151.00	\$ 437.42	61.30%
140,000	\$ 766.29	\$ 1,236.00	\$ 469.71	61.30%
150,000	\$ 819.00	\$ 1,321.00	\$ 502.00	61.29%
160,000	\$ 871.71	\$ 1,406.00	\$ 534.29	61.29%
170,000	\$ 924.42	\$ 1,491.00	\$ 566.58	61.29%
180,000	\$ 977.13	\$ 1,576.00	\$ 598.87	61.29%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
LITTLE WASHINGTON DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 77.70	\$ 74.00	\$ (3.70)	-4.76%
1,000	\$ 83.69	\$ 83.60	\$ (0.09)	-0.10%
2,000	\$ 89.67	\$ 93.20	\$ 3.53	3.94%
3,000	\$ 95.66	\$ 102.80	\$ 7.15	7.47%
4,000	\$ 101.64	\$ 112.40	\$ 10.76	10.59%
5,000	\$ 107.63	\$ 122.00	\$ 14.38	13.36%
6,000	\$ 113.61	\$ 131.60	\$ 17.99	15.83%
7,000	\$ 119.60	\$ 141.20	\$ 21.61	18.07%
8,000	\$ 125.58	\$ 150.80	\$ 25.22	20.08%
9,000	\$ 131.57	\$ 160.40	\$ 28.84	21.92%
10,000	\$ 137.55	\$ 170.00	\$ 32.45	23.59%
11,000	\$ 143.54	\$ 179.60	\$ 36.07	25.13%
12,000	\$ 149.52	\$ 189.20	\$ 39.68	26.54%
13,000	\$ 155.51	\$ 198.80	\$ 43.30	27.84%
14,000	\$ 161.49	\$ 208.40	\$ 46.91	29.05%
15,000	\$ 167.48	\$ 218.00	\$ 50.53	30.17%
16,000	\$ 173.46	\$ 227.60	\$ 54.14	31.21%
17,000	\$ 179.45	\$ 237.20	\$ 57.76	32.19%
18,000	\$ 185.43	\$ 246.80	\$ 61.37	33.10%
19,000	\$ 191.42	\$ 256.40	\$ 64.99	33.95%
20,000	\$ 197.40	\$ 266.00	\$ 68.60	34.75%
25,000	\$ 227.33	\$ 314.00	\$ 86.68	38.13%
30,000	\$ 257.25	\$ 362.00	\$ 104.75	40.72%
35,000	\$ 287.18	\$ 410.00	\$ 122.83	42.77%
40,000	\$ 317.10	\$ 458.00	\$ 140.90	44.43%
45,000	\$ 347.03	\$ 506.00	\$ 158.98	45.81%
50,000	\$ 376.95	\$ 554.00	\$ 177.05	46.97%
60,000	\$ 436.80	\$ 650.00	\$ 213.20	48.81%
70,000	\$ 496.65	\$ 746.00	\$ 249.35	50.21%
80,000	\$ 556.50	\$ 842.00	\$ 285.50	51.30%
90,000	\$ 616.35	\$ 938.00	\$ 321.65	52.19%
100,000	\$ 676.20	\$ 1,034.00	\$ 357.80	52.91%
110,000	\$ 736.05	\$ 1,130.00	\$ 393.95	53.52%
120,000	\$ 795.90	\$ 1,226.00	\$ 430.10	54.04%
130,000	\$ 855.75	\$ 1,322.00	\$ 466.25	54.48%
140,000	\$ 915.60	\$ 1,418.00	\$ 502.40	54.87%
150,000	\$ 975.45	\$ 1,514.00	\$ 538.55	55.21%
160,000	\$ 1,035.30	\$ 1,610.00	\$ 574.70	55.51%
170,000	\$ 1,095.15	\$ 1,706.00	\$ 610.85	55.78%
180,000	\$ 1,155.00	\$ 1,802.00	\$ 647.00	56.02%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
LAUREL LAKES DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 46.20	\$ 46.00	\$ (0.20)	-0.43%
1,000	\$ 47.46	\$ 54.50	\$ 7.04	14.83%
2,000	\$ 48.72	\$ 63.00	\$ 14.28	29.31%
3,000	\$ 49.98	\$ 71.50	\$ 21.52	43.06%
4,000	\$ 51.24	\$ 80.00	\$ 28.76	56.13%
5,000	\$ 52.50	\$ 88.50	\$ 36.00	68.57%
6,000	\$ 53.76	\$ 97.00	\$ 43.24	80.43%
7,000	\$ 55.02	\$ 105.50	\$ 50.48	91.75%
8,000	\$ 56.28	\$ 114.00	\$ 57.72	102.56%
9,000	\$ 57.54	\$ 122.50	\$ 64.96	112.90%
10,000	\$ 58.80	\$ 131.00	\$ 72.20	122.79%
11,000	\$ 60.06	\$ 139.50	\$ 79.44	132.27%
12,000	\$ 61.32	\$ 148.00	\$ 86.68	141.36%
13,000	\$ 62.58	\$ 156.50	\$ 93.92	150.08%
14,000	\$ 63.84	\$ 165.00	\$ 101.16	158.46%
15,000	\$ 65.10	\$ 173.50	\$ 108.40	166.51%
16,000	\$ 66.36	\$ 182.00	\$ 115.64	174.26%
17,000	\$ 67.62	\$ 190.50	\$ 122.88	181.72%
18,000	\$ 68.88	\$ 199.00	\$ 130.12	188.91%
19,000	\$ 70.14	\$ 207.50	\$ 137.36	195.84%
20,000	\$ 71.40	\$ 216.00	\$ 144.60	202.52%
25,000	\$ 77.70	\$ 258.50	\$ 180.80	232.69%
30,000	\$ 84.00	\$ 301.00	\$ 217.00	258.33%
35,000	\$ 90.30	\$ 343.50	\$ 253.20	280.40%
40,000	\$ 96.60	\$ 386.00	\$ 289.40	299.59%
45,000	\$ 102.90	\$ 428.50	\$ 325.60	316.42%
50,000	\$ 109.20	\$ 471.00	\$ 361.80	331.32%
60,000	\$ 121.80	\$ 556.00	\$ 434.20	356.49%
70,000	\$ 134.40	\$ 641.00	\$ 506.60	376.93%
80,000	\$ 147.00	\$ 726.00	\$ 579.00	393.88%
90,000	\$ 159.60	\$ 811.00	\$ 651.40	408.15%
100,000	\$ 172.20	\$ 896.00	\$ 723.80	420.33%
110,000	\$ 184.80	\$ 981.00	\$ 796.20	430.84%
120,000	\$ 197.40	\$ 1,066.00	\$ 868.60	440.02%
130,000	\$ 210.00	\$ 1,151.00	\$ 941.00	448.10%
140,000	\$ 222.60	\$ 1,236.00	\$ 1,013.40	455.26%
150,000	\$ 235.20	\$ 1,321.00	\$ 1,085.80	461.65%
160,000	\$ 247.80	\$ 1,406.00	\$ 1,158.20	467.39%
170,000	\$ 260.40	\$ 1,491.00	\$ 1,230.60	472.58%
180,000	\$ 273.00	\$ 1,576.00	\$ 1,303.00	477.29%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
DEERFIELD KNOLL DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 47.25	\$ 46.00	\$ (1.25)	-2.65%
1,000	\$ 50.79	\$ 54.50	\$ 3.71	7.31%
2,000	\$ 54.33	\$ 63.00	\$ 8.67	15.96%
3,000	\$ 57.87	\$ 71.50	\$ 13.63	23.56%
4,000	\$ 61.40	\$ 80.00	\$ 18.60	30.28%
5,000	\$ 64.94	\$ 88.50	\$ 23.56	36.27%
6,000	\$ 68.48	\$ 97.00	\$ 28.52	41.65%
7,000	\$ 72.02	\$ 105.50	\$ 33.48	46.49%
8,000	\$ 75.56	\$ 114.00	\$ 38.44	50.88%
9,000	\$ 79.10	\$ 122.50	\$ 43.40	54.87%
10,000	\$ 82.64	\$ 131.00	\$ 48.37	58.53%
11,000	\$ 86.17	\$ 139.50	\$ 53.33	61.88%
12,000	\$ 89.71	\$ 148.00	\$ 58.29	64.97%
13,000	\$ 93.25	\$ 156.50	\$ 63.25	67.83%
14,000	\$ 96.79	\$ 165.00	\$ 68.21	70.47%
15,000	\$ 100.33	\$ 173.50	\$ 73.17	72.93%
16,000	\$ 103.87	\$ 182.00	\$ 78.13	75.23%
17,000	\$ 107.40	\$ 190.50	\$ 83.10	77.37%
18,000	\$ 110.94	\$ 199.00	\$ 88.06	79.37%
19,000	\$ 114.48	\$ 207.50	\$ 93.02	81.25%
20,000	\$ 118.02	\$ 216.00	\$ 97.98	83.02%
25,000	\$ 135.71	\$ 258.50	\$ 122.79	90.48%
30,000	\$ 153.41	\$ 301.00	\$ 147.60	96.21%
35,000	\$ 171.10	\$ 343.50	\$ 172.40	100.76%
40,000	\$ 188.79	\$ 386.00	\$ 197.21	104.46%
45,000	\$ 206.48	\$ 428.50	\$ 222.02	107.52%
50,000	\$ 224.18	\$ 471.00	\$ 246.83	110.10%
60,000	\$ 259.56	\$ 556.00	\$ 296.44	114.21%
70,000	\$ 294.95	\$ 641.00	\$ 346.06	117.33%
80,000	\$ 330.33	\$ 726.00	\$ 395.67	119.78%
90,000	\$ 365.72	\$ 811.00	\$ 445.29	121.76%
100,000	\$ 401.10	\$ 896.00	\$ 494.90	123.39%
110,000	\$ 436.49	\$ 981.00	\$ 544.52	124.75%
120,000	\$ 471.87	\$ 1,066.00	\$ 594.13	125.91%
130,000	\$ 507.26	\$ 1,151.00	\$ 643.75	126.91%
140,000	\$ 542.64	\$ 1,236.00	\$ 693.36	127.78%
150,000	\$ 578.03	\$ 1,321.00	\$ 742.98	128.54%
160,000	\$ 613.41	\$ 1,406.00	\$ 792.59	129.21%
170,000	\$ 648.80	\$ 1,491.00	\$ 842.21	129.81%
180,000	\$ 684.18	\$ 1,576.00	\$ 891.82	130.35%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
CS WATER, MASTHOPE DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 28.31	\$ 31.00	\$ 2.69	9.51%
1,000	\$ 28.83	\$ 38.60	\$ 9.77	33.87%
2,000	\$ 29.36	\$ 46.20	\$ 16.84	57.37%
3,000	\$ 29.88	\$ 53.80	\$ 23.92	80.04%
4,000	\$ 30.41	\$ 61.40	\$ 30.99	101.92%
5,000	\$ 30.93	\$ 69.00	\$ 38.07	123.06%
6,000	\$ 31.46	\$ 76.60	\$ 45.14	143.50%
7,000	\$ 31.98	\$ 84.20	\$ 52.22	163.26%
8,000	\$ 32.51	\$ 91.80	\$ 59.29	182.39%
9,000	\$ 33.03	\$ 99.40	\$ 66.37	200.91%
10,000	\$ 33.56	\$ 107.00	\$ 73.44	218.85%
11,000	\$ 34.08	\$ 114.60	\$ 80.52	236.24%
12,000	\$ 34.61	\$ 122.20	\$ 87.59	253.10%
13,000	\$ 35.13	\$ 129.80	\$ 94.67	269.45%
14,000	\$ 35.66	\$ 137.40	\$ 101.74	285.33%
15,000	\$ 36.18	\$ 145.00	\$ 108.82	300.74%
16,000	\$ 36.71	\$ 152.60	\$ 115.89	315.71%
17,000	\$ 37.23	\$ 160.20	\$ 122.97	330.26%
18,000	\$ 37.76	\$ 167.80	\$ 130.04	344.41%
19,000	\$ 38.28	\$ 175.40	\$ 137.12	358.17%
20,000	\$ 38.81	\$ 183.00	\$ 144.19	371.55%
25,000	\$ 41.43	\$ 221.00	\$ 179.57	433.39%
30,000	\$ 44.06	\$ 259.00	\$ 214.94	487.86%
35,000	\$ 46.68	\$ 297.00	\$ 250.32	536.21%
40,000	\$ 49.31	\$ 335.00	\$ 285.69	579.40%
45,000	\$ 51.93	\$ 373.00	\$ 321.07	618.23%
50,000	\$ 54.56	\$ 411.00	\$ 356.44	653.33%
60,000	\$ 59.81	\$ 487.00	\$ 427.19	714.27%
70,000	\$ 65.06	\$ 563.00	\$ 497.94	765.38%
80,000	\$ 70.31	\$ 639.00	\$ 568.69	808.86%
90,000	\$ 75.56	\$ 715.00	\$ 639.44	846.29%
100,000	\$ 80.81	\$ 791.00	\$ 710.19	878.86%
110,000	\$ 86.06	\$ 867.00	\$ 780.94	907.46%
120,000	\$ 91.31	\$ 943.00	\$ 851.69	932.77%
130,000	\$ 96.56	\$ 1,019.00	\$ 922.44	955.32%
140,000	\$ 101.81	\$ 1,095.00	\$ 993.19	975.55%
150,000	\$ 107.06	\$ 1,171.00	\$ 1,063.94	993.80%
160,000	\$ 112.31	\$ 1,247.00	\$ 1,134.69	1010.34%
170,000	\$ 117.56	\$ 1,323.00	\$ 1,205.44	1025.40%
180,000	\$ 122.81	\$ 1,399.00	\$ 1,276.19	1039.18%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
PEDDLERS VIEW DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 56.70	\$ 62.00	\$ 5.30	9.35%
1,000	\$ 62.00	\$ 71.50	\$ 9.50	15.32%
2,000	\$ 67.31	\$ 81.00	\$ 13.70	20.35%
3,000	\$ 72.61	\$ 90.50	\$ 17.89	24.64%
4,000	\$ 77.91	\$ 100.00	\$ 22.09	28.35%
5,000	\$ 83.21	\$ 109.50	\$ 26.29	31.59%
6,000	\$ 88.52	\$ 119.00	\$ 30.49	34.44%
7,000	\$ 93.82	\$ 128.50	\$ 34.68	36.97%
8,000	\$ 99.12	\$ 138.00	\$ 38.88	39.23%
9,000	\$ 104.42	\$ 147.50	\$ 43.08	41.25%
10,000	\$ 109.73	\$ 157.00	\$ 47.28	43.08%
11,000	\$ 115.03	\$ 166.50	\$ 51.47	44.75%
12,000	\$ 120.33	\$ 176.00	\$ 55.67	46.26%
13,000	\$ 125.63	\$ 185.50	\$ 59.87	47.65%
14,000	\$ 130.94	\$ 195.00	\$ 64.07	48.93%
15,000	\$ 136.24	\$ 204.50	\$ 68.26	50.11%
16,000	\$ 141.54	\$ 214.00	\$ 72.46	51.19%
17,000	\$ 146.84	\$ 223.50	\$ 76.66	52.20%
18,000	\$ 152.15	\$ 233.00	\$ 80.86	53.14%
19,000	\$ 157.45	\$ 242.50	\$ 85.05	54.02%
20,000	\$ 162.75	\$ 252.00	\$ 89.25	54.84%
25,000	\$ 189.26	\$ 299.50	\$ 110.24	58.25%
30,000	\$ 215.78	\$ 347.00	\$ 131.23	60.82%
35,000	\$ 242.29	\$ 394.50	\$ 152.21	62.82%
40,000	\$ 268.80	\$ 442.00	\$ 173.20	64.43%
45,000	\$ 295.31	\$ 489.50	\$ 194.19	65.76%
50,000	\$ 321.83	\$ 537.00	\$ 215.18	66.86%
60,000	\$ 374.85	\$ 632.00	\$ 257.15	68.60%
70,000	\$ 427.88	\$ 727.00	\$ 299.13	69.91%
80,000	\$ 480.90	\$ 822.00	\$ 341.10	70.93%
90,000	\$ 533.93	\$ 917.00	\$ 383.08	71.75%
100,000	\$ 586.95	\$ 1,012.00	\$ 425.05	72.42%
110,000	\$ 639.98	\$ 1,107.00	\$ 467.03	72.98%
120,000	\$ 693.00	\$ 1,202.00	\$ 509.00	73.45%
130,000	\$ 746.03	\$ 1,297.00	\$ 550.98	73.85%
140,000	\$ 799.05	\$ 1,392.00	\$ 592.95	74.21%
150,000	\$ 852.08	\$ 1,487.00	\$ 634.93	74.52%
160,000	\$ 905.10	\$ 1,582.00	\$ 676.90	74.79%
170,000	\$ 958.13	\$ 1,677.00	\$ 718.88	75.03%
180,000	\$ 1,011.15	\$ 1,772.00	\$ 760.85	75.25%

\*\* Present rates include 5.00% DSIC.



AQUA PENNSYLVANIA INC.  
THE GREENS AT PENN OAKS DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 97.91	\$ 74.00	\$ (23.91)	-24.42%
1,000	\$ 101.85	\$ 83.60	\$ (18.25)	-17.92%
2,000	\$ 105.79	\$ 93.20	\$ (12.59)	-11.90%
3,000	\$ 109.73	\$ 102.80	\$ (6.93)	-6.31%
4,000	\$ 113.66	\$ 112.40	\$ (1.26)	-1.11%
5,000	\$ 117.60	\$ 122.00	\$ 4.40	3.74%
6,000	\$ 121.54	\$ 131.60	\$ 10.06	8.28%
7,000	\$ 125.48	\$ 141.20	\$ 15.73	12.53%
8,000	\$ 129.41	\$ 150.80	\$ 21.39	16.53%
9,000	\$ 133.35	\$ 160.40	\$ 27.05	20.28%
10,000	\$ 137.29	\$ 170.00	\$ 32.71	23.83%
11,000	\$ 141.23	\$ 179.60	\$ 38.38	27.17%
12,000	\$ 145.16	\$ 189.20	\$ 44.04	30.34%
13,000	\$ 149.10	\$ 198.80	\$ 49.70	33.33%
14,000	\$ 153.04	\$ 208.40	\$ 55.36	36.18%
15,000	\$ 156.98	\$ 218.00	\$ 61.03	38.88%
16,000	\$ 160.91	\$ 227.60	\$ 66.69	41.44%
17,000	\$ 164.85	\$ 237.20	\$ 72.35	43.89%
18,000	\$ 168.79	\$ 246.80	\$ 78.01	46.22%
19,000	\$ 172.73	\$ 256.40	\$ 83.68	48.44%
20,000	\$ 176.66	\$ 266.00	\$ 89.34	50.57%
25,000	\$ 196.35	\$ 314.00	\$ 117.65	59.92%
30,000	\$ 216.04	\$ 362.00	\$ 145.96	67.56%
35,000	\$ 235.73	\$ 410.00	\$ 174.28	73.93%
40,000	\$ 255.41	\$ 458.00	\$ 202.59	79.32%
45,000	\$ 275.10	\$ 506.00	\$ 230.90	83.93%
50,000	\$ 294.79	\$ 554.00	\$ 259.21	87.93%
60,000	\$ 334.16	\$ 650.00	\$ 315.84	94.52%
70,000	\$ 373.54	\$ 746.00	\$ 372.46	99.71%
80,000	\$ 412.91	\$ 842.00	\$ 429.09	103.92%
90,000	\$ 452.29	\$ 938.00	\$ 485.71	107.39%
100,000	\$ 491.66	\$ 1,034.00	\$ 542.34	110.31%
110,000	\$ 531.04	\$ 1,130.00	\$ 598.96	112.79%
120,000	\$ 570.41	\$ 1,226.00	\$ 655.59	114.93%
130,000	\$ 609.79	\$ 1,322.00	\$ 712.21	116.80%
140,000	\$ 649.16	\$ 1,418.00	\$ 768.84	118.44%
150,000	\$ 688.54	\$ 1,514.00	\$ 825.46	119.89%
160,000	\$ 727.91	\$ 1,610.00	\$ 882.09	121.18%
170,000	\$ 767.29	\$ 1,706.00	\$ 938.71	122.34%
180,000	\$ 806.66	\$ 1,802.00	\$ 995.34	123.39%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
NEWLIN GREEN DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 115.50	\$ 110.00	\$ (5.50)	-4.76%
1,000	\$ 123.38	\$ 117.50	\$ (5.88)	-4.76%
2,000	\$ 131.25	\$ 125.00	\$ (6.25)	-4.76%
3,000	\$ 139.13	\$ 132.50	\$ (6.63)	-4.76%
4,000	\$ 147.00	\$ 140.00	\$ (7.00)	-4.76%
5,000	\$ 154.88	\$ 147.50	\$ (7.38)	-4.76%
6,000	\$ 162.75	\$ 155.00	\$ (7.75)	-4.76%
7,000	\$ 170.63	\$ 162.50	\$ (8.13)	-4.76%
8,000	\$ 178.50	\$ 170.00	\$ (8.50)	-4.76%
9,000	\$ 186.38	\$ 177.50	\$ (8.88)	-4.76%
10,000	\$ 194.25	\$ 185.00	\$ (9.25)	-4.76%
11,000	\$ 202.13	\$ 192.50	\$ (9.63)	-4.76%
12,000	\$ 210.00	\$ 200.00	\$ (10.00)	-4.76%
13,000	\$ 217.88	\$ 207.50	\$ (10.38)	-4.76%
14,000	\$ 225.75	\$ 215.00	\$ (10.75)	-4.76%
15,000	\$ 233.63	\$ 222.50	\$ (11.13)	-4.76%
16,000	\$ 241.50	\$ 230.00	\$ (11.50)	-4.76%
17,000	\$ 249.38	\$ 237.50	\$ (11.88)	-4.76%
18,000	\$ 257.25	\$ 245.00	\$ (12.25)	-4.76%
19,000	\$ 265.13	\$ 252.50	\$ (12.63)	-4.76%
20,000	\$ 273.00	\$ 260.00	\$ (13.00)	-4.76%
25,000	\$ 312.38	\$ 297.50	\$ (14.88)	-4.76%
30,000	\$ 351.75	\$ 335.00	\$ (16.75)	-4.76%
35,000	\$ 391.13	\$ 372.50	\$ (18.63)	-4.76%
40,000	\$ 430.50	\$ 410.00	\$ (20.50)	-4.76%
45,000	\$ 469.88	\$ 447.50	\$ (22.38)	-4.76%
50,000	\$ 509.25	\$ 485.00	\$ (24.25)	-4.76%
60,000	\$ 588.00	\$ 560.00	\$ (28.00)	-4.76%
70,000	\$ 666.75	\$ 635.00	\$ (31.75)	-4.76%
80,000	\$ 745.50	\$ 710.00	\$ (35.50)	-4.76%
90,000	\$ 824.25	\$ 785.00	\$ (39.25)	-4.76%
100,000	\$ 903.00	\$ 860.00	\$ (43.00)	-4.76%
110,000	\$ 981.75	\$ 935.00	\$ (46.75)	-4.76%
120,000	\$ 1,060.50	\$ 1,010.00	\$ (50.50)	-4.76%
130,000	\$ 1,139.25	\$ 1,085.00	\$ (54.25)	-4.76%
140,000	\$ 1,218.00	\$ 1,160.00	\$ (58.00)	-4.76%
150,000	\$ 1,296.75	\$ 1,235.00	\$ (61.75)	-4.76%
160,000	\$ 1,375.50	\$ 1,310.00	\$ (65.50)	-4.76%
170,000	\$ 1,454.25	\$ 1,385.00	\$ (69.25)	-4.76%
180,000	\$ 1,533.00	\$ 1,460.00	\$ (73.00)	-4.76%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
WOODLOCH SPRINGS DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 49.35	\$ 46.00	\$ (3.35)	-6.79%
1,000	\$ 50.61	\$ 54.50	\$ 3.89	7.69%
2,000	\$ 51.87	\$ 63.00	\$ 11.13	21.46%
3,000	\$ 53.13	\$ 71.50	\$ 18.37	34.58%
4,000	\$ 54.39	\$ 80.00	\$ 25.61	47.09%
5,000	\$ 55.65	\$ 88.50	\$ 32.85	59.03%
6,000	\$ 56.91	\$ 97.00	\$ 40.09	70.44%
7,000	\$ 58.17	\$ 105.50	\$ 47.33	81.36%
8,000	\$ 59.43	\$ 114.00	\$ 54.57	91.82%
9,000	\$ 60.69	\$ 122.50	\$ 61.81	101.85%
10,000	\$ 61.95	\$ 131.00	\$ 69.05	111.46%
11,000	\$ 63.21	\$ 139.50	\$ 76.29	120.69%
12,000	\$ 64.47	\$ 148.00	\$ 83.53	129.56%
13,000	\$ 65.73	\$ 156.50	\$ 90.77	138.10%
14,000	\$ 66.99	\$ 165.00	\$ 98.01	146.31%
15,000	\$ 68.25	\$ 173.50	\$ 105.25	154.21%
16,000	\$ 69.51	\$ 182.00	\$ 112.49	161.83%
17,000	\$ 70.77	\$ 190.50	\$ 119.73	169.18%
18,000	\$ 72.03	\$ 199.00	\$ 126.97	176.27%
19,000	\$ 73.29	\$ 207.50	\$ 134.21	183.12%
20,000	\$ 74.55	\$ 216.00	\$ 141.45	189.74%
25,000	\$ 80.85	\$ 258.50	\$ 177.65	219.73%
30,000	\$ 87.15	\$ 301.00	\$ 213.85	245.38%
35,000	\$ 93.45	\$ 343.50	\$ 250.05	267.58%
40,000	\$ 99.75	\$ 386.00	\$ 286.25	286.97%
45,000	\$ 106.05	\$ 428.50	\$ 322.45	304.05%
50,000	\$ 112.35	\$ 471.00	\$ 358.65	319.23%
60,000	\$ 124.95	\$ 556.00	\$ 431.05	344.98%
70,000	\$ 137.55	\$ 641.00	\$ 503.45	366.01%
80,000	\$ 150.15	\$ 726.00	\$ 575.85	383.52%
90,000	\$ 162.75	\$ 811.00	\$ 648.25	398.31%
100,000	\$ 175.35	\$ 896.00	\$ 720.65	410.98%
110,000	\$ 187.95	\$ 981.00	\$ 793.05	421.95%
120,000	\$ 200.55	\$ 1,066.00	\$ 865.45	431.54%
130,000	\$ 213.15	\$ 1,151.00	\$ 937.85	440.00%
140,000	\$ 225.75	\$ 1,236.00	\$ 1,010.25	447.51%
150,000	\$ 238.35	\$ 1,321.00	\$ 1,082.65	454.23%
160,000	\$ 250.95	\$ 1,406.00	\$ 1,155.05	460.27%
170,000	\$ 263.55	\$ 1,491.00	\$ 1,227.45	465.74%
180,000	\$ 276.15	\$ 1,576.00	\$ 1,299.85	470.70%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
STONY CREEK DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 47.25	\$ 46.00	\$ (1.25)	-2.65%
1,000	\$ 50.30	\$ 54.50	\$ 4.21	8.36%
2,000	\$ 53.34	\$ 63.00	\$ 9.66	18.11%
3,000	\$ 56.39	\$ 71.50	\$ 15.12	26.81%
4,000	\$ 59.43	\$ 80.00	\$ 20.57	34.61%
5,000	\$ 62.48	\$ 88.50	\$ 26.03	41.66%
6,000	\$ 65.52	\$ 97.00	\$ 31.48	48.05%
7,000	\$ 68.57	\$ 105.50	\$ 36.94	53.87%
8,000	\$ 71.61	\$ 114.00	\$ 42.39	59.20%
9,000	\$ 74.66	\$ 122.50	\$ 47.85	64.09%
10,000	\$ 77.70	\$ 131.00	\$ 53.30	68.60%
11,000	\$ 80.75	\$ 139.50	\$ 58.76	72.77%
12,000	\$ 83.79	\$ 148.00	\$ 64.21	76.63%
13,000	\$ 86.84	\$ 156.50	\$ 69.67	80.23%
14,000	\$ 89.88	\$ 165.00	\$ 75.12	83.58%
15,000	\$ 92.93	\$ 173.50	\$ 80.58	86.71%
16,000	\$ 95.97	\$ 182.00	\$ 86.03	89.64%
17,000	\$ 99.02	\$ 190.50	\$ 91.49	92.40%
18,000	\$ 102.06	\$ 199.00	\$ 96.94	94.98%
19,000	\$ 105.11	\$ 207.50	\$ 102.40	97.42%
20,000	\$ 108.15	\$ 216.00	\$ 107.85	99.72%
25,000	\$ 123.38	\$ 258.50	\$ 135.13	109.52%
30,000	\$ 138.60	\$ 301.00	\$ 162.40	117.17%
35,000	\$ 153.83	\$ 343.50	\$ 189.68	123.31%
40,000	\$ 169.05	\$ 386.00	\$ 216.95	128.33%
45,000	\$ 184.28	\$ 428.50	\$ 244.23	132.53%
50,000	\$ 199.50	\$ 471.00	\$ 271.50	136.09%
60,000	\$ 229.95	\$ 556.00	\$ 326.05	141.79%
70,000	\$ 260.40	\$ 641.00	\$ 380.60	146.16%
80,000	\$ 290.85	\$ 726.00	\$ 435.15	149.61%
90,000	\$ 321.30	\$ 811.00	\$ 489.70	152.41%
100,000	\$ 351.75	\$ 896.00	\$ 544.25	154.73%
110,000	\$ 382.20	\$ 981.00	\$ 598.80	156.67%
120,000	\$ 412.65	\$ 1,066.00	\$ 653.35	158.33%
130,000	\$ 443.10	\$ 1,151.00	\$ 707.90	159.76%
140,000	\$ 473.55	\$ 1,236.00	\$ 762.45	161.01%
150,000	\$ 504.00	\$ 1,321.00	\$ 817.00	162.10%
160,000	\$ 534.45	\$ 1,406.00	\$ 871.55	163.07%
170,000	\$ 564.90	\$ 1,491.00	\$ 926.10	163.94%
180,000	\$ 595.35	\$ 1,576.00	\$ 980.65	164.72%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
NEW DALEVILLE DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
1,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
2,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
3,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
4,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
5,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
6,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
7,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
8,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
9,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
10,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
11,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
12,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
13,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
14,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
15,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
16,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
17,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
18,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
19,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
20,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
25,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
30,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
35,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
40,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
45,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
50,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
60,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
70,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
80,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
90,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
100,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
110,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
120,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
130,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
140,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
150,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
160,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
170,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%
180,000	\$ 74.17	\$ 100.00	\$ 25.83	34.82%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
VILLAGE AT VALLEY FORGE DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
COMMERCIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 12.60	\$ 31.00	\$ 18.40	146.03%
1,000	\$ 16.28	\$ 38.60	\$ 22.33	137.17%
2,000	\$ 19.95	\$ 46.20	\$ 26.25	131.58%
3,000	\$ 23.63	\$ 53.80	\$ 30.18	127.72%
4,000	\$ 27.30	\$ 61.40	\$ 34.10	124.91%
5,000	\$ 30.98	\$ 69.00	\$ 38.03	122.76%
6,000	\$ 34.65	\$ 76.60	\$ 41.95	121.07%
7,000	\$ 38.33	\$ 84.20	\$ 45.88	119.70%
8,000	\$ 42.00	\$ 91.80	\$ 49.80	118.57%
9,000	\$ 45.68	\$ 99.40	\$ 53.73	117.62%
10,000	\$ 49.35	\$ 107.00	\$ 57.65	116.82%
11,000	\$ 53.03	\$ 114.60	\$ 61.58	116.12%
12,000	\$ 56.70	\$ 122.20	\$ 65.50	115.52%
13,000	\$ 60.38	\$ 129.80	\$ 69.43	114.99%
14,000	\$ 64.05	\$ 137.40	\$ 73.35	114.52%
15,000	\$ 67.73	\$ 145.00	\$ 77.28	114.10%
16,000	\$ 71.40	\$ 152.60	\$ 81.20	113.73%
17,000	\$ 75.08	\$ 160.20	\$ 85.13	113.39%
18,000	\$ 78.75	\$ 167.80	\$ 89.05	113.08%
19,000	\$ 82.43	\$ 175.40	\$ 92.98	112.80%
20,000	\$ 86.10	\$ 183.00	\$ 96.90	112.54%
25,000	\$ 104.48	\$ 221.00	\$ 116.53	111.53%
30,000	\$ 122.85	\$ 259.00	\$ 136.15	110.83%
35,000	\$ 141.23	\$ 297.00	\$ 155.78	110.30%
40,000	\$ 159.60	\$ 335.00	\$ 175.40	109.90%
45,000	\$ 177.98	\$ 373.00	\$ 195.03	109.58%
50,000	\$ 196.35	\$ 411.00	\$ 214.65	109.32%
60,000	\$ 233.10	\$ 487.00	\$ 253.90	108.92%
70,000	\$ 269.85	\$ 563.00	\$ 293.15	108.63%
80,000	\$ 306.60	\$ 639.00	\$ 332.40	108.41%
90,000	\$ 343.35	\$ 715.00	\$ 371.65	108.24%
100,000	\$ 380.10	\$ 791.00	\$ 410.90	108.10%
110,000	\$ 416.85	\$ 867.00	\$ 450.15	107.99%
120,000	\$ 453.60	\$ 943.00	\$ 489.40	107.89%
130,000	\$ 490.35	\$ 1,019.00	\$ 528.65	107.81%
140,000	\$ 527.10	\$ 1,095.00	\$ 567.90	107.74%
150,000	\$ 563.85	\$ 1,171.00	\$ 607.15	107.68%
160,000	\$ 600.60	\$ 1,247.00	\$ 646.40	107.63%
170,000	\$ 637.35	\$ 1,323.00	\$ 685.65	107.58%
180,000	\$ 674.10	\$ 1,399.00	\$ 724.90	107.54%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
BEECH MOUNTAIN DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
1,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
2,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
3,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
4,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
5,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
6,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
7,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
8,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
9,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
10,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
11,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
12,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
13,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
14,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
15,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
16,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
17,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
18,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
19,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
20,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
25,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
30,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
35,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
40,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
45,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
50,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
60,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
70,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
80,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
90,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
100,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
110,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
120,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
130,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
140,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
150,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
160,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
170,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%
180,000	\$ 56.04	\$ 80.00	\$ 23.96	42.76%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
LAKE HARMONY DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
1,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
2,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
3,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
4,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
5,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
6,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
7,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
8,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
9,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
10,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
11,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
12,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
13,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
14,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
15,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
16,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
17,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
18,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
19,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
20,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
25,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
30,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
35,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
40,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
45,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
50,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
60,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
70,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
80,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
90,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
100,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
110,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
120,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
130,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
140,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
150,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
160,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
170,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%
180,000	\$ 65.63	\$ 100.00	\$ 34.38	52.38%

\*\* Present rates include 5.00% DSIC.



AQUA PENNSYLVANIA INC.  
TREASURE LAKE DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 21.64	\$ 31.00	\$ 9.36	43.25%
1,000	\$ 25.58	\$ 38.60	\$ 13.02	50.91%
2,000	\$ 29.52	\$ 46.20	\$ 16.68	56.53%
3,000	\$ 33.45	\$ 53.80	\$ 20.35	60.82%
4,000	\$ 37.39	\$ 61.40	\$ 24.01	64.21%
5,000	\$ 41.33	\$ 69.00	\$ 27.67	66.96%
6,000	\$ 45.27	\$ 76.60	\$ 31.33	69.22%
7,000	\$ 49.20	\$ 84.20	\$ 35.00	71.13%
8,000	\$ 53.14	\$ 91.80	\$ 38.66	72.75%
9,000	\$ 57.08	\$ 99.40	\$ 42.32	74.15%
10,000	\$ 61.02	\$ 107.00	\$ 45.98	75.37%
11,000	\$ 64.95	\$ 114.60	\$ 49.65	76.44%
12,000	\$ 68.89	\$ 122.20	\$ 53.31	77.38%
13,000	\$ 72.83	\$ 129.80	\$ 56.97	78.23%
14,000	\$ 76.77	\$ 137.40	\$ 60.63	78.99%
15,000	\$ 80.70	\$ 145.00	\$ 64.30	79.67%
16,000	\$ 84.64	\$ 152.60	\$ 67.96	80.29%
17,000	\$ 88.58	\$ 160.20	\$ 71.62	80.86%
18,000	\$ 92.52	\$ 167.80	\$ 75.28	81.38%
19,000	\$ 96.45	\$ 175.40	\$ 78.95	81.85%
20,000	\$ 100.39	\$ 183.00	\$ 82.61	82.29%
25,000	\$ 120.08	\$ 221.00	\$ 100.92	84.05%
30,000	\$ 139.77	\$ 259.00	\$ 119.23	85.31%
35,000	\$ 159.45	\$ 297.00	\$ 137.55	86.26%
40,000	\$ 179.14	\$ 335.00	\$ 155.86	87.00%
45,000	\$ 198.83	\$ 373.00	\$ 174.17	87.60%
50,000	\$ 218.52	\$ 411.00	\$ 192.48	88.09%
60,000	\$ 257.89	\$ 487.00	\$ 229.11	88.84%
70,000	\$ 297.27	\$ 563.00	\$ 265.73	89.39%
80,000	\$ 336.64	\$ 639.00	\$ 302.36	89.82%
90,000	\$ 376.02	\$ 715.00	\$ 338.98	90.15%
100,000	\$ 415.39	\$ 791.00	\$ 375.61	90.42%
110,000	\$ 454.77	\$ 867.00	\$ 412.23	90.65%
120,000	\$ 494.14	\$ 943.00	\$ 448.86	90.84%
130,000	\$ 533.52	\$ 1,019.00	\$ 485.48	91.00%
140,000	\$ 572.89	\$ 1,095.00	\$ 522.11	91.14%
150,000	\$ 612.27	\$ 1,171.00	\$ 558.73	91.26%
160,000	\$ 651.64	\$ 1,247.00	\$ 595.36	91.36%
170,000	\$ 691.02	\$ 1,323.00	\$ 631.98	91.46%
180,000	\$ 730.39	\$ 1,399.00	\$ 668.61	91.54%

\*\* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.  
PENN TOWNSHIP DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 22.50	\$ 46.00	\$ 23.50	104.44%
1,000	\$ 22.50	\$ 54.50	\$ 32.00	142.22%
2,000	\$ 26.00	\$ 63.00	\$ 37.00	142.34%
3,000	\$ 36.50	\$ 71.50	\$ 35.00	95.91%
4,000	\$ 47.00	\$ 80.00	\$ 33.00	70.23%
5,000	\$ 57.50	\$ 88.50	\$ 31.00	53.92%
6,000	\$ 68.00	\$ 97.00	\$ 29.00	42.65%
7,000	\$ 78.50	\$ 105.50	\$ 27.00	34.40%
8,000	\$ 89.00	\$ 114.00	\$ 25.00	28.09%
9,000	\$ 99.50	\$ 122.50	\$ 23.00	23.12%
10,000	\$ 110.00	\$ 131.00	\$ 21.00	19.09%
11,000	\$ 120.50	\$ 139.50	\$ 19.00	15.77%
12,000	\$ 131.00	\$ 148.00	\$ 17.00	12.98%
13,000	\$ 141.50	\$ 156.50	\$ 15.00	10.60%
14,000	\$ 152.00	\$ 165.00	\$ 13.00	8.56%
15,000	\$ 162.50	\$ 173.50	\$ 11.00	6.77%
16,000	\$ 173.00	\$ 182.00	\$ 9.00	5.20%
17,000	\$ 183.50	\$ 190.50	\$ 7.00	3.82%
18,000	\$ 194.00	\$ 199.00	\$ 5.00	2.58%
19,000	\$ 204.50	\$ 207.50	\$ 3.00	1.47%
20,000	\$ 215.00	\$ 216.00	\$ 1.00	0.47%
25,000	\$ 267.50	\$ 258.50	\$ (9.00)	-3.36%
30,000	\$ 320.00	\$ 301.00	\$ (19.00)	-5.94%
35,000	\$ 372.50	\$ 343.50	\$ (29.00)	-7.78%
40,000	\$ 425.00	\$ 386.00	\$ (39.00)	-9.18%
45,000	\$ 477.50	\$ 428.50	\$ (49.00)	-10.26%
50,000	\$ 530.00	\$ 471.00	\$ (59.00)	-11.13%
60,000	\$ 635.00	\$ 556.00	\$ (79.00)	-12.44%
70,000	\$ 740.00	\$ 641.00	\$ (99.00)	-13.38%
80,000	\$ 845.00	\$ 726.00	\$ (119.00)	-14.08%
90,000	\$ 950.00	\$ 811.00	\$ (139.00)	-14.63%
100,000	\$ 1,055.00	\$ 896.00	\$ (159.00)	-15.07%
110,000	\$ 1,160.00	\$ 981.00	\$ (179.00)	-15.43%
120,000	\$ 1,265.00	\$ 1,066.00	\$ (199.00)	-15.73%
130,000	\$ 1,370.00	\$ 1,151.00	\$ (219.00)	-15.99%
140,000	\$ 1,475.00	\$ 1,236.00	\$ (239.00)	-16.20%
150,000	\$ 1,580.00	\$ 1,321.00	\$ (259.00)	-16.39%
160,000	\$ 1,685.00	\$ 1,406.00	\$ (279.00)	-16.56%
170,000	\$ 1,790.00	\$ 1,491.00	\$ (299.00)	-16.70%
180,000	\$ 1,895.00	\$ 1,576.00	\$ (319.00)	-16.83%

AQUA PENNSYLVANIA INC.  
BUNKER HILL DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
1,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
2,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
3,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
4,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
5,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
6,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
7,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
8,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
9,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
10,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
11,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
12,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
13,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
14,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
15,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
16,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
17,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
18,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
19,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
20,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
25,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
30,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
35,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
40,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
45,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
50,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
60,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
70,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
80,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
90,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
100,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
110,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
120,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
130,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
140,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
150,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
160,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
170,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%
180,000	\$ 31.92	\$ 61.40	\$ 29.48	92.36%

AQUA PENNSYLVANIA INC.  
HONEYCROFT VILLAGE DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
1,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
2,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
3,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
4,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
5,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
6,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
7,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
8,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
9,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
10,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
11,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
12,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
13,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
14,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
15,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
16,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
17,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
18,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
19,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
20,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
25,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
30,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
35,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
40,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
45,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
50,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
60,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
70,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
80,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
90,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
100,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
110,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
120,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
130,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
140,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
150,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
160,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
170,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
180,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%

AQUA PENNSYLVANIA INC.  
EMLENTON DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
1,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
2,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
3,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
4,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
5,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
6,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
7,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
8,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
9,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
10,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
11,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
12,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
13,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
14,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
15,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
16,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
17,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
18,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
19,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
20,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
25,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
30,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
35,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
40,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
45,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
50,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
60,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
70,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
80,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
90,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
100,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
110,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
120,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
130,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
140,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
150,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
160,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
170,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%
180,000	\$ 45.00	\$ 80.00	\$ 35.00	77.78%

AQUA PENNSYLVANIA INC.  
TOBYHANNA DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
RESIDENTIAL - MONTHLY  
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
1,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
2,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
3,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
4,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
5,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
6,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
7,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
8,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
9,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
10,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
11,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
12,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
13,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
14,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
15,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
16,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
17,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
18,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
19,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
20,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
25,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
30,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
35,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
40,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
45,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
50,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
60,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
70,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
80,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
90,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
100,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
110,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
120,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
130,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
140,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
150,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
160,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
170,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%
180,000	\$ 66.67	\$ 100.00	\$ 33.33	49.99%

AQUA PENNSYLVANIA INC.  
AVON GROVE SCHOOL DISTRICT DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
COMMERCIAL - MONTHLY  
6 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
1,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
2,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
3,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
4,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
5,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
6,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
7,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
8,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
9,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
10,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
11,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
12,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
13,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
14,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
15,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
16,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
17,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
18,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
19,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
20,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
25,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
30,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
35,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
40,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
45,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
50,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
60,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
70,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
80,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
90,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
100,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
110,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
120,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
130,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
140,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
150,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
160,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
170,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%
180,000	\$ 6,625.00	\$ 8,281.30	\$ 1,656.30	25.00%

AQUA PENNSYLVANIA INC.  
SAGE HILL DIVISION  
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES  
ALL CUSTOMER CLASSES - MONTHLY  
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
1,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
2,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
3,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
4,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
5,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
6,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
7,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
8,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
9,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
10,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
11,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
12,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
13,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
14,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
15,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
16,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
17,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
18,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
19,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
20,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
25,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
30,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
35,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
40,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
45,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
50,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
60,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
70,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
80,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
90,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
100,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
110,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
120,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
130,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
140,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
150,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
160,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
170,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
180,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%

\*\* Present rates include 5.00% DSIC.