



**THE GREENVILLE WATER AUTHORITY**  
MERCER COUNTY, PENNSYLVANIA

# **2017 WATER SYSTEM ANNUAL REPORT & 2018 OPERATING BUDGET**

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**Project No.: 4631.01**

**Dated: February 14, 2018**

**The Greenville Water Authority**

**Mercer County**

**Entech Project Number: 4631.01**

**February 2018**

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## 1. INTRODUCTION

This Water System Annual Report has been prepared in accordance with the authorization given to Entech Engineering Inc., (Entech) by the Greenville Water Authority (Authority) in accordance with Article VI, Section 6.07 of the Third Supplemental Trust Indenture dated December 29, 2011 which states:

"The Consulting Engineer shall be required to report annually on (i) the condition and operation of the Water System, and (ii) on the sufficiency of the Capital Improvements and Redemption Fund. The Capital Improvements and Redemption Fund shall be funded by any additional amounts recommended by the Consulting Engineer. Furthermore, amounts on deposit in the Capital Improvements and Redemption Fund shall be used to replenish any deficiency in the Debt Service Reserve Fund."

The Annual Report, presented herein is classified under the following headings:

- Operational and Maintenance Status of Authority Water Facilities
- Revenues and Expenditures
- Capital Improvements and Redemption Fund
- Rates, Rents and Charges for Water
- Insurance
- Conclusions and Recommendations

This report is the seventy-fifth annual report upon the operation of the water system under Authority management. Reports have been submitted annually covering operations since April 1, 1942. Additions and improvements during the past year are reviewed, and the report includes recommendations for additions and improvements, the operating budget for fiscal year 2018, and the capital expenditures proposed for the fiscal year 2018. Information used in this report has been obtained from Authority Management.

### 1.1. Greenville Water Authority Water System Description

The Greenville Water Authority Water System is comprised of one treatment plant, five storage tanks, distribution mains, and associated appurtenances. This system serves Greenville Borough, a portion of Hempfield Township, and West Salem Township. Pertinent information about the Authority and its water system is provided in Section 2.

## 2. OPERATIONAL & MAINTENANCE STATUS OF AUTHORITY FACILITIES

### 2.1. System Operational and Maintenance Status

The general performance of all Greenville Water Authority distribution and treatment facilities during Fiscal Year 2017 has been satisfactory. Management reports that all Authority facilities have functioned well throughout the year with no extraordinary operational or maintenance problems encountered.

### 2.2. Water Treatment Plant

The filtration plant contains four (4) filters that have a total of 360 square feet of surface area. Considering these filters to be rapid rate filters with multimedia beds per the Department of Environmental Protection Regulations, the filters can produce 2,000,000 gallons of water per day.

The filtration plant was operated 5,166 hours during the past year for an average of approximately 14.2 hours daily and processed sufficient quantities of water to meet all consumer requirements. A review of operating results indicates that the water produced by the plant met or exceeded primary drinking water regulations of the Safe Drinking Water Act.

In addition to performing routine maintenance, Greenville Water Authority added nine (9) cameras to the security system as well as a wireless bridge to establish connection with the Authority office. Instrumentation purchased includes hand-held analysis equipment, turbidity monitoring equipment, and continuous chlorine analyzers. The Authority also purchased and installed buoys and booms for protection of the river intake.

### 2.3. Distribution System

The distribution system has been properly maintained during the past year. Hydrants were regularly inspected, and repairs were made as required to the distribution system to provide for minimum interruption of service to customers. Also, a new 2017 Ford F-150 was purchased and outfitted for service during 2017.

Under the Meter Account, 65 remote meters were installed and 2 meters were tested or repaired in 2017.

A review of the operating records, as noted above, indicates that the Authority has continued to expand and improve distribution and service facilities during the past year and has operated and maintained them in accordance with accepted waterworks practice.

The Authority also continued an ongoing inspection of fire hydrants and turned valves in an effort to keep the system's components operational. Three (3) Automatic Flushing Devices were purchased and installed in 2017 to maintain consistent water quality. The Authority conducted system-wide flushing activities in April and October.

## 2.4. Distribution Storage Facilities

The exterior surfaces and grounds surrounding the two (2), 750,000-gallon, 255,000-gallon, the high level 250,000-gallon and 1,000,000-gallon storage tanks are maintained in a satisfactory manner. Construction for the new 1 million gallon storage tank adjacent to the existing Hadley Road storage tank was completed in December 2010. The Hadley Road 250,000 gallon tank was repainted in 2014 with an inlet arrangement designed to facilitate tank turnover.

It is recommended that the Authority continue the annual inspection and maintenance program for all distribution storage tanks. This program will identify potential problems before they become major and costly.

In 2017, four (4) cameras were installed at the East Tank site. The water storage tanks were last painted as follows:

<u>Tank</u>	<u>Year</u>
750,000-Gallon, South Tank	1997
750,000-Gallon, North Tank	1995
250,000-Gallon, Hadley Road Tank	2014
255,000-Gallon, West Main Street	2005
1,000,000-Gallon, Hadley Road Tank	2010

## 2.5. General Office Structures and Equipment

The general office structure has been well maintained and is adequate in size for Authority operations. While a new roof was added to the building in 2016, Snow Guards were added to the roof in 2017 to mitigate the risk associated with falling ice.

Under General Shop Equipment, general tools and equipment were purchased during 2017. Adequate small tools and repair equipment are available and maintained in good condition for repairs and service to customers.

## 2.6. Consumers

The total number of customers according to consumer classifications listed on the books of the Authority as of December 31, 2017, compared with those listed at the end of 2016, is as follows:

On the following chart is a breakdown of customers from 2016 compared to 2017. Note that no new taps were added in 2017.

<b>Number of Customers</b>		
	December 31, 2016	December 31, 2017
Residential	2,464	2,438
Commercial	223	250
Industrial	3	3
Public	22	23
Private Fire Protection	53	55
Public Fire Protection	2	2

## 2.7. Use of Water

The comparison of the amount of water sold by consumer classification for the past five (5) years is tabulated in the following summary:

<b>Classification</b>	<b>Total Gallons Sold (units 1,000 Gallons)</b>				
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Residential	104,940	102,932	99,693	97,037	94,345
Commercial	52,607	50,881	49,980	43,496	45,370
Industrial	5,232	2,891	2,434	1,929	2,374
Public	11,187	11,737	10,159	10,479	10,868
Bulk Sales	3,115	1,646	522	939	1,163
<b>TOTAL</b>	<b>177,082</b>	<b>170,087</b>	<b>162,788</b>	<b>153,880</b>	<b>154,120</b>

Sales to metered consumers totaled 154,120,000 gallons or a daily average of approximately 422,247 gallons in 2017; representing an increase in total sales of 240,000 gallons from 2016. A breakdown of sales per customer class indicates that while residential sales decreased by 2,692,000 gallons, commercial increased by 1,874,000 gallons, industrial increased by 445,000 gallons, public increased by 389,000 gallons and bulk sales increased by 224,000 gallons in 2017.

## 2.8. Water Treatment Plant Operation

The following tabulation lists plant output, quantity of water sold, water used in plant operation, daily average output and the percentage of water unbilled for during the past ten years.

<u>Year</u>	<u>Plant Output (1)</u>	<u>Sold (1)</u>	<u>Other (1,2)</u>	<u>Daily Average Output (1)</u>	<u>Percentage Unbilled</u>
<b>2017</b>	211,989	154,120	4,000	581	25.2
<b>2016</b>	224,767	153,880	4,108	616	29.7
<b>2015</b>	255,681	162,788	15,570	700	30.2
<b>2014</b>	255,805	170,087	-	701	33.5
<b>2013</b>	255,760	177,081	15,000	701	30.9
<b>2012</b>	268,303	183,751	7,500	735	31.5
<b>2011</b>	240,000	179,052	1,000	658	25.4
<b>2010</b>	245,171	175,030	3,000	672	28.6
<b>2009</b>	256,327	176,827	2,024	702	31.0
<b>2008</b>	265,236	186,294	5,500	727	29.8
Note :	(1) Units in 1,000 gallons				
	(2) Estimated for fire hydrant flushing				

The Unbilled percentage is based on the Plant Output and Water Sold values and accounts for unmetered water usage from hydrant flushing, leaks, tank drawdowns, fire protection, etc.



The following tabulation compares the chemical usage and cost for the last two years:

<u>Chemical</u>	<u>2016</u>		<u>2017</u>	
	<u>Amount Used (lbs)</u>	<u>Total Cost</u>	<u>Amount Used (lbs)</u>	<u>Total Cost</u>
Activated Carbon	-	\$ -	-	\$ -
AquaMag (gal)	429	\$5,992	381	\$5,023
Caustic Soda	42,824	\$14,998	45,531	\$15,644
Chlorine	10,808	\$6,154	10,182	\$6,909
Fluoride	10,641	\$5,207	12,169	\$6,159
PolyEZ N1986	88	\$251	124	\$371
Stern PAC	215,370	\$38,767	245,538	\$44,197
300-53 Polymer (Sludge Press)	1,904	\$3,256	2,132	\$3,967
Potassium Permanganate	2,191	\$8,766	2,255	\$7,438
Ammonia	9,051	\$4,337	6,830	\$2,892
<b>TOTAL</b>		<b>\$87,728</b>		<b>\$92,600</b>

### **3. REVENUES AND EXPENDITURES**

#### **3.1. Revenues and Expenditures**

Based on information provided by the Authority, Table 1 has been prepared to show the actual 2016 revenues and expenses compared with the projected actual (unaudited) and budgeted revenues and expenses for 2017.

**TABLE 1**

**REVENUES AND EXPENSES FOR 2016, 2017 AND 2017 BUDGET**

		<b>2017 Year End (unaudited)</b>	
<b>Operating Revenue</b>	<b>2016 Actual</b>		<b>2017 Budget</b>
Metered Residential	\$1,237,224	\$1,253,128	\$1,250,280
Metered Commercial	\$367,635	\$399,413	\$376,800
Metered Industrial	\$20,814	\$22,973	\$22,092
Metered Public	\$38,331	\$41,166	\$36,216
Private Fire Protection	\$37,640	\$39,507	\$37,548
Public Fire Protection	\$26,828	\$26,828	\$26,892
Tap in Fees	\$28,568	\$0	\$2,000
<b>Subtotal Operations Revenue</b>	<b>\$1,757,040</b>	<b>\$1,783,016</b>	<b>\$1,751,828</b>
<b>Non-Operations Revenue</b>			
Bulk Water Sales	\$9,433	\$10,723	\$9,000
Well Sample Test	\$8,815	\$13,200	\$6,900
Turn On/Off Service Fee	\$9,208	\$9,044	\$9,084
Lien Letter Receipts	\$2,725	\$2,125	\$2,500
Collection Cost Recovery	\$42,218	\$40,946	\$41,000
Miscellaneous/Scrap	\$869	\$549	\$1,500
Work for Others	\$7,156	\$8,634	\$7,000
Sewer Collection Fees	\$30,055	\$27,743	\$27,744
Interest Earnings	\$3,932	\$4,431	\$1,800
Written Off Account Recovery	\$759	\$798	\$240
Grant and Property Sale/Lease	\$11,370	\$0	\$0
USB Trust- Debt Interest	\$63	\$182	\$18
USB Trust - Debt Holdings Interest	\$18	\$1,225	\$48
USB Capital Interest	\$44.00	\$45.66	\$4.00
<b>Subtotal Non-Operations</b>	<b>\$126,665</b>	<b>\$119,646</b>	<b>\$106,838</b>
<b>TOTAL REVENUES</b>	<b>\$1,883,705</b>	<b>\$1,902,661</b>	<b>\$1,858,666</b>

**TABLE 1 (cont'd)**

**REVENUES AND EXPENSES FOR 2016, 2017 AND 2017 BUDGET**

		<b>2017 Year End</b>	
<b>General &amp; Administrative</b>	<b>2016 Actual</b>	<b>(unaudited)</b>	<b>2017 Budget</b>
Authority Board	\$5,900	\$5,900	\$6,000
Office Salaries	\$110,622	\$113,673	\$114,204
Billing Supplies	\$44,179	\$36,433	\$50,200
Contracted Services	\$43,284	\$48,105	\$41,900
Utilities	\$11,144	\$12,087	\$12,400
Office Building Maintenance	\$381	\$0	\$1,000
Permits/ Right of Ways	\$6,050	\$5,125	\$10,500
General Adjusted Bank Fees	\$4,698	\$4,733	\$5,000
Uncollectible Write Off	\$0	\$0	\$600
Engineering Retainer	\$4,583	\$4,917	\$5,170
Legal & Professional	\$11,157	\$14,056	\$12,925
Insurance Premiums	\$39,070	\$36,820	\$43,600
Social Security	\$34,883	\$33,905	\$36,397
Health Benefits	\$92,367	\$135,615	\$128,000
Mileage Reimbursements	\$823	\$1,156	\$530
Education/Safety/ Medical	\$3,535	\$6,456	\$3,000
Unemployment Compensation	\$2,821	\$3,121	\$3,800
Retirement	\$7,489	\$16,384	\$7,400
Court Fees	\$543	\$459	\$1,400
<b>Subtotal General Administrative Fees</b>	<b>\$423,529</b>	<b>\$478,945</b>	<b>\$484,026</b>
<b>PURIFICATION SYSTEM</b>			
Operations Labor	\$164,005	\$176,937	\$166,824
Overtime Labor	\$7,629	\$2,098	\$8,508
Operations Expense	\$14,864	\$16,380	\$19,500
Treating Chemicals	\$87,727	\$92,601	\$82,404
Contracted Services	\$32,098	\$46,142	\$35,600
Utilities	\$56,691	\$56,290	\$62,000
Lab Chemicals	\$20,485	\$12,839	\$18,108
WTP Evaluation	\$1,963	\$1,885	\$1,000
<b>Subtotal Purification</b>	<b>\$385,462</b>	<b>\$405,171</b>	<b>\$393,944</b>

<b>TABLE 1 (cont'd)</b>			
<b>REVENUES AND EXPENSES FOR 2016, 2017 AND 2017 BUDGET</b>			
<b>HADLEY ROAD BOOSTER PUMP</b>	<b>2016 Actual</b>	<b>2017 Year End (unaudited)</b>	<b>2017 Budget</b>
Electric / Building	\$738	\$780	\$814
Electric / Pump	\$5,682	\$5,812	\$6,108
Heating	\$1,670	\$1,223	\$2,400
Pump Maintenance	\$2,831	\$662	\$3,000
Contracted Services	\$0	\$0	\$0
<b>Subtotal Pumping</b>	<b>\$10,920</b>	<b>\$8,477</b>	<b>\$12,322</b>
<b>DISTRIBUTION SYSTEM</b>			
Operations Labor	\$166,195	\$147,765	\$148,584
Labor Overtime	\$9,639	\$3,025	\$14,856
Services Materials	\$4,590	\$5,286	\$5,500
Mains Material	\$8,658	\$11,394	\$15,600
Meters Material	\$25,503	\$20,294	\$29,496
Operation Expense	\$23,456	\$17,509	\$22,860
Contracted Service	\$44,398	\$38,426	\$57,600
Vehicle Expense	\$4,729	\$1,229	\$2,004
Gasoline Expense	\$3,241	\$3,082	\$4,920
<b>Subtotal Distribution</b>	<b>\$290,409</b>	<b>\$248,011</b>	<b>\$301,420</b>
<b>TOTAL EXPENSES</b>	<b>\$1,110,320</b>	<b>\$1,140,604</b>	<b>\$1,191,712</b>

As shown in Table 1, for Fiscal Year 2017 the total unaudited operating revenues were higher than budgeted operating revenues by \$30,249. However, overall revenues exceeded budget by \$43,995. Total expenses for 2017 were \$51,108 less than the budget and the net income available for depreciation, debt service and capital additions is \$762,057.

Table 2 has been prepared to show the actual (unaudited) revenues and expenses of the Authority compared to the 2018 budget of revenues and expenses adopted by the Authority.

<b>TABLE 2</b>		
<b><u>2018 OPERATING BUDGET</u></b>		
<b>Operating Revenue</b>	<b>2017 (unaudited)</b>	<b>2018 Budget</b>
Metered Residential	1,253,128	1,275,286
Metered Commercial	399,413	384,336
Metered Industrial	22,973	22,534
Metered Public	41,166	39,400
Private Fire Protection	39,507	38,928
Public Fire Protection	26,828	26,892
Tap in Fees	0	2,000
<b>Subtotal Operation Revenue</b>	<b>1,783,016</b>	<b>1,789,375</b>
<b>Non-Operations Revenue</b>		
Bulk Water Sales	10,723	9,500
Well Sample Test	13,200	14,000
Turn On/Off Service Fee	9,044	9,000
Lien Letter Receipts	2,125	2,400
Collection Cost Recovery	40,946	41,000
Miscellaneous/Scrap	549	1,000
Theft of Service Recovered	0	100
Work for Others	8,634	9,000
Sewer Collection Fees	27,743	27,744
Interest Earnings	4,431	3,200
Written Off Account Recovery	798	300
Grant and Property Sale/Lease	0	10,000
USB Trust- Debt Interest	182	48
USB Trust - Debt Holdings Interest	1,225	18
USB Capital Interest	46	4
<b>Subtotal Non-Operations Revenue</b>	<b>119,646</b>	<b>127,314</b>
<b>TOTAL REVENUES</b>	<b>1,902,661</b>	<b>1,916,689</b>

<b>TABLE 2 (Cont'd)</b>		
<b><u>2018 OPERATING BUDGET</u></b>		
<b>General &amp; Administrative</b>	<b>2017 (unaudited)</b>	<b>2018 Budget</b>
Authority Board	5,900	6,000
Office Salaries	113,673	119,000
Billing Supplies	36,433	49,000
Contracted Services	48,105	46,090
Utilities	12,087	13,400
Office Building Maintenance	0	500
Permits/ Right of Ways	5,125	10,500
General Adjusted Bank Fees	4,733	5,170
Uncollectable Consumer Write-offs	0	700
Engineering Retainer	4,917	4,800
Legal & Professional	14,056	12,950
Insurance Premiums	36,820	38,000
Social Security	33,905	34,930
Health Benefits	135,615	132,300
Mileage Reimbursements	1,156	1,200
Education/Safety/ Medical	6,456	5,000
Unemployment Compensation	3,121	3,600
Retirement	16,384	7,500
Court Fees	459	1,000
<b>Subtotal General Administrative Fees</b>	<b>478,945</b>	<b>491,640</b>
<b>PURIFICATION SYSTEM</b>		
Operations Labor	176,937	172,200
Overtime Labor	2,098	8,000
Operations Expense	16,380	20,280
Treating Chemicals	92,601	102,000
Contracted Services	46,142	40,200
Utilities	56,290	61,000
Lab Chemicals	12,839	18,108
WTP Evaluation	1,885	0
<b>Subtotal Purification</b>	<b>405,171</b>	<b>421,788</b>

<b>TABLE 2 (Cont'd)</b>		
<b><u>2018 OPERATING BUDGET</u></b>		
<b>HADLEY ROAD BOOSTER PUMP</b>	<b>2017 (unaudited)</b>	<b>2018 Budget</b>
Electric / Building	780	815
Electric / Pump	5,812	6,100
Heating	1,223	1,900
Pump Maintenance	662	0
Contracted Services	0	0
<b>Subtotal Pumping</b>	<b>8,477</b>	<b>8,815</b>
<b>DISTRIBUTION SYSTEM</b>		
Operations Labor	147,765	157,300
Labor Overtime	3,025	10,700
Services Materials	17,509	5,000
Mains Material	11,394	9,000
Meters Material	5,286	20,000
Operation Expense	20,294	22,500
Contracted Service	38,426	55,000
Vehicle Expense	1,229	2,100
Gasoline Expense	3,082	3,500
<b>Subtotal Distribution</b>	<b>248,011</b>	<b>285,100</b>
<b>TOTAL EXPENSES</b>	<b>1,140,604</b>	<b>1,207,343</b>

The Operating Budgeted Expenses for 2018, included herein, total \$1,207,343. This represents an increase of approximately 6 percent over the unaudited operating expenses in 2017. Expenses are based on present and anticipated 2018 costs of chemicals, power, contract dewatering of treatment plant sludge, and other operating requirements.

The anticipated revenues from metered sales, fire protection, and tap-in fees revenue are estimated to provide approximately \$1,789,375 in 2018. Non-operating revenues are estimated to amount to \$127,314, which includes the fee charged to the Borough of Greenville and Hempfield Township for billing and collecting sewer charges, and interest income from investments. On the above basis, total revenues for 2018 have been anticipated to amount to \$1,916,689.



### 3.2. Comparative Statement of Revenues, Expenses, and Debt Service

A comparative statement of operating revenues, expenses, and debt service for Fiscal Years 2017 and 2018 is shown in Table. The Budget FY 2018 figures reflect the Fourth Issue Water Revenue Bonds, Series of 2011 dated December 29, 2011 values.

<b>TABLE 3</b>		
<b>COMPARATIVE STATEMENT OF REVENUE AND DEBT SERVICE</b>		
	<b>Unaudited FY 2017</b>	<b>Budget FY 2018</b>
<b><u>Net Revenue</u></b>		
Total Revenue	\$1,902,661	\$1,916,689
Total Expenses	\$1,140,604	\$1,207,343
Total Revenue Available for Debt Service	<b>\$762,057</b>	<b>\$709,346</b>
<b><u>Debt Service</u></b>		
Pennvest Princ/Int. Dist. Improvement	\$248,400	\$248,400
USB Bonds Princ/ Int. Pay off Sept. 2024	\$284,988	\$290,988
New Pennvest	\$0	\$65,000
Total Debt Service	<b>\$533,388</b>	<b>\$604,388</b>
<b><u>Capital Additions</u></b>		
Revenue Available for Debt Service	\$762,057	\$709,346
Total Debt Service	\$533,388	\$604,388
Available for Capital Additions	<b>\$228,669</b>	<b>\$104,958</b>
<b>Coverage Provided</b>	<b>1.43</b>	<b>1.17</b>

The above summary indicates that revenues produced by the rate schedule effective January 1, 2018 together with other non-operating revenue will provide revenues for the year 2018 that will be sufficient to cover the minimum requirements (1.1) for operating expenses and for debt service as required by the Trust Indenture.

#### 4. CAPITAL IMPROVEMENTS AND REDEMPTION FUND

##### 4.1. Capital Improvements 2017

Cost of capital additions to plant and equipment of the Waterworks System in 2017 totaled \$410,211. These improvements were sufficient for proper operation of the Authority's system.

A tabulation of budgeted and actual expenses is shown in Table 4.

<b>TABLE 4</b>		
<b>Capital Improvements Program 2017</b>		
<b>ITEM</b>	<b>Actual 2017</b>	<b>Budget 2017</b>
A- Hadley Rd, Cobblestone	\$4,589	-\$4,589
West Tank Pipe Gallery	\$92,756	\$200,000
Lab & Plant Equipment	\$30,374	\$22,000
Raw/ Finish Pump	\$994	\$15,000
Sludge Press	\$675	\$3,000
Building & Lot Repair	\$5,488	\$0
Hydrant & Valves	\$8,915	\$4,800
Power Equipment	\$0	\$3,000
Vehicle 2017	\$26,777	\$42,000
Equipment	\$27,852	\$15,200
<b>TOTAL</b>	<b>\$198,420</b>	<b>\$300,411</b>

*\*Note that the Cobblestone Hotel line item reflects activity related to a Developers' agreement escrow account.*

#### 4.2. Capital Improvements Program 2018-2020

Proposed capital improvements for the years 2018, 2019 and 2020 are shown in Table 5. These improvements will be prioritized by the Authority and implemented based upon need and available funds.

<b>TABLE 5</b>			
<b>Capital Improvements Program 2018-2020</b>			
<b>ITEM</b>	<b>Budget 2018</b>	<b>Budget 2019</b>	<b>Budget 2020</b>
Lab/Plant Equipment	\$10,000	\$20,000	\$10,000
Raw Pumps/Finish Pumps	\$3,000	\$0	\$1,000
Sludge/ Press Improvements	\$3,500	\$1,500	\$0
Building & Parking Lot Repairs	\$0	\$18,000	\$30,000
New Vehicles Replacement	\$65,000	\$0	\$0
Hydrant/Valve Program	\$5,000	\$5,000	\$5,000
Tools & Equipment	\$0	\$0	\$1,000
Storage Tanks	\$15,000	\$0	\$0
Office Equipment	\$1,500	\$0	\$1,000
<b>TOTAL</b>	<b>\$103,000</b>	<b>\$44,500</b>	<b>\$48,000</b>

The Authority is preparing to close on a PENNVEST loan/ grant package in 2018.

## 5. RATES, RENTS AND CHARGES FOR WATER

### 5.1. Rate Schedule

The Authority's current rate schedule, which became effective January 1, 2018, is summarized as follows:

Monthly Minimum charge for which 500 gallons of water is allowed

<b>Size of meter</b>	<b>Rate</b>
5/8"	\$18.70
5/8" x 3/4"	\$18.70
3/4"	\$27.70
1"	\$41.15
1 1/4"	\$49.30
1 1/2"	\$55.90
2"	\$85.15
3"	\$171.50
4"	\$281.00
6"	\$532.25

Monthly consumption charges, per thousand gallons for water used by one customer

for the next	3,500 gallons	\$8.20
for the next	29,500 gallons	\$8.45
for the next	66,500 gallons	\$8.20
for the next	233,500 gallons	\$6.10
over	333,500 gallons	\$4.30

Stand and by Service for Private Fire Protection (Annual Cost – Billed Monthly)

<b>STAND BY SERVICE FOR PRIVATE FIRE PROTECTION</b>	
(Annual Cost - billed monthly)	
<u>Private Hydrants</u>	
Annually	\$590.40
<u>Sprinkler Systems</u>	
2" Connection - Each	\$106.20
4" Connection - Each	\$448.80
6" Connection - Each	\$590.40
8" Connection - Each	\$1,015.80

Public Fire Protection includes main line (4" size or larger) and Fire Hydrants include supply line from the treatment plant (unchanged).

Borough of Greenville	\$18,256.92 per year
Hempfield Township	\$8,571.24 per year

## 5.2. Bulk Water Rates

The bulk water sale rate is \$8.20 per thousand gallons (billed monthly).

Metered bulk water use throughout the system is billed with a \$25.00 minimum.

Bulk water obtained at the water treatment plant has a \$5.00 service fee applied per load.

## **6. INSURANCE**

Insurance in force as of December 31, 2017, is tabulated on the following page and includes General Liability, Commercial Property Coverage, Employees, Automobile, Public Officials Liability, Employee Workers Compensation, and Employee Dishonesty as noted. The insurance coverage is based on an appraisal by an independent professional appraiser. The appraisal is updated annually. It is recommended that this practice be continued and that the Authority's appraisal be updated annually.

<b>SCHEDULE OF INSURANCE</b>				
<b>AS OF DECEMBER 31, 2017</b>				
<b><u>Policy No.</u></b>	<b><u>Property Covered</u></b>	<b><u>Type of Coverage</u></b>	<b><u>Amount of Coverage</u></b>	<b><u>Expiration Date</u></b>
Cicinatti Insurance/ Anderson Insurance	General Liability	Liability	\$1,000,000	5/1/2020
	Commercial Property	Building Coverage	\$9,984,841	
	General Liability	Inland Marine	\$38,000	
		Payroll	\$317,500	
		Limit	\$3,000,000	
			\$1,000,000	
		Employee Benefits	\$3,000,000	
			\$1,000,000	
	Wrongful Acts &	Retro 5/1/2000	\$3,000,000	
	Professional Liability		\$1,000,000	
	Employee Practices	Retro 5/1/2000	\$3,000,000	
			\$1,000,000	
	Commercial Crime	Employee Theft	\$100,000	
		Forgery/ Alteration	\$100,000	
		Computer Fraud	\$50,000	
		Money	\$25,000	
		Fund Transfer	-	
		Money Orders/Counterfeit	-	
	Automobile	Liability	\$1,000,000	
		Non-Owned Liability	\$1,000,000	
	Excess Liability		\$1,000,000	
	Terrorism		\$1,000,000	
	Cyber		\$1,000,000	
	Earthquake		\$150,000	
	Flood		\$100,000	
Matheson Insurance	Employee Workers Compensation		PA Standard	2/28/2018

## 7. CONCLUSIONS & RECOMMENDATIONS

In accordance with the covenants of the Trust Indenture dated December 29, 2011, as set forth in Section 6.07, the following conclusions and recommendations are submitted:

Total Expenses in the amount of \$1,207,343 as outlined in the Budget, represent the estimate of the amount required for operational and administrative costs and maintenance of the water system for the 2018 fiscal year.

The operating budget, as provided herein, has been approved and adopted. In our opinion, it represents the required expenditures necessary to maintain the properties of the Authority in good repair and sound operating condition.

The insurance schedule, as set forth herein, is based on an independent professional appraisal. It is recommended that this appraisal be updated annually and insurance coverage be revisited as necessary for the coming fiscal year.

The capital improvements budget has been developed to provide a listing of desirable improvements over the next three (3) years. These improvements will be completed based upon the Authority's prioritization and available funding.

In its seventy-fourth year of existence, the Authority has continued to provide good, sound, direction to the operation of the utility in accordance with recognized water works practices, regulatory requirements, and industry standards.

Entech is registered to provide engineering services as Entech Engineering, Inc. In the performance of its services on behalf of the Greenville Water Authority (a municipal entity), Entech is not recommending any financing action, is not acting as a municipal advisor to the Client and does not owe a fiduciary duty pursuant to Section 15B of the Exchange Act to the Authority in respect to the information and material contained in this Report. The Authority should discuss any information and material contained in this Report with any and all internal and/or external financial advisors and experts deemed appropriate before acting on the information contained herein.



**8. ACKNOWLEDGMENT**

Entech Engineering, Inc. would like to take this opportunity to express sincere gratitude to the Authority Board for the opportunity to serve as the Greenville Water Authority consulting engineer; and to recognize the valuable contributions of Ms. Carol Paul and the Greenville Water Authority staff to the preparation of this report

Respectfully Submitted,



ENTECH ENGINEERING, INC.

Robert L. Horvat, PE  
Regional Director/ Project Manager

