

THE GREENVILLE WATER AUTHORITY MERCER COUNTY, PENNSYLVANIA

2018 WATER SYSTEM ANNUAL REPORT & 2019 OPERATING BUDGET

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Dated: February 13, 2019

The Greenville Water Authority

Mercer County

Entech Project Number: 4631.002

February 2019

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The Greenville Water Authority

Mercer County

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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:

- Section 2 Operational and Maintenance Status of Authority Water Facilities
- Section 3 Revenues and Expenditures
- Section 4 Capital Improvements and Redemption Fund
- Section 5 Rates, Rents, and Water Charges Water
- Section 6 Insurance
- Section 7 Conclusions and Recommendations

This report is the seventy-sixth 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 2019, and the capital expenditures proposed for the fiscal year 2019. 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 AND MAINTENANCE STATUS OF AUTHORITY WATER FACILITIES

2.1. System Operational and Maintenance Status

The general performance of all Greenville Water Authority distribution and treatment facilities during Fiscal Year 2018 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 6,011 hours during the past year for an average of approximately 16.5 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 replaced the finish water pump variable frequency drives and added emergency power provisions to utilize a portable generator in the event of a long-term interruption of service. The Authority also permitted and completed a change from Ammonium Hydroxide to liquid Ammonium Sulfate in order to improve water quality consistency. Scheduled maintenance of the bolted steel sludge holding tanks (based upon manufacturer recommendations) is anticipated for 2019.

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 2018 Ford F-550 dump truck was purchased and outfitted for service during 2018.

Under the Meter Account, 21 remote meters were installed and 0 meters were tested or repaired in 2018.

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. Eight (8) Automatic Flushing Devices were purchased in 2018 (installation anticipated for 2019) to maintain consistent water quality. The Authority conducted system-wide flushing activities in May and October.

2.4. Distribution Pump Station

The Booster Pump Station is located at the former treatment facility along Hadley Road and pumps finished water from the plant zone to the east zone pressure gradient. Pumping is regulated based upon Hadley Road Tank levels. In addition to routine maintenance, the Authority rebuilt one of the two pumps, installed new monitoring equipment, replaced the front door, and added provisions for use of a portable generator in the event of a long duration utility outage. Additional facility improvements anticipated for 2019 include a new roof and replacement of two unit heaters.

2.5. 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 1,000,000-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.

A Tank Rehabilitation Project was completed on the North and South 750,000 gallon tanks in 2018. Improvements included interior / exterior coatings, safety improvements, elimination of the underground valve vault and replacement of associated site piping. Mixing system installation, site fencing, security camera installations, remote tank level monitoring, and associated electrical improvements will round out the project in 2019. Installation of remote tank level monitoring equipment was completed at the Hadley Road Tanks in 2018. Security cameras will be installed at the West Tank site in 2019.

The water storage tanks were last painted as shown in Table 2-1:

Storage Unit	Volume (Gallons)	Year Last Painted
North Tank	750,000	2018
South Tank	750,000	2018
West Main Street Tank	255,000	2005
Hadley Road Tank #1	250,000	2014
Hadley Road Tank #2	1,000,000	2010

Table 2-1: Tank Painting History

2.6. General Office Structures and Equipment

The general office structure has been well maintained and is adequate in size for Authority operations. The roof was last replaced in 2016.

Under General Shop Equipment, general tools and equipment were purchased during 2018. Adequate small tools and repair equipment are available and maintained in good condition for repairs and service to customers.

2.7. Customers

The total number of customers according to consumer classifications listed on the books of the Authority as of December 31, 2018, compared with those listed at the end of 2017, is as presented in Table 2-2.

Classification	December 31, 2017	December 31, 2018
Residential	2,438	2429
Commercial	250	246
Industrial	3	3
Public	23	21
Private Fire Protection	55	55
Public Fire Protection	2	2

Table 2-2: Number of Customers, By Classification (2-Year)

Note that no new taps were added in 2018.

2.8. Use of Water

Table 2-3 provides a comparison of the amount of water sold by consumer classification for the past five (5) years:

Classification	Total Volume Sold (1,000 Gallons)				
Classification	2014	2015	2016	2017	2018
Residential	102,932	99,693	97,037	94,345	92,171
Commercial	50,881	49,980	43,496	45,370	47,072
Industrial	2,891	2,434	1,929	2,374	2,647
Public	11,737	10,159	10,479	10,868	11,849
Bulk Sales	1,646	522	939	1,163	1,092
TOTALS:	170,087	162,788	153,880	154,120	154,831

Sales to metered consumers totaled 154,831,400 gallons or a daily average of approximately 424,195 gallons in 2018; representing an increase in total sales of 711,000 gallons from 2017. A breakdown of sales per customer class indicates that while residential sales decreased by 2,174,000 gallons and bulk sales decreased by 71,000 gallons, commercial increased by 1,702,000 gallons, industrial increased by 273,000 gallons, public increased by 981,000 gallons in 2018.

2.9. Water Treatment Plant Operation

Table 2-4 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 (10) years.

Year	Plant Output ¹	Daily Average Output ¹	Sold ¹	Other ^{1,2}	Percentage Unbilled
2018	217,106	595	154,831	6,166	28.7
2017	211,989	581	154,120	4,000	25.2
2016	224,767	614	153,880	4,108	29.7
2015	255,681	700	162,788	15,570	30.2
2014	255,805	701	170,087	0	33.5
2013	255,760	701	177,081	15,000	30.9
2012	268,303	733	183,751	7,500	31.5
2011	240,000	658	179,052	1,000	25.4
2010	245,171	672	175,030	3,000	28.6
2009	256,327	702	176,827	2,024	31.0

Table 2-4: Plant Throughput and Unbilled (10-Year)

Notes: 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.

Table 2-5 compares chemical usage and costs for the last two (2) years:

	2017		20)18
Chemical	Usage (Ibs)	Total Cost	Usage (lbs)	Total Cost
Activated Carbon	0	\$0	0	\$0
AquaMag (gal)	381	\$5,023	503	\$6,255
Caustic Soda	45,531	\$15,644	48,029	\$16,619
Chlorine	10,182	\$6,909	9,007	\$6,485
Fluoride	12,169	\$6,159	12,578	\$4,994
Polymer N1986	124	\$371	116	\$355
Stern PAC	245,538	\$44,197	276,499	\$50,065
300-53 Polymer (Sludge Press)	2,132	\$3,967	2,218	\$3,793
Potassium Permanganate	2,255	\$7,438	2,188	\$6,126
Ammonia	6,830	\$2,892	5,205	\$3,385
TOTALS:		\$92,600		\$98,077

Table 2-5: Chemical Usage and Cost (2-Year)

3. REVENUES AND EXPENDITURES

3.1. Revenues and Expenditures

Based on information provided by the Authority, Table 3-1 has been prepared to show the actual 2017 revenues and expenses compared with the projected actual (unaudited) and budgeted revenues and expenses for 2018.

Operating Revenue	2017 Actual	2018 Year End (unaudited)	2018 Budget
Metered Residential	\$1,262,870	\$1,273,232	\$1,275,286
Metered Commercial	\$407,879	\$424,675	\$384,336
Metered Industrial	\$22,766	\$25,644	\$22,534
Metered Public	\$41,481	\$35,316	\$39,400
Private Fire Protection	\$39,963	\$43,035	\$38,928
Public Fire Protection	\$26,828	\$26,828	\$26,892
Tap in Fees	\$0	\$6,000	\$2,000
Subtotal Operations Revenue	\$1,801,788	\$1,834,730	\$1,789,376
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Non-Operations Revenue			
Bulk Water Sales	\$10,723	\$11,033	\$9,500
Well Sample Test	\$13,200	\$17,800	\$14,000
Turn On/Off Service Fee	\$9,044	\$9,232	\$9,000
Lien Letter Receipts	\$2,125	\$2,645	\$2,400
Collection Cost Recovery	\$40,946	\$43,670	\$41,000
Miscellaneous/Scrap	\$549	\$381	\$1,000
Work for Others	\$8,634	\$7,569	\$9,000
Sewer Collection Fees	\$27,743	\$27,743	\$27,744
Interest Earnings	\$4,431	\$5,379	\$3,200
Written Off Account Recovery	\$798	\$788	\$300
Grant and Property Sale/Lease	\$0	\$0	\$0
USB Trust- Debt Interest	\$182	\$1,566	\$48
USB Trust - Debt Holdings Interest	\$1,225	\$3,903	\$18
USB Capital Interest	\$45	\$83	\$4
Subtotal Non-Operations Revenue	\$119,645	\$131,792	\$117,214
TOTAL REVENUES	\$1,921,433	\$1,966,522	\$1,906,590

Table 3-1: Revenues and Expenses for 2017, 2018, and 2018 Budget

General & Administrative	2017 Actual	2018 Year End (unaudited)	2018 Budget
Authority Board	\$5,900	\$5,900	\$6,000
Office Salaries	\$114,107	\$118,300	\$119,000
Billing Supplies	\$36,433	\$35,849	\$49,000
Contracted Services	\$48,105	\$51,378	\$46,090
Utilities	\$12,087	\$8,094	\$13,400
Office Building Maintenance	\$0	\$192	\$500
Permits/ Right of Ways	\$5,125	\$11,155	\$10,500
General Adjusted Bank Fees	\$4,733	\$5,480	\$5,170
Uncollectible Write Off	\$0	\$0	\$0
Engineering Retainer	\$4,917	\$3,500	\$4,800
Legal & Professional	\$14,056	\$13,647	\$12,950
Insurance Premiums	\$36,820	\$38,337	\$38,000
Social Security	\$33,905	\$36,247	\$34,930
Health Benefits	\$125,948	\$134,027	\$132,300
Mileage Reimbursements	\$1,156	\$218	\$1,200
Education/Safety/ Medical	\$6,456	\$4,926	\$5,000
Unemployment Compensation	\$3,121	\$3,982	\$3,600
Retirement	\$3,337	\$16,810	\$7,500
Court Fees	\$459	\$401	\$1,000
Subtotal General Administrative Fees	\$456,665	\$488,443	\$490,940
PURIFICATION SYSTEM			
Operations Labor	\$177,805	\$166,677	\$172,200
Overtime Labor	\$2,098	\$15,371	\$8,000
Operations Expense	\$16,380	\$19,851	\$20,280
Treating Chemicals	\$80,766	\$97,846	\$102,000
Contracted Services	\$46,142	\$44,052	\$40,200
Utilities	\$56,290	\$49,049	\$61,000
Lab Chemicals	\$12,839	\$17,807	\$18,108
WTP Evaluation	\$1,885	\$0	\$0
Subtotal Purification	\$394,204	\$410,653	\$421,788

Table 3-1 (cont'd)Revenues and Expenses for 2017, 2018, and 2018 Budget

HADLEY ROAD BOOSTER PUMP	2017 Actual	2018 Year End (unaudited)	2018 Budget
Electric / Building	\$780	\$648	\$815
Electric / Pump	\$5,812	\$5,992	\$6,100
Heating	\$1,223	\$1,711	\$1,900
Pump Maintenance	\$662	\$2,580	\$0
Contracted Services	\$0	\$0	\$0
Subtotal Pumping	\$8,477	\$10,931	\$8,815
DISTRIBUTION SYSTEM			
Operations Labor	\$149,582	\$152,792	\$157,300
Labor Overtime	\$3,025	\$20,680	\$10,700
Services Materials	\$5,286	\$3,073	\$5,000
Mains Material	\$11,394	\$20,631	\$9,000
Meters Material	\$20,294	\$18,340	\$20,000
Operation Expense	\$17,509	\$25,546	\$22,500
Contracted Service	\$40,626	\$75,429	\$55,000
Vehicle Expense	\$1,229	\$2,633	\$2,100
Gasoline Expense	\$3,082	\$5,576	\$3,500
Subtotal Distribution	\$252,028	\$324,700	\$285,100
TOTAL EXPENSES	\$1,111,374	\$1,234,727	\$1,206,643

Table 3-1 (cont'd)Revenues and Expenses for 2017, 2018, and 2018 Budget

As shown in Table 3-1, for Fiscal Year 2018 the total unaudited operating revenues were higher than budgeted operating revenues by \$45,354 and overall revenues exceeded budget by \$59,932. Total expenses for 2018 were only \$28,084 over budget and the net income available for depreciation, debt service and capital additions was \$731,795.

Table 3-2 has been prepared to show the actual (unaudited) revenues and expenses of the Authority compared to the 2019 budget of revenues and expenses adopted by the Authority.

Operating Revenue	2018 (unaudited)	2019 Budget
Metered Residential	1,273,232	1,326,297
Metered Commercial	424,675	430,835
Metered Industrial	25,644	23,435
Metered Public	35,316	40,582
Private Fire Protection	43,035	40,485
Public Fire Protection	26,828	26,892
DEP Safe Drinking Water Fee		10,000
Tap in Fees	6,000	2,000
Subtotal Operation Revenue	1,834,730	1,900,527
Non-Operations Revenue		
Bulk Water Sales	11,033	9,500
Well Sample Test	17,800	16,000
Turn On/Off Service Fee	9,232	9,200
Lien Letter Receipts	2,645	2,500
Collection Cost Recovery	43,670	43,000
Miscellaneous/Scrap	381	500
Work for Others	7,569	9,100
Sewer Collection Fees	27,743	27,744
Interest Earnings	5,379	4,000
Written Off Account Recovery	788	795
Grant and Property Sale/Lease	0	80,000
USB Trust- Debt Interest	1,566	1,000
USB Trust - Debt Holdings Interest	3,903	500
USB Capital Interest	83	50
Subtotal Non-Operations		
Revenue	131,792	203,889
TOTAL REVENUES	1,966,522	2,104,416

Table 3-2: 2019 Operating Budget

General & Administrative	2018 (unaudited)	2019 Budget
Authority Board	5,900	6,000
Office Salaries	118,300	122,600
Billing Supplies	35,849	49,000
Contracted Services	51,378	53,000
Utilities	8,094	13,400
Office Building Maintenance	192	1,000
Permits/ Right of Ways	11,155	15,000
General Adjusted Bank Fees	5,480	5,346
Uncollectable Consumer Write-offs	0	700
Engineering Retainer	3,500	4,800
Legal & Professional	13,647	18,000
Insurance Premiums	38,337	39,000
Social Security	36,247	36,118
Health Benefits	134,027	143,000
Mileage Reimbursements	218	1,100
Education/Safety/ Medical	4,926	4,000
Unemployment Compensation	3,982	3,820
Retirement	16,810	7,600
Court Fees	401	1,100
Subtotal General Administrative Fees	488,443	524,584
	400,445	524,504
PURIFICATION SYSTEM		
Operations Labor	166,677	172,000
Overtime Labor	15,371	12,000
Operations Expense	19,851	20,000
Treating Chemicals	97,846	102,000
Contracted Services	44,052	44,000
Utilities	49,049	57,000
Lab Chemicals	17,807	18,000
WTP Evaluation	0	0
Subtotal Purification	410,653	425,000

Table 3-2 (cont'd)2019 Operating Budget

HADLEY ROAD BOOSTER PUMP	2018 (unaudited)	2019 Budget
Electric / Building	648	0
Electric / Pump	5,992	7,320
Heating	1,711	2,000
Pump Maintenance	2,580	0
Contracted Services	0	1,000
Subtotal Pumping	10,931	10,320
DISTRIBUTION SYSTEM		
	152 702	162 900
Operations Labor	152,792	163,800
Labor Overtime	20,680	12,000
Services Materials	3,073	5,150
Mains Material Meters Material	20,631	15,000
	18,340	21,000
Operation Expense Contracted Service	25,546	24,500
	75,429	70,000
Vehicle Expense	2,633	2,200
Gasoline Expense Subtotal	5,576	5,000
Distribution	324,700	318,650
TOTAL EXPENSES	1,234,727	1,278,554

Table 3-2 (Cont'd)2019 Operating Budget

The Operating Budgeted Expenses for 2019, included herein, total \$1,278,554. This represents an increase of approximately 3.5 percent over the unaudited operating expenses in 2018. Expenses are based on present and anticipated 2019 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 \$1,900,527 in 2019. Non-operating revenues are estimated to amount to \$203,889, 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 2019 have been anticipated to amount to \$2,104,416.

3.2. Comparative Statement of Revenues and Debt Service

A comparative statement of operating revenues and debt service for Fiscal Years 2018 and 2019 is shown in Table 3-3. The Budget FY 2019 figures reflect the Fourth Issue Water Revenue Bonds, Series of 2011 dated December 29, 2011 values.

	Unaudited FY 2018	Budget FY 2019
Net Revenue		
Total Revenue	\$1,966,522	\$2,104,416
Total Expenses	\$1,234,727	\$1,278,554
Total Revenue Available for Debt Service	\$731,795	\$825,862
Debt Service		
Pennvest Princ/Int. Dist. Improvement	\$246,997	\$248,400
USB Bonds Princ/ Int. Pay off Sept. 2024	\$290,988	\$290,988
New Pennvest	\$1,439	\$65,000
Total Debt Service	\$539,424	\$604,388
Capital Additions		
Revenue Available for Debt Service	\$731,795	\$825,862
Total Debt Service	\$539,424	\$604,388
Available for Capital Additions	\$192,371	\$221,474
Coverage Provided	1.36	1.37

 Table 3-3: Comparative Statement of Revenue and Debt Service

The above summary indicates that revenues produced by the rate schedule effective January 1, 2019 together with other non-operating revenue will provide revenues for the year 2019 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 2018

Cost of capital additions to plant and equipment of the Waterworks System in 2018 totaled \$341,844. These improvements were sufficient for proper operation of the Authority's system.

A tabulation of budgeted and actual expenses is shown in Table 4-1.

ltem	Actual 2018	Budget 2018
Lab & Plant Equipment	\$10,246	\$10,000
Raw/Finish Pump	\$400	\$3,000
Sludge Press	\$2,662	\$3,500
New Vehicles - Capital	\$59,674	\$65,000
Hydrant & Valves	\$0	\$5,000
Storage Tanks	\$0	\$15,000
CFA Grant - Plant & Distribution	\$6,722	\$32,000
Admin/Billing Equipment Capital	\$0	\$1,500
West Tank - PENNVEST Project	\$262,140	\$0
CFA Grant - Matching Funds	\$0	\$32,000
Race Street Project w/Boro	\$0	\$60,000
TOTALS:	\$341,844	\$227,000

Table 4-1: Capital Improvements Program 2018

4.2. Capital Improvements Program 2019-2021

Proposed capital improvements for the years 2019, 2020 and 2021 are shown in Table 4-2. These improvements will be prioritized by the Authority and implemented based upon need and available funds.

Item	Budget 2019	Budget 2020	Budget 2021
Lab/Plant Equipment	\$26,000	\$20,000	\$15,000
Raw Pumps/Finish Pumps	\$0	\$1,000	\$1,000
Sludge/Press Improvements	\$4,000	\$18,000	\$8,000
Building & Parking Lot Repairs	\$24,000	\$30,000	\$0
System Map & Model Capital or Expense	\$0	\$0	\$0
New Vehicles Replacement	\$0	\$0	\$32,000
Hydrant/Valve Program	\$10,000	\$5,000	\$5,000
Tools & Equipment	\$17,000	\$1,000	\$3,600
Main/Service Line Improvements - Capital	\$60,000	\$0	\$0
Storage Tanks	\$0	\$0	\$0
Admin/Billing Equipment Capital	\$20,000	\$1,000	\$10,000
TOTALS:	\$161,000	\$76,000	\$74,600

Table 4-2: Capital Improvements Program 2019-2021

The Authority closed on a PENNVEST loan/grant package in 2018.

5. RATES, RENTS, AND WATER CHARGES

5.1. Rate Schedule

The Authority's current rate schedule, which became effective January 1, 2019, is summarized in Table 5-1:

Residential, Industrial, Commercial Service - Base & Incremental Rates				
Base	Meter Size	Rate (Monthly)	Rate (Annually)	
	5/8"	\$19.65	\$235.80	
	5/8" x 3/4"	\$19.65	\$235.80	
	3/4"	\$29.10	\$349.20	
	1"	\$43.20	\$518.40	
First EOO College	1 1/4"	\$51.75	\$621.00	
First 500 Gallons:	1 1/2"	\$58.70	\$704.40	
	2"	\$89.40	\$1,072.80	
	3"	\$180.10	\$2,161.20	
	4"	\$295.00	\$3,540.00	
	6"	\$559.00	\$6,708.00	
Increment	Volume Limit (Gallons)	Rate (Monthly, Per 1,000 Gallons)		
	3,500	\$8	.65	
Eastha Naut	29,500	\$8.85		
For the Next:	66,500	\$8.65		
	233,500	\$6.	.40	
Over:	333,500	\$4.50		
Fire Protection Stand-By Service				
Туре	Connection Size	Rate (Monthly)	Rate (Annually)	
Private Hydrants:		\$51.65	\$619.80	
	2"	\$9.30	\$111.60	
			¢471.00	
Sprinkler Systems	4"	\$39.25	\$471.00	
Sprinkler Systems (Per Connection):	4" 6"	\$39.25 \$51.65	\$471.00 \$619.80	

Table 5-1: 2019 Rates, Rents, and Water Charges

In addition to a 5% increase in base and incremental billing rates, two additional monthly fees will be added to customer bills in 2019:

PADEP Safe Drinking Water Act Fee:	\$0.30
Public Fire Protection Fee:	\$0.80
Total (per customer, per month):	\$1.10

Note that the Public Fire Protection Fee replaces charges previously remunerated by the Borough of Greenville and Hempfield Township

5.2. Bulk Water Rates

The bulk water sale rate is \$8.65 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 for 2019 (as of December 31, 2018), is provided in Table 6-1 below 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.

Provider	Expiration Date	Property Covered	Coverage Type	Coverage Amount
		General Liability	Liability	\$1,000,000
		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
Cincinnati				\$1,000,000
Insurance	5/1/2020	Commercial Crime	Employee Theft	\$100,000
Company			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
UPMC Work Partners		Employee Workers Compensation		PA Standard

7. CONCLUSIONS AND RECOMMENDATIONS

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

- Total Expenses in the amount of \$1,278,554 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 2019 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-sixth 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. AKNOWLEDGMENT

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, Ms. Shannon McClimans, 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

