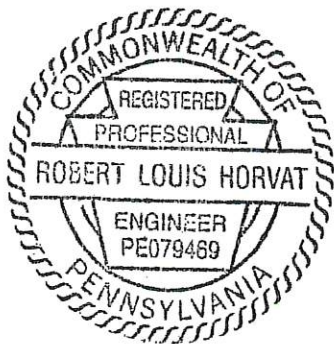


**THE GREENVILLE WATER AUTHORITY**  
MERCER COUNTY, PENNSYLVANIA

# **2019 WATER SYSTEM ANNUAL REPORT & 2020 OPERATING BUDGET**



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**The Greenville Water Authority**

**Mercer County**

**Entech Project Number: 4631.002**

**February 2020**

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**The Greenville Water Authority**  
**Mercer County**  
**Entech Project Number: 4631.002**  
**February 2020**  
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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-seventh 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 2020, and the capital expenditures proposed for the fiscal year 2020. 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 2019 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 5,552 hours during the past year for an average of approximately 15.2 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 completed scheduled maintenance of the bolted steel sludge holding tanks and replaced sludge valves located in the yard. Rooftop and unit heaters in the treatment plant were also replaced. Additional process instrumentation and improvements including upgrades to the sludge press PLC are anticipated for 2020.

### 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.

Under the Meter Account, 23 remote meters were installed and 0 meters were tested or repaired in 2019.

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 2019. Two (2) units remain in stock for installation in 2020 to maintain consistent water quality. The Authority conducted system-wide flushing activities in April-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 completed repairs to the roof and replaced two unit heaters. A pressure reducing valve was also installed in pump room to facilitate return of water flow from the boosted zone back into the plant zone (in case of emergency).

## 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.

The North and South 750,000 gallon tanks received Grid-Bee mixing systems, site fencing, security camera installations, remote tank level monitoring, and associated electrical improvements in 2019. Security cameras and monitoring equipment installations were also completed in 2019.

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

**Table 2-1: Tank Painting History**

<b>Storage Unit</b>	<b>Volume (Gallons)</b>	<b>Year Last Painted</b>
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

## 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 2019. Adequate small tools and repair equipment are available and maintained in good condition for repairs and service to customers. Authority employees completed renovations to the conference room lavatory.

In 2019, the Authority successfully negotiated and purchased a building and property at 43 South Race Street for future consideration.

## 2.7. Customers

The total number of customers according to consumer classifications listed on the books of the Authority as of December 31, 2019, compared with those listed at the end of 2018, is as presented in Table 2-2.

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

<b>Classification</b>	<b>December 31, 2018</b>	<b>December 31, 2019</b>
Residential	2,429	2,414
Commercial	246	249
Industrial	3	3
Public	21	21
Private Fire Protection	55	54
Public Fire Protection	2	0

Note that one (1) new tap was added in 2019.

Public fire protection was transferred from municipalities (2) to a fee applied directly to end users (customer bills) in 2019.

## 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:

**Table 2-3: Customer Sales, By Classification (5-Year)**

Classification	Total Volume Sold (1,000 Gallons)				
	2015	2016	2017	2018	2019
Residential	99,693	97,037	94,345	92,171	93,080
Commercial	49,980	43,496	45,370	47,072	44,723
Industrial	2,434	1,929	2,374	2,647	3,531
Public	10,159	10,479	10,868	11,849	10,857
Bulk Sales	522	939	1,163	1,092	1,173
<b>TOTALS:</b>	<b>162,788</b>	<b>153,880</b>	<b>154,120</b>	<b>154,831</b>	<b>153,364</b>

Sales to metered consumers totaled 153,364,450 gallons or a daily average of approximately 420,177 gallons in 2019; representing a decrease in total sales of 1,466,950 gallons from 2018. A breakdown of sales per customer class indicates that while residential sales increased by 909,000 gallons, bulk sales increased by 81,000 gallons, and industrial sales increased by 884,000 gallons in 2019; commercial sales decreased by 2,349,000 gallons and public sales decreased by 992,000 gallons.



## 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.

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

<b>Year</b>	<b>Plant Output <sup>1</sup></b>	<b>Daily Average Output <sup>1</sup></b>	<b>Sold <sup>1</sup></b>	<b>Other <sup>1,2</sup></b>	<b>Percentage Unbilled</b>
<b>2019</b>	216,733	594	153,364	9,962	24.6
<b>2018</b>	217,106	595	154,831	6,166	28.7
<b>2017</b>	211,989	581	154,120	4,000	25.2
<b>2016</b>	224,767	614	153,880	4,108	29.7
<b>2015</b>	255,681	700	162,788	15,570	30.2
<b>2014</b>	255,805	701	170,087	0	33.5
<b>2013</b>	255,760	701	177,081	15,000	30.8
<b>2012</b>	268,303	733	183,751	7,500	31.5
<b>2011</b>	240,000	658	179,052	1,000	25.4
<b>2010</b>	245,171	672	175,030	3,000	28.6

Notes: <sup>1</sup> Units in 1,000 gallons

<sup>2</sup> 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, automatic flushing device operation, leaks, tank drawdowns, fire protection, etc.

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

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

Chemical	2018		2019	
	Usage (lbs)	Total Cost	Usage (lbs)	Total Cost
Activated Carbon	0	\$0	0	\$0
AquaMag (gal)	503	\$6,255	713	\$9,223
Caustic Soda	48,029	\$16,619	59,444	\$21,909
Chlorine	9,007	\$6,485	9,044	\$7,196
Fluoride	12,578	\$4,994	13,594	\$6,053
Polymer N1986	116	\$355	208	\$636
Stern PAC	276,499	\$50,065	251,114	\$51,511
300-53 Polymer (Sludge Press)	2,218	\$3,793	2,002	\$3,423
Potassium Permanganate	2,188	\$6,126	2,087	\$5,806
Ammonia	5,205	\$3,385	10,686	\$4,810
<b>TOTALS:</b>		<b>\$98,077</b>		<b>\$110,569</b>

Note that the increase in Ammonia cost is due to the change from Ammonia Hydroxide to Liquid Ammonium Sulfate that occurred in 2019.

### 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 2018 revenues and expenses compared with the projected actual (unaudited) and budgeted revenues and expenses for 2019.

**Table 3-1: Revenues and Expenses for 2018, 2019, and 2019 Budget**

	<b>2018 Actual</b>	<b>2019 Year End (unaudited)</b>	<b>2019 Budget</b>
<b>Operating Revenue</b>			
Metered Residential	\$1,283,077	\$1,366,797	\$1,326,297
Metered Commercial	\$425,685	\$423,915	\$430,835
Metered Industrial	\$25,816	\$32,447	\$23,435
Metered Public	\$34,549	\$37,506	\$40,582
Private Fire Protection	\$43,131	\$44,521	\$40,485
Public Fire Protection	\$24,592	\$31,518	\$26,892
Tap in Fees	\$6,000	\$3,308	\$2,000
<b>Subtotal Operations Revenue</b>	<b>\$1,842,850</b>	<b>\$1,940,011</b>	<b>\$1,890,526</b>
<b>Non-Operations Revenue</b>			
Bulk Water Sales	\$11,033	\$11,718	\$9,500
Well Sample Test	\$17,800	\$17,146	\$16,000
Turn On/Off Service Fee	\$9,232	\$8,680	\$9,200
Lien Letter Receipts	\$2,645	\$2,934	\$2,500
Collection Cost Recovery	\$43,670	\$44,931	\$43,000
Miscellaneous/Scrap	\$381	\$619	\$500
DEP Safe Drinking Water Fee	N/A	\$9,946	\$10,000
Work for Others	\$7,461	\$19,281	\$9,100
Sewer Collection Fees	\$27,743	\$27,743	\$27,744
Interest Earnings	\$5,379	\$7,743	\$4,000
Written Off Account Recovery	\$788	\$1,402	\$795
Grant and Property Sale/Lease	\$0	\$136,800	\$80,000
USB Trust- Debt Interest	\$3,903	\$5,526	\$1,000
USB Trust - Debt Holdings Interest	\$1,566	\$2,932	\$500
USB Capital Interest	\$83	\$507	\$50
<b>Subtotal Non-Operations Revenue</b>	<b>\$131,684</b>	<b>\$297,908</b>	<b>\$213,889</b>
<b>TOTAL REVENUES</b>	<b>\$1,974,534</b>	<b>\$2,237,919</b>	<b>\$2,104,415</b>

**Table 3-1 (cont'd)**  
**Revenues and Expenses for 2018, 2019, and 2019 Budget**

	<b>2018 Actual</b>	<b>2019 Year End (unaudited)</b>	<b>2019 Budget</b>
<b>General &amp; Administrative</b>			
Authority Board	\$5,900	\$6,000	\$6,000
Office Salaries	\$118,472	\$120,936	\$122,600
Billing Supplies	\$35,849	\$41,337	\$49,000
Contracted Services	\$51,378	\$45,950	\$53,000
Utilities	\$8,094	\$7,046	\$13,400
Office Building Maintenance	\$192	\$895	\$1,000
Permits/ Right of Ways	\$11,155	\$12,275	\$15,000
General Adjusted Bank Fees	\$5,480	\$5,733	\$5,346
Uncollectible Write Off	\$0	\$0	\$700
Engineering Retainer	\$3,900	\$6,300	\$4,800
Legal & Professional	\$14,028	\$18,197	\$18,000
Insurance Premiums	\$38,337	\$34,588	\$39,000
Social Security	\$36,247	\$35,465	\$36,118
Health Benefits	\$126,881	\$114,002	\$143,000
Mileage Reimbursements	\$218	\$460	\$1,100
Education/Safety/ Medical	\$4,926	\$3,658	\$4,000
Unemployment Compensation	\$3,982	\$3,280	\$3,820
Retirement	\$3,326	\$0	\$7,600
Court Fees	\$401	\$823	\$1,100
<b>Subtotal General Administrative Fees</b>	<b>\$468,768</b>	<b>\$456,942</b>	<b>\$524,584</b>
<b>PURIFICATION SYSTEM</b>			
Operations Labor	\$166,577	\$177,382	\$172,000
Overtime Labor	\$13,938	\$8,253	\$12,000
Operations Expense	\$19,851	\$16,326	\$20,000
Treating Chemicals	\$92,661	\$110,570	\$102,000
Contracted Services	\$44,052	\$44,937	\$44,000
Utilities	\$49,049	\$50,624	\$57,000
Lab Chemicals	\$17,807	\$23,134	\$18,000
WTP Evaluation	\$0	\$0	\$0
<b>Subtotal Purification</b>	<b>\$403,935</b>	<b>\$431,225</b>	<b>\$425,000</b>

**Table 3-1 (cont'd)**  
**Revenues and Expenses for 2018, 2019, and 2019 Budget**

<b>HADLEY ROAD BOOSTER PUMP</b>	<b>2018 Actual</b>	<b>2019 Year End (unaudited)</b>	<b>2019 Budget</b>
Electric / Building	\$648	\$0	\$0
Electric / Pump	\$5,992	\$7,036	\$7,320
Heating	\$1,711	\$1,246	\$2,000
Pump Maintenance	\$0	\$0	\$0
Contracted Services	\$2,580	\$657	\$1,000
<b>Subtotal Pumping</b>	<b>\$10,932</b>	<b>\$8,939</b>	<b>\$10,320</b>
<b>DISTRIBUTION SYSTEM</b>			
Operations Labor	\$152,050	\$152,500	\$163,800
Labor Overtime	\$5,728	\$4,518	\$12,000
Services Materials	\$3,073	\$6,574	\$5,150
Mains Material	\$13,791	\$9,967	\$15,000
Meters Material	\$18,340	\$17,111	\$21,000
Operation Expense	\$25,894	\$26,874	\$24,500
Contracted Service	\$73,782	\$48,710	\$70,000
Vehicle Expense	\$2,633	\$1,603	\$2,200
Gasoline Expense	\$5,576	\$4,817	\$5,000
<b>Subtotal Distribution</b>	<b>\$300,865</b>	<b>\$272,673</b>	<b>\$318,650</b>
<b>TOTAL EXPENSES</b>	<b>\$1,184,499</b>	<b>\$1,169,779</b>	<b>\$1,278,554</b>

As shown in Table 3-1, for Fiscal Year 2019 the total unaudited operating revenues were higher than budgeted operating revenues by \$49,485 and overall revenues exceeded budget by \$133,504. Total expenses for 2019 were \$108,775 below budget and the net income available for depreciation, debt service and capital additions was \$1,068,140.

Table 3-2 has been prepared to show the actual (unaudited) revenues and expenses of the Authority compared to the 2020 budget of revenues and expenses adopted by the Authority.

**Table 3-2: 2019 Operating Budget**

<b>Operating Revenue</b>	<b>2019 (unaudited)</b>	<b>2020 Budget</b>
Metered Residential	\$1,366,797	\$1,358,822
Metered Commercial	\$423,915	\$430,800
Metered Industrial	\$32,447	\$30,636
Metered Public	\$37,506	\$37,044
Private Fire Protection	\$44,521	\$45,500
Public Fire Protection	\$31,518	\$31,800
Tap in Fees	\$3,308	\$2,000
<b>Subtotal Operation Revenue</b>	<b>\$1,940,011</b>	<b>\$1,936,602</b>
<b>Non-Operations Revenue</b>		
Bulk Water Sales	\$11,718	\$10,000
Well Sample Test	\$17,146	\$16,500
Turn On/Off Service Fee	\$8,680	\$9,000
DEP Safe Drinking Water Fee	\$9,946	\$10,000
Lien Letter Receipts	\$2,934	\$2,600
Collection Cost Recovery	\$44,931	\$43,000
Miscellaneous/Scrap	\$619	\$500
Work for Others	\$19,281	\$9,200
Sewer Collection Fees	\$27,743	\$27,744
Interest Earnings	\$7,743	\$5,000
Written Off Account Recovery	\$1,402	\$800
Grant and Property Sale/Lease	\$136,800	\$0
USB Trust- Debt Interest	\$5,526	\$4,000
USB Trust - Debt Holdings Interest	\$2,932	\$3,000
USB Capital Interest	\$507	\$200
<b>Subtotal Non-Operations Revenue</b>	<b>\$297,908</b>	<b>\$141,544</b>
<b>TOTAL REVENUES</b>	<b>\$2,237,919</b>	<b>\$2,078,146</b>

**Table 3-2 (cont'd)**  
**2020 Operating Budget**

<b>General &amp; Administrative</b>	<b>2019 (unaudited)</b>	<b>2020 Budget</b>
Authority Board	\$6,000	\$6,000
Office Salaries	\$120,936	\$130,000
Billing Supplies	\$41,337	\$45,000
Contracted Services	\$45,950	\$50,000
Utilities	\$7,046	\$12,800
Office Building Maintenance	\$895	\$1,500
Permits/ Right of Ways	\$12,275	\$15,000
General Adjusted Bank Fees	\$5,733	\$5,600
Uncollectable Consumer Write-offs	\$0	\$900
Engineering Retainer	\$6,300	\$5,000
Legal & Professional	\$18,197	\$18,500
Insurance Premiums	\$34,588	\$40,000
Social Security	\$35,465	\$37,346
Health Benefits	\$114,002	\$137,000
Mileage Reimbursements	\$460	\$1,100
Education/Safety/ Medical	\$3,658	\$4,000
Unemployment Compensation	\$3,280	\$4,900
Retirement	\$0	\$3,000
Court Fees	\$823	\$1,200
<b>Subtotal General Administrative Fees</b>	<b>\$456,942</b>	<b>\$518,846</b>
<b>PURIFICATION SYSTEM</b>		
Operations Labor	\$177,382	\$195,000
Overtime Labor	\$8,253	\$10,000
Operations Expense	\$16,326	\$20,800
Treating Chemicals	\$110,570	\$112,000
Contracted Services	\$44,937	\$46,000
Utilities	\$50,624	\$57,000
Lab Chemicals	\$23,134	\$23,000
WTP Evaluation	\$0	\$0
<b>Subtotal Purification</b>	<b>\$431,225</b>	<b>\$463,800</b>

**Table 3-2 (Cont'd)  
2020 Operating Budget**

<b>HADLEY ROAD BOOSTER PUMP</b>	<b>2019 (unaudited)</b>	<b>2020 Budget</b>
Electric / Building	\$0	\$0
Electric / Pump	\$7,036	\$7,600
Heating	\$1,246	\$2,000
Pump Maintenance	\$0	\$0
Contracted Services	\$657	\$1,000
<b>Subtotal Pumping</b>	<b>\$8,939</b>	<b>\$10,600</b>
<b>DISTRIBUTION SYSTEM</b>		
Operations Labor	\$152,500	\$166,500
Labor Overtime	\$4,518	\$10,000
Services Materials	\$6,574	\$7,100
Mains Material	\$9,967	\$14,000
Meters Material	\$17,111	\$22,000
Operation Expense	\$26,874	\$26,000
Contracted Service	\$48,710	\$58,000
Vehicle Expense	\$1,603	\$2,300
Gasoline Expense	\$4,817	\$5,200
<b>Subtotal Distribution</b>	<b>\$272,673</b>	<b>\$311,100</b>
<b>TOTAL EXPENSES</b>	<b>\$1,169,779</b>	<b>\$1,304,346</b>

The Operating Budgeted Expenses for 2020, included herein, total \$1,304,346. This represents an increase of approximately 11.5 percent over the unaudited operating expenses in 2019. Expenses are based on present and anticipated 2020 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 \$1,936,602 in 2020. Non-operating revenues are estimated to amount to \$141,544, 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 2020 have been anticipated to amount to \$2,078,146.



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

A comparative statement of operating revenues and debt service for Fiscal Years 2019 and 2020 is shown in Table 3-3. The Budget FY 2020 figures reflect the Fourth Issue Water Revenue Bonds, Series of 2011 dated December 29, 2011 values.

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

	<b>Unaudited FY 2019</b>	<b>Budget FY 2020</b>
<b><u>Net Revenue</u></b>		
Total Revenue	\$2,237,919	\$2,078,146
Total Expenses	\$1,169,779	\$1,304,346
Total Revenue Available for Debt Service	<b>\$1,068,140</b>	<b>\$773,800</b>
<b><u>Debt Service</u></b>		
Pennvest Princ/Int. Dist. Improvement	\$246,400	\$248,400
USB Bonds Princ/ Int. Pay off Sept. 2024	\$280,588	\$289,713
New Pennvest	\$76,756	\$132,537
Total Debt Service	<b>\$605,744</b>	<b>\$670,650</b>
<b><u>Capital Additions</u></b>		
Revenue Available for Debt Service	\$1,068,139	\$773,800
Total Debt Service	\$605,744	\$670,650
Available for Capital Additions	<b>\$113,940</b>	<b>\$102,000</b>
<b>Coverage Provided</b>	<b>1.76</b>	<b>1.15</b>

The above summary indicates that revenues produced by the rate schedule effective January 1, 2020 together with other non-operating revenue will provide revenues for the year 2020 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 2019

Cost of capital additions to plant and equipment of the Waterworks System in 2019 totaled \$113,940. 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.

**Table 4-1: Capital Improvements Program 2019**

<b>Item</b>	<b>Actual 2019</b>	<b>Budget 2019</b>
Lab & Plant Equipment	\$32,848	\$26,000
Raw/Finish Pump	\$0	\$0
Sludge Press	\$23,434	\$4,000
Building & Lot Repairs	\$8,688	\$24,000
System Map & Model	\$0	\$0
New Vehicles - Capital	\$0	\$0
Hydrant & Valves	\$0	\$10,000
Power Equipment	\$2,209	\$17,000
Main / Service Line Improvements	\$46,261	\$60,000
Storage Tanks	\$0	\$0
Admin/Billing Equipment Capital	\$500	\$20,000
<b>TOTALS:</b>	<b>\$113,940</b>	<b>\$161,000</b>

#### 4.2. Capital Improvements Program 2020-2022

Proposed capital improvements for the years 2020, 2021 and 2022 are shown in Table 4-2. These improvements will be prioritized by the Authority and implemented based upon need and available funds.

**Table 4-2: Capital Improvements Program 2020-2022**

<b>Item</b>	<b>Budget 2020</b>	<b>Budget 2021</b>	<b>Budget 2022</b>
Lab/Plant Equipment	\$43,000	\$30,000	\$32,000
Raw Pumps/Finish Pumps	\$0	\$1,000	\$1,000
Sludge/Press Improvements	\$24,000	\$5,000	\$10,000
Building & Parking Lot Repairs	\$10,000	\$0	\$0
New Vehicles Replacement	\$0	\$32,000	\$33,000
Hydrant/Valve Program	\$6,000	\$7,000	\$7,000
Tools & Equipment	\$0	\$700	\$1,000
Main/Service Line Improvements - Capital	\$15,000	\$0	\$0
Storage Tanks	\$0	\$0	\$0
Admin/Billing Equipment Capital	\$4,000	\$5,000	\$1,000
<b>TOTALS:</b>	<b>\$102,000</b>	<b>\$80,700</b>	<b>\$85,000</b>

The Authority closed on a PENNVEST loan/grant package in 2018. Associated activity continues into 2020.

## 5. RATES, RENTS, AND WATER CHARGES

### 5.1. Rate Schedule

The Authority's current rate schedule, which became effective January 1, 2020, is summarized in Table 5-1:

**Table 5-1: 2020 Rates, Rents, and Water Charges**

<b>Residential, Industrial, Commercial Service - Base &amp; Incremental Rates</b>			
<b>Base</b>	<b>Meter Size</b>	<b>Rate (Monthly)</b>	<b>Rate (Annually)</b>
First 500 Gallons:	5/8"	\$20.25	\$243.00
	5/8" x 3/4"	\$20.25	\$243.00
	3/4"	\$30.00	\$360.00
	1"	\$44.50	\$534.00
	1 1/4"	\$53.30	\$639.60
	1 1/2"	\$60.50	\$726.00
	2"	\$92.10	\$1,105.20
	3"	\$185.50	\$2,226.00
	4"	\$303.85	\$3,646.20
	6"	\$575.75	\$6,909.00
<b>Increment</b>	<b>Volume Limit (Gallons)</b>	<b>Rate (Monthly, Per 1,000 Gallons)</b>	
For the Next:	3,500	\$8.95	
	29,500	\$9.10	
	66,500	\$8.90	
	233,500	\$6.60	
Over:	333,500	\$4.65	
<b>Fire Protection Stand-By Service</b>			
<b>Type</b>	<b>Connection Size</b>	<b>Rate (Monthly)</b>	<b>Rate (Annually)</b>
Private Hydrants:	---	\$53.20	\$638.40
Sprinkler Systems (Per Connection):	2"	\$9.60	\$115.20
	4"	\$40.45	\$485.40
	6"	\$53.20	\$638.40
	8"	\$91.60	\$1,099.20

Two additional monthly fees are added to customer bills:

PADEP Safe Drinking Water Act Fee:	\$0.30
<u>Public Fire Protection Fee:</u>	<u>\$0.80</u>
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 \$8.95 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 2020 (as of December 31, 2019), 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.

**Table 6-1: 2020 Schedule of Insurance**

Provider	Expiration Date	Property Covered	Coverage Type	Coverage Amount	
Cincinnati Insurance Company	5/1/2020	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	
			Employee Benefits	\$3,000,000	
		Wrongful Acts & Professional Liability	Retro 5/1/2000		\$1,000,000
					\$3,000,000
		Employee Practices	Retro 5/1/2000		\$1,000,000
					\$3,000,000
		Commercial Crime	Employee Theft	\$100,000	
			Forgery/ Alteration	\$100,000	
			Computer Fraud	\$50,000	
			Money	\$25,000	
			Fund Transfer	-	
		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			
Cincinnati Insurance		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 \$1,304,346 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 2020 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-seventh 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, 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