

**The Greenville Water Authority**  
Mercer County, Pennsylvania

**2010 Water System  
Annual Report and  
2011 Operating Budget**

February 2011



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## **1. INTRODUCTION**

### **1.1 Introduction**

This Water System Annual Report has been prepared in accordance with the authorization given to Gannett Fleming, Inc. by the Greenville Water Authority (Authority) in accordance with Article VI, Section 6.07 of the First Supplemental Trust Indenture dated January 15, 1994, which states:

"The Consulting Engineer shall be required to report annually on (1) 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:

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

This report is the sixty-eighth 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 2011, and the capital expenditures proposed for the fiscal year 2011. Information used in this report has been obtained from Authority Management.

## **2. OPERATIONAL AND 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 2010 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 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 5,633 hours during the past year for an average of approximately 15 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.

Filtration Plant equipment purchased in 2010 included new chlorine scales, and a new raw water jet pump for raw water meter. The Authority also rebuilt the sludge press and pump, rebuilt an air compressor in the press building, repaired a VFD on the raw water pumps, rebuilt ammonia feeder #3, and installed the Hach Source Water Protection analyzer.

### **2.3 Distribution System**

The distribution system has been properly maintained during the past year, and extensions were made as required to serve customers. A 2" line was installed on Bentley Avenue. Hydrants were regularly inspected, and repairs were made as required to the distribution system to provide for minimum interruption of service to customers.

<u>Tank</u>	<u>Year</u>
750,000-Gallon, South Tank	1997
750,000-Gallon, North Tank	1995
250,000-Gallon, Hadley Road Tank	1988
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. New software and computer hardware was added in 2010.

Under General Shop Equipment, general tools and equipment were purchased during 2010. 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, 2010, compared with those listed at the end of 2009, is as follows:

	<u>Number of Consumers</u>	
	<u>December 31, 2009</u>	<u>December 31, 2010</u>
Domestic	2,399	2,338
Commercial	244	244
Industrial	3	3
Public	<u>24</u>	<u>22</u>
	2,670	2,607
Private Fire Protection	45	47
Public Fire Protection	2	2

The customer total as of December 31, 2010, included 192 domestic multiple minimum accounts and 164 commercial multiple minimum accounts.

2006	336,783	211,846	2,965 <sup>(4)</sup>	923	36.2
2005	315,901 <sup>(3)</sup>	192,038	0 <sup>(4)</sup>	865	39.2
2004	328,425 <sup>(3)</sup>	191,741	0 <sup>(4)</sup>	897	41.6
2003	234,345	190,009	0 <sup>(4)</sup>	642	18.9
2002	283,317	225,500	0 <sup>(4)</sup>	776	20.4
2001	269,868	205,514	0 <sup>(4)</sup>	739	23.8

- Notes:
- (1) Water unit in 1,000 gallons.
  - (2) Water use estimated for hydrant flushing, fire protection, sludge building, etc.
  - (3) Water use estimated due to meter inaccuracies.
  - (4) Water used in plant operation is supplied before output meter.

### **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 2009 revenues and expenses compared with the projected actual (unaudited) and budgeted revenues and expenses for 2010.

TABLE 1 (Cont'd)

REVENUES AND EXPENSES FOR THE YEARS 2009 AND 2010  
AND 2010 BUDGET

GENERAL AND ADMINISTRATIVE	<u>Actual 2009</u>	2010 <u>Year End (unaudited)</u>	<u>Budget 2010</u>
Authority Board	\$6,000	\$6,000	\$6,000
Office Salaries	105,021	106,339	103,021
Supplies & Expense (including Postage)	40,675	33,661	40,600
Contracted Services	18,477	13,735	17,500
Utility Expenses (Building)	15,785	13,637	15,526
Office Building Maintenance	102	597	1,500
Pipe Line Permits (Railroad and Borough)	7,104	3,200	6,000
Uncollectible Consumer (Writeoffs)	2,061	0	2,000
Engineer Expense (Not including Projects)	5,664	5,417	5,700
Legal and Professional	17,508	7,200	12,000
Insurance Expense (Liability & Workers Comp)	38,500	32,647	39,655
Social Security	30,886	31,341	32,480
Employee Health Benefits	98,139	113,241	106,555
Mileage Reimbursement	249	591	500
Education Expense	1,683	970	1,545
Unemployment Comp.	2,376	3,753	3,600
Retirement Expense	17,359	17,570	17,570
Miscellaneous	<u>13,583</u>	<u>20,538</u>	<u>16,000</u>
<b>Subtotal General &amp; Administrative</b>	<b>\$421,172</b>	<b>\$410,437</b>	<b>\$427,752</b>
<b>PURIFICATION SYSTEM</b>			
Operating Labor	\$141,252	\$142,667	\$135,500
Labor Overtime	9,909	8,334	8,900
Operating Expenses	26,287	20,009	27,260
Chemicals	59,552	63,815	61,200
Contracted Services	23,669	37,589	35,000
Utilities	71,682	60,876	74,832
Lab Chemicals	<u>10,677</u>	<u>6,865</u>	<u>8,500</u>
<b>Subtotals Purification System</b>	<b>\$343,028</b>	<b>\$340,155</b>	<b>\$351,192</b>



As shown in Table 1, for Fiscal Year 2010 the total unaudited operating revenue exceeded the budgeted revenues by \$14,577. For the same year, the total operating expenses were under budget by \$8,856 and the net operating income available for depreciation, debt service and capital additions are \$458,389.

Table 2 has been prepared to show the actual (unaudited) revenues and expenses of the Authority compared to the 2011 budget of revenues and expenses adopted by the Authority.

TABLE 2 (Cont'd)

**OPERATING BUDGET FOR 2011**

	<b>2010</b>	<b>2011 Budget</b>
	<b><u>Year End (unaudited)</u></b>	<b><u>2011 Budget</u></b>
<b>GENERAL AND ADMINISTRATIVE</b>		
Authority Board	\$6,000	\$6,000
Office Salaries	106,339	105,081
Office Supplies and Expenses (Incl. Postage)	33,661	40,000
Contracted Services	13,735	17,500
Utility Expense (Building)	13,637	15,000
Office Building Maintenance	597	1,000
Pipe Line Permits (Railroad and Borough)	3,200	3,500
Uncollectible Consumer (Writeoffs)	0	2,500
Engineer Expense (Not including Projects)	5,417	5,700
Legal & Professional	7,200	8,000
Insurance Expense (Liability & Workers Comp)	32,647	35,000
Social Security	31,341	33,130
Employee Health Benefits	113,241	124,565
Mileage Reimbursement	591	650
Education Expense	970	1,500
Unemployment Comp,	3,753	4,250
Retirement Expense	17,570	17,650
Miscellaneous	<u>20,538</u>	<u>20,000</u>
<b>Subtotals General and Administrative</b>	<b>\$410,437</b>	<b>\$441,026</b>
<b>PURIFICATION SYSTEM</b>		
Operating Labor	\$142,667	\$145,520
Labor Overtime	8,334	8,501
Operating Expense	20,009	27,000
Chemicals	63,815	64,000
Contracted Services	37,589	25,000
Utilities	60,876	70,000
Lab Chemicals	<u>6,865</u>	<u>8,000</u>
<b>Subtotals Purification System</b>	<b>\$340,155</b>	<b>\$348,021</b>

The Operating Budgeted Expenses for 2011, included herein, total \$1,020,069. This represents an increase of approximately 5 percent over the unaudited operating expenses in 2010. Expenses are based on present and anticipated 2011 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 \$1,447,537 in 2011. Non-operating revenues are estimated to amount to \$82,813, which includes the fee charged to the Borough of Greenville for billing and collecting sewer charges, office rentals, and interest income from investments. On the above basis, total revenues for 2011 have been anticipated to amount to \$1,530,350.

The above summary indicates that revenues produced by the rate schedule effective January 1, 2011 together with other non-operating revenue will provide revenues for the year 2011 that will be sufficient to cover the requirements for operating expenses and for debt service as required by the Trust Indenture.

#### 4. CAPITAL IMPROVEMENTS AND REDEMPTION FUND

##### 4.1 Capital Improvements 2010

Cost of capital additions to plant and equipment of the Waterworks System in 2010 totaled \$63,753. These improvements were sufficient for proper operation of the Authority's system.

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

**TABLE 4**

#### **CAPITAL IMPROVEMENTS PROGRAM 2010**

<b><u>ITEM</u></b>	<b><u>Budget 2010</u></b>	<b><u>Actual 2010</u></b>
Plant Evaluation	\$15,000	\$19,000
Lab / Plant Equipment	20,000	16,000
Raw Pumps	11,000	0
Finish Pumps	0	0
Sludge/Press Pump Improvements	7,550	7,000
Building & Parking Lot Repairs	2,000	500
System Map and Model	5,000	5,000
Meter Reading & Meter Replacement Program	12,000	5,418
Distribution Vehicles	0	0
Hydrant/Valve Program	6,000	250
Tools & Equipment	1,750	2,000
Main Line Improvements	25,500	3,000
Storage Tank Maintenance/Painting	0	0
Land Right of Way Acquisition River Crossing	0	0
Computer Hardware	375	0
Computer Software	375	300
Office Improvements	2,500	2,000
Source Water Protection Program	<u>4,500</u>	<u>3,285</u>
<b>Total</b>	<b>\$113,550</b>	<b>\$63,753</b>

**5. RATES, RENTS AND CHARGES FOR WATER**

The Authority's current rate schedule, which became effective January 1, 2011, is summarized as follows:

**Bi monthly minimum charge for which 1,000 gallons of water is allowed**

<u>Size of meter</u>	<u>Rate</u>
5/8"	\$29.21
3/4"	\$43.21
1"	\$64.25
1 1/4"	\$77.02
1 1/2"	\$87.31
2"	\$132.96
3"	\$267.91
4"	\$438.99
6"	\$831.56

**Bi monthly consumption charges, per thousand gallons for water used by one consumer**

for the next	7,000 gallons	\$6.38
for the next	59,000 gallons	\$6.60
for the next	133,000 gallons	\$6.37
for the next	467,000 gallons	\$4.73
over	667,000 gallons	\$3.34

**STAND BY SERVICE FOR PRIVATE FIRE PROTECTION**

(Annual Cost – billed bimonthly)

2" Hydrant - each	\$82.98
4" Hydrant - each	\$350.46
6" Hydrant - each	\$461.10

Sprinkler Systems

2" Connection - each	\$82.98
4" Connection - each	\$350.46
6" Connection - each	\$461.10
8" Connection - each	\$793.14



**6. INSURANCE**

Insurance in force as of December 31, 2010, is tabulated on the following page and includes general Liability, Property Coverage, Earthquake/Flood, Employees, Vehicles, Public Officials Liability, Boiler and Machinery and Employee Dishonesty as noted. The insurance coverage is based on an appraisal by an independent professional appraiser. The appraisal is updated periodically. It is recommended that this practice be continued and that the Authority's appraisal be updated annually.

## **7. CONCLUSIONS AND RECOMMENDATIONS**

In accordance with the covenants of the Trust Indenture dated as of January 15, 1994, as set forth in Section 6.07, the following conclusions and recommendations are submitted:

1. Operating Expenses in the amount of \$1,020,069, as outlined in the Budget, represent the estimate of the amount required for operating and administrative costs and maintenance of the water system for the 2011 fiscal year.
2. The operating budget, as provided herein, have been approved and adopted. In our opinion, they represent the required expenditures necessary to maintain the properties of the Authority in good repair and sound operating condition.
3. 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 revised as necessary for the coming fiscal year.
4. 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 on the Authority's prioritization and available funding.
5. We recommend that the Authority continue to inspect, maintain, clean, and disinfect all distribution storage tanks.

In its sixty-ninth 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

**ACKNOWLEDGMENTS**

Gannett Fleming, Inc. would like to take this opportunity to express its sincere thanks to the Authority Board and Mr. William M. Brady and his staff for their work and valuable contributions to this report.

Respectfully submitted,

GANNETT FLEMING, INC.



THOMAS L. THOMPSON, P.E.

Senior Project Manager

