

**CONSULTING ENGINEER'S
ANNUAL REPORT**

2014 OPERATING YEAR

FOR

**THE MUNICIPAL WATER
AUTHORITY OF ALIQUIPPA**

160 HOPEWELL AVENUE
ALIQUIPPA, PENNSYLVANIA 15001

NOVEMBER 2015



**Lennon, Smith, Souleret
Engineering, Inc.**

Civil Engineers and Surveyors

846 Fourth Avenue, Coraopolis, PA 15108
(412) 264-4400 • (412) 264-1200 Fax
info@lsse.com • www.lsse.com

**CONSULTING ENGINEER'S
ANNUAL REPORT**

2014 OPERATING YEAR

FOR

**THE MUNICIPAL WATER
AUTHORITY OF ALIQUIPPA**

160 HOPEWELL AVENUE
ALIQUIPPA, PENNSYLVANIA 15001

NOVEMBER 2015



**Lennon, Smith, Souleret
Engineering, Inc.**

Civil Engineers and Surveyors

846 Fourth Avenue, Coraopolis, PA 15108
(412) 264-4400 • (412) 264-1200 Fax
info@lsse.com • www.lsse.com

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
CONSULTING ENGINEER'S ANNUAL REPORT
NOVEMBER 2015

TABLE OF CONTENTS

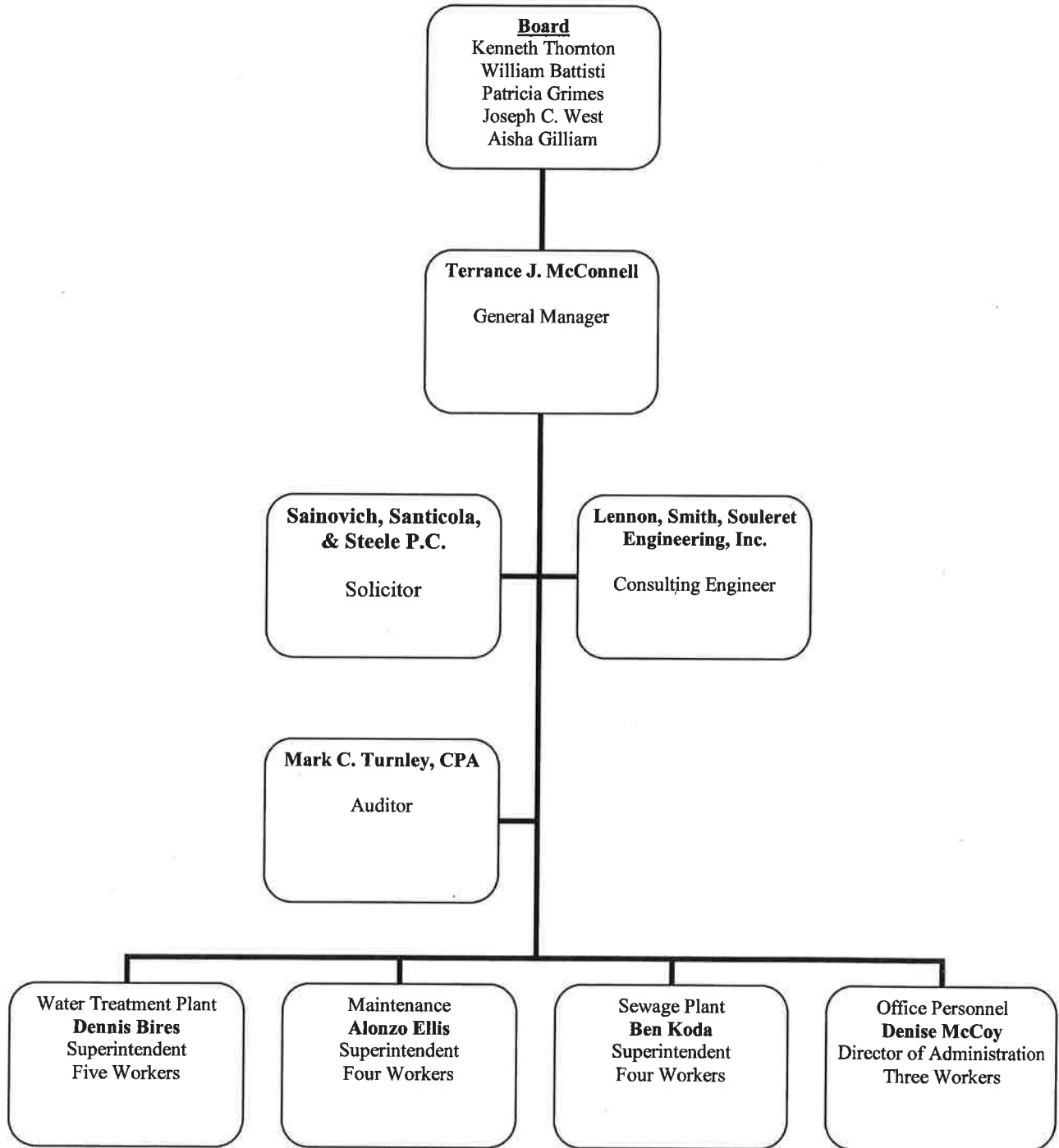
	<u>PAGE NO.</u>
ORGANIZATIONAL CHART	
BOARD MEMBERS / PROFESSIONAL APPOINTMENTS / MANAGEMENT	1
INTRODUCTION	2
DRINKING WATER SYSTEM	2 - 5
DESCRIPTION OF SYSTEM	2 - 3
WATER RATES	3
WATER WITHDRAWAL AND SALES	4 - 5
SEWER SYSTEM	6 - 8
DESCRIPTION OF SYSTEM	7
SEWER RATES	7
FINANCIAL MANAGEMENT	8 - 9
SUMMARY AND RECOMMENDATIONS	9 - 10
WATER SYSTEM	9 - 10
SEWER SYSTEM	10
FINANCIAL MANAGEMENT	10
WATER SYSTEM APPENDIX	Appended
SEWER SYSTEM APPENDIX	Appended
FINANCIAL MANAGEMENT APPENDIX	Appended

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
CONSULTING ENGINEER'S ANNUAL REPORT
NOVEMBER 2015

LIST OF TABLES

<u>TABLE NO.</u>		<u>PAGE NO.</u>
1	SCHEDULE OF RATES – QUARTERLY CHARGES (WATER RATES)	4
2	SCHEDULE OF RATES – QUARTERLY CHARGES (SEWER RATES)	8

ORGANIZATIONAL CHART
MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
2014



MUNICIPAL WATER AUTHORITY OF ALIQUIPPA

Aliquippa, Beaver County, Pennsylvania

724-375-5525

Identification No. 25-6007701

AUTHORITY BOARD MEMBER FOR OPERATING YEAR 2014

Kenneth Thornton.....Chairman
William Battisti.....Vice Chairman
Patricia Grimes.....Secretary
Joseph C. West.....Treasurer
Aisha Gilliam.....Assistant Secretary/Treasurer

PROFESSIONAL APPOINTMENTS

Sainovich, Santicola, & Steele P.C.....Solicitor
Bank of New York, Mellon Trust No. N.A.....Trustee
Mark C. Turnley, CPA.....Auditor
ESB Bank.....Depository
Lennon, Smith, Souleret Engineering, Inc.....Consulting Engineer

MANAGEMENT

Terrance J. McConnell.....General Manager
Denise McCoy..... Director of Administration

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA

CONSULTING ENGINEER'S ANNUAL REPORT

INTRODUCTION

We are pleased to submit the Consulting Engineer's Report of Operations for Fiscal Year 2014 for the Municipal Water Authority of Aliquippa (MWAA).

DRINKING WATER SYSTEM

DESCRIPTION OF SYSTEM

The water system serves a population of approximately 10,300 within the City of Aliquippa, Hopewell Township, Potter Township, Shippingport Borough and Raccoon Township.

MWAA is located in Aliquippa, Pennsylvania. The primary source of water consists of five vertical wells, one Ranney Well, and one Collector Well, each located along the Ohio River. The Ranney Well and the Collector Well combined can pump approximately 4.0 MGD to the treatment plant. The treatment plant has a rated capacity of 4.0 MGD. The vertical wells were previously considered "backup" wells to provide additional capacity as needed. In 2014, the Pennsylvania Department of Environmental Protection (PaDEP) advised this was no longer allowed. The wells now need to be used for supply and sampled/permitted accordingly. In addition to the wells, there is a ready interconnect with the Center Township Water Authority system.

The treatment plant process includes iron and manganese removal, softening, and disinfection. The total amount of treated water storage is 9,678,000 gallons of water via six storage tanks.

Flow meters at the treatment plant and each of the wells will be replaced in 2015. Distribution water meters were replaced in 2014 and funded with a bond issue.

The Raccoon Tank is the only tank supplying the Raccoon Township service area and provides less than 1 day's supply of potable water. MWAA staff installed meters and repaired valves in the system in 2014.

The Water Allocation Permit was renewed in 2014 for the next 50 years. Rules and Regulations were prepared and adopted in 2014.

The distribution system is aging and the conditions of the waterlines is commensurate with age. Waterlines are repaired as required to maintain service and stop leaks.

The Pennsylvania Department of Environmental Protection (PaDEP) has notified that violations exist in the MWAA system. An Inspection Report from PaDEP included a list of deficiencies. MWAA is continuing to work on rectifying these deficiencies in 2015.

WATER RATES

Table 1 indicates the current and previous water user rates charged by the MWAA to their customers. The last rate increase was in January 2007. Included in the Water System Appendix is a Regional Water Rate Comparison Table which identifies the quarterly water bill for various water systems throughout the region. The rates are based on 15,000 gallons per quarter of use and include the years 2008 through 2013. Based on this information, the average percent change in water use rates since 2008 for the region is 17% while MWAA has not increased their water use rates during this period. The need for a rate increase will be evaluated during preparation of the 2016 budget.

TABLE 1
SCHEDULE OF RATES – QUARTERLY CHARGES

Current Rate Structure – January 1, 2007	
	Water
First 6,000 gallons	\$46.27 minimum
Next 12,000 gallons	6.25/1,000
Next 42,000 gallons	5.41/1,000
Over 60,000 gallons	4.66/1,000
Previous Rate Structure – January 1, 2005	
	Water
First 6,000 gallons	\$38.56 minimum
Next 12,000 gallons	5.21/1,000
Next 42,000 gallons	4.51/1,000
Over 60,000 gallons	3.88/1,000
Previous Rate Structure – January 1, 2001	
	Water
First 6,000 gallons	\$34.43 minimum
Next 12,000 gallons	4.652/1,000
Next 42,000 gallons	4.03/1,000
Over 60,000 gallons	3.46/1,000

WATER WITHDRAWAL AND SALES

The data gathered for this section of the report was taken from official reports of MWAA.

The Daily Water Withdrawal/Instream Flow Requirement Report is a report prepared monthly and indicates the total amount of water pumped from the wells to the treatment plant on a daily basis. Of the wells producing water, only the Ranney well has an individual meter. The Collector Well and Wells 25, 26, 27 and 28 have a common meter that has been out of service for several years. For all wells, an estimate is made of the amount of water pumped based upon the pump capacity and the length of running time. The total combined well output for 2014 was 1,291,172,008 gallons of water based on flow estimated. A table has been included in the Water System Appendix using MWAA data which details the monthly water withdrawal from each well.

The Report of Operations records the amount of water coming into the treatment plant and the amount of finished water pumped into the distribution system for sale. In

comparison, the raw water that entered the plant measured 1,251,538,000 gallons of water according to the report. The data from the Report of Operations will be used rather than the well withdrawal values in this report because the raw water data is measured and not merely estimated. The finished water leaving the plant was 1,016,576,000 gallons of water and is measured with a calibrated venturi meter installed in 1998.

The Metered Sales of 382,660,160 gallons plus the estimated 101,288,090 gallons for maintenance, and plant use compared to the finished water of 1,016,579,000 gallons pumped to the system indicated that about 52% of the water leaving the plant is not accounted for. This water loss is significant and is suspected to include undetected leaks, fires, unreported hydrant usage, and aged plant metering.

The Water System Appendix includes a table which details the above referenced data.

SEWER SYSTEM

DESCRIPTION OF SYSTEM

The MWAA Wastewater Treatment Plant (WWTP) serves both the City of Aliquippa and Hopewell Township. The wastewater treatment plant has a design hydraulic capacity of 3.4 MGD. The maximum wet weather hydraulic capacity is 7.0 MGD. The plant discharges treated effluent to the Ohio River under NPDES Permit (PA0025968) parameters. The WWTP was not hydraulically or organically overloaded during the 2014 operating year, nor is it projected to be hydraulically or organically overloaded within the next 5 years. The Sewer System Appendix includes a hydraulic loading graphic and an organic loading graphic which was previously included in MWAA's Annual Wasteload Management Report.

The NPDES Permit for the system was renewed for another 5 years in 2014. The new permit included a more stringent limit for total residual chlorine which is currently being evaluated by the Authority. Rules and Regulations were adopted in 2014.

There are seven sewage pump stations that contribute flow to the WWTP.

1. The Wye Lift Station serves Aliquippa and portion of Hopewell Township. It is equipped with four 3,000 gpm pumps powered by 75 HP motors.
2. The West Aliquippa Lift Station serves West Aliquippa and portions of Hopewell Township. It is equipped with two 500 gpm pumps powered by 10 HP motors.
3. The Golf Course Road Lift Station serves the Hospital Drive area. It is equipped with two 160 gpm pumps powered by 15 HP motors.
4. The pump station at the Woodlawn Park Area in Hopewell services 11 residential units. The assumed flow at this pump station is 11 gpm, and was designed to handle 85 gpm. (This pump station is owned and operated by Hopewell Township.)

5. The Jail Pump Station serves the new Beaver County Jail. It is equipped with two 300 gpm pumps powered by 5 HP motors.
6. The Woodlawn Pump Station is equipped with two 122 gpm pumps powered by 4 HP motors. Projected average future flows are only 6,000 gpd (30,000 gpd peak). The pumps are not installed at this time, but are stored for future use. There is no electrical power to the pump station presently. It has never been reported to operate.
7. Steel Street Lift Station is equipped with two 200 gpm pumps powered by 5 HP motors.

The collection system is considered a separate sewer system and is relatively old. Its condition is commensurate with age. The system primarily consists of vitrified clay pipe and is subject to inflow and infiltration.

Replacement of the sewer main through the J&L Tunnel was bid in 2014. Funding alternatives are being considered by MWAA.

SEWER RATES

Table 2 indicates the current and previous sewer user rates charged by the MWAA to their customers. The last rate increase was in January 2012. Included in the Sewer System Appendix is a Regional Sewer Rate Comparison Table which identifies the quarterly sewer bill for various water systems throughout the region. The rates are based on 15,000 gallons per quarter of use and include the years 2008 through 2013. Based on this information, the average percent change in water use rates since 2008 for the region is 37% while MWAA has increased their sewer user rates 25% during this period.

TABLE 2
SCHEDULE OF RATES – QUARTERLY CHARGES

Current Rate Structure – January 1, 2012	
First 6,000 gallons	\$39.08 minimum
Next 12,000 gallons	5.24/1,000
Next 42,000 gallons	4.53/1,000
Over 60,000 gallons	3.62/1,000

Previous Rate Structure – January 1, 2007	
First 6,000 gallons	\$31.26 minimum
Next 12,000 gallons	4.19/1,000
Next 42,000 gallons	3.62/1,000
Over 60,000 gallons	2.89/1,000

Previous Rate Structure – January 1, 2005	
First 6,000 gallons	\$26.05 minimum
Next 12,000 gallons	3.49/1,000
Next 42,000 gallons	3.02/1,000
Over 60,000 gallons	2.41/1,000

Previous Rate Structure – January 1, 2001	
First 6,000 gallons	\$23.26 minimum
Next 12,000 gallons	3.11/1,000
Next 42,000 gallons	2.70/1,000
Over 60,000 gallons	2.15/1,000

FINANCIAL MANAGEMENT

The Financial Management Appendix provides a summary of significant historical data regarding expenses and revenues. The budget format was changed significantly in 2015 to updated budget line items to match the current operations of the Authority. The budgets also provide the required Debt Service Ratio calculation in accordance with the Trust Indenture. A ratio of 1.02 is projected for the 2015 Operating Year compared to the required ratio of 1.10.

MWAA maintains various insurance policies, a listing of which is included in the Financial Management Appendix. As an “appropriate” level of insurance is not an

engineering matter, we can only rely on the recommendation of the Authority's insurance broker regarding the "adequacy" of the insurance coverage.

SUMMARY AND RECOMMENDATIONS

WATER SYSTEM

- The supply of water appears to be adequate to accommodate current demand and modest expansions of the service area.
- Increasing the source water flow by improving the collector well pumping capacity may enhance water filtration plant operations and reduce reliance on aging vertical wells.
- If future demands require treated water in excess of 4.0 MGD, system updates will be required. The vertical wells should be included in this consideration.
- Development and implementation of a replacement program for both lines and valves is recommended.
- Storage capacity appears to be adequate for the Aliquippa service area with a total of six (6) tanks in service.
- It is recommended the Raccoon Tank be repainted.
- It is recommended that an additional 500,000 gallon tank be installed in the western end of the Raccoon service area.
- It is recommended that the West Aliquippa Tank be painted as recommended in an inspection report from DEP.
- The following additional capital improvements are recommended:
 - Map Distribution System
 - Inspect interiors of Water Storage Tanks
 - Collector Well Pump Cleaning
 - Conversion of media in the filters to facilitate iron and manganese removal
 - Implement very aggressive leak detection program

- Raise water rates to cover operating costs and provide capital for system improvements
- Integrated SCADA system for wells, water treatment plant, booster stations, and storage facilities

SEWER SYSTEM

- There appears to be adequate hydraulic and organic capacity for the coming 5-year period at the WWTP.
- Efforts to reduce infiltration and inflow should be continued to maintain this available capacity at the treatment plant and the collection and conveyance system as well.
- Infiltration/Inflow with past rehabilitation of sewer lines within many areas of the City is reported as successful. Continuing efforts to televise, clean and rehabilitate lines should continue. A more aggressive I/I program should be implemented to reduce flow storm response.
- Replace Golf Course Lift Station pumps with new pumps of higher capacity.
- Slipline the segment of gravity sewer along Golf Course Road.
- The following additional capital improvements are recommended:
 - Map Collection Systems
 - Upsize Golf Course Road Sewage Pumps
 - Digester Concrete Repairs
 - Replace primary clarifier at sewage treatment plant
 - Integrated SCADA system for sewage pump stations and sewage treatment plant

FINANCIAL MANAGEMENT

- Monitor 2015 expenses to ensure debt service factor of 1.10 is provided.
- The meter replacement program is near completion and is anticipated to result in increased collections. Result pending.

**WATER SYSTEM
APPENDIX**

**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
CONSULTING ENGINEER'S ANNUAL REPORT**

REGIONAL WATER RATE COMPARISON
Based on 15,000 Gallons/Quarter Residential usage

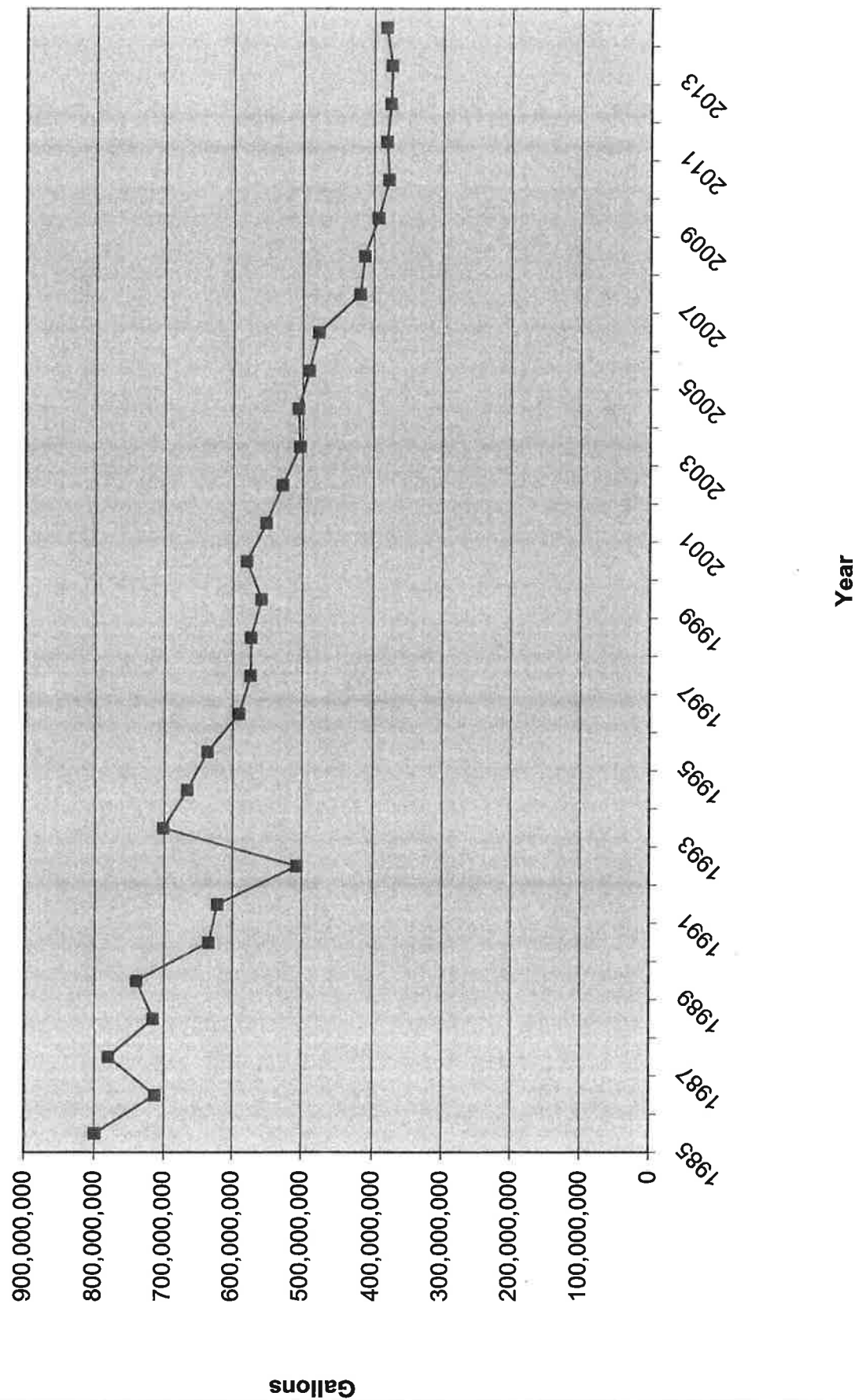
<u>WATER RATE COMPARISON</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>% Change in 6 year period</u>
Vanport Township	15.78	15.78	15.78	15.78	15.78	15.78	0%
Shippingport Borough	39.00	39.00	39.00	39.00	39.00	39.00	0%
Beaver Borough	46.25	46.25	46.25	47.25	47.25	47.25	2%
Moon Township	46.05	46.05	46.05	52.50	52.50	52.50	14%
Industry Municipal Authority	56.40	56.40	56.40	66.60	66.60	66.60	18%
Ambridge Water Authority	61.90	68.21	68.21	71.21	71.21	71.21	15%
Midland Municipal Authority	39.11	76.20	76.20	76.20	76.20	76.20	95%
Brighton Township	86.55	86.55	86.55	86.55	86.55	86.55	0%
Harmony (Ambridge Water Authority)	77.66	84.09	84.09	87.09	87.09	87.09	12%
Cranberry Twp. Municipal Authority	67.75	67.75	81.15	84.90	88.35	88.35	30%
Center Township Water Authority	71.50	71.50	71.50	88.45	88.45	88.45	24%
Creswell Heights Joint Authority	70.92	81.57	83.22	84.87	84.87	88.68	25%
East Liverpool, Ohio (City)	84.15	88.95	88.95	88.95	96.90	96.90	15%
Monaca Borough	88.30	88.30	88.30	88.30	98.00	98.00	11%
Western Allegheny County Mun. Auth.	88.56	88.56	95.82	96.72	98.22	99.12	12%
Beaver Falls Municipal Authority	76.62	82.94	82.94	92.35	100.20	100.20	31%
Municipal Water Authority of Aliquippa	102.52	102.52	102.52	102.52	102.52	102.52	0%
Economy Borough	94.35	100.66	100.66	103.66	103.66	103.66	10%
New Sewickley Municipal Authority	129.00	129.00	129.00	116.10	110.31	104.79	-19%
Baden Borough	96.50	96.50	96.50	114.50	114.50	114.50	19%
Findlay Township Municipal Authority	99.90	99.90	99.90	110.85	110.85	119.10	19%
North Sewickley Municipal Authority	96.00	96.00	121.90	109.86	121.90	121.90	27%
East Liverpool, Ohio (Outside City)	112.95	112.95	112.95	112.95	123.00	123.00	9%
Conway Borough	99.88	114.36	114.36	114.36	118.99	123.80	24%
Koppel (PA American Water Co.)	138.14	138.14	157.35	157.35	174.75	174.75	27%
AVERAGE % CHANGE IN WATER RATES SINCE 2008							17%

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA CONSULTING ENGINEER'S ANNUAL REPORT

ANNUAL WATER WITHDRAWAL REPORT - 2014

	Ranney Wells	Well 23	Collector Well	Well 25	Well 26	Well 27	Well 28	Total Well Production	TOTAL MGD
				(GALLONS)					
January	70,481,400	0	52,176,070	0	0	0	0	122,657,470	3.957
February	70,662,900	0	49,180,470	0	0	0	0	119,843,370	4.280
March	76,353,100	0	53,846,120	0	0	0	0	130,199,220	4.200
April	68,656,560	0	48,411,580	0	0	0	0	117,068,140	3.902
May	65,220,000	0	44,618,360	0	0	0	0	109,838,360	3.543
June	64,824,300	0	41,090,960	0	0	0	0	105,915,260	3.531
July	52,468,800	0	32,798,940	0	0	0	0	85,267,740	2.751
August	64,130,370	0	29,227,800	0	0	0	0	93,358,170	3.012
September	47,558,050	0	42,442,300	0	0	0	0	90,000,350	3.000
October	55,650,500	0	35,208,502	0	0	0	0	90,859,002	2.931
November	55,738,600	0	54,975,510	0	0	0	0	110,714,110	3.690
December	63,727,596	0	51,723,220	0	0	0	0	115,450,816	3.724
DAILY AVE.	2,069,787	0	1,467,671	0	0	0	0	3,537,458	3.543
TOTAL	755,472,176	0	535,699,832	0	0	0	0	1,291,172,008	

Municipal Water Authority of Aliquippa Annual Metered Water Sales



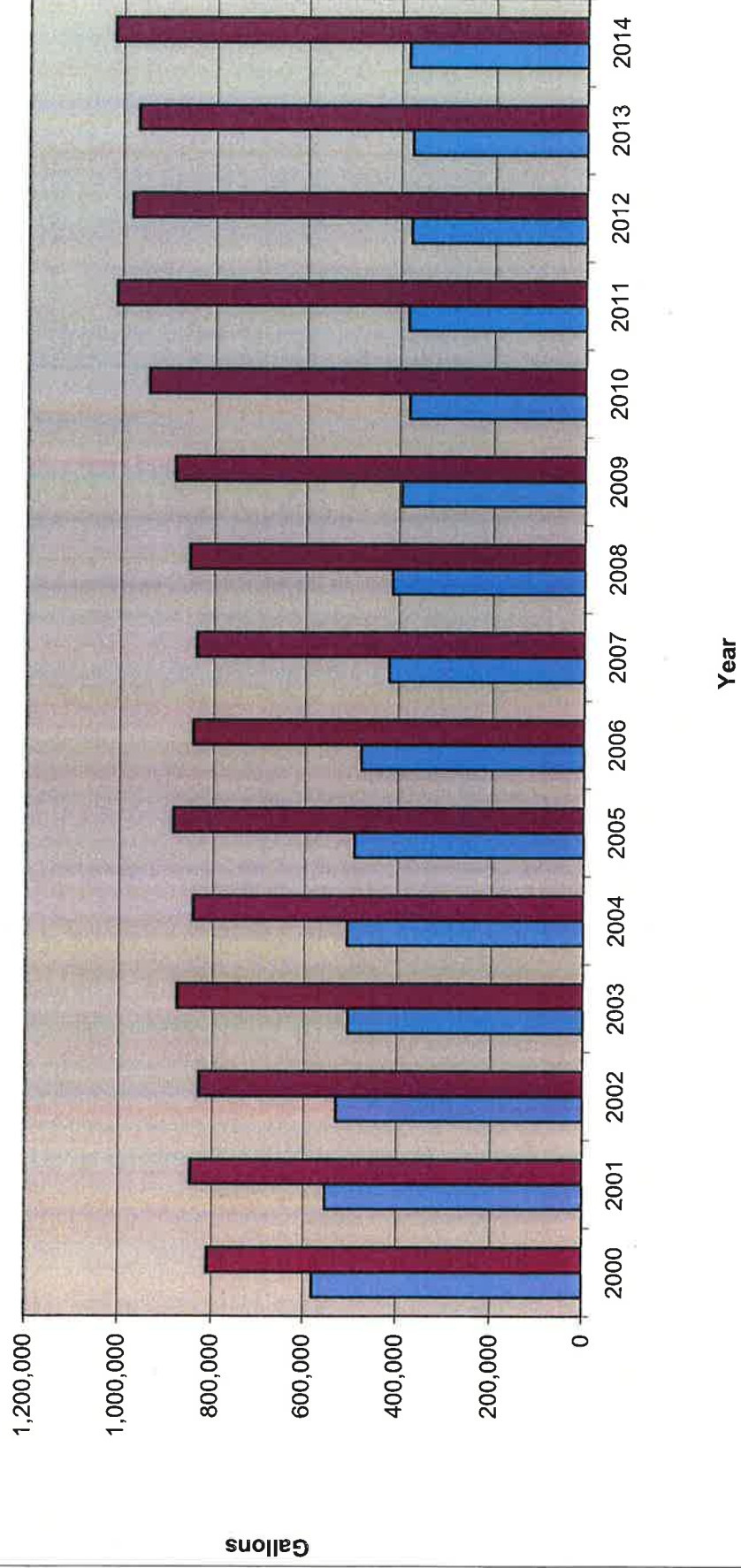
**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
CONSULTING ENGINEER'S ANNUAL REPORT**

**WATER WITHDRAWAL AND SALES
(GALLONS)**

Month	WATER WITHDRAWAL	REPORT OF OPERATIONS					Line Breaks and Flushing ⁽¹⁾	Metered Sales
		Combined Well Output	Raw Water Input	Finished Output				
				Finished	Rinse/Wash	Total		
Jan	122,657,470	116,939,000	96,159,000	4,615,100	100,774,100	3,875,000		
Feb	119,843,370	116,215,000	93,145,000	4,871,490	98,016,490	3,500,000		
Mar	130,199,220	124,725,000	101,051,000	5,266,000	106,317,000	3,875,000		
Apr	117,068,140	111,578,000	90,345,000	4,625,300	94,970,300	3,750,000		
May	109,838,360	102,332,000	82,533,000	4,453,800	86,986,800	3,875,000		
Jun	105,915,260	104,700,000	84,903,000	4,950,600	89,853,600	3,750,000		
Jul	85,267,740	94,670,000	76,883,000	4,743,200	81,626,200	3,875,000		
Aug	93,358,170	92,493,000	75,824,000	4,636,600	80,460,600	3,875,000		
Sept	90,000,350	91,000,000	74,317,000	4,421,200	78,738,200	3,750,000		
Oct	90,859,002	97,286,000	79,578,000	4,492,200	84,070,200	3,875,000		
Nov	110,714,110	95,771,000	77,932,000	4,310,200	82,242,200	3,750,000		
Dec	115,450,816	103,829,000	83,906,000	4,277,400	88,183,400	3,875,000		
TOTAL	1,291,172,008	1,251,538,000	1,016,576,000	55,663,090	1,072,239,090	45,625,000	382,660,160	
DAILY AVG.	3,537,458	3,428,871	2,785,140	152,502	2,937,641	125,000	1,048,384	

(1) Maintenance data includes water used to flush lines after line break repair operations and bi-annual line flushing water. These numbers are estimates only.

Municipal Water Authority of Aliquippa **Historic Water Sales and Finished Water Produced**



■ Thousand Gallons of Water Billed
 ■ Thousand Gallons of Finished Water Produced

SEWER SYSTEM
APPENDIX

FIGURE 1
HYDRAULIC LOADING GRAPH
MWAA WASTEWATER TREATMENT PLANT

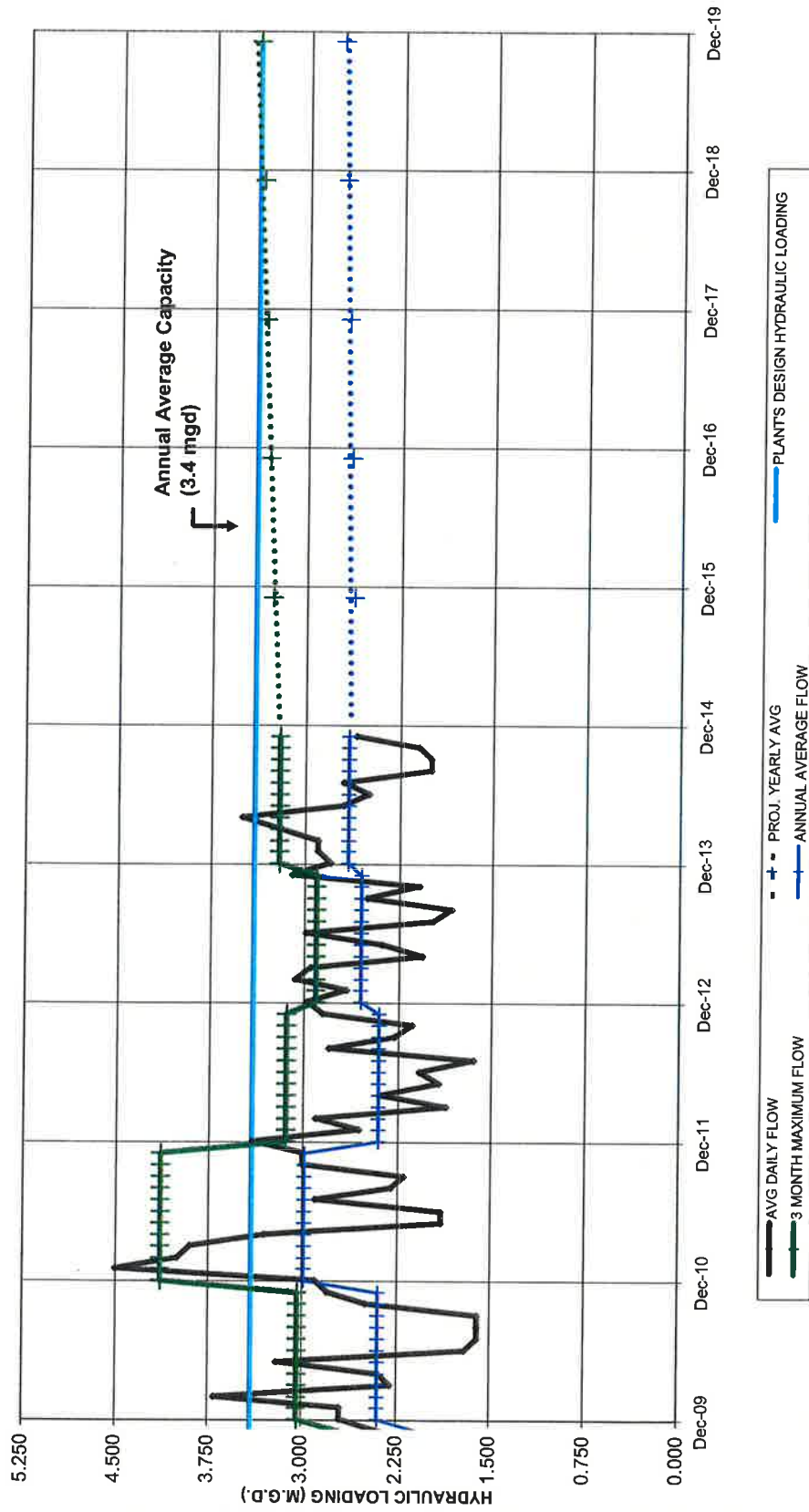
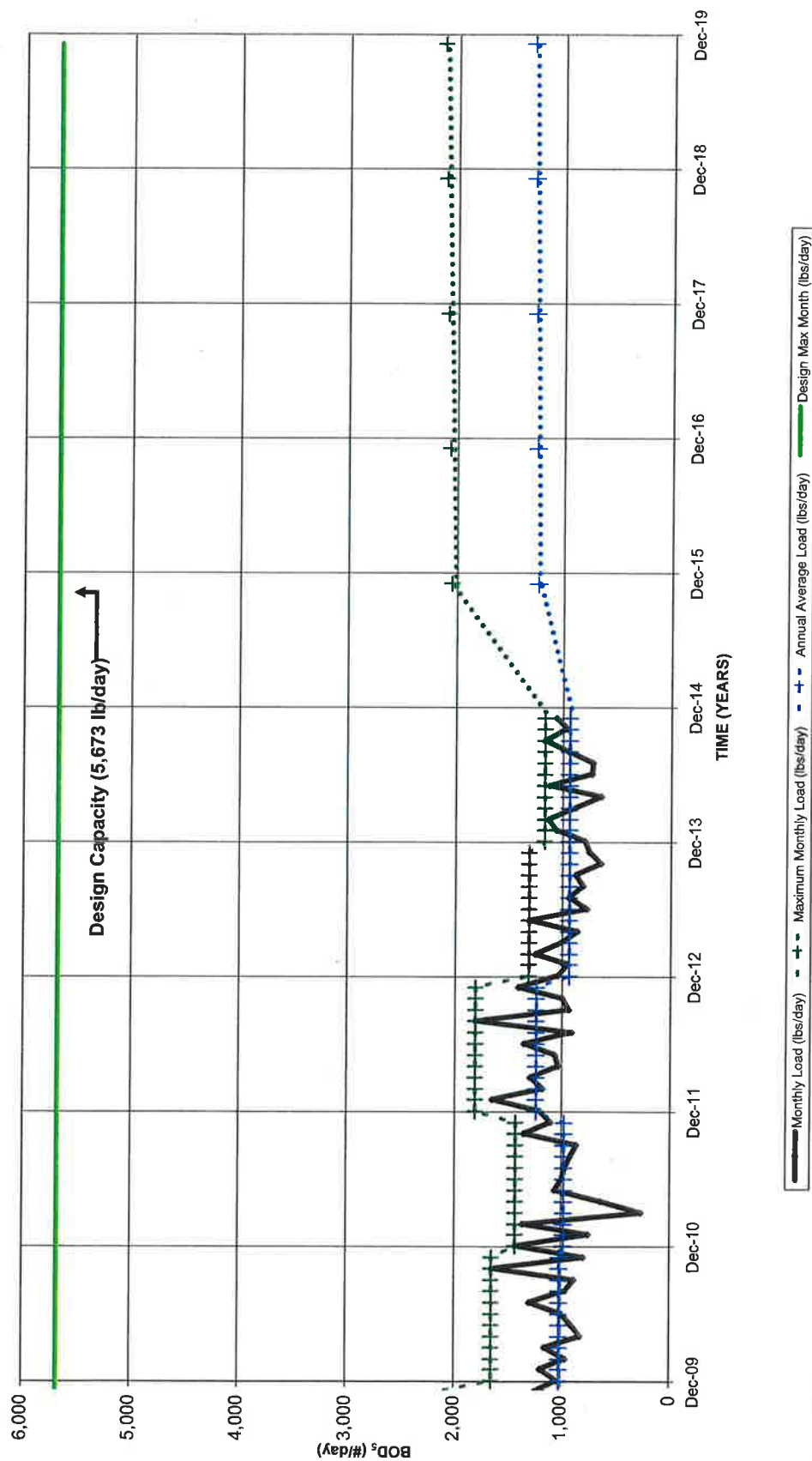


FIGURE 2
ORGANIC LOADING GRAPH
MWAA WASTEWATER TREATMENT PLANT



MUNICIPAL WATER AUTHORITY OF ALIQUIPPA CONSULTING ENGINEER'S ANNUAL REPORT

REGIONAL SEWER RATE COMPARISON Based on 15,000 Gallons/Quarter Residential usage

<u>SEWER RATE COMPARISON</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>% Change in 6-year period</u>
Shippingport Borough	-	39.00	39.00	39.00	39.00	39.00	0%
Eastvale Borough (Beaver Falls)	34.00	48.00	48.00	58.00	58.00	58.00	71%
East Liverpool	-	55.50	63.00	69.00	69.00	69.00	24%
Beaver Borough	64.25	64.25	64.25	65.25	65.25	65.25	2%
Alcosan	55.58	64.47	64.47	69.08	73.87	73.87	33%
West Mayfield Borough (Beaver Falls)	37.00	50.50	50.50	50.50	50.50	75.00	103%
White Township	-	-	-	-	75.00	75.00	0%
New Brighton Borough Sanitary Authority	62.55	62.55	72.75	72.75	75.75	75.75	21%
Rochester Township	63.50	63.50	63.50	70.00	78.40	79.50	25%
Midland Municipal Authority	52.80	84.15	84.15	84.15	84.15	84.15	59%
Municipal Water Auth. of Aliquippa	68.97	68.97	68.97	68.97	86.24	86.24	25%
Monaca Borough	52.33	68.53	68.53	68.53	90.10	90.10	72%
Ellwood City	73.50	96.00	96.00	96.00	96.00	96.00	31%
New Sewickley Twp (to Rochester Sys)	122.25	122.25	122.25	115.65	104.58	99.36	-19%
Patterson Twp (to Beaver Falls Sys.)	99.60	99.60	99.60	99.60	99.60	99.60	0%
Baden, Municipal Authority of	76.00	76.00	76.00	81.00	88.50	103.00	36%
Beaver Falls, City of	46.85	67.50	67.50	67.50	100.50	103.50	121%
Moon Township	-	73.50	73.50	75.00	105.00	105.00	43%
Cranberry Township Municipal Authority	-	95.55	102.05	106.05	106.05	106.05	11%
Brighton Township	89.25	89.25	89.25	107.85	107.85	107.85	21%
Center Township Sewer Authority	108.75	108.75	108.75	108.75	108.75	108.75	0%
Patterson Heights Borough	55.08	85.60	85.74	85.60	85.60	113.00	105%
Patterson Township (to Chippewa Sys.)	114.60	114.60	114.60	114.60	114.60	114.60	0%
Vanport Township Municipal Authority	64.65	64.65	64.65	117.00	117.00	117.00	81%
Koppel Borough	98.79	108.66	108.66	124.95	124.95	124.95	26%
Rochester Borough	95.00	95.00	95.00	70.00	78.40	126.50	33%
Conway Borough	53.87	53.87	53.87	53.87	99.67	134.62	150%
Borough of Ambridge Municipal Authority	106.80	117.39	131.49	131.49	140.65	148.05	39%
Hopewell Township	116.25	130.55	148.50	156.50	156.50	156.50	35%
Chippewa Township	156.54	156.54	156.54	156.54	156.54	156.54	0%
Economy Borough Municipal Authority	180.00	186.00	186.00	195.00	195.00	195.00	8%
Big Beaver Municipal Authority	145.08	217.62	217.62	217.62	217.62	217.62	50%
North Sewickley Township	242.25	242.25	242.25	242.25	242.25	258.75	7%
Industry Borough	165.00	165.00	165.00	261.00	261.00	261.00	58%
AVERAGE % CHANGE IN SEWER RATES SINCE 2008							37%

FINANCIAL MANAGEMENT APPENDIX

**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
CONSULTING ENGINEER'S ANNUAL REPORT**

HISTORIC WATER BUDGET COMPARISON 2011 - 2014 ⁽¹⁾

WATER DEPARTMENT	2011 ACTUAL	2012 ACTUAL	2013 ACTUAL	2014 ACTUAL
REVENUES				
METERED SALES - BILLING				
Metered Sales - Domestic	\$ 1,788,792	\$ 1,797,157	\$ 1,793,368	\$ 1,642,778
Metered Sales - Commercial	\$ 276,718	\$ 274,175	\$ 334,005	\$ 336,816
Metered Sales - Industrial	\$ 288,909	\$ 307,651	\$ 328,910	\$ 327,186
SUBTOTAL	<u>\$ 2,354,419</u>	<u>\$ 2,378,983</u>	<u>\$ 2,456,283</u>	<u>\$ 2,306,780</u>
FIRE PROTECTION - BILLING				
Private Fire Protection	\$ 15,829	\$ 16,675	\$ 16,798	\$ 16,798
Public Fire Protection	\$ 182,990	\$ 196,229	\$ 208,309	\$ 226,198
SUBTOTAL	<u>\$ 198,819</u>	<u>\$ 212,904</u>	<u>\$ 225,107</u>	<u>\$ 242,996</u>
OTHER WATER SALES - RECEIPTS				
Sales to Public Authorities	\$ 41,040	\$ 48,538	\$ 53,584	\$ 38,617
SUBTOTAL	<u>\$ 41,040</u>	<u>\$ 48,538</u>	<u>\$ 53,584</u>	<u>\$ 38,617</u>
MISC. REVENUE - RECEIPTS				
Customer Penalties	\$ 56,484	\$ 58,883	\$ 67,682	\$ 59,361
Miscellaneous Water Revenues	\$ -	\$ -	\$ -	\$ -
Tap Fees	\$ 24,983	\$ 2,206	\$ 43,304	\$ 6,244
Turn on Charges & NSF Charges	\$ 2,601	\$ 3,995	\$ 4,620	\$ 4,765
Inst Remote Dials, Rep Bi	\$ 5,226	\$ 540	\$ 390	\$ -
SUBTOTAL	<u>\$ 89,294</u>	<u>\$ 65,624</u>	<u>\$ 115,996</u>	<u>\$ 70,370</u>
MISC. NON-OPERATING REVENUE - RECEIPTS				
Merc. Job Const. Revenue	\$ 1,377	\$ 1,305	\$ 1,410	\$ 1,440
Revenue/Raccoon Grant	\$ 555,885	\$ 277,325	\$ 742	\$ -
Misc. Non-Operating Revenue	\$ 5,171	\$ 6,136	\$ 24,072	\$ 11,082
Employee Contribution	\$ 21,060	\$ 24,695	\$ 29,640	\$ 37,185
TOTAL NON-OPERATING REVENUE	<u>\$ 583,493</u>	<u>\$ 309,461</u>	<u>\$ 55,864</u>	<u>\$ 49,707</u>
TOTAL WATER REVENUE	<u><u>\$ 3,267,065</u></u>	<u><u>\$ 3,015,510</u></u>	<u><u>\$ 2,906,834</u></u>	<u><u>\$ 2,708,470</u></u>
EXPENDITURES				
SOURCE OF SUPPLY EXPENSE				
Supplies and Expenses	\$ 16,851	\$ 5,828	\$ 18,474	\$ 5,970
Maintenance of Mains	\$ -	\$ -	\$ -	\$ -
SUBTOTAL	<u>\$ 16,851</u>	<u>\$ 5,828</u>	<u>\$ 18,474</u>	<u>\$ 5,970</u>
POWER AND PUMPING EXPENSE				
Operation (Labor)	\$ 29,035	\$ 28,790	\$ 28,196	\$ 21,478
Supplies and Expenses	\$ 14,688	\$ 12,325	\$ 21,768	\$ 13,068
Maint. & Improvement of Structures	\$ 9,610	\$ 12,291	\$ 29,431	\$ 21,077
Maint. Of Power & Pump Equipment	\$ 7,567	\$ 14,820	\$ 28,408	\$ 11,366
Power No. 23 Well	\$ 673	\$ 563	\$ 711	\$ 485
Power Softening Plant	\$ 206,861	\$ 211,282	\$ 221,699	\$ 218,170
Power South Wells & Collector Well	\$ 36,611	\$ 37,986	\$ 36,525	\$ 39,881
Labor - Ranney Well	\$ 2,652	\$ 2,701	\$ 2,739	\$ 2,402
Power - Ranney Well	\$ 51,325	\$ 48,424	\$ 47,803	\$ 58,429
Power Booster Sta.	\$ 12,370	\$ 9,508	\$ 12,870	\$ 12,387
Power Racoon Twp.	\$ 25,845	\$ 16,974	\$ 16,608	\$ 18,378
#1 Tank Rd/Reservoir - Beaver County Jail	\$ 377	\$ 260	\$ 388	\$ 196
SUBTOTAL	<u>\$ 397,614</u>	<u>\$ 395,924</u>	<u>\$ 447,146</u>	<u>\$ 417,316</u>
PURIFICATION AND LAB EXPENSE				
Purification and Lab (Labor)	\$ 192,461	\$ 199,071	\$ 160,601	\$ 141,195
Water Testing	\$ 15,044	\$ 8,620	\$ 8,017	\$ 10,845
Purification and Lab Supplies	\$ 164,068	\$ 164,164	\$ 157,446	\$ 161,737
Maint. & Improvement of Structures (Labor)	\$ 32,226	\$ 38,037	\$ 45,442	\$ 30,789
Maint. Supervision Plant Equip. (Labor)	\$ 102,503	\$ 97,139	\$ 102,743	\$ 93,872
SUBTOTAL	<u>\$ 506,302</u>	<u>\$ 507,031</u>	<u>\$ 474,249</u>	<u>\$ 438,439</u>

EXPENSES

Operation Supplies and Expense	\$ 7,791	\$ 5,692	\$ 4,706	\$ 12,426
Operation Lines, Hydrants, & Strg - (Labor)	\$ 12,497	\$ 5,965	\$ 10,241	\$ 2,362
Service on Customer Premises	\$ -	\$ -	\$ -	\$ -
Maintenance Supervision (Labor)	\$ 113,839	\$ 110,587	\$ 111,114	\$ 125,867
Maint. Of Mains (Labor)	\$ 131,823	\$ 163,490	\$ 71,257	\$ 251,207
Maint. Of Service Lines (Labor)	\$ 122,511	\$ 67,400	\$ 89,421	\$ 108,601
Maintenance of Meters (Labor)	\$ 15,340	\$ 17,592	\$ 6,006	\$ 46,487
Maint. Of Hydrants (Labor)	\$ 14,510	\$ 8,878	\$ 2,676	\$ 15,098
Capital Improvement	\$ -	\$ -	\$ -	\$ (18,040)
Capital Improvements - Raccoon	\$ 602,312	\$ 201,384	\$ -	\$ -
Maintenance of Structure	\$ 4,393	\$ 2,704	\$ 5,844	\$ 41,739
SUBTOTAL	\$ 1,025,016	\$ 583,692	\$ 301,265	\$ 585,748

RENTS/TRUCKS AND EQUIPMENT

Rents	\$ 200	\$ 400	\$ 200	\$ 2,400
Trucks and Equip. (Labor)	\$ 80,014	\$ 70,363	\$ 50,098	\$ 111,270
Equipment	\$ 17,924	\$ 2,981	\$ -	\$ -
SUBTOTAL	\$ 98,138	\$ 73,744	\$ 50,298	\$ 113,670

CUSTOMER ACCTG. & COLLTG. EXPENSE

Cust. Orders, Meter Reading (Labor)	\$ 89,042	\$ 86,900	\$ 85,773	\$ 72,828
Customer Billing & Accounting (Labor)	\$ 41,101	\$ 42,012	\$ 46,499	\$ 47,999
Miscellaneous Exp.	\$ 558	\$ -	\$ -	\$ -
SUBTOTAL	\$ 130,701	\$ 128,912	\$ 132,272	\$ 120,827

GENERAL & ADMINISTRATION EXPENSE

Salaries of General Officer	\$ 2,779	\$ 2,779	\$ 2,510	\$ 2,779
Other General Office Salaries	\$ 124,653	\$ 62,022	\$ 93,684	\$ 53,978
Office Supplies and Expenses	\$ 33,766	\$ 34,258	\$ 30,834	\$ 34,348
Real Estate Taxes/Sohn Road	\$ 151	\$ 215	\$ 156	\$ 159
Auditor	\$ 2,975	\$ 4,100	\$ 5,467	\$ 3,259
Engineering Retainer	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,000
Engineering Expense	\$ 35,778	\$ 27,059	\$ 29,498	\$ 31,052
Maintenance of Backwash	\$ -	\$ -	\$ -	\$ -
Insurance - PIRMA - Auto	\$ -	\$ -	\$ -	\$ -
Insurance - PIRMA - Gen. Liability	\$ 33,170	\$ 33,832	\$ 80,037	\$ 40,618
Insurance - Workmen Comp.	\$ 14,724	\$ 21,101	\$ 20,519	\$ 17,162
Insurance - Multi Peril	\$ 10,375	\$ 13,780	\$ 18,373	\$ 14,422
Insurance Boiler	\$ 3,480	\$ 4,712	\$ 6,283	\$ 4,784
Insurance - PIRMA - Public Officials	\$ 5,096	\$ 5,221	\$ 6,961	\$ 6,909
Insurance - Auto Physical	\$ -	\$ -	\$ -	\$ -
Insurance	\$ 2,401	\$ 2,769	\$ 493	\$ 2,956
Employees Insurance and Pension	\$ 395,994	\$ 390,597	\$ 461,206	\$ 447,316
Employees Salary Pension	\$ 68,444	\$ 61,497	\$ 66,291	\$ 68,392
Miscellaneous General Expense	\$ 25,687	\$ 18,226	\$ 20,666	\$ 28,588
Maintenance of General Property (Labor)	\$ 21,162	\$ 9,502	\$ 47,457	\$ 41,717
Legal Fees/Arbitrator	\$ -	\$ -	\$ -	\$ -
Solicitor	\$ 10,225	\$ 18,234	\$ 14,055	\$ 8,237
SUBTOTAL	\$ 792,060	\$ 711,104	\$ 905,690	\$ 807,676

DEPRECIATION & INTEREST

Depreciation	\$ 420,187	\$ 420,087	\$ 420,187	\$ -
1994 PENNVEST Loan No. 35098	\$ 484	\$ 270	\$ 60	\$ -
ESB Line of Credit	\$ -	\$ -	\$ -	\$ -
2013 Bond Issue Principal	\$ -	\$ -	\$ -	\$ -
2003 Bond Issue Interest	\$ 246,120	\$ 229,125	\$ 229,125	\$ -
2001 PENNVEST Loan No. 88002	\$ 82,636	\$ 76,011	\$ 69,153	\$ -
SUBTOTAL	\$ 749,427	\$ 725,493	\$ 718,525	\$ -

DEBT SERVICE AND PRINCIPAL

ESB Line of Credit	\$ -	\$ -	\$ -	\$ -
2013 Bond Issue Principal	\$ -	\$ -	\$ -	\$ -
2003/1998 Bond Issue Principal	\$ -	\$ -	\$ -	\$ -
2001 PENNVEST Loan No. 88002	\$ -	\$ -	\$ -	\$ -
TOTAL DEBT SERVICE AND PRINCIPAL	\$ -	\$ -	\$ -	\$ 1,195,429

TOTAL WATER EXPENSES

	\$ 3,716,109	\$ 3,131,728	\$ 3,047,919	\$ 3,685,075
--	---------------------	---------------------	---------------------	---------------------

NET WATER INCOME

	\$ (449,044)	\$ (116,218)	\$ (141,085)	\$ (976,605)
--	---------------------	---------------------	---------------------	---------------------

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA CONSULTING ENGINEER'S ANNUAL REPORT

HISTORIC SEWER BUDGET COMPARISON 2011 - 2014 ⁽¹⁾

SEWER DEPARTMENT	2011 ACTUAL	2012 ACTUAL	2013 ACTUAL	2014 ACTUAL
REVENUES				
METERED SALES - BILLING				
Metered Sales - Domestic	\$ 722,583	\$ 893,393	\$ 908,930	\$ 807,789
Metered Sales - Commercial	\$ 137,731	\$ 167,637	\$ 202,480	\$ 191,145
Metered Sales - Industrial	\$ 12,581	\$ 18,802	\$ 27,940	\$ 31,457
Sales to Public	\$ 94,892	\$ 128,378	\$ 143,111	\$ 163,047
SUBTOTAL	<u>\$ 967,787</u>	<u>\$ 1,208,210</u>	<u>\$ 1,282,461</u>	<u>\$ 1,193,439</u>
OTHER SEWER SALES-RECEIPTS				
No Name on Old System				\$ -
Sales to Public Authorities	\$ 376,502	\$ 455,082	\$ 470,634	\$ 470,138
SUBTOTAL	<u>\$ 376,502</u>	<u>\$ 455,082</u>	<u>\$ 470,634</u>	<u>\$ 470,138</u>
MISCELLANEOUS REVENUE-RECEIPTS				
Customer Penalties	\$ 30,145	\$ 36,787	\$ 41,707	\$ 39,678
Miscellaneous	\$ -	\$ -	\$ -	\$ -
Sewer-Taps	\$ 19,680	\$ 8,243	\$ -	\$ 4,596
Employee Contribution	\$ 4,680	\$ 5,060	\$ 5,070	\$ 6,870
SUBTOTAL	<u>\$ 54,505</u>	<u>\$ 50,090</u>	<u>\$ 46,777</u>	<u>\$ 51,144</u>
SEWER REVENUE TOTAL	<u><u>\$ 1,398,794</u></u>	<u><u>\$ 1,713,382</u></u>	<u><u>\$ 1,799,872</u></u>	<u><u>\$ 1,714,721</u></u>
EXPENDITURES				
SOURCE OF SUPPLY EXPENSE				
Maintenance of Sewer Lines (Labor)	\$ 39,192	\$ 30,360	\$ 39,090	\$ 23,223
Capital Improvements	\$ -	\$ -	\$ -	\$ 29,637
SUBTOTAL	<u>\$ 39,192</u>	<u>\$ 30,360</u>	<u>\$ 39,090</u>	<u>\$ 52,859</u>
POWER AND PUMPING EXPENSE				
Operation (Labor)	\$ 11,819	\$ 13,388	\$ 11,112	\$ 30,280
Power - S.T.P. N.Beaver-Thompson	\$ 41,197	\$ 35,267	\$ 36,017	\$ 30,703
Power - S.T.P./Pump Station	\$ 1,964	\$ 1,483	\$ 1,374	\$ 1,132
Power - Wye Pump Station	\$ 41,729	\$ 35,990	\$ 36,938	\$ 36,009
Power - Golf Pump Station	\$ 2,852	\$ 1,905	\$ 2,104	\$ 2,010
Power - Steel Street Pump Station	\$ 745	\$ 739	\$ 735	\$ 859
Power - Jail Pump Station	\$ 1,403	\$ 1,230	\$ 1,340	\$ 1,242
Supplies and Expense/Pumping	\$ 13,936	\$ 9,703	\$ 10,655	\$ 12,258
Pumping Maint. Supervision (Labor)	\$ 2,183	\$ 149	\$ 142	\$ -
Maint. Of Equipment	\$ 15,649	\$ 14,794	\$ 13,082	\$ 10,900
Maint. Of Pump Stations (Labor)	\$ 16,782	\$ 13,575	\$ 14,100	\$ 10,606
SUBTOTAL	<u>\$ 150,259</u>	<u>\$ 128,223</u>	<u>\$ 127,599</u>	<u>\$ 135,998</u>
TREATMENT AND LAB EXPENSE				
Operation Supervision (Labor)	\$ 82,844	\$ 54,951	\$ 20,581	\$ 22,216
Lab (Labor)	\$ 72,038	\$ 72,128	\$ 83,394	\$ 93,571
Tests	\$ 7,882	\$ 11,670	\$ 12,269	\$ 9,985
Lab Supplies	\$ 62,064	\$ 57,079	\$ 46,067	\$ 43,766
Maintenance Supervision-Treatment (Labor)	\$ -	\$ 170	\$ 42	\$ -
Maint. & Improvement of Structures	\$ 1,654	\$ 176	\$ 742	\$ 212
Maint. Of Treatment Plant Equipment	\$ 80,194	\$ 42,935	\$ 37,674	\$ 21,550
Clarifire Repairs				\$ -
Drying Bed Maint. & Disposal	\$ 23,842	\$ 21,707	\$ 7,483	\$ 30,130
SUBTOTAL	<u>\$ 330,518</u>	<u>\$ 260,816</u>	<u>\$ 208,252</u>	<u>\$ 221,429</u>

RENTS/TRUCKS AND EQUIPMENT

Trucks and Equipment	\$ 12,524	\$ 16,244	\$ 11,188	\$ 11,456
Equipment (vehicle)	\$ -	\$ -	\$ -	\$ -
SUBTOTAL	<u>\$ 12,524</u>	<u>\$ 16,244</u>	<u>\$ 11,188</u>	<u>\$ 11,456</u>

EXPENSE

Customer Orders, Meter Reading (Labor)	\$ 66,659	\$ 68,635	\$ 65,352	\$ 54,415
Customer Billing and Accounting (Labor)	\$ 28,141	\$ 30,844	\$ 31,803	\$ 33,451
SUBTOTAL	<u>\$ 94,800</u>	<u>\$ 99,479</u>	<u>\$ 97,155</u>	<u>\$ 87,866</u>

GENERAL & ADMINISTRATION EXPENSES

Other General Office Salaries	\$ 80,269	\$ 46,401	\$ 58,345	\$ 49,832
Office Supplies Expense	\$ 27,101	\$ 29,639	\$ 38,174	\$ 32,291
Auditor	\$ 6,775	\$ 5,650	\$ 6,233	\$ 6,325
Engineers Retainer	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,000
Engineers Expense	\$ 7,560	\$ 8,990	\$ 9,520	\$ 9,533
Insurance - PIRMA - Auto	\$ -	\$ -	\$ -	\$ -
Insurance - PIRMA - Gen. Liability	\$ 2,582	\$ 22,555	\$ 30,073	\$ 3,114
Insurance Workmens Comp.	\$ 11,792	\$ 14,067	\$ 13,679	\$ 11,902
Insurance - Multi - Peril	\$ -	\$ -	\$ -	\$ -
Insurance - Boiler	\$ 870	\$ 1,178	\$ 1,571	\$ 1,196
Insurance - Auto Physical	\$ -	\$ -	\$ -	\$ -
Insurance	\$ 12,613	\$ 16,249	\$ 18,467	\$ 17,078
Employees Insurance and Pension	\$ 139,573	\$ 139,730	\$ 102,094	\$ 94,236
Employees - Salary Pensions	\$ 24,973	\$ 20,591	\$ 18,928	\$ 17,509
Miscellaneous General Expense	\$ 2,905	\$ 3,227	\$ 2,510	\$ 1,480
Maintenance of General Property (Labor)	\$ 21,697	\$ 26,660	\$ 20,489	\$ 8,817
Solicitor	\$ 3,575	\$ 3,900	\$ 3,900	\$ 4,155
SUBTOTAL	<u>\$ 343,485</u>	<u>\$ 340,037</u>	<u>\$ 325,183</u>	<u>\$ 258,467</u>

DEPRECIATION & INTEREST

Depreciation	\$ 152,666	\$ 152,666	\$ 152,798	\$ -
Interest Expense - PENNVEST	\$ -	\$ -	\$ -	\$ -
Interest Expense on Bonds	\$ -	\$ -	\$ -	\$ -
Loan Interest - ESB	\$ -	\$ -	\$ -	\$ -
1992 PENNVEST Loan No. 72027	\$ 516	\$ 90	\$ -	\$ -
SUBTOTAL	<u>\$ 153,182</u>	<u>\$ 152,756</u>	<u>\$ 152,798</u>	<u>\$ 132,825</u>

SEWER EXPENSE TOTAL

<u>\$ 1,123,960</u>	<u>\$ 1,027,915</u>	<u>\$ 961,265</u>	<u>\$ 900,901</u>
---------------------	---------------------	-------------------	-------------------

TOTAL NET SEWER REVENUE

<u>\$ 274,834</u>	<u>\$ 685,467</u>	<u>\$ 838,607</u>	<u>\$ 813,820</u>
-------------------	-------------------	-------------------	-------------------

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA CONSULTING ENGINEER'S ANNUAL REPORT

2014 BUDGET SUMMARY

	<u>REVENUES</u>	<u>EXPENSES ⁽¹⁾</u>	<u>NET INCOME / (LOSS)</u>
WATER	\$2,708,470	\$2,489,646	\$218,824
SEWER	<u>\$1,714,721</u>	<u>\$768,076</u>	<u>\$946,646</u>
	\$4,423,191	\$3,257,722	\$1,165,469

DEBT SERVICES:

2014 Payments

2014 Debt Service Payments

\$1,328,254

TOTAL ANNUAL DEBT SERVICE PAYMENT

\$1,328,254

TOTAL ANNUAL DEBT SERVICE COVERAGE ⁽³⁾

\$101,262

NET REVENUE ⁽²⁾

\$1,165,469

2014 BUDGETED COVERAGE FACTOR

0.82

REQUIRED COVERAGE FACTOR

1.10

⁽¹⁾ Excludes Depreciation and Debt Service

⁽²⁾ Includes Net Income/(Loss) plus Debt Service Coverage

⁽³⁾ Debt Service Coverage for Bond Issue based on 2015 budget

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA CONSULTING ENGINEER'S ANNUAL REPORT

WATER DEPARTMENT

2015 BUDGET

REVENUES

METERED SALES

Metered Sales - Domestic	\$ 1,750,000
Metered Sales - Commercial	\$ 323,400
Metered Sales - Industrial	\$ 324,505
SUBTOTAL	\$ 2,397,905

FIRE PROTECTION

Private Fire Protection	\$ 17,000
Public Fire Protection	\$ 200,000
SUBTOTAL	\$ 217,000

OTHER WATER SALES

Sales to Public Authorities	\$ 40,000
SUBTOTAL	\$ 40,000

MISC. REVENUE

Customer Penalties	\$ 55,000
Miscellaneous Water Revenue	\$ -
Water Tap Fees	\$ -
Turn on Charges & NSF Charge	\$ 6,000
SUBTOTAL	\$ 61,000

MISC. NON-OPERATING REVENUE

Revenue from Merc. Job C	\$ -
Interest Revenue	\$ -
Misc. Non-Operating Revenue	\$ 10,000
Employee Contribution	\$ 41,600
SUBTOTAL	\$ 51,600

TOTAL WATER REVENUE

\$ 2,767,505

EXPENSES

POWER AND PUMPING

Outside Services	\$ 10,000
Maint. Of Structures and Improvements	\$ 25,000
Maint. Of Power and Pumping	\$ 25,000
Utility - Power - Wells	\$ 1,000
Utility - Power - Collector Well	\$ 40,000
Utility - Power - Ranney Well	\$ 60,000
Utility - Power - Booster Station	\$ 16,000
Utility - Power - Raccoon Township	\$ 21,000
SUBTOTAL	\$ 198,000

PURIFICATION AND LAB

Operations Salaries - Regular	\$ 270,000
Operations Salaries - Overtime	\$ -
Water Testing	\$ 15,000
Supplies - Salt	\$ 145,000
Supplies - Chlorine	\$ 18,000
Outside Services	\$ 5,000
Maint. Of Structures and Improvements	\$ 30,000
Maint. Of Equipment	\$ 30,000
Maint. Of Backwash	\$ 2,500
Utility - Power	\$ 230,000
Utility - Gas	\$ 1,200
SUBTOTAL	\$ 746,700

TRANSMISSION AND DISTRIBUTION

Operations Salaries - Regular	\$ 315,000
Operations Salaries - Overtime	\$ -
Outside Services	\$ 5,000

Maint. Of Lines	\$	150,000
Maint. Of Meters	\$	10,000
Maint. Of Hydrants	\$	10,000
Maint. Of Structures and Improvements	\$	30,000
SUBTOTAL	\$	<u>520,000</u>

VEHICLES AND EQUIPMENT

Purchase	\$	25,000
Rentals	\$	2,000
Outside Services	\$	12,000
Maintenance	\$	25,000
Fuel	\$	15,000
SUBTOTAL	\$	<u>79,000</u>

GENERAL ADMINISTRATION

Board Salaries	\$	1,500
Manager / Office Salaries - Regular	\$	135,000
Manager / Office Salaries - Overtime	\$	-
Unemployment / SUI	\$	4,200
Social Security / FICA	\$	7,200
Office Supplies and Expenses	\$	20,000
Real Estate Taxes / Sohn R	\$	225
Auditor	\$	6,000
Solicitor - Retainer	\$	3,600
Solicitor - Expenses	\$	9,000
Engineering Retainer	\$	1,200
Engineering Expenses	\$	30,000
Insurance - Auto	\$	6,000
Insurance - General Liability	\$	27,000
Insurance - Workmen's Compensation	\$	12,000
Insurance - Multi Peril	\$	9,000
Insurance - Boiler	\$	3,600
Insurance - Public Officials	\$	4,200
Insurance - Property / Equipment	\$	12,000
Hospitalization / Health Insurance	\$	360,000
Retirement	\$	36,000
Misc. General Expenses	\$	10,000
Maint. Of Property	\$	6,000
Utilities - Power	\$	2,880
Utilities - Telephone	\$	3,600
Utilities - Gas	\$	2,160
Utilities - Cellular	\$	2,160
Uniforms / Clothing Allowance	\$	1,200
Postage	\$	4,200
Dues, Memberships, Subscriptions	\$	900
Software	\$	7,200
Office Equipment	\$	3,000
Travel and Education	\$	1,500
SUBTOTAL	\$	<u>732,525</u>

CAPITAL IMPROVEMENTS

Capital Improvements	\$	-
Capital Improvements - Raccoon	\$	-
SUBTOTAL		<u>-</u>

DEBT SERVICE

2013 Bond Issue	\$	194,324
2003/1998 Bond Issue	\$	688,743
Debt Service Coverage	\$	88,307
2001 Pennvest Loan No. 88002	\$	284,302
ESB 2011 Chevy Truck Loan	\$	6,504
ESB 2011 Ford Truck Loan	\$	4,607
ESB 2013 Ford Truck Loan	\$	2,278
SUBTOTAL	\$	<u>1,269,065</u>

TOTAL WATER EXPENSES	\$	<u><u>3,545,290</u></u>
-----------------------------	----	-------------------------

NET WATER INCOME	\$	<u><u>(777,785)</u></u>
-------------------------	----	-------------------------

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA CONSULTING ENGINEER'S ANNUAL REPORT

SEWER DEPARTMENT

2015 BUDGET

REVENUES

METERED SALES

Metered Sales - Domestic	\$ 800,000
Metered Sales - Commercial	\$ 190,000
Metered Sales - Industrial	\$ 30,000
Sale to Public Agencies	\$ 150,000
SUBTOTAL	\$ 1,170,000

PUBLIC FIRE

Sales to Public Authority (Hopewell)	\$ 470,000
SUBTOTAL	\$ 470,000

MISC. REVENUE

Customer Penalties	\$ 35,000
Sewer Tap Fees	\$ -
Employee Contribution	\$ 13,000
SUBTOTAL	\$ 48,000

TOTAL SEWER REVENUE	\$ 1,688,000
----------------------------	---------------------

EXPENSES

COLLECTION SYSTEM

Operation Salaries - Regular	\$ 45,000
Operation Salaries - Overtime	\$ -
Outside Services	\$ 10,000
Maint. Of Collection System	\$ 45,000
SUBTOTAL	\$ 100,000

TREATMENT PLANT AND PUMP STATIONS

Operation Salaries - Regular	\$ 90,000
Operation Salaries - Overtime	\$ -
Testing / Sampling	\$ 10,000
Tools and Supplies	\$ 15,000
Chlorine	\$ 12,000
Outside Services	\$ 5,000
Maint. Of Structures	\$ 1,000
Maint. Of Plant Equipment	\$ 25,000
Maint. Of Pump Stations	\$ 50,000
Sludge Processing Maintenance	\$ 5,000
Sludge Disposal	\$ 10,000
Utilities - Power - Rus LS	\$ 1,500
Utilities - Power - Wye LS	\$ 40,000
Utilities - Power - Golf Course LS	\$ 2,500
Utilities - Power - Steel Street LS	\$ 1,000
Utilities - Power - Jail LS	\$ 1,500
Utilities - Power - Treatment Plant	\$ 41,000
Utilities - Gas - Treatment Plant	\$ 18,000
SUBTOTAL	\$ 328,500

VEHICLES AND EQUIPMENT

Purchases	\$	-
Rentals	\$	500
Outside Services	\$	8,000
Maintenance	\$	7,000
Fuel	\$	10,000
SUBTOTAL	\$	<u>25,500</u>

GENERAL ADMINISTRATION

Board Salaries	\$	1,500
Manager / Office Salaries - Regular	\$	90,000
Manager / Office Salaries - Overtime	\$	-
Unemployment / SUI	\$	1,400
Social Security / FICA	\$	2,250
Office Supplies and Expenses	\$	40,000
Auditor	\$	4,000
Solicitor - Retainer	\$	3,600
Solicitor - Expenses	\$	6,000
Engineering Retainer	\$	1,200
Engineering Expenses	\$	10,000
Insurance - Auto	\$	4,000
Insurance - General Liability	\$	18,000
Insurance - Workmen's Compensation	\$	8,000
Insurance - Multi Peril	\$	6,000
Insurance - Boiler	\$	2,400
Insurance - Public Officials	\$	2,800
Insurance - Property and Equipment	\$	8,000
Hospitalization / Health Insurance	\$	240,000
Retirement / Pension	\$	11,250
Misc. General Expenses	\$	2,500
Maint. Of Property	\$	4,000
Utilities - Power 50/50	\$	1,920
Utilities - Telephone	\$	2,400
Utilities - Gas	\$	1,440
Utilities - Cellular	\$	1,440
Uniforms / Clothing Allowance	\$	800
Postage	\$	2,800
Dues, Memberships, Subscriptions	\$	600
Software	\$	4,800
Office Equipment	\$	2,000
Travel and Education	\$	1,000
SUBTOTAL	\$	<u>486,100</u>

CAPITAL IMPROVEMENTS

Capital Improvements	\$	-
SUBTOTAL		<u>-</u>

DEBT SERVICE COVERAGE

2013 Bond Issue	\$	129,549
Debt Service Coverage	\$	12,955
ESB 2013 Ford Truck Loan	\$	2,278
SUBTOTAL	\$	<u>144,782</u>

TOTAL SEWER EXPENSES	\$	<u><u>1,084,882</u></u>
-----------------------------	----	-------------------------

NET SEWER INCOME	\$	<u><u>603,118</u></u>
-------------------------	----	-----------------------

**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
CONSULTING ENGINEER'S ANNUAL REPORT**

2015 BUDGET SUMMARY

	<u>REVENUES</u>	<u>EXPENSES</u> ⁽¹⁾	<u>NET INCOME / (LOSS)</u>
WATER	\$ 2,767,505	\$ 2,276,225	\$ 491,280
SEWER	\$ 1,688,000	\$ 940,100	\$ 747,900
	\$ 4,455,505	\$ 3,216,325	\$ 1,239,180

DEBT SERVICES:

2013 Bond Issue	<u>2015 Payments</u>
2003/1998 Bond Issue	\$ 323,873
2001 Pennvest Loan No. 88002	\$ 688,743
ESB 2011 Chevy Truck Loan	\$ 284,302
ESB 2011 Ford Truck Loan	\$ 6,504
ESB 2013 Ford Truck Loan	\$ 4,607
	<u>\$ 4,557</u>

TOTAL ANNUAL DEBT SERVICE PAYMENT	\$ 1,312,586
TOTAL ANNUAL DEBT SERVICE COVERAGE	\$ 101,262
NET REVENUE ⁽²⁾	\$ 1,340,442
2015 BUDGETED COVERAGE FACTOR	1.02
REQUIRED COVERAGE FACTOR	1.10

⁽¹⁾ Excludes Debt Service and Debt Service Coverage

⁽²⁾ Includes Net Revenue/(Loss) plus Debt Service Coverage

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA

Year 2015/2016 – Schedule of Insurance

POLICY	% WATER	% SEWER	PREMIUM AMOUNT	DATE
Pirma-Auto (Liability)	60	40	\$ 6487.00	10/19/15 – 10/19/16
Pirma-Public Officials (Liability)	60	40	\$ 6681.00	10/19/15 – 10/19/16
Pirma-General Liability	60	40	\$ 71,826.00	10/19/15 – 10/19/16
H.A.R.I.E. Workers Compensation	60	40	\$ 48767.00	08/01/15 – 08/31/16
Ameri-Group Multi-Peril Hicks Heim Mustio HH Policy No. CAP-5153905	60	40	\$ 37,643.00	07/05/15 – 07/05/18
Cincinnati Ins. Co. Policy No. BEP2667664	60	40	\$ 4,518.00	07/05/15 – 07/05/18
H.A. Thompson Risk Management Services Inland Marine and Auto Physical Damage	60	40	\$ 5,363.00	10/19/15 – 10/19/16

