

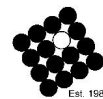
**CONSULTING ENGINEER'S  
ANNUAL REPORT**

**2017 / 2018 OPERATING YEAR  
(November 1, 2017 - October 31, 2018)**

FOR

**THE MUNICIPAL WATER  
AUTHORITY OF ALIQUIPPA**  
160 HOPEWELL AVENUE  
ALIQUIPPA, PENNSYLVANIA 15001

**OCTOBER 2018**



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

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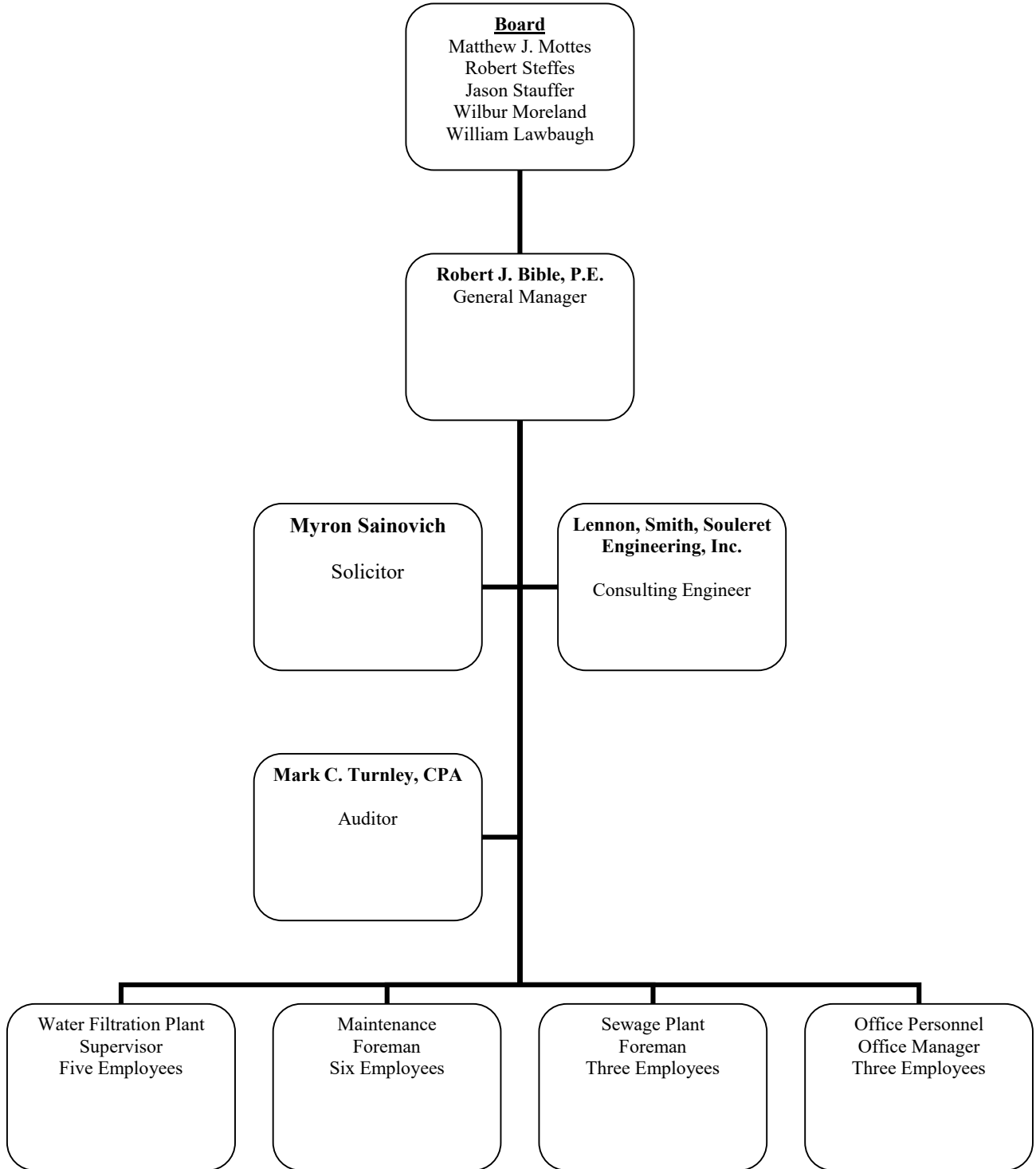
Civil Engineers and Surveyors  
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MUNICIPAL WATER AUTHORITY OF ALIQUIPPA  
CONSULTING ENGINEER'S ANNUAL REPORT  
OCTOBER 2018

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**ORGANIZATIONAL CHART  
MUNICIPAL WATER AUTHORITY OF ALIQUIPPA  
AS OF OCTOBER 31, 2018**



**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA**  
Aliquippa, Beaver County, Pennsylvania  
724-375-5525  
Identification No. 25-6007701

**AUTHORITY BOARD MEMBER AS OF OCTOBER 31, 2018**

Matthew J. Mottes.....Chairman  
Robert Steffes.....Vice Chairman  
Jason Stauffer.....Treasurer  
Wilbur Moreland.....Secretary  
William Lawbaugh.....Assistant Secretary/Treasurer

**PROFESSIONAL APPOINTMENTS**

Myron Sainovich.....Solicitor  
Bank of New York, Mellon Trust No. N.A.....Trustee  
Mark C. Turnley, CPA.....Auditor  
WesBanco.....Depository  
Lennon, Smith, Souleret Engineering, Inc.....Consulting Engineer

**MANAGEMENT**

Robert J. Bible, P.E.....General Manager  
Denise McCoy.....Office Manager

**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 2018, through October 31, 2018 for the Municipal Water Authority of Aliquippa (MWAA).

**DRINKING WATER SYSTEM**

**DESCRIPTION OF SYSTEM**

The water system serves a population of approximately 13,892 within the City of Aliquippa, Hopewell Township, Potter Township, and Raccoon Township.

MWAA is located in Aliquippa, Pennsylvania. The primary source of water consists of six vertical wells (Wells 14, 18, 25, 26, 27, and 28), 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.

In February 2018, Wells 14, 26, and 27 were cleaned and new pumps installed. The Collector Well had its pumps rebuilt and the Collector and Rainey wells are scheduled to be cleaned. The motor in Well 18 pump failed in May 2018 and was replaced.

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 seven storage tanks:

- Davidson Heights 1,078,000 Gallon Concrete Reservoir
- Davidson Heights 2,300,000 Gallon Steel Reservoir #1
- Davidson Heights 2,500,000 Gallon Steel Reservoir #2
- Sheffield Terrace 2,000,000 Gallon Steel Reservoir
- West Aliquippa 1,000,000 Gallon Steel Reservoir
- West Aliquippa 500,000 Gallon Reservoir
- Raccoon 300,000 Gallon Reservoir

Construction is currently underway for a new altitude valve for the West Tank as well as the rebuild of the pressure reducing valve (PRV) vault and the installation of a second PRV vault to serve West Aliquippa. It is anticipated this will stop overflows and reduce leaking currently experienced at the site. This project was initiated as a corrective measure in response to an Inspection Report issued by the Department of Environmental Protection (PADEP).

Lennon, Smith, Souleret Engineering, Inc. is currently evaluating the Water Plant operations in order to identify necessary future upgrades to maintain proper operation.

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

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

The distribution system is aging and the condition of the waterlines is commensurate with age. Waterlines are repaired as required to maintain service and stop leaks. Several other projects have been completed or are underway to replace aging waterlines.

- Approximately 3,000 linear feet of waterline was replaced on Edgewood Avenue in Hopewell in 2016.
- Approximately 850 linear feet of waterline was replaced on Adams Street in late 2016.
- A waterline on Golf Course Road was exposed and was replaced in July 2016.

Due to the age of the system, valves are often inoperable or do not properly seat when operated. When valves cannot be operated properly, the distribution system cannot be isolated into small areas to facilitate repair. The result is the temporary shut-down of service to large portions of the system to repair isolated waterline breaks or leaks causing a disruption of service to a large number of customers. Large scale disruptions of service could be more effectively mitigated if the valves were operable and the system could be properly isolated. In February 2018, the Authority resubmitted an application to the Commonwealth Financing Authority to seek funding through the PA Small Water and Sewer Program to replace many of these inoperable valves. The application was awarded funding in September 2018. These valve replacements are to increase system isolation capabilities and reduce water service outages for customers. Additionally, eliminating leaks and making repairs to the system will decrease the amount of unaccounted for water within the system. Design and construction phases are planned for 2019.

Geographic Information System based mapping of the water system was initiated in 2018.

In July 2018, the Authority contracted with a third party service to conduct inspections on the interior and exterior of the water storage tanks. Findings / recommendations of these inspections generally include miscellaneous repairs and maintenance to each tank.

The interior and exterior of the Sheffield Terrace, Raccoon and Davidson Heights Tank 2 require blast cleaning and painting.

WATER RATES

Table 1 indicates the current and previous water user rates charged by the MWAA to their customers. Rates were increased effective January 1, 2016 to account for increased costs and to provide for necessary capital improvements. Assuming an average water use of 11,000 gallons per quarter. The water rate is approximately 1.70% of the median household income based on 2016 U.S. Census data.

TABLE 1  
SCHEDULE OF RATES – QUARTERLY RESIDENTIAL CHARGES

<b>Current Rate Structure – January 1, 2016</b>	
	Water
First 6,000 gallons	\$75.00 minimum
Over 6,000 gallons	12.50/1,000
<b>Current Rate Structure – January 1, 2007</b>	
	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
<b>Previous Rate Structure – January 1, 2005</b>	
	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
<b>Previous Rate Structure – January 1, 2001</b>	
	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. The Collector Well and Wells 25, 26, 27 and 28 have a common meter that was replaced in 2015. The total combined well output for 2017 was 1,153,832,330 gallons of water. 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 1,142,734,000 gallons of water according to the report. The finished water leaving the plant was 1,092,508,000 gallons of water and is measured with a magnetic meter installed in 2015.

The Metered Sales of 360,713,440 gallons plus the estimated 73,255,500 gallons for maintenance and plant use compared to the finished water of 1,092,508,000 gallons pumped to the system indicates that about 40% of the water leaving the plant is not accounted for. This water loss is significant and is suspected to include undetected leaks, fires, and unreported hydrant usage. The Water System Appendix includes tables and charts which detail the above referenced data.

In early 2016, a “Distribution and Storage Control and Leak Repair Plan” was prepared by the Authority. Implementation of the plan is ongoing.

## **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 2017 operating year. The Report projects the 3-month maximum average will exceed the average annual design capacity in 2020. The 2017 Annual Wasteload Management Report was completed by MWAA. The hydraulic and organic loading charts from this report are provided in the Sewer Appendix.

As the result of the projected a hydraulic overload, regulations require a Corrective Action Plan (CAP). A CAP is currently being negotiated with the PADEP. CAP tasks include smoke and dye testing, flow monitoring, closed circuit televising, night time flow isolation measurements, and a cost effectiveness analysis.

The mechanical equipment in one of the primary clarifier tanks was replaced in 2016. The equipment in the second tank is scheduled to be replaced in late 2018/early 2019.

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 (TRC) which was evaluated by the Authority in a feasibility study. The project was bid in October 2017. Installation of a dechlorination facility and the rebuilding of the plant's existing bar screen was completed in August 2018.

Rules and Regulations were prepared and under review in 2014 and adopted in 2015. The NPDES Permit renewal application is currently being prepared.

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

1. The Wye Lift Station serves Aliquippa and portions 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 Jail Pump Station serves the new Beaver County Jail. It is equipped with two 300 gpm pumps powered by 5 HP motors.
5. The Steel Street Lift Station is equipped with two 200 gpm pumps powered by 5 HP motors.
6. 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.)
7. 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.

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 2017 and the construction was completed in March 2018.

Geographic information system based mapping of the sewer system was initiated in 2018.

## 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 2018. Assuming an average water use of 11,000 gallons per quarter, the sewer rate is approximately 1.0% of the median household income based on 2016 U.S. Census data. A rate increase is expected for the 2019 fiscal year.

TABLE 2  
SCHEDULE OF RATES – QUARTERLY RESIDENTIAL CHARGES

Current Rate Structure – January 1, 2018	
First 6,000 gallons	\$47.00 minimum
Over 6,000 gallons	6.25/1,000
Previous 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 update 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 1.54 was calculated for the 2017 Operating Year. A ratio of 1.20 is projected for the 2018 and 2019 Operating Year Approved Budget compared to the required ratio of 1.10.

In 2016, a delinquency policy was put in place by the Authority to address outstanding accounts receivable.

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.

In September 2017, MWAA refinanced their existing bonds and is proposing to fund CAP tasks and additional capital improvements with a new bond issue.

## **SUMMARY AND RECOMMENDATIONS**

### **WATER SYSTEM**

- The supply of water appears to be adequate to accommodate current demand and modest expansions of the service area.
- If future demands require treated water in excess of 4.0 MGD, system updates will be required. Continue with proposed repairs of the recently permitted vertical wells.
- Development and implementation of a replacement program for both lines and valves is recommended. Grant funding was awarded in 2018 for this purpose.
- Storage capacity appears to be adequate for the Aliquippa service area with a total of seven (7) tanks in service.

- The following additional capital improvements are recommended:
  - Construction of new water treatment plant
  - Implement very aggressive leak detection program
  - Integrated SCADA system for wells, water treatment plant, booster stations, and storage facilities
  - Implement recommendations of water storage tank inspections conducted in 2018
  - Terrace Booster Station upgrade
  - Install an additional 500,000 gallon tank in the western end of the Raccoon service area
  - Green Street Waterline Replacement and other piping repairs

#### SEWER SYSTEM

- There appears to be adequate annual average hydraulic and organic capacity for the coming 5-year period at the WWTP. Efforts to reduce infiltration and inflow should be continued to maintain (and increase) 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.
- Implement Corrective Action Plan, including the Sewer Flow Characterization / Flow Monitoring Program.
- The following additional capital improvements are recommended:
  - Miscellaneous plant upgrades including digester concrete repairs, grit removal system, primarily clarifier replacement
  - Integrated SCADA system for sewage pump stations and sewage treatment plant
  - Wye Lift Station Bar Screen Rehabilitation

## FINANCIAL MANAGEMENT

- Monitor 2018 and 2019 expenses to ensure debt service factor of 1.10 is provided.
- Continued implementation of the delinquency policy.

WATER SYSTEM  
APPENDIX

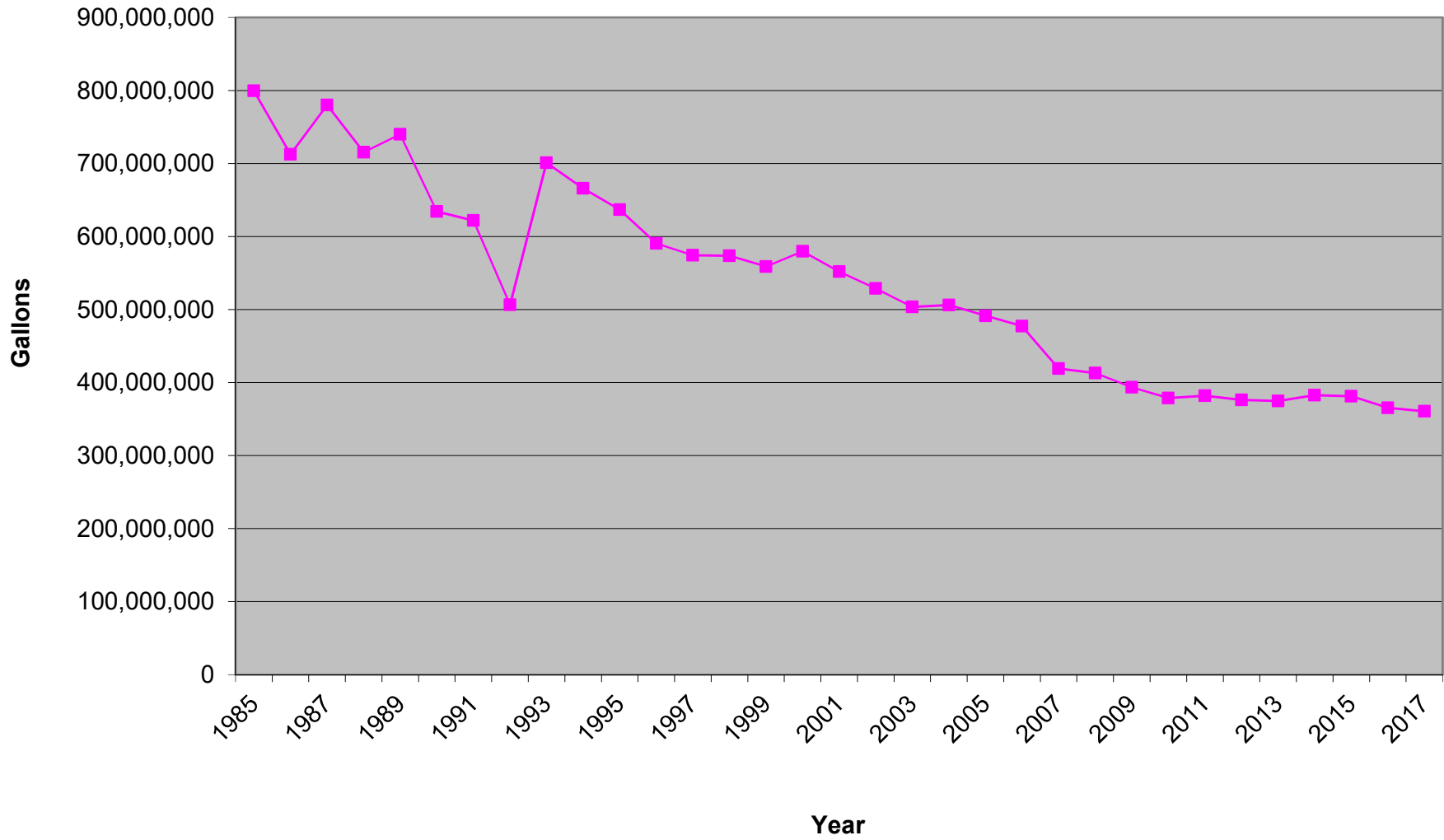


**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA  
CONSULTING ENGINEER'S ANNUAL REPORT**

**ANNUAL WATER WITHDRAWAL REPORT - 2017**

2017	Ranney Wells	Well 23	Collector Well	Well 25	Well 26	Well 27	Well 28	Total Well Production	TOTAL
	GALLONS							GALLONS	MGD
January	58,401,200	36,000	45,227,700	36,000	0	0	36,000	103,736,900	3.346
February	57,376,600	0	42,674,200	0	0	0	0	100,050,800	3.450
March	62,030,400	0	45,702,100	0	0	0	0	107,732,500	3.475
April	58,976,400	42,000	41,521,900	42,000	0	0	42,000	100,624,300	3.354
May	62,265,700	0	44,325,200	0	0	0	0	106,590,900	3.438
June	58,754,800	0	40,071,400	0	0	0	0	98,826,200	3.294
July	55,294,800	43,200	35,880,900	43,200	0	0	43,200	91,305,300	2.945
August	55,273,900	27,000	39,833,300	27,000	0	0	27,000	95,188,200	3.071
September	55,552,700	0	35,478,100	0	0	0	0	91,030,800	3.034
October	57,924,800	0	31,784,400	0	0	0	42,000	89,751,200	2.895
November	55,359,100	0	32,701,820	0	0	0	0	88,060,920	2.935
December	57,107,410	0	23,826,900	0	0	0	0	80,934,310	2.611
<b>Total</b>	694,317,810	148,200	459,027,920	148,200	0	0	190,200	<b>1,153,832,330</b>	<b>37.85</b>
<b>DAILY AVE.</b>	1,902,241	406	1,257,611	406	0	0	521	<b>3,161,184</b>	<b>3.154</b>

### Municipal Water Authority of Aliquippa Annual Metered Water Sales



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

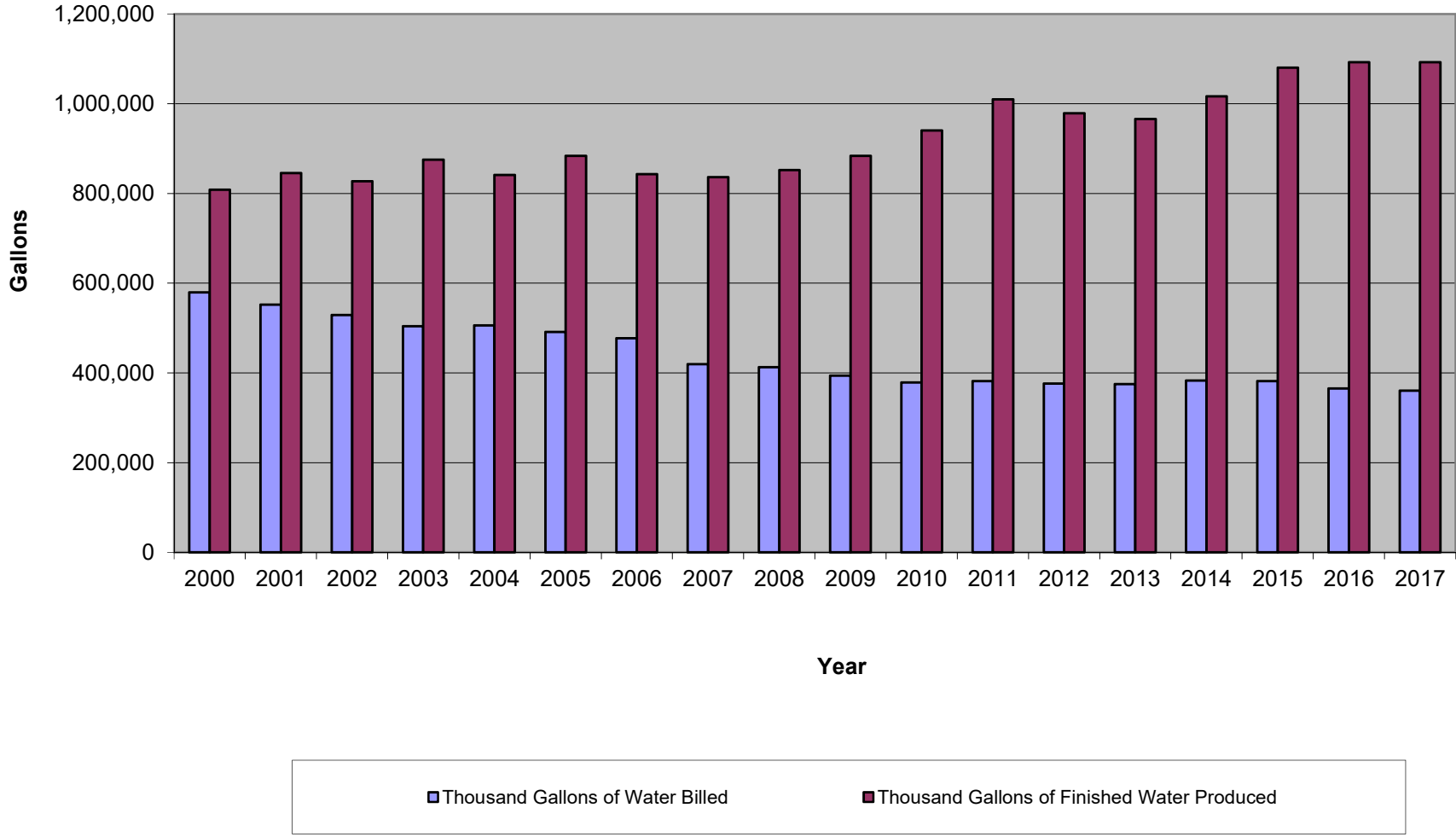
**WATER WITHDRAWAL AND SALES - 2017  
(GALLONS)**

230,684

Month	WATER WITHDRAWAL	REPORT OF OPERATIONS				Line Breaks and Flushing <sup>(1)</sup>	Metered Sales
	Combined Well Output	Raw Water Input	Finished Output				
			Finished	Rinse/Wash	Total		
Jan	103,736,900	101,330,000	96,972,000	5,001,300	101,973,300	7,151,204	
Feb	100,050,800	95,928,000	92,881,000	4,868,900	97,749,900	6,689,836	
Mar	107,732,500	106,159,000	101,721,000	5,543,900	107,264,900	7,151,204	
Apr	100,624,300	99,334,000	95,001,000	5,217,800	100,218,800	6,920,520	
May	106,590,900	104,883,000	100,765,000	5,698,400	106,463,400	7,151,204	
Jun	98,826,200	98,034,000	93,924,000	5,270,800	99,194,800	6,920,520	
Jul	91,305,300	89,271,000	84,732,000	5,119,600	89,851,600	7,151,204	
Aug	95,188,200	95,770,000	91,210,000	5,112,400	96,322,400	7,151,204	
Sept	91,030,800	86,934,000	82,479,000	5,080,900	87,559,900	6,920,520	
Oct	89,751,200	88,810,000	83,294,000	5,029,800	88,323,800	7,151,204	
Nov	88,060,920	86,421,000	83,255,000	4,766,700	88,021,700	6,920,520	
Dec	80,934,310	89,860,000	86,274,000	4,894,900	91,168,900	7,151,204	
<b>TOTAL</b>	<b>1,153,832,330</b>	<b>1,142,734,000</b>	<b>1,092,508,000</b>	<b>61,605,400</b>	<b>1,154,113,400</b>	<b>84,430,344</b>	<b>360,713,440</b>
<b>DAILY AVG.</b>	<b>3,161,184</b>	<b>3,130,778</b>	<b>2,993,173</b>	<b>168,782</b>	<b>3,161,955</b>	<b>231,316</b>	<b>988,256</b>

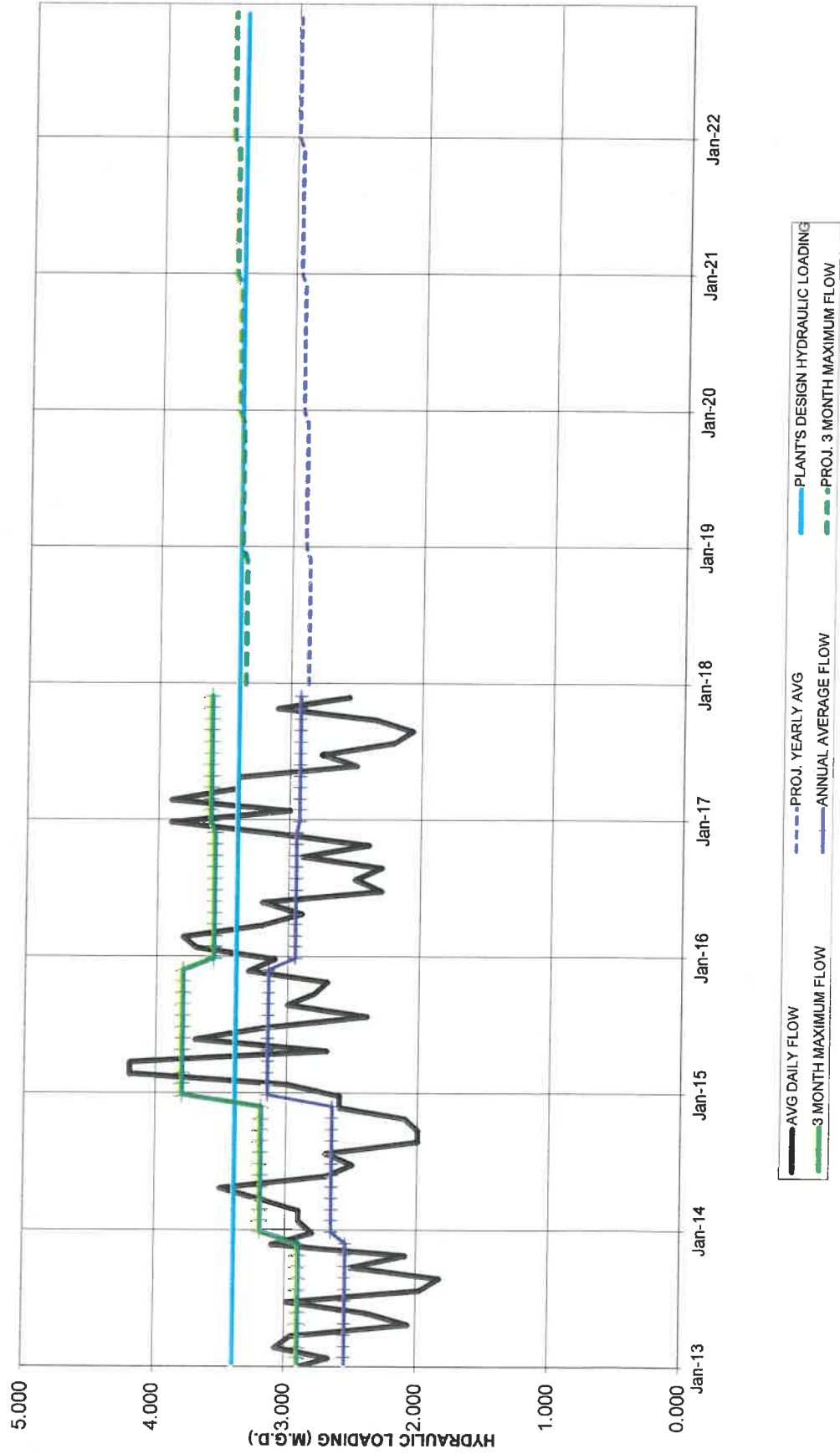
(1) Maintenance data includes water used to flush lines after line break repair operations and bi-annual line flushing water. These numbers are estimates only.

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

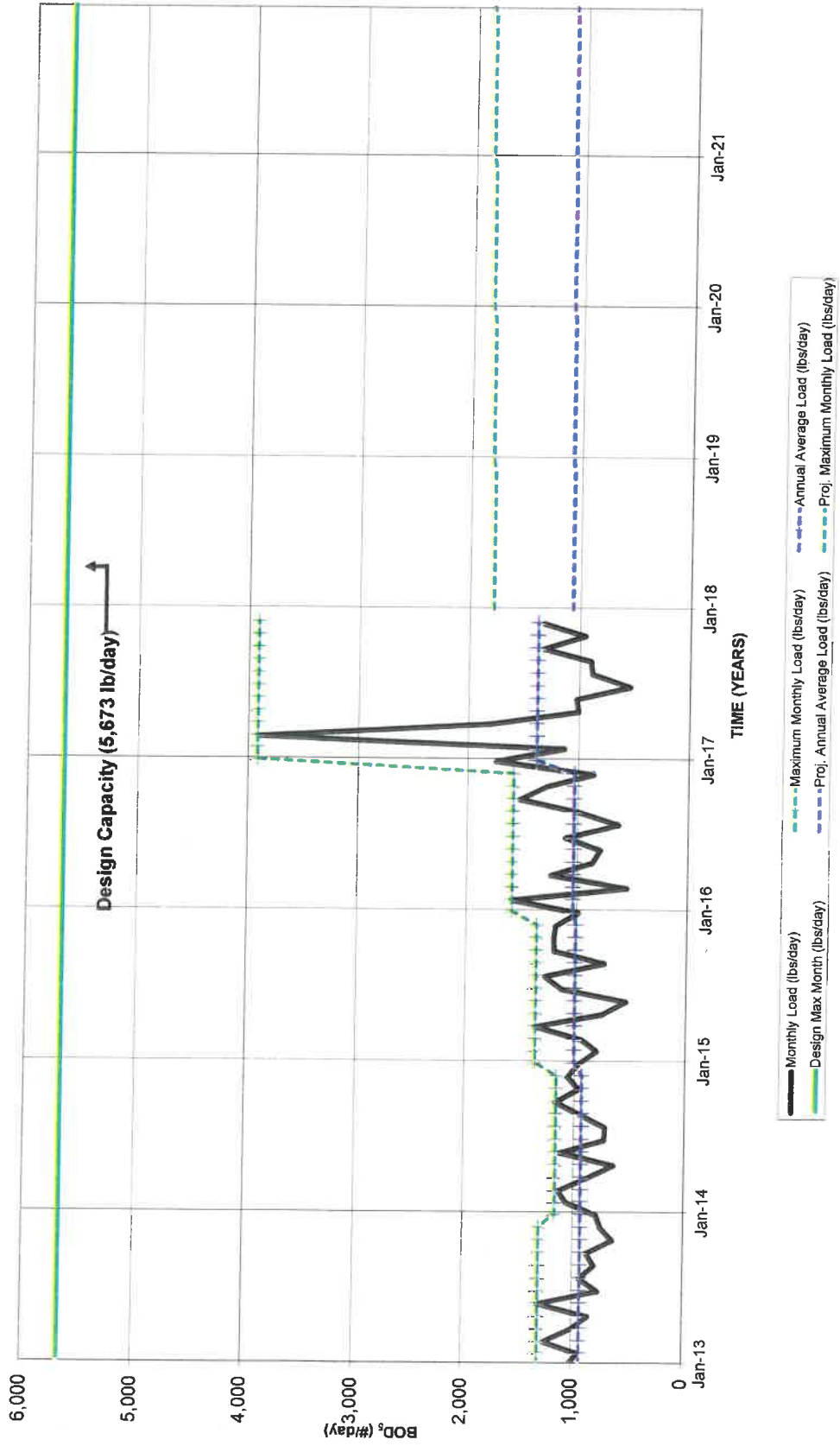


SEWER SYSTEM  
APPENDIX

**FIGURE 1**  
**HYDRAULIC LOADING GRAPH**  
**MWAA WASTEWATER TREATMENT PLANT**



**FIGURE 2**  
**ORGANIC LOADING GRAPH**  
**MWAA WASTEWATER TREATMENT PLANT**



**FINANCIAL MANAGEMENT  
APPENDIX**



**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA  
CONSULTING ENGINEER'S ANNUAL REPORT  
WATER FUND  
BUDGET VS ACTUAL**

		2017	2017	2018	YTD As Of	2019
		Budget	Actual	Budget	8-31-18	Budget
<b>Revenue</b>						
<u>Metered Sales</u>						
01.01. 430110	Metered Sales - Domestic	\$2,850,000.00	\$2,954,894.83	\$2,878,500.00	\$2,180,910.22	\$2,878,500.00
01.01. 430120	Metered Sales - Commercial	\$550,000.00	\$490,159.78	\$555,500.00	\$279,316.62	\$440,000.00
01.01. 430130	Metered Sales - Industrial	\$545,000.00	\$563,653.62	\$550,450.00	\$374,304.57	\$550,450.00
	Subtotal	\$3,945,000.00	\$4,008,708.23	\$3,984,450.00	\$2,834,531.41	\$3,868,950.00
<u>Fire Protection</u>						
01.01. 430410	Private Fire Protection	\$20,000.00	\$24,226.82	\$20,000.00	\$17,932.67	\$20,000.00
01.01. 430420	Public Fire Protection	\$290,000.00	\$229,443.32	\$265,000.00	\$26,045.80	\$45,000.00
	Subtotal	\$310,000.00	\$253,670.14	\$285,000.00	\$43,978.47	\$65,000.00
<u>Other Water Sales</u>						
01.01. 430610	Sales to Public Authority	\$60,000.00	\$67,034.16	\$60,600.00	\$55,104.58	\$60,600.00
	Subtotal	\$60,000.00	\$67,034.16	\$60,600.00	\$55,104.58	\$60,600.00
<u>Miscellaneous Revenue</u>						
01.01. 431210	Customer Penalties	\$75,000.00	\$92,500.31	\$75,000.00	\$63,785.00	\$75,000.00
01.01. 412520	Miscellaneous Water Revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
01.01. 431230	Water Tap Fees	\$0.00	\$18,425.00	\$0.00	\$5,000.00	\$0.00
01.01. 431240	Turn on Charges & NSF Charge	\$5,000.00	\$5,312.42	\$5,000.00	\$4,274.00	\$5,000.00
	Subtotal	\$80,000.00	\$116,237.73	\$80,000.00	\$73,059.00	\$80,000.00
<u>Misc Non-Operating Revenue</u>						
01.01. 432010	Revenue from Frozen Meters	\$500.00	\$2,467.75	\$500.00	\$2,565.51	\$500.00
01.01. 432610	Misc Non-Operating Revenue	\$15,000.00	\$20,395.33	\$15,000.00	\$15,666.60	\$15,000.00
01.01. 432630	Employee Contribution	\$53,040.00	\$44,900.00	\$38,870.00	\$32,880.00	\$41,860.00
	Subtotal	\$68,540.00	\$67,763.08	\$54,370.00	\$51,112.11	\$57,360.00
	<b>Total Revenue</b>	<b>\$4,463,540.00</b>	<b>\$4,513,413.34</b>	<b>\$4,464,420.00</b>	<b>\$3,057,785.57</b>	<b>\$4,131,910.00</b>
<b>Expenses</b>						
<u>Power and Pumping</u>						
01.01. 542210	Non-Salary Compensation / Meals	\$10,000.00	\$1,060.68	\$1,500.00	\$637.95	\$1,500.00
01.01. 542410	Supplies and Expenses	\$10,000.00	\$12,508.44	\$15,000.00	\$13,563.99	\$20,000.00
01.01. 542610	Maintenance of Structures and Improvements	\$25,000.00	\$515.00	\$5,000.00	\$0.00	\$5,000.00
01.01. 542710	Maintenance of Power and Pumping Equip	\$25,000.00	\$24,874.38	\$40,000.00	\$8,400.00	\$40,000.00
01.01. 542910	Utility - Power - Wells	\$6,000.00	\$698.25	\$6,000.00	\$985.19	\$6,000.00
01.01. 542920	Power- Soft. Plant		\$0.00	\$0.00	\$0.00	\$0.00
01.01. 544910	Utility- Gas/Plant		\$0.00	\$0.00	\$0.00	\$0.00
01.01. 542930	Utility - Power - Collector Well	\$42,000.00	\$39,806.82	\$45,000.00	\$19,484.44	\$45,000.00
01.01. 542950	Utility - Power - Ranney Well	\$63,000.00	\$60,813.67	\$63,000.00	\$39,864.35	\$63,000.00
01.01. 542960	Utility - Power - Booster Station	\$15,000.00	\$22,602.36	\$30,000.00	\$6,498.78	\$25,000.00
01.01. 542970	Utility - Power - Raccoon Township	\$25,000.00	\$3,939.52	\$5,000.00	\$12,163.68	\$15,000.00
01.01. 542980	Utility - Power - West Reservoir / Jail	\$250.00	\$285.48	\$300.00	\$184.95	\$300.00
	Subtotal	\$221,250.00	\$167,104.60	\$210,800.00	\$101,783.33	\$220,800.00
<u>Purification and Lab</u>						
01.01. 544210	Operations Salaries	\$285,000.00	\$185,157.68	\$343,360.00	\$141,241.32	\$364,615.00
01.01. 544220	Water Testing	\$15,000.00	\$10,137.58	\$15,000.00	\$7,338.76	\$15,000.00
01.01. 544310	Supplies - Salt	\$150,000.00	\$120,129.38	\$150,000.00	\$88,814.94	\$150,000.00
01.01. 544320	Supplies - Chlorine	\$8,000.00	\$9,487.42	\$9,000.00	\$11,817.75	\$18,000.00
01.01. 544325	Supplies - Buffer	\$0.00	\$439.72	\$0.00	\$448.44	\$0.00
01.01. 544410	Outside Services	\$15,000.00	\$49,530.32	\$30,000.00	\$17,466.27	\$30,000.00
01.01. 544510	Maintenance of Structures and Improvements	\$25,000.00	\$9,233.26	\$5,000.00	\$40,482.02	\$5,000.00
01.01. 544710	Maintenance of Backwash	\$2,500.00	\$352.32	\$2,500.00	\$0.00	\$2,500.00
01.01. 544610	Maintenance of Equipment	\$100,000.00	\$121,187.25	\$100,000.00	\$67,027.52	\$100,000.00
01.01. 542920	Utility - Power	\$250,000.00	\$260,176.87	\$200,000.00	\$187,056.25	\$280,000.00
01.01. 544910	Utility - Gas	\$7,500.00	\$4,797.34	\$7,500.00	\$4,870.35	\$8,500.00
	Subtotal	\$858,000.00	\$770,629.14	\$862,360.00	\$566,563.62	\$973,615.00

	2017 Budget	2017 Actual	2018 Budget	YTD As Of 8-31-18	2019 Budget	
<u>Transmission and Distribution</u>						
01.01. 545210	Operations Salaries	\$268,000.00	\$389,759.70	\$306,030.00	\$271,464.63	\$386,580.00
01.01. 545215	Outside Services	\$75,000.00	\$183,040.33	\$125,000.00	\$51,330.81	\$125,000.00
01.01. 545310	Maintenance of Lines	\$250,000.00	\$144,729.48	\$250,000.00	\$93,986.67	\$250,000.00
01.01. 545920	Maintenance of Meters	\$75,000.00	\$36,894.64	\$50,000.00	\$37,513.49	\$50,000.00
01.01. 545930	Maintenance of Hydrants	\$25,000.00	\$15,664.65	\$10,000.00	\$8,653.65	\$10,000.00
01.01. 545710	Maintenance of Structures and Improvements	\$25,000.00	\$5,487.96	\$10,000.00	\$24.84	\$10,000.00
	Subtotal	\$718,000.00	\$775,576.76	\$751,030.00	\$462,974.09	\$831,580.00
<u>Vehicles and Equipment</u>						
01.01. 546010	Rentals	\$2,000.00	\$100.00	\$1,000.00	\$3,700.00	\$6,400.00
01.01. 546110	Purchase	\$25,000.00	\$29,226.11	\$8,820.00	\$0.00	\$40,000.00
01.01. 546145	Maintenance	\$25,000.00	\$20,386.00	\$15,000.00	\$10,222.33	\$20,000.00
01.01. 546155	Fuel	\$20,000.00	\$17,787.60	\$20,000.00	\$10,126.53	\$20,000.00
	New Trucks #37 & #39		\$22,406.81	\$0.00	\$0.00	\$0.00
	Subtotal	\$72,000.00	\$89,906.52	\$44,820.00	\$24,048.86	\$86,400.00
<u>General Administration</u>						
01.01. 549010	Board Salaries	\$0.00	\$2,600.00	\$3,000.00	\$0.00	\$3,000.00
01.01. 549110	Office Salaries	\$90,000.00	\$86,511.72	\$111,410.00	\$62,811.66	\$94,370.00
01.01. 549020	Manager's Salary	\$84,000.00	\$74,776.98	\$47,500.00	\$32,882.40	\$82,500.00
01.01. 549310	Office Supplies and Expenses	\$30,000.00	\$26,628.20	\$30,000.00	\$14,828.47	\$30,000.00
01.01. 549410	Real Estate Taxes / Sohn Road	\$225.00	\$171.75	\$225.00	\$176.89	\$225.00
01.01. 549510	Auditor	\$4,000.00	\$3,392.00	\$4,000.00	\$3,542.00	\$3,500.00
01.01. 549890	Solicitor - Retainer	\$6,500.00	\$5,206.25	\$7,200.00	\$2,600.00	\$3,900.00
01.01. 549870	Solicitor - Expenses	\$9,000.00	\$0.00	\$6,000.00	\$10,206.25	\$6,000.00
01.01. 549610	Engineer - Retainer	\$1,200.00	\$1,100.00	\$1,200.00	\$700.00	\$1,200.00
01.01. 549620	Engineer - Expenses	\$20,000.00	\$42,732.71	\$35,000.00	\$30,709.96	\$35,000.00
01.01. 549720	Insurance - General Liability	\$25,000.00	\$21,234.00	\$25,000.00	\$0.00	\$25,500.00
01.01. 549730	Insurance - Workmen's Compensation	\$21,500.00	\$33,151.20	\$26,300.00	\$11,404.40	\$24,500.00
01.01. 549770	Insurance - Property / Equipment	\$16,000.00	\$17,792.50	\$17,900.00	\$13,633.50	\$18,500.00
01.01. 549810	Insurance - Bonds	\$0.00	\$300.00	\$300.00	\$300.00	\$300.00
01.01. 549820	Insurance Retirement	\$0.00	\$28,360.64	\$0.00	\$16,406.02	\$0.00
01.01. 549830	Hospitalization / Health Insurance	\$315,000.00	\$331,547.92	\$251,340.00	\$223,222.99	\$275,600.00
01.01. 549840	Employees Pension	\$104,000.00	\$93,512.78	\$88,440.00	\$68,162.93	\$93,600.00
01.01. 549841	Utilities - Telephone	\$6,000.00	\$5,700.86	\$6,000.00	\$3,627.04	\$6,000.00
01.01. 549845	Utilities - Power	\$5,000.00	\$5,147.84	\$5,000.00	\$2,752.44	\$5,000.00
01.01. 549855	Utilities - Gas	\$3,400.00	\$4,244.58	\$5,000.00	\$5,775.95	\$8,000.00
01.01. 549865	Utilities - Cellular	\$2,500.00	\$2,505.79	\$3,000.00	\$1,508.75	\$3,000.00
01.01. 549880	Postage	\$11,000.00	\$12,290.86	\$13,000.00	\$7,344.34	\$13,000.00
01.01. 549885	Uniforms / Clothing Allowance	\$5,000.00	\$10,465.95	\$12,000.00	\$8,693.04	\$14,000.00
01.01. 549895	Dues, Memberships, Subscriptions	\$1,600.00	\$3,735.00	\$3,500.00	\$3,084.50	\$5,000.00
01.01. 549905	Software	\$6,000.00	\$0.00	\$6,000.00	\$5,327.25	\$9,000.00
01.01. 549925	Office Equipment	\$2,500.00	\$589.50	\$2,500.00	\$0.00	\$2,500.00
01.01. 549920	Travel and Education	\$1,500.00	\$609.00	\$1,500.00	\$2,223.73	\$4,000.00
01.01. 549850	Miscellaneous General Expenses	\$25,000.00	\$27,049.71	\$25,000.00	\$11,454.86	\$25,000.00
01.01. 549860	Maintenance - Property	\$7,000.00	\$0.00	\$5,000.00	\$42.48	\$5,000.00
	Subtotal	\$802,925.00	\$841,357.74	\$742,315.00	\$543,421.85	\$797,195.00
<u>Capital Improvements</u>						
01.01. 545970	Capital Improvements	\$521,521.70	\$270,367.50	\$1,661,662.00	\$261,165.10	\$419,244.00
01.01.	Capital Improvements - Raccoon	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Subtotal	\$521,521.70	\$270,367.50	\$1,661,662.00	\$261,165.10	\$419,244.00
<u>Debt Service</u>						
	2017 Bond Issue			\$174,030.00	\$40,765.13	\$530,531.00
	New Bond Issue			\$0.00	\$0.00	\$199,538.00
01.01. 549915	Debt Service Coverage	\$89,358.60	\$0.00	\$17,403.00	\$0.00	\$73,007.00
	Subtotal	\$1,269,843.30	\$903,840.48	\$191,433.00	\$40,765.13	\$803,076.00
	<b>Total Expenses</b>	<b>\$4,463,540.00</b>	<b>\$3,818,782.74</b>	<b>\$4,464,420.00</b>	<b>\$2,000,721.98</b>	<b>\$4,131,910.00</b>
	<b>Net Income</b>	<b>\$0.00</b>	<b>\$694,630.60</b>	<b>\$0.00</b>	<b>\$1,057,063.59</b>	<b>\$0.00</b>

**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA  
CONSULTING ENGINEER'S ANNUAL REPORT  
SEWER FUND  
BUDGET VS ACTUAL**

	2017 Budget	2017 Actuals	2018 Budget	YTD As Of 8-31-18	2019 Budget	
<b>Revenue</b>						
<u>Metered Sales</u>						
01.02. 430110	Metered Sales - Domestic	\$875,000.00	\$846,065.20	\$1,120,818.50	\$772,371.25	\$1,453,338.00
01.02. 430120	Metered Sales - Commercial	\$205,000.00	\$131,349.45	\$277,493.50	\$83,449.05	\$167,144.00
01.02. 430130	Metered Sales - Industrial	\$30,000.00	\$8,120.74	\$58,007.89	\$14,108.88	\$26,838.00
01.02. 430140	Sales to Public Agencies	\$165,000.00	\$94,181.00	\$231,234.00	\$42,269.01	\$82,005.00
	Subtotal	\$1,275,000.00	\$1,079,716.39	\$1,687,553.89	\$912,198.19	\$1,729,325.00
<u>Public Authorities</u>						
01.02. 430610	Sales to Public Authorities (Hopewell)	\$470,000.00	\$432,966.10	\$378,299.11	\$295,404.09	\$378,299.00
	Subtotal	\$470,000.00	\$432,966.10	\$378,299.11	\$295,404.09	\$378,299.00
<u>Miscellaneous Revenue</u>						
01.02. 431110	Customer Penalties	\$35,000.00	-\$563.93	\$35,000.00	\$27,936.73	\$35,000.00
01.02. 431620	Sewer Tap Fees	\$0.00	\$10,069.08	\$0.00	\$1,000.00	\$0.00
01.02. 431630	Employee Contribution	\$12,480.00	\$12,360.00	\$32,110.00	\$8,800.00	\$34,580.00
	Subtotal	\$47,480.00	\$21,865.15	\$67,110.00	\$37,736.73	\$69,580.00
	<b>Total Revenue</b>	<b>\$1,792,480.00</b>	<b>\$1,534,547.64</b>	<b>\$2,132,963.00</b>	<b>\$1,245,339.01</b>	<b>\$2,177,204.00</b>
<b>Expenses</b>						
<u>Collection System</u>						
01.02. 540510	Maintenance of Collection System	\$55,000.00	\$48,889.17	\$55,000.00	\$29,338.84	\$50,000.00
01.02. 544515	Outside Services	\$50,000.00	\$35,377.84	\$50,000.00	\$48,569.86	\$50,000.00
	Subtotal	\$105,000.00	\$84,267.01	\$105,000.00	\$77,908.70	\$100,000.00
<u>Treatment Plant and Pump Stations</u>						
01.02. 542410	Utilities - Power - Treatment Plant	\$41,000.00	\$33,511.94	\$40,000.00	\$23,531.01	\$40,000.00
01.02. 542420	Utilities - Power - West LS	\$1,700.00	\$1,400.66	\$1,500.00	\$985.94	\$1,500.00
01.02. 542430	Utilities - Power - Wye LS	\$42,000.00	\$39,906.06	\$45,000.00	\$28,641.62	\$45,000.00
01.02. 542440	Utilities - Power - Golf Course LS	\$3,000.00	\$1,981.89	\$3,000.00	\$1,699.89	\$3,000.00
01.02. 545710	Utility - Gas - Treatment Plant	\$18,000.00	\$14,391.35	\$18,000.00	\$11,246.74	\$18,000.00
01.02. 542450	Utilities - Power - Steel Street LS	\$150.00	\$0.00	\$150.00	\$0.00	\$150.00
01.02. 542460	Utilities - Power - Jail LS	\$1,500.00	\$1,371.76	\$1,500.00	\$1,191.80	\$2,000.00
01.02. 542510	SUPPLIES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
01.02. 542710	Non-Salary Compensation / Meals	\$800.00	\$340.00	\$10,000.00	\$835.00	\$1,500.00
01.02. 542810	Maintenance of Pump Stations	\$20,000.00	\$20,929.53	\$20,000.00	\$50,146.02	\$15,000.00
01.02. 544210	Operations Salaries	\$305,000.00	\$262,763.97	\$301,430.00	\$156,205.41	\$274,220.00
01.02. 544220	Testing / Sampling	\$17,000.00	\$13,535.63	\$15,000.00	\$9,465.48	\$15,000.00
01.02. 544310	Supplies	\$20,000.00	\$6,154.03	\$10,000.00	\$3,959.77	\$10,000.00
01.02. 544320	Chlorine	\$10,000.00	\$4,648.50	\$10,000.00	\$5,015.36	\$10,000.00
01.02. 545215	Outside Services	\$5,000.00	\$30,554.50	\$30,000.00	\$496.01	\$15,000.00
01.02. 544510	Maintenance of Structures	\$1,000.00	\$0.00	\$1,000.00	\$112.38	\$1,000.00
01.02. 544610	Maintenance of Plant Equipment	\$25,000.00	\$18,826.59	\$25,000.00	\$490.31	\$20,000.00
01.02. 544710	Sludge Processing and Disposal	\$17,500.00	\$46,082.83	\$17,500.00	\$0.00	\$45,000.00
	Subtotal	\$528,650.00	\$496,399.24	\$549,080.00	\$294,022.74	\$516,370.00

	2017 Budget	2017 Actuals	2018 Budget	YTD As Of 8-31-18	2019 Budget
<u>Vehicles and Equipment</u>					
			\$30,000.00	\$0.00	\$0.00
01.02. 546010	Purchase				
	Rentals	\$500.00	\$0.00	\$500.00	\$3,600.00
01.02. 546145	Maintenance	\$7,500.00	\$19,620.75	\$5,000.00	\$14,152.80
01.02. 546155	Fuel	\$3,000.00	\$3,056.45	\$3,000.00	\$1,933.20
	Subtotal	\$26,000.00	\$74,310.11	\$38,500.00	\$19,686.00
<u>General Administration</u>					
01.02. 549010	Board Salaries	\$0.00	\$2,600.00	\$3,000.00	\$0.00
01.02. 549110	Office Salaries	\$107,000.00	\$86,511.59	\$111,410.00	\$62,811.64
01.02. 549120	Manager's Salary	\$84,000.00	\$74,776.98	\$47,500.00	\$32,882.40
01.02. 549310	Office Supplies and Expenses	\$30,000.00	\$19,943.95	\$20,000.00	\$10,113.64
01.02. 549510	Auditor	\$4,000.00	\$3,392.00	\$3,500.00	\$3,542.00
01.02. 549610	Engineer - Retainer	\$1,200.00	\$1,100.00	\$1,200.00	\$700.00
01.02. 549620	Engineer - Expenses	\$35,000.00	\$17,468.41	\$25,000.00	\$10,095.65
01.02. 549720	Insurance - General Liability	\$25,000.00	\$21,234.00	\$25,000.00	\$0.00
01.02. 549730	Insurance - Workmen's Compensation	\$21,500.00	\$22,100.80	\$21,900.00	\$9,715.60
01.02. 549770	Insurance - Property / Equipment	\$16,000.00	\$16,826.82	\$17,900.00	\$10,353.50
01.02. 549820	Insurance Retirement	\$0.00	\$12,154.56	\$0.00	\$7,031.15
01.02. 549830	Hospitalization / Health Insurance	\$315,000.00	\$105,985.41	\$213,500.00	\$71,611.48
01.02. 549840	Employees Pension	\$78,000.00	\$30,419.82	\$81,160.00	\$18,026.56
01.02. 549841	Utilities - Telephone	\$15,000.00	\$15,901.47	\$15,000.00	\$10,211.67
01.02. 549850	Miscellaneous General Expenses	\$7,000.00	\$9,855.05	\$8,000.00	\$8,248.84
01.02. 549855	Utilities - Gas	\$3,400.00	\$0.00	\$3,400.00	\$0.00
01.02. 549865	Utilities - Cellular	\$2,500.00	\$2,505.74	\$3,000.00	\$1,508.71
01.02. 549885	Uniforms / Clothing Allowance	\$1,500.00	\$3,675.17	\$4,500.00	\$3,906.90
01.02. 549860	Maintenance - Property	\$15,000.00	\$3,162.51	\$5,000.00	\$48,354.28
01.02. 549880	Postage	\$8,100.00	\$12,223.89	\$13,000.00	\$6,807.13
01.02. 549895	Dues, Memberships, Subscriptions	\$500.00	\$0.00	\$500.00	\$514.50
01.02. 549905	Software	\$6,000.00	\$0.00	\$6,000.00	\$5,327.25
01.02. 549920	Travel and Education	\$1,000.00	\$206.50	\$1,000.00	\$355.00
01.02. 549925	Office Equipment	\$2,500.00	\$589.48	\$2,500.00	\$0.00
01.02. 549420	Solicitor - Expenses	\$6,000.00	\$0.00	\$5,000.00	\$8,206.25
01.02. 549890	Solicitor - Retainer	\$7,200.00	\$4,943.75	\$3,900.00	\$2,600.00
	Subtotal	\$792,400.00	\$467,577.90	\$641,870.00	\$332,924.15
<u>Capital Improvements</u>					
01.02. 540620	Capital Improvements	\$140,000.00	\$65,237.08	\$607,080.00	\$82,930.12
	Subtotal	\$140,000.00	\$65,237.08	\$607,080.00	\$82,930.12
<u>Debt Service</u>					
	2017 Bond Issue		\$174,030.00	\$40,765.12	\$530,531.00
	New Bond Issue		\$0.00	\$0.00	\$199,538.00
01.02. 549915	Debt Service Coverage	\$17,500.00	\$0.00	\$17,403.00	\$0.00
	Subtotal	\$194,398.70	\$429,261.92	\$191,433.00	\$40,765.12
	<b>Total Expenses</b>	<b>\$1,786,448.70</b>	<b>\$1,617,053.26</b>	<b>\$2,132,963.00</b>	<b>\$848,236.83</b>
	<b>Net Income</b>	<b>\$6,031.30</b>	<b>-\$82,505.62</b>	<b>\$0.00</b>	<b>\$397,102.18</b>
					<b>\$0.00</b>

**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA  
CONSULTING ENGINEER'S ANNUAL REPORT  
DEBT SERVICE COVERAGE FACTOR CALCULATOIN  
2017 ACTUAL BUDGET**

	<u>REVENUES</u>	<u>EXPENSES</u> <sup>(1)</sup>	<u>NET INCOME / (LOSS)</u>
<b>WATER</b>	\$ 4,513,413	\$ 2,914,942	\$ 1,598,471
<b>SEWER</b>	\$ 1,534,548	\$ 1,187,791	\$ 346,756
	<b>\$ 6,047,961</b>	<b>\$ 4,102,734</b>	<b>\$ 1,945,227</b>

**DEBT SERVICES:**

2017 Debt Service Payments

**2016 Payments**

\$ 1,333,102

<b>TOTAL ANNUAL DEBT SERVICE PAYMENT</b>	<b>\$ 1,333,102</b>
<b>TOTAL ANNUAL DEBT SERVICE COVERAGE</b> <sup>(2)</sup>	<b>\$ 106,859</b>
<b>NET REVENUE</b> <sup>(3)</sup>	<b>\$ 2,052,086</b>
<b>2017 BUDGETED COVERAGE FACTOR</b>	<b>1.54</b>
<b>REQUIRED COVERAGE FACTOR</b>	<b>1.10</b>

<sup>(1)</sup> Excludes Depreciation and Debt Service

<sup>(2)</sup> Debt Service Coverage for Bond Issue based on 2017 budget

<sup>(3)</sup> Includes Net Income/(Loss) plus Debt Service Coverage

**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA  
CONSULTING ENGINEER'S ANNUAL REPORT  
DEBT SERVICE COVERAGE FACTOR CALCULATOIN  
2018 APPROVED BUDGET**

	<u>REVENUES</u>	<u>EXPENSES</u> <sup>(1)</sup>	<u>NET INCOME / (LOSS)</u>
<b>WATER</b>	\$ 4,464,420	\$ 4,272,987	\$ 191,433
<b>SEWER</b>	\$ 2,132,963	\$ 1,941,530	\$ 191,433
	<b>\$ 6,597,383</b>	<b>\$ 6,214,517</b>	<b>\$ 382,866</b>

	<u>2018 Payments</u>
<b><u>DEBT SERVICES:</u></b> 2018 Debt Service Payments	\$ 348,060
<b>TOTAL ANNUAL DEBT SERVICE PAYMENT</b>	<b>\$ 348,060</b>
<b>TOTAL ANNUAL DEBT SERVICE COVERAGE</b> <sup>(2)</sup>	<b>\$ 34,806</b>
<b>NET REVENUE</b> <sup>(3)</sup>	<b>\$ 417,672</b>
<b>2018 BUDGETED COVERAGE FACTOR</b>	<b>1.20</b>
<b>REQUIRED COVERAGE FACTOR</b>	<b>1.10</b>

<sup>(1)</sup> Excludes Depreciation and Debt Service

<sup>(2)</sup> Debt Service Coverage for Bond Issue based on 2018 budget

<sup>(3)</sup> Includes Net Income/(Loss) plus Debt Service Coverage

**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA  
CONSULTING ENGINEER'S ANNUAL REPORT  
DEBT SERVICE COVERAGE FACTOR CALCULATOIN  
2019 APPROVED BUDGET**

	<u>REVENUES</u>	<u>EXPENSES</u> <sup>(1)</sup>	<u>NET INCOME / (LOSS)</u>
<b>WATER</b>	\$ 4,131,910	\$ 3,328,834	\$ 803,076
<b>SEWER</b>	\$ 2,177,204	\$ 1,374,128	\$ 803,076
	<b>\$ 6,309,114</b>	<b>\$ 4,702,962</b>	<b>\$ 1,606,152</b>

	<u>2019 Payments</u>
<b><u>DEBT SERVICES:</u></b> 2019 Debt Service Payments	\$ 1,460,138
 <b>TOTAL ANNUAL DEBT SERVICE PAYMENT</b>	 <b>\$ 1,460,138</b>
<b>TOTAL ANNUAL DEBT SERVICE COVERAGE</b> <sup>(2)</sup>	<b>\$ 146,014</b>
<b>NET REVENUE</b> <sup>(3)</sup>	<b>\$ 1,752,166</b>
 <b>2018 BUDGETED COVERAGE FACTOR</b>	 <b>1.20</b>
<b>REQUIRED COVERAGE FACTOR</b>	<b>1.10</b>

<sup>(1)</sup> Excludes Depreciation and Debt Service

<sup>(2)</sup> Debt Service Coverage for Bond Issue based on 2019 budget

<sup>(3)</sup> Includes Net Income/(Loss) plus Debt Service Coverage

**MUNICIPAL WATER AUTHORITY OF ALIQUIPPA**

**Year 2018/2019 – Schedule of Insurance**

POLICY	% WATER	% SEWER	TOTAL PREMIUM AMOUNT	DATE
Selective Insurance Company – Commercial Property Policy No. 2242201	50	50	\$37,000.00	07/05/18 – 07/05/19
Selective Insurance Company – Inland Marine Policy No. 2242201	50	50	Included in Above	07/05/18 – 07/05/19
Selective Insurance Company – Crime Policy No. 2242201	50	50	Included in Above	07/05/18 – 07/05/19
State National Insurance – Auto Policy No. BPF-AU-101194-01	50	50	\$49,100.00	10/19/18 – 10/19/19
State National Insurance - Property Policy No. BPF-PK-101194-01	50	50		10/19/18 – 10/19/19
BCS Insurance Company – Cyber Policy No. RPS-P-0285408	50	50	\$1,900.00	10/19/18 – 10/19/19
Selective Insurance Company – Workers Compensation Policy No. WC 9036360	50	50	\$49,000.00	08/01/18 – 08/01/19