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June 20, 2025

VIA ELECTRONIC FILING

Matthew Homsher, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

**Re: Pennsylvania Public Utility Commission, et al. v. Aqua Pennsylvania, Inc. et al.
Docket No. R-2024-3047822, et al.**

Dear Secretary Homsher:

Pursuant to Paragraph 91 of the Settlement approved by the Pennsylvania Public Utility Commission (“Commission”), attached is the Wastewater Flat Rate Study of Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., (collectively, “Aqua PA”) in the above-captioned proceeding.

Copies of this filing are being served as indicated on the enclosed Certificate of Service.

Respectfully submitted,



Garrett P. Lent

GPL/dmc
Attachments

cc: Certificate of Service
Honorable Gail M. Chiodo (*via email w/attachments*)
Honorable Alphonso Arnold III (*via email w/attachments*)
Office of Special Assistants (*via email w/attachments*)

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

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Date: June 20, 2025



Garrett P. Lent



Aqua Pennsylvania Wastewater, Inc.

Wastewater Flat Rate Study

June 20, 2025

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Introduction

Aqua requested Gannett Fleming to perform a Flat Rate Study to research the following methodologies to calculate flat rates for the Company's wastewater customers, pursuant to meeting the requirements in the Pennsylvania Public Utility Commission's ("PUC" or the "Commission") Final Order of the Company's 2024 Rate Case.¹ The flat rate study was completed to explore different methodologies to calculate flat rates for its wastewater customers. Aqua is completing this report for filing with the PUC as required by the order in Docket R-2024-3047824. Aqua will be summarizing and reviewing this report with the customer workgroup. The Company commits to listening to any concerns or recommendations that result from the workgroup session and maintains the ability to update or revise the report with the Commission. The Company also maintains the ability to file a different recommendation in its next base rate case based on the feedback provided from the workgroup session or based on other information.

Based on the Company's review of the Public Input Hearings and Formal Complaints filed in the 2024 Rate Case, approximately three customers across the state, expressed their disagreement with calculating flat rates based on a system-wide monthly average consumption in the Company's 2021 Rate Case² and the most recent 2024 Rate Case. In the Company's 2021 Rate Case, the average monthly residential consumption to calculate flat rates was 4,000 gallons. In the Company's 2024 Rate Case, the average monthly residential consumption to calculate flat rates was 3,870 gallons. About 10% out of all Aqua wastewater customers are unmetered. However, for wastewater Rate Zone 4, almost 80% of its customers are unmetered due to customers that receive their water service from a private well or from a non-public utility where water usage data is unavailable.

To develop any rate, estimates and assumptions are used to set an average monthly consumption rate and these assumptions are reviewed in each rate case to ensure the rate accurately reflects system needs and usage trends. Since some customers in wastewater Rate Zone 4 are unmetered and exact usage data is unavailable, the Company made a reasonable assumption using a system-wide average usage from Aqua's water customers where meters are available. Therefore, using a system-wide average usage from Aqua water customers is reasonable, as less than 1% of water customers are unmetered, so the water customer average usage is a more exact estimate of Aqua wastewater customer average monthly consumption. As originally calculated in the 2018 Rate Case³, the Company used the average water usage from Aqua water customers because at the

¹ *Pa. Pub. Util. Comm'n et al. v. Aqua Pennsylvania Wastewater, Inc.*, Docket No. R-2024-3047824, Opinion and Order Entered February 7, 2025. (hereinafter "2024 Rate Case").

² *Pa. Pub. Util. Comm'n et al. v. Aqua Pennsylvania Wastewater, Inc.*, Docket No. R-2021-3027386, Opinion and Order Entered May 16, 2022. (hereinafter "2021 Rate Case").

³ *Pa. Pub. Util. Comm'n et al. v. Aqua Pennsylvania Wastewater, Inc.*, Docket No. R-2018-3003561, Opinion and Order Entered May 9, 2019. (hereinafter "2018 Rate Case").

time the wastewater customer base was less than 19,000 customers. Now that Aqua’s wastewater customer base has significantly grown and more usage data is available for the Company’s wastewater customers, it may be more appropriate in the next rate case to move to using the average wastewater consumption of 3,570 as opposed to the water average of 3,870. This proposal is shown below in Methodology 1.

Before going into the details of the report, it should be noted that the cost to service wastewater customers is established in rate design. Any changes – either higher or lower – would impact the rates of other wastewater customers. For example, if a lower monthly average usage is utilized to create a flat rate, then the associated customer charge and volumetric charge would increase for all customers in Rate Zone 4.

The following report predominantly utilizes the pro forma billing determinants and historic test year average monthly consumption of Rate Zone 4 customers from the 2024 Rate Case to show the revenue impacts on these wastewater flat rate customers across each methodology studied. The following study and methodologies should only be considered to calculate wastewater flat rates and not be interpreted as a use for determining wastewater system capacity design days nor a way for the Company to determine a customer’s number of EDUs.

The calculation for flat rates in the following methodologies uses the following equation:

$$\text{Flat Rate} = \text{Rate Zone Residential Customer Charge} + (\text{Monthly Avg. Usage} * \text{Rate Zone Vol. Rate})$$

i. Methodology 1. System-wide Monthly Average Consumption

Using a system-wide monthly average consumption to calculate flat rates (or unmetered rates) reflects Aqua’s proposed flat rate calculation methodology in Aqua’s 2024 Rate Case, and it is the Company’s preferred methodology for designing flat rates. The proposed wastewater (and water) flat rates were calculated by multiplying each rate zone’s volumetric rate by the water Rate Zone 1 monthly average residential consumption for 5/8” metered customers of 3,870 gallons, plus the rate zone’s monthly residential customer charge for one EDU.

It was recommended by the Commission’s Bureau of Investigation and Enforcement (“I&E”)⁴ in the 2024 Rate Case for the Company to calculate non-residential flat rates using a higher monthly average of 4,660 gallons per month. Resulting from the settlement of the 2024 Rate Case, the Company agreed to calculate its settlement flat rates using the 3,870-gallon monthly average for residential customers and 4,660-gallon monthly average for non-residential customers.

⁴ See 2024 Rate Case, I&E Statement No. 3, pgs. 15-16.

Table 1 reflects the average monthly wastewater consumption by each wastewater rate zone by residential and non-residential customers for the year ended December 31, 2023. Table 2 reflects the average monthly residential water consumption by water rate zone. The tables show that using 3,870-gallons per month is a reasonable level to base the Company’s residential wastewater flat rates. I&E also agreed this was a reasonable level for the Company to use to calculate flat rates for its residential wastewater customers.⁵ The majority of Wastewater Rate Zone-wide averages are greater than the water system-wide average of 3,870 gallons except for Rate Zones 3 and 6 (seasonal community). Using a set monthly average to calculate flat rates for all rate zones brings uniformity to the flat rate design and aligns well with the Company’s objective to achieve single tariff pricing.

Table 1. Average Monthly Metered Water Consumption for Wastewater Customers by Class and Rate Zone

Wastewater Rate Zone*	Residential Avg. (gals.)	Non-Residential Avg. (gals.)	Rate Zone Avg. (gals.)
Zone 1	3,800	6,023	4,342
Zone 1A	2,725	160,570	7,290
Zone 2	3,320	6,228	4,324
Zone 3	2,700	3,380	2,810
Zone 4	3,835	5,374	4,100
Zone 5	3,770	25,210	3,900
Zone 6 (seasonal)	1,275	12,630	1,340
Zone 8	All unmetered	126,600	126,600
System-wide	3,570	7,190	4,330

*Table 1. reflects the consolidation of rate zones under the final order of the 2024 Rate Case.

⁵ See 2024 Rate Case, I&E Statement No. 3, pg. 15.

Table 2. Average Monthly Metered Residential Water Consumption

Water Rate Zone	Residential Avg. (gals)	Rate Zone Avg. (gals)
Zone 1	3,950	6,320
Zone 1 (5/8" only)	3,870	---
Zone 2	3,790	4,090
Zone 3	1,840	2,040
Bunker Hill	3,900	3,895
Sun Valley	3,160	3,160
Phoenixville	3,610	5,775
Shenandoah	2,980	4,160

Table 3. Rate Zone 4 Revenues with Monthly Flat Rates Calculated at System-wide Wastewater Average Monthly Usage at 3,570 gallons

Sewer Rate Zone 4 Customer Class	Pro Forma 12/31/2025									
	EDUs/Usq	Settlement Rates	Settlement Revenue	Adjusted Rates	Adjusted Revenue	Percent Change	Rev. Neutral Rates	Rev. Neutral Revenue	Percent Change	
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(3)-1	(7)	(8)	(9)=(8)/(3)-1	
Residential										
Flat Rate Customers	24,984	\$ 137.06	\$ 3,424,261	\$ 133.11	\$ 3,325,567	-2.88%	\$ 137.54	3,436,244	0.35%	
Loss/Gain of Revenue & Avg.Usg.		3,870 (gals.)		3,570 (gals.)	(98,694)		3,570 (gals.)	11,983		
Non-Residential										
Flat Rate Customers	6,101	144.17	879,602	130.59	796,743	-9.42%	\$ 134.79	822,367	-6.51%	
Loss/Gain of Revenue & Avg.Usg.		4,660 (gals.)		3,570 (gals.)	(82,859)		3,570 (gals.)	(57,235)		
Residential										
Metered Customers	8,253	\$ 86.12	710,714	\$ 86.12	710,714	0.00%	\$ 86.12	710,714	0.00%	
Usage (100gals.)	293,269	1.3163	386,026	1.3163	386,026	0.00%	1.4404	422,425	9.43%	
Loss/Gain of Revenue					-			36,399	3.32%	
Non-Residential										
Metered Customers	1,385	84.60	117,196	84.60	117,196	0.00%	84.60	117,196	0.00%	
Usage (100gals.)	74,429	1.2457	92,718	1.2457	92,718	0.00%	1.3632	101,462	9.43%	
Loss/Gain of Revenue					-			8,744	4.17%	
Low Income Discounts			(386,858)		(386,858)			(386,858)		
Total Revenue			\$ 5,223,659		\$ 5,042,106			\$ 5,223,550		
Loss/Gain of Revenue					\$ (181,553)			\$ (109)		

Table 3 represents the impact to rates in Rate Zone 4 if the flat rates were to be calculated by using the system-wide wastewater monthly average of 3,570 gallons instead of the system-wide water average. **This table shows that utilizing the system-wide wastewater monthly average consumption results in a higher flat rate for customers in Rate Zone 4.** The Company could support this change to the current methodology without incurring additional costs as the system-wide wastewater average is determined during each rate case. The average is merely 300 gallons less than the system-wide water monthly average, so rate impacts would be

mitigated as illustrated in Table 3. Aqua has shown in recent cases that it prefers to meter its wastewater customers and has actively been moving unmetered wastewater customers to metered rates where connecting a meter to monitor water usage from the service line is feasible. In the 2024 Rate Case, Aqua moved over 1,500 customers from flat rate to metered service. The accuracy of using a system-wide wastewater monthly average would improve as the Company continues to move flat rate customers to metered rates when possible. Furthermore, this methodology would continue to support the Company’s goal of rate equalization.

ii. Methodology 2. Rate Zone 4 Average Monthly Consumption

In the 2024 Rate Case, it was recommended by the Office of Consumer Advocate (“OCA”)⁶ for the Company to evaluate whether designing flat rates based on each rate zone’s average monthly consumption would be fairer methodology for calculating flat rates. Rate consolidation of Aqua’s multiple wastewater rate zones has been a primary objective for the Company during its history of rate cases. The goal is to achieve single tariff pricing for its wastewater customers by gradually moving the various rate zones to the Rate Zone 1 – Main Division rates. If flat rates are calculated using the individual rate zone monthly averages, it would result in the flat rate customers being further away from rate consolidation or single tariff pricing. For example, the flat rate customers in rate zones with lower monthly consumption would experience greater increases than the metered customers of the same rate zone when that rate zone’s rates are consolidated to the Rate Zone 1 water or wastewater rates in future rate proceedings.

Table 4. Rate Zone 4 Monthly Averages of Metered Customers by Class and Zone

Customer Class	No. of Bills	2023 Consumption (gals.)	Monthly Avg.
Residential	6,513	24,976,900	3,835
Non Residential	1,385	7,442,900	5,374
Total Rate Zone 4	7,898	32,399,800	4,100 (rounded)

Table 4 shows the total Rate Zone 4 monthly average of 4,100 gallons is greater than the 3,870-gallon average used for the flat rate calculation. Based on Table 4’s

⁶ See 2024 Rate Case, OCA Statement No. 5, pg. 39.

calculated monthly averages (by class and zone), there are three methods (2a, 2b and 2c) in which flat rates could be calculated for Rate Zone 4.

Table 5. Rate Zone 4 Revenues with Monthly Flat Rates Calculated at 3,835 gallons for All Customers (2a)

Sewer Rate Zone 4 Customer Class	Pro Forma 12/31/2025 EDUs/Usg	Settlement Rates	Settlement Revenue	Method 2a Adjusted Rates	Method 2a Adjusted Revenue	Percent Change	Method 2a Rev. Neutral Rates	Method 2a Rev. Neutral Revenue	Percent Change
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(3)-1	(7)	(8)	(9)=(8)/(3)-1
Residential									
Flat Rate Customers	24,984	\$ 137.06	\$ 3,424,261	\$ 136.60	\$ 3,412,760	-0.34%	\$ 138.44	3,458,730	1.01%
Loss/Gain of Revenue & Avg.Usg.		3,870 (gals.)		3,835 (gals.)	(11,501)		3,835 (gals.)	34,469	
Non-Residential									
Flat Rate Customers	6,101	144.17	879,602	133.89	816,876	-7.13%	\$ 135.64	827,553	-5.92%
Loss/Gain of Revenue & Avg.Usg.		4,660 (gals.)		3,835 (gals.)	(62,726)		3,835 (gals.)	(52,049)	
Residential									
Metered Customers	8,253	\$ 86.12	710,714	\$ 86.12	710,714	0.00%	\$ 86.12	710,714	0.00%
Usage (100gals.)	293,269	1.3163	386,026	1.3163	386,026	0.00%	1.3643	400,107	3.65%
Loss/Gain of Revenue					-			14,081	1.28%
Non-Residential									
Metered Customers	1,385	84.60	117,196	84.60	117,196	0.00%	84.60	117,196	0.00%
Usage (100gals.)	74,429	1.2457	92,718	1.2457	92,718	0.00%	1.2912	96,103	3.65%
Loss/Gain of Revenue					-			3,385	1.61%
Low Income Discounts			(386,858)		(386,858)			(386,858)	
Total Revenue			\$ 5,223,659		\$ 5,149,432			\$ 5,223,545	
Loss/Gain of Revenue					\$ (74,227)			\$ (114)	

Table 5 shows the revenues produced under settlement rates in the 2024 Rate Case, the revenues produced under method 2a from flat rates that are calculated using the Rate Zone 4 monthly residential average of 3,835 gallons, and the revenues produced under revenue neutral rates that would reach the settlement revenues of Rate Zone 4 calculated in the 2024 Rate Case. As a result, the revenues under the adjusted rates (3,835-gallon avg. consumption) would be reduced by \$74,227 for flat rate customers. In order to become revenue neutral with settlement revenues, the residential flat rate revenues would be increased by 1.01%, the non-residential flat rate revenues would be decreased by 5.92% and the volumetric revenues from metered residential and non-residential customers would be increased by 3.65%. Not only would the residential flat rate customers require an increase from settlement rates to become revenue neutral, but the metered customers would also experience an increase as well, and the non-residential flat rate customers would experience a decrease to rates.

Table 6. Rate Zone 4 Revenues with Residential Monthly Flat Rates Calculated at 3,835 Gallons and Non-Residential Flat Rates Calculated at 5,374 Gallons (2b)

Sewer Rate Zone 4 Customer Class	Pro Forma 12/31/2025 EDUs/Usg	Settlement Rates	Settlement Revenue	Method 2b Adjusted Rates	Method 2b Adjusted Revenue	Percent Change	Method 2b Rev. Neutral Rates	Method 2b Rev. Neutral Revenue	Percent Change
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(3)-1	(7)	(8)	(9)=(8)/(3)-1
Residential									
Flat Rate Customers	24,984	\$ 137.06	\$ 3,424,261	\$ 136.60	\$ 3,412,760	-0.34%	\$ 135.59	3,387,526	-1.07%
Loss/Gain of Revenue & Avg.Usg.		3,870 (gals.)		3,835 (gals.)	(11,501)		3,835 (gals.)	(36,735)	
Non-Residential									
Flat Rate Customers	6,101	144.17	879,602	153.06	933,834	6.17%	151.73	925,720	5.24%
Loss/Gain of Revenue & Avg.Usg.		4,660 (gals.)		5,374 (gals.)	54,232		5,374 (gals.)	46,118	
Residential									
Metered Customers	8,253	\$ 86.12	710,714	\$ 86.12	710,714	0.00%	\$ 86.12	710,714	0.00%
Usage (100gals.)	293,269	1.3163	386,026	1.3163	386,030	0.00%	1.2900	378,317	-2.00%
Loss/Gain of Revenue					4			(7,709)	-0.70%
Non-Residential									
Metered Customers	1,385	84.60	117,196	84.60	117,196	0.00%	84.60	117,196	0.00%
Usage (100gals.)	74,429	1.2457	92,718	1.2457	92,716	0.00%	1.2208	90,863	-2.00%
Loss/Gain of Revenue					(2)			(1,855)	-0.88%
Low Income Discounts			(386,858)		(386,858)			(386,858)	
Total Revenue			\$ 5,223,659		\$ 5,266,392			\$ 5,223,478	
Loss/Gain of Revenue					\$ 42,733			\$ (181)	

Table 6 shows the revenues produced under settlement rates in the 2024 Rate Case, the revenues produced under method 2b from flat rates that are calculated using the Rate Zone 4 monthly residential average of 3,835 gallons and the monthly non-residential average of 5,374 gallons, and the revenues produced under revenue neutral rates that would reach the settlement revenues of Rate Zone 4 calculated in the 2024 Rate Case. As a result, the flat rate residential revenue under the adjusted rates (3,835-gallon avg. consumption), would be reduced by \$11,501. The flat rate non-residential revenue under the adjusted rates (5,374-gallon avg. consumption) would be increased by \$54,233. In order to become revenue neutral with settlement revenues, the residential flat rate revenues would be decreased by 1.07%, the non-residential flat rate revenues would be increased by 5.24% and the volumetric revenues from metered residential and non-residential customers would be decreased by 2.00%. In this scenario, the non-residential flat rate customers would take on the burden of lost revenues from loss of revenues from the residential flat rate customers, and the metered Rate Zone 4 customers.

Table 7. Rate Zone 4 Revenues with Monthly Flat Rates Calculated at the Rate Zone 4 Monthly Average of 4,100 Gallons (2c)

Sewer Rate Zone 4 Customer Class	Pro Forma 12/31/2025 EDUs/Usq	Settlement Rates	Settlement Revenue	Method 2c Adjusted Rates	Method 2c Adjusted Revenue	Percent Change	Method 2c Rev. Neutral Rates	Method 2c Rev. Neutral Revenue	Percent Change
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(3)-1	(7)	(8)	(9)=(8)/(3)-1
Residential									
Flat Rate Customers	24,984	\$ 137.06	\$ 3,424,261	\$ 140.09	\$ 3,499,953	2.21%	\$ 139.25	3,478,966	1.60%
Loss/Gain of Revenue		3,870 (gals.)		4,100 (gals.)	75,692		4,100 (gals.)	54,705	
Non-Residential									
Flat Rate Customers	6,101	144.17	879,602	137.19	837,010	-4.84%	136.40	832,190	-5.39%
Loss/Gain of Revenue		4,660 (gals.)		4,100 (gals.)	(42,592)		4,100 (gals.)	(47,412)	
Residential									
Metered Customers	8,253	\$ 86.12	710,714	\$ 86.12	710,714	0.00%	\$ 86.12	710,714	0.00%
Usage (100gals.)	293,269	1.3163	386,026	1.3163	386,030	0.00%	1.2959	380,047	-1.55%
Loss/Gain of Revenue					4			(5,979)	-0.55%
Non-Residential									
Metered Customers	1,385	84.60	117,196	84.60	117,196	0.00%	84.60	117,196	0.00%
Usage (100gals.)	74,429	1.2457	92,718	1.2457	92,716	0.00%	1.2264	91,280	-1.55%
Loss/Gain of Revenue					(2)			(1,438)	-0.69%
Low Income Discounts			(386,858)		(386,858)			(386,858)	
Total Revenue			\$ 5,223,659		\$ 5,256,761			\$ 5,223,535	
Loss/Gain of Revenue					\$ 33,102			\$ (124)	

Table 7 shows the revenues produced under settlement rates in the 2024 Rate Case, the revenues produced under method 2c from flat rates that are calculated using the total Rate Zone 4 monthly average of 4,100 gallons, and the revenues produced under revenue neutral rates that would reach the settlement revenues of Rate Zone 4 calculated in the 2024 Rate Case. As a result, the revenue under the adjusted rates (4,100-gallon avg. consumption) would be increased by \$33,102 for flat rate customers. In order to become revenue neutral with settlement revenues, the residential flat rate revenues would be increased by 1.60%, the non-residential flat rate revenues would be decreased by 5.39% and the volumetric revenues from metered residential and non-residential customers would be decreased by 1.55%. The residential flat rate customers would experience an increase from settlement rates in this scenario.

iii. Methodology 3. System Average Based on Rate Zone 4 Treatment Plants’ Flows and EDUs

Methodology 3 analyzes the calculation of flat rates on the respective rate zones’ annual treatment plants’ flows. In this example, Rate Zone 4 treatment plants’ annual flows and annual number of EDUs were used to determine the average monthly consumption.

Table 8. Calculation of Average Monthly Flows by EDU

Total Annual Rate Zone 4 EDUs: **38,980**

Total Annual EDUs Sending Flows to Kidder and Tobyhanna: **28,836** = (2,403 EDUs/month * 12 months)

Kidder Split Rock Annual EDUs: **18,324** = (1,527 EDUs/month * 12 months)

Tobyhanna Annual EDUs: **10,512** = (876 EDUs/month * 12 months)

Rate Zone 4 WWTP	2023 Flows (gals.)	Direct Customer Flow*
Kidder Split Rock	73,374,500	48,918,779
Kidder Split Rock EDUs		18,324
Avg. Monthly Consumption:		2,670 gallons
Tobyhanna	57,419,700	38,281,714
Tobyhanna EDUs		10,512
Avg. Monthly Consumption:		3,641 gallons
Total Rate Zone 4	130,794,200	87,200,493
Total Rate Zone 4 EDUs		28,836
Avg. Monthly Flow:	Direct Cst. Flow ÷ Annual EDUs	3,024 gallons

**Direct Customer flow estimated to be (2/3) and (1/3) I&I.*

The direct customer flow in Table 8 assumes a weighting of (2/3) to direct customer flow and (1/3) to inflow and infiltration (“I&I”). I&I costs pose special challenges in wastewater ratemaking because these costs are not a consequence of directly measurable service demands by wastewater customers. The “Financing and Charges for Wastewater Systems,” Manual of Practice No. 27, published by the Water Environment Federation provides a method of estimating I&I, which is done by taking the difference between facility inflow and billed volumes of water.⁷ However, due to the high percentage of unmetered customers found in the Kidder Split Rock and Tobyhanna Township service areas, the estimated I&I for these plants cannot be determined. Aqua would want to consider completing testing and monitoring to ensure accurate I&I estimates for these locations, which would cause the Company to incur added costs to undertake calculating flat rates under this methodology.

Table 9 presents the rates calculated for the customers that send flows to the Kidder Split Rock or Tobyhanna plants, which serves most of the Rate Zone 4 flat rate customers. The customers that send flows to the Kidder Split Rock plant clearly benefit from this rate structure. However, it is at the expense of the customers who send flows

⁷ “Financing and Charges for Wastewater Systems,” Manual of Practice No. 27, pgs. 143-145.

to the Tobyhanna plant and the metered customers who make up the loss in revenue (under revenue neutral rates) if the flat rate calculations were based on plant average monthly flows per EDU. Additionally, Methodology 3 would create multiple flat rates within one rate zone, as shown in Table 8, which would move rates further away from the Company's goal of single tariff pricing.

Table 9. Calculation of Rate Zone 4 Flat Rates at Average Monthly Flows

Sewer Rate Zone 4 Customer Class	Pro Forma 12/31/2025 EDUs/Usq	Settlement Rates	Settlement Revenue	Method 3 Adjusted Rates	Method 3 Adjusted Revenue	Percent Change	Method 3 Rev. Neutral Rates	Method 3 Rev. Neutral Revenue	Percent Change
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(3)-1	(7)	(8)	(9)=(8)/(3)-1
Residential									
Flat Rate Customers	3,672	\$ 137.06	\$ 503,231	\$ 137.06	\$ 503,229	0.00%	\$ 147.94	\$ 543,177	7.94%
Kidder Split Rock EDUs	13,152	\$ 137.06	1,802,618	121.26	1,594,812	-11.53%	128.77	1,693,583	-6.05%
Tobyhanna EDUs	8,160	\$ 137.06	1,118,412	134.05	1,093,848	-2.20%	144.28	1,177,325	5.27%
Loss/Gain of Revenue & Avg.Usg.		<i>3,870 (gals.)</i>		<i>(various)</i>	(232,372)		<i>(various)</i>	39,946	
Non-Residential									
Flat Rate Customers	137	144.17	19,766	144.17	19,766	0.00%	\$ 156.57	21,466	8.60%
Kidder Split Rock EDUs	5,172	144.17	745,653	119.38	617,433	-17.20%	126.48	654,155	-12.27%
Tobyhanna EDUs	792	144.17	114,183	131.48	104,132	-8.80%	141.16	111,799	-2.09%
Loss/Gain of Revenue & Avg.Usg.		<i>4,660 (gals.)</i>		<i>(various)</i>	(138,271)		<i>(various)</i>	1,700	
Residential									
Metered Customers	8,253	\$ 86.12	710,714	\$ 86.12	710,714	0.00%	\$ 86.12	710,714	0.00%
Usage (100gals.)	293,269	1.3163	386,026	1.3163	386,026	0.00%	1.5973	468,439	21.35%
Loss/Gain of Revenue					-			82,413	
Non-Residential									
Metered Customers	1,385	84.60	117,196	84.60	117,196	0.00%	84.60	117,196	0.00%
Usage (100gals.)	74,429	1.2457	92,718	1.2457	92,718	0.00%	1.5117	112,514	21.35%
Loss/Gain of Revenue					-			19,796	9.43%
Low Income Discounts			(386,858)		(386,858)			(386,858)	
Total Revenue			\$ 5,223,659		\$ 4,853,016			\$ 5,223,510	
Loss/Gain of Revenue					\$ (370,643)			\$ (149)	

iv. Methodology 4. Flat Rates Based on Seasonal Rates

The Company has a seasonal rate zone (Rate Zone 6) in which the volumetric rates are the lowest out of all wastewater rate zones. The Company has maintained, in recent rate proceedings, its seasonal rate structure so that the seasonal consumption rate is always priced lower than Rate Zone 1 (Main Division), and the customer charge remains higher than Rate Zone 1. During the Company's 2021 Rate Case and most recent 2024 Rate Case⁸, there were customers in Rate Zone 4, residing in Lake Harmony that claimed it is a seasonal community, and requested a lower seasonal rate be adopted for the Lake Harmony community. Though the Commission has ruled against this request for Lake Harmony (Rate Zone 4) customers, Aqua is presenting in this report a methodology in which the Rate Zone 4 flat rates are calculated based on the Rate Zone 6 volumetric seasonal rates. Table 10 reflects flat rate calculations using the

⁸ Reference Statement No. 3-R, pgs. 23-25, and Statement No. 11-R, pgs. 14-18.

Rate Zone 6 volumetric seasonal rates and the system-wide residential (3,870 gallons) and non-residential (4,660 gallons) average monthly consumption from settlement in the 2024 Rate Case.

Table 10. Rate Zone 4 Revenues Based on Flat Rates Calculated with Rate Zone 6 Volumetric Rates

Sewer Rate Zone 4 Customer Class	Pro Forma 12/31/2025 EDUs/Usq	Settlement Rates	Settlement Revenue	Method 4 Adjusted Rates	Method 4 Adjusted Revenue	Percent Change	Method 4 Rev. Neutral Rates	Method 4 Rev. Neutral Revenue	Percent Change
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(3)-1	(7)	(8)	(9)=(8)/(3)-1
Residential									
Flat Rate Customers	24,984	\$ 137.06	\$ 3,424,261	\$ 98.24	\$ 2,454,389	-28.32%	\$ 128.62	3,213,391	-6.16%
Loss/Gain of Revenue & Avg.Usq.		3,870 (gals.)		3,870 (gals.)	(969,872)		3,870 (gals.)	(210,870)	
Non-Residential									
Flat Rate Customers	6,101	144.17	879,602	100.46	612,917	-30.32%	130.84	798,268	-9.25%
Loss/Gain of Revenue & Avg.Usq.		4,660 (gals.)		4,660 (gals.)	(266,685)		4,660 (gals.)	(81,334)	
Residential									
Metered Customers	8,253	\$ 86.12	710,714	\$ 86.12	710,714	0.00%	\$ 116.50	961,428	35.28%
Usage (100gals.)	293,269	1.3163	386,026	1.3163	386,030	0.00%	1.3163	386,030	0.00%
Loss/Gain of Revenue					4			250,718	22.86%
Non-Residential									
Metered Customers	1,385	84.60	117,196	84.60	117,196	0.00%	114.45	158,548	35.28%
Usage (100gals.)	74,429	1.2457	92,718	1.2457	92,716	0.00%	1.2457	92,716	0.00%
Loss/Gain of Revenue					(2)			41,350	19.70%
Low Income Discounts			(386,858)		(386,858)			(386,858)	
Total Revenue			\$ 5,223,659		\$ 3,987,104			\$ 5,223,523	
Loss/Gain of Revenue					\$ (1,236,555)			\$ (136)	
Rate Zone 6 Vol. Rate									
Residential				0.3133			0.3133		
Non-Residential				0.3077			0.3077		

As a result of calculating the flat rates at a much lower volumetric rate, it would be necessary to increase the residential customer charge from \$86.12 to \$116.50, and to increase the non-residential customer charge from \$84.60 to \$114.45 in order for Rate Zone 4 to be revenue neutral with the settlement revenues calculated in the 2024 Rate Case. The residential flat rate revenues would be decreased by 6.16%, the non-residential flat rate revenues would be decreased by 9.25% and the metered residential and non-residential customer revenues would be increased by 22.86% and 19.70%, respectively. Currently the highest customer charges are in Rate Zone 5 at \$98.95 per EDU per month for a residential customer and \$97.20 per EDU per month for a non-residential customer. In this example, the Rate Zone 4 residential customer charge would be \$17.55 greater than the Rate Zone 5 residential customer charge, and the non-residential charge would be \$17.25 greater than the Rate Zone 5 non-residential customer charge. Additionally, the reduction to the volumetric rates would only move Rate Zone 4 further away from consolidation.

**Table 11. Rate Zone 4 Revenues Based on Flat Rates Calculated with Rate Zone 6
(Seasonal) Average Usage**

Sewer Rate Zone 4 Customer Class	Pro Forma	Settlement	Settlement	Method 4	Method 4	Percent Change	Method 4	Method 4	Percent Change
	12/31/2025 EDUs/Usg	Rates	Revenue	Adjusted Rates	Adjusted Revenue		Rev. Neutral Rates	Rev. Neutral Revenue	
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(3)-1	(7)	(8)	(9)=(8)/(3)-1
Residential									
Flat Rate Customers	24,984	\$ 137.06	\$ 3,424,261	\$ 102.90	\$ 2,570,812	-24.92%	\$ 130.19	3,252,615	-5.01%
Loss/Gain of Revenue & Avg.Usg.		3,870 (gals.)		1,275 (gals.)	(853,449)		1,275 (gals.)	(171,646)	
Non-Residential									
Flat Rate Customers	6,101	144.17	879,602	102.00	622,312	-29.25%	129.29	788,811	-10.32%
Loss/Gain of Revenue & Avg.Usg.		4,660 (gals.)		1,275 (gals.)	(257,290)		1,275 (gals.)	(90,791)	
Residential									
Metered Customers	8,253	\$ 86.12	710,714	\$ 86.12	710,714	0.00%	\$ 113.41	935,927	31.69%
Usage (100gals.)	293,269	1.3163	386,026	1.3163	386,030	0.00%	1.3163	386,030	0.00%
Loss/Gain of Revenue					4			225,217	20.54%
Non-Residential									
Metered Customers	1,385	84.60	117,196	84.60	117,196	0.00%	111.41	154,336	31.69%
Usage (100gals.)	74,429	1.2457	92,718	1.2457	92,716	0.00%	1.2457	92,716	0.00%
Loss/Gain of Revenue					(2)			37,138	17.69%
Low Income Discounts			(386,858)		(386,858)			(386,858)	
Total Revenue			\$ 5,223,659		\$ 4,112,922			\$ 5,223,577	
Loss/Gain of Revenue					\$ (1,110,737)			\$ (82)	

Another option under Methodology 4 is to determine the rate impacts on Rate Zone 4 customers if the flat rates were calculated using the Rate Zone 6 monthly average usage of 1,275 gallons. Table 11 illustrates that the flat rate customers would experience a decrease in rates. However, the metered customers would experience large increases, as the customer charge would have to be increased to make up for the loss in revenues due to the flat rate calculation utilizing a lower average monthly usage. Using seasonal averages provides additional challenges for Aqua, especially in Rate Zone 4. Aqua understands there is a mix of seasonal and full time residents within the Lake Harmony community. It would be difficult for Aqua to actively monitor a mix of seasonal customers and full time residents across the entire service area. It would not be economical for the Company to actively monitor each customer to determine whether the customer is a seasonal or full time resident on an annual basis. Furthermore, Aqua is responsible for providing a service to a premise whether the customer is occupying the premise 100% of the time, or for less than 100% of the time.

Conclusion

The report presented four methodologies on ways to calculate flat rates. It was organized by the Company's preferred to least preferred methodology, which was based on evaluating the impacts to customers, cost effectiveness of each methodology, acceptable industry standards, and mitigating financial, legal, and regulatory risk. Aqua's preferred methodology remains to be Methodology 1, where a system-wide average monthly water consumption is determined for residential and non-residential customer classes and used to calculate wastewater flat rates for all its rate zones. Methodology 1 proves to be the most cost effective, fair and equitable way to calculate flat rates for all its unmetered customers. Aqua's second preferred methodology would be to utilize the system-wide wastewater monthly average usage as a cost-effective way to calculate flat rates, though, any change to how these flat rates are calculated will not only impact flat rate customers but metered customers' rates as well. Switching to Methodology 2 would be another cost-effective approach, but the downside is that it moves away from the Company's goal of rate equalization. Methodologies 3 and 4 are not preferred by Aqua, as these will either discourage rate equalization, cause greater impacts to metered wastewater customers, will burden the Company with additional costs, or will foster legal and regulatory risk.

The Company understands each customer is focused on their individual situation. However, the Company must consider the resources and process inefficiencies that would result in using other methods, to accommodate each customer's situation. The practice of calculating flat rates based on a system-wide average essentially takes into consideration all the unique situations of each customer, whether it is a lower user, seasonal user, or high consumer of the wastewater service. Additionally, the Company has to consider the long-term outlook for rate planning, and incurring additional costs for developing different methods of calculating flat rates for individual rate zones that are planned to be consolidated into one single tariff rate zone over the future of rate cases does not align with the financial and ratemaking goals of the Company.