

# Willistown Township 2024 Proposed Sewer Rates



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## Penn's Preserve – 2024 Proposed Sewer Rates

### **\$221.25 quarterly flat rate**

The proposed rates are based upon costs included in the Township budget. Penn's Preserve will remain a flat rate. The new rate was derived from the following costs.

#### **Penn's Preserve 2024 Costs**

Plant Operator	\$ 70,000
Personnel Cost	\$ 48,259
Utilities	\$ 23,700
Margin of safety	\$ 15,000
Repairs and Maintenance, Grounds Maintenance	\$ 14,000
Operating supplies and general expenses	\$ 4,915
Audit and Insurance	\$ 1,700
	\$ 177,574

#### **Resulting 2024 Penn's Preserve Rate**

Total Costs	\$ 177,574
Interest Income	\$ (5,000)
Annual Amount Billed to Users	\$ 172,574
Quarterly Rate Revenue to be Billed	\$ 43,143.50
Quarterly Rate Per User	<b>\$ 221.25</b>

## Penn's Preserve Sewer Rate Increases – Frequently Asked Questions

### ***By how much are the rates increasing?***

The 2023 rate for Penn's Preserve was \$187.96. The new rate of \$221.25 represents a 17.7% increase.

### ***Why are the rates increasing?***

Rates haven't been raised since 2019; there have been no increases in relation to inflation. Rates are increasing to plan for the future and conduct upgrades to avoid costly emergency repairs.

### ***Why are the rates going up if there was a surplus last year?***

While there appeared to be a surplus in past years' Penn's Preserve balances, all personnel costs were previously concentrated in the Valley Forge Sewer account. The 2024 rates are based directly on budgeted costs, so the personnel costs were taken into consideration separately during the rate calculation. While the accounts were previously considered together, the rate study required that the costs be broken down more specifically.

### ***How were the personnel costs determined?***

A percentage of staff time allocated to sewer is further broken down between the Penn's Preserve and VFS Districts based on the number of users in each.

### ***Who is the Plant Operator?***

The Township contracts with Yerkes Associates, Inc. and their subcontractor KBX Golden, to serve as the Operator of the Penn's Preserve Treatment Plant. Unlike the pump stations, which convey the wastewater, the treatment plant processes sewage into effluent that can be safely disposed of via the spray fields.

### ***What is the margin of safety?***

Funding for repair and replacement of existing capital infrastructure and potential emergencies. This money will not be used for capital projects that would expand the system to new users.

### ***What infrastructure is there to replace?***

A pump station, treatment plant, spray irrigation fields, and 5,850 feet of sewer pipes. The full system will not be replaced all at once; components will be earmarked for repair or replacement as they reach the end of their useful life.

### ***How was the margin of safety number calculated?***

The initial capital reserve study performed by Carroll Engineering indicated that a reserve for ultimate full replacement would need to be much higher. However, the presented margin of safety seeks to soften the increase to the small number of users in Penn's Preserve and remain compliant with all regulations about funding of this nature.

## Valley Forge Sewer District – 2024 Proposed Sewer Rates

**\$140.12 plus \$8.80 per 1,000 gallons per quarter**

The proposed rates are based upon costs included in the Township budget and are comprised of fixed costs and usage costs, which make up the fixed (or base) rate and the usage rate, respectively. The rates were derived from the following costs.

### Valley Forge Sewer - Usage Costs and Rates

#### VFS Usage Cost Components

Conveyance by Valley Creek Trunk Line	\$ 647,000
Treatment at Valley Forge Sewer Authority	\$ 811,200
	\$ 1,458,200

#### Resulting VFS Usage Rate

Total Usage Costs	\$ 1,458,200
Average Total Water Usage (gallons)	165,710,406
Cost per 1,000 gallons	<b>\$ 8.80</b>

## Valley Forge Sewer - Fixed Costs and Rates

### VFS Fixed Cost Components

Personnel Cost	\$	522,210
Bond and Loan Payments	\$	494,115
Margin of Safety	\$	221,267
Engineering Services	\$	82,000
Repairs and Maintenance, Grounds Maintenance	\$	73,000
Planned Televising of Sewer Pipes	\$	66,847
Utilities	\$	62,750
Operating supplies and general expenses	\$	45,000
Audit and Insurance	\$	21,535
Legal Expenses	\$	6,000
	\$	1,594,724

### Resulting VFS Fixed Rate

Total Costs	\$	1,594,724
Interest Income		(40,000)
Annual Amount Billed to Users	\$	1,554,724
Quarterly Rate Revenue to be Billed	\$	388,680.98
<b>Quarterly Fixed Rate Per User</b>	<b>\$</b>	<b>140.12</b>
<b>Average User Payment with Usage Added<sup>1</sup></b>	<b>\$</b>	<b>239.18</b>

<sup>1</sup> The average Valley Forge Sewer district user's quarterly usage is 11,257 gallons.

## Valley Forge Sewer Rate Increases – Frequently Asked Questions

### ***By how much are the rates increasing?***

In 2023, an average Valley Forge Sewer user paid approximately \$189.52 per quarter in fixed and usage charges. The average use payment in the proposed rate structure will pay approximately \$239.18, representing a 26.2% increase. The rate smoothing options, which are described on the next page, represent a 23.7% and 21.2% increase, respectively.

### ***Why are the rates increasing?***

Rates haven't been raised since 2019; there have been no increases in relation to inflation, higher conveyance costs, or greater treatment costs. Reserves have been drawn down due to emergency repairs in the district. Rates are increasing to plan for the future and conduct upgrades to avoid costly emergency repairs.

### ***I heard the rates were increasing by much more. What happened?***

The Township has opted to finance the large capital project planned for next year, the Paoli Pike/Long Lane sewer replacement. Therefore, instead of the whole \$1 million+ cost of the project falling on current users, only the new loan payment is incorporated into the cost components that result in the rate.

### ***How were the personnel costs determined?***

A percentage of staff time allocated to sewer is further broken down between the Penn's Preserve and VFS Districts based on the number of users in each.

### ***What infrastructure makes up the system?***

5 Pump stations, 2 booster stations, and 180,632 feet of sewer pipe. The full system will not be replaced all at once; components will be earmarked for repair or replacement as they reach the end of their useful life.

### ***How was the margin of safety number calculated?***

The capital reserve study performed by Carroll Engineering inventoried all equipment and facilities and calculated the needed replacement costs over the life of the components. The required annual contribution is included as the margin of safety, which will allow the Township to replace pieces of the infrastructure on an annual basis and provide a cushion for emergency repairs.

## Valley Forge Sewer - Rate Smoothing Options

There are two more options for the Board to consider that will help smooth the rate increase for the VFS users. Both contemplate using the recently approved allocation of \$513,477.40 to cover the loan payments on the financing of the upcoming Paoli Pike/Long Lane project.

### Rate Smoothing Option A

The following option contemplates that half of the loan payment will be paid by the rate payers. The rest will be covered by the recently approved allocation for about the first 10 years of the life of the debt. The fixed cost in Option A is \$4.74 less than the proposed rate above.

Personnel Cost	\$	522,210
Bond and Loan Payments	\$	441,615
Margin of safety	\$	221,267
Engineering Services	\$	82,000
Repairs and Maintenance, Grounds Maintenance	\$	73,000
Planned Televising of Sewer Pipes	\$	66,847
Utilities	\$	62,750
Operating supplies and general expenses	\$	45,000
Audit and Insurance	\$	21,535
Legal Expenses	\$	6,000
	\$	1,542,224

### Resulting VFS Fixed Rate

Total Costs	\$	1,542,224
Non-User Revenue	\$	(40,000)
Annual Amount Billed to Users	\$	1,502,224
Quarterly Rate Revenue to be Billed	\$	375,555.98
Quarterly Rate Per User	\$	135.38
Average User Payment with Usage Added	\$	234.44

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### Rate Smoothing Option B

The following option contemplates that none of the loan payment will be paid by the rate payers. The entirety will be covered by the recently approved allocation for about the first 5 years of the life of the debt. The fixed cost in Option B is \$9.46 less than the proposed rate above.

#### VFS Fixed Cost Components

Personnel Cost	\$	522,210
Bond and Loan Payments	\$	389,115
Margin of safety	\$	221,267
Engineering Services	\$	82,000
Repairs and Maintenance, Grounds Maintenance	\$	73,000
Planned Televising of Sewer Pipes	\$	66,847
Utilities	\$	62,750
Operating supplies and general expenses	\$	45,000
Audit and Insurance	\$	21,535
Legal Expenses	\$	6,000
	\$	1,489,724

#### Resulting VFS Fixed Rate

Total Costs	\$	1,489,724
Non-User Revenue	\$	(40,000)
Annual Amount Billed to Users	\$	1,449,724
Quarterly Rate Revenue to be Billed	\$	362,430.98
Quarterly Rate Per User	\$	130.65
Average User Payment with Usage Added	\$	229.71