BEFORE THE

PHILADELPHIA WATER, SEWER, AND STORM WATER RATE BOARD

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In the Matter of the Philadelphia Water Department's Proposed Change in Water, Wastewater, and Stormwater Rates and Related Charges Fiscal Years 2026 – 2027 Rates and Charges to Become Effective September 1, 2025 and September 1, 2026

PUBLIC ADVOCATE HEARING EXHIBIT I

May 21, 2025

PA Hearing Ex I, Page

Assessing the Affordability of Federal Water Mandates







An Issue Brief









Prepared for

The United States Conference of Mayors, the American Water Works Association, and the Water Environment Federation by Stratus Consulting, Boulder, Colorado

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Assessing the Affordability of Federal Water Mandates

Communities and the water agencies that serve them have limited resources, so the investments they make need to address the most important risks to public health and the environment and deliver maximum benefits at affordable cost. This issue brief summarizes the U.S. Environmental Protection Agency's (EPA's) methods for analyzing the affordability of federal mandates stemming from the Clean Water Act and Safe Drinking Water Act. The paper describes the Agency's current policies, offers a critique, and identifies a number of alternatives that might be more suitable for analyzing the affordability of water and wastewater mandates on American communities. Finally, the paper notes the importance of weighing the benefits as well as the costs of federal mandates while considering their affordability. This paper is the result of a collaborative effort by the United States Conference of Mayors (USCM), the American Water Works Association (AWWA), and the Water Environment Federation (WEF). Its purpose is to raise issues and provoke discussion. It does not represent the official policy of these organizations or their members. The three associations also offer to their members, separately, an affordability assessment tool that allows communities to directly assess the affordability of water and wastewater mandates after considering the issues raised in this paper. Unless otherwise noted, the term "water" is used throughout this paper to mean drinking water, wastewater, and stormwater.

Background

Investment to meet federal water and wastewater requirements can impose significant financial hardships on households, businesses, and the broader communities in which they are located. When communities face largeand sometimes multiple-federal water mandates, the combined impact of the required expenditures can be extremely expensive for everyone in that community who pays a water or wastewater bill (most consumers get one combined bill for water and wastewater services). For the utility, the cumulative suite of required investments not only strains fiscal capacity but may also displace other important investments, including critical but nonmandatory capital improvement and infrastructure renewal projects. For the greater community, mandatory investments may also squeeze out other important priorities, such as social safety net programs and economic development efforts. For the residents and businesses in affected cities, the capital and operating expenses associated with federal mandates are often reflected in water and wastewater bills that must grow faster than household incomes and the general rate of inflation. Very significant affordability challenges are often created, particularly for lower-income households.

With the intention of providing a mechanism for relieving undue economic stress in the face of water mandates, EPA has developed "affordability" criteria to indicate when such mandates would cause substantial and widespread economic distress in the community. In those cases, the Agency might be willing to exercise some flexibility in the mandate, such as allowing a longer timeframe to achieve compliance with wastewater and stormwater requirements. The affordability of drinking water requirements is handled differently and can—at least in theory and case-by-case—affect the kind of technology that must be deployed in some small communities.

If EPA affordability criteria functioned properly, the economic hardship imposed on lower-income households might be alleviated in many communities by relaxing compliance requirements or stretching them out over a longer time frame. Unfortunately, there are several critical limitations to how EPA defines affordability and applies its assessment criteria. This is due in part to EPA's reliance on metrics such as median household income (MHI), which is highly misleading as an indicator of a community's ability to pay. As a result, regulatory relief is not provided in many communities where substantial and widespread economic hardships are indeed being created.

EPA's Two-level Affordability Screening Analysis for Wastewater and Combined Sewer Overflow (CSO) Controls

In 1995, EPA published its first set of affordabilityrelated guidelines: *The Interim Economic Guidance for Water Quality Standards*. The 1995 Guidance contains a detailed discussion of the analyses a municipality should undertake to evaluate the economic impact of complying with water quality standards (WQS) under the Clean Water Act (CWA). In 1997, EPA published *Guidance for Financial Capability Assessment and Schedule Development* using a nearly identical approach to assess whether an extended compliance schedule might be granted to a community facing affordability problems. The analyses put forth in these guidance documents are divided into two parts:

- 1. The "preliminary screen" examines affordability using a factor called the Residential Indicator (RI). The RI weighs the average per household cost of wastewater bills relative to median household income in the service area. Ultimately, an RI of 2% or greater is deemed to signal a "large economic impact" on residents, meaning that the community is likely to experience economic hardship in complying with federal water quality standards.
- 2. A "secondary screen" examines metrics related to the financial capability of the impacted community. This screen applies a Financial Capability Indicator (FCI) reflecting the average of six economic indicators. Those indicators include the community's bond rating, its net debt, its median household income, the local unemployment rate, the service area's property tax burden, and its property tax collection rate. Each indicator is assigned a score of 1 to 3, based on EPA-established benchmarks. Lower FCI scores imply weaker economic conditions and thus an increased likelihood the mandate would cause substantial and widespread economic impact on the community or service area.

The results of the RI and the FCI are ultimately combined into an overall rating based on EPA's Financial Capability Matrix. This rating is intended to demonstrate the overall level of financial burden imposed on a community by compliance with Clean Water Act mandates.

EPA's Assessment of Affordability for Drinking Water Regulations

Whereas EPA's consideration of affordability for wastewater and CSO compliance is aimed at assessing an individual community's ability to comply with regulatory mandates and schedules, EPA's consideration of affordability in the context of potable water supply is limited to assessing the *national-level affordability of regulatory options for small communities.* EPA does not consider the affordability of drinking water requirements in any manner that pertains to individual utilities (even small ones), or to the category of medium and large utilities.

EPA has stated that it would consider a National Primary Drinking Water Regulation to be unaffordable to small communities (those with populations under 10,000) if the standard would result in a household drinking water bill in excess of 2.5% of the national average MHI in such communities. To date, EPA has never made this finding. If EPA were to make such a finding, it would be required to identify technologies for small systems that might not result in meeting particular drinking water standards but are found to protect public health. Then, on a case-by-case basis, states may approve the use of such affordable small system technologies (called a variance) or approve an extended deadline for compliance (called an exemption). States cannot approve both a variance and an exemption for the same standard in the same community. Variances are subject to review and approval by EPA. States have allowed very few variances and exemptions because they can be difficult and expensive to issue.

EPA's stated view on potable water—that it is affordable if it costs less than 2.5% of small community MHI—influences the perceived affordability of combined water and wastewater bills. Specifically, it is inferred that EPA would consider a combined annual water and wastewater bill of less than 4.5% of MHI to be affordable (2.5% for water, plus 2% for wastewater services and CSO controls).

Limitations of EPA's Preliminary Screening Approach

A central issue in assessing affordability of federal water mandates is the reasonableness of community-wide MHI as a primary yardstick. MHI can be a highly misleading indicator of a community's ability to pay for several reasons.

- MHI is a poor indicator of economic distress and bears little relationship to poverty or other measures of economic need within a community. For example, consider an analysis of MHI and poverty data for the 100 largest cities in the United States. It shows that for 21 cities identified as having an MHI within \$3,000 of the 2010 national MHI (\$50,046), there is no discernible relationship between MHI and the incidence of poverty. Statistical analysis confirms that the correlation between MHI and poverty among these cities is not meaningful, with a correlation coefficient (r) of 0.024. Indeed, within these 21 cities, the poverty rate ranges from a low of 14.1% to a high of 23.3%.
- MHI does not capture impacts across diverse populations. In many cities, income levels are not clustered around the median, but are spread over a wide income range or concentrated at either end of the income spectrum. This tendency for the income distribution to spread away from the middle has been increasing and may well continue to increase in the future, making MHI an even less meaningful metric. In addition, income distribution and other economic measures can vary widely across different districts and neighborhoods within a city. Thus, the economic hardship associated with increasing water and wastewater bills can be concentrated in a few lower-income neighborhoods. This will compound the economic hardship within the community and may raise issues of environmental justice (EJ). These impacts are not captured with the use of service area MHI as a sole indicator.

- *MHI provides a "snapshot" that does not account for the historical and future trends of a community's economic, demographic, and/or social conditions.* This is particularly relevant in areas that may be experiencing economic declines or population losses (which will result in the costs of water and wastewater programs being spread across fewer residents). Without consideration of these and other economic and demographic trends, the affordability determination will overestimate the ability of residents to tolerate rate increases over time.
- *MHI does not capture impacts to landlords and public housing agencies.* Many renters do not receive water bills because water and wastewater service is included in the cost of rent. The same is true of many residents in public housing. In cities with a high percentage of renters and/or public housing residents, use of MHI and RI does not capture impacts to landlords and public housing agencies, which must often absorb the cost of increased water and wastewater bills. In many cases, higher water bills mean that public housing authorities will be required to reduce the number of needy renters they serve, unless there can be offsetting increases in public housing budgets.
- The RI does not fully capture household economic burdens. Economic burdens are commonly measured by comparing the costs of particular necessities to available household income. The RI is such a measure in that it is used to evaluate the economic burden from water bills by comparing those bills to MHI. However, there can be situations where the economic burdens in a community are substantially different from those typically associated with its RI. For example, a community may experience unusually high costs of basic necessities or may have a distribution of household income that differs significantly from that in most communities. In these cases, the standard application of EPA's RI would be insufficient on its own to distinguish between higher and lower levels of economic impact.

Alternative Household Affordability Metrics: Moving Beyond EPA's Criteria

Given the limitations of the RI, and in particular the use of MHI as a primary indicator of household affordability, it is important to consider the use of alternative metrics to gauge the affordability of federal water mandates. For example, impacts on customer bills can be assessed as follows:

• Across the income distribution. Given the relatively large percentage of households in the lower portions of the income distribution in many cities, it is important to examine the effect of rising water bills across the entire income distribution—and especially at the lower end—rather than simply at the median. For example, a key indicator could include the analysis of average water and wastewater bills borne by each income quintile as a percentage of the average income for that quintile. The percentage of households below specific income thresholds can also be used to examine household impacts. Figure 1 illustrates this point.

EPA's "Guidance for Preparing Economic Analyses" (240-R-00-003) recognizes the legitimacy of assessing impacts to all households across the income distribution, though EPA has not provided information on how such analyses have been conducted in the past or used in enforcement actions.

- *Across household types.* Average water and wastewater bills can be examined as a percentage of income for potentially vulnerable populations (e.g., renters and elderly households).
- Across neighborhoods or similar geographic units, such as Census tracts, or Public Use Microdata Areas. Poverty rates and households located in poverty areas can be considered to identify portions of communities that are economically at risk. Alternative measures of poverty, such as the Supplemental Poverty Measure (SPM) recently developed by the U.S. Census Bureau, can be especially useful in this respect. The analysis could capture affordability issues in particular parts of a community or service area that may be masked when looking at the area as a whole.

- *Other indicators* of economic need and widespread impacts can also be considered for the community or parts of the community2. These might include:
 - The unemployment rate.
 - The percentage of households receiving public assistance such as food stamps or living below the poverty level.
 - The percentage of households meeting Home Energy Assistance Program requirements.
 - The percentage of customers eligible for water affordability programs.
 - *The percentage of households paying high housing costs*—for example the percentage of households with housing costs in excess of 35% of income.
 - Other household cost burdens such as nondiscretionary spending as a percentage of household income for households within each income quintile (Rubin 2003).

Figure 1: Household Income Quintile Upper Limits in Atlanta, Georgia and the United States (2011\$)

	Atlanta, Georgia	United States
Lowest quintile	12,294	20,585
Second quintile	31,873	39,466
Third quintile	59,043	63,001
Fourth quintile	104,233	101,685
Lower limit of top 5%	246,335	187,087
Source: U.S. Census Bureau	ACS, 2012.	

2. EPA's 1995 Interim Economic Guidance for Water Quality Standards provides a good list of these indicators, also including economic losses, impacts on property values, decreases in tax revenues, and potential for future job losses, among others.

^{1.} The SPM includes changes in the measure of available household resources (e.g., using after-tax income instead of pre-tax income and taking into account income received through food stamps and other forms of public assistance) and also recognizes some nondiscretionary expenses that such households bear. The SPM also adjusts for different housing status (e.g., renters versus owners). Additional details can be found in the U.S. Census Bureau (2011).

EPA's Secondary Screening Analysis: Limitations and Alternative Indicators

Just as the RI falls short of its intended purpose, so too does the Financial Capability Indicator (FCI). The FCI that makes up EPA's secondary screening analysis does not adequately reflect a community's ability to finance investments associated with federal water mandates. This measure fails to fully capture financial capability because:

- EPA uses property tax revenues as a percentage of full market property value (FMPV) as its sole measure of local tax effort. Focusing solely on property taxes— while ignoring income, sales, business taxes, and user fees typically charged for city services—inevitably understates the tax effort in cities that rely on multiple forms of taxation. As an alternative, EPA should allow municipalities to use *total local tax and fee revenues as a percentage of gross taxable resources*. This would provide a better measure of the extent to which a municipality is already using the full range of its taxable resources.
- The secondary screening analysis includes measures of local MHI and unemployment levels compared to the national average. By focusing on how these measures compare with national levels, EPA fails to acknowledge the profound impact of the absolute levels themselves. For example, if the national unemployment rate is 9%, a community with an unemployment rate of 10% is considered by EPA as having only a "mid-range" unemployment problem. In fact, a community with a 10% unemployment rate is all-but-certain to be experiencing significant distress, regardless of the national average.

In addition to supplemental measures for MHI (as previously described), EPA should consider a metric that compares a municipality's *current* unemployment rate with the long-term state and national average (the national average was 5.8% between 1991 and 2010). Use of the *long-term* state and national averages as a benchmark would provide a more insightful socioeconomic indicator than a single current number. A community's long-term unemployment rate (for example, the share of the labor force continuously unemployed for one-half year or more) could also be evaluated.

- The FCI does not take into account any deterioration of a local government's ability to finance major capital improvements, as evidenced in municipal capital markets. EPA should consider adding a measure of local government revenue growth or decline to the FCI matrix, with a decline in real revenues over some period taken as a sign of weakened financial capacity.
- EPA's methodology for assessing municipalities' financial capabilities takes into account formal debt burden, but it does not consider what for many cities is an even greater liability: unfunded pension and health care commitments to retirees. These are generally not reflected in formal debt.
- Community or utility revenues are not considered in the secondary screening analysis. This creates a significant weakness, especially in areas that are experiencing economic difficulties, delinquency in water and wastewater payments, declining water usage, shrinking revenues, or a growing number of older customers on fixed or declining incomes. EPA should consider the addition of more appropriate measures of revenue collection, such as current delinquency rates, the agency's ability to enforce collection, and its likelihood of recovering these costs.
- EPA's secondary screening analysis does not take into account the fact that many communities have a legal debt ceiling. Debt limitations have the potential to severely limit a community's ability to finance unfunded mandates absent an extended schedule.
- Finally, EPA does not consider the longer-term needs facing many municipalities for reinvestment and renewal of water and wastewater infrastructure due to the current system's age and condition. As documented by the American Water Works Association's 2012 *Buried No Longer: Confronting America's Water Infrastructure Challenge* report (covering buried drinking water infrastructure only), these needs add up to at least \$1 trillion over the next 25 years. Wastewater needs are at least as great, not counting CSO costs. The need for this investment is real and urgent.

Weighing the Benefits of Additional Mandate-Driven Expenditures

Federal Clean Water Act and Safe Drinking Water Act mandates are intended to provide better public health protection, water quality enhancements, and other benefits. However, not all drinking water and wastewater mandates are the same. Some provide greater benefits than others, or provide benefits sooner than others, or generate benefits to different groups of people or ecosystems than others.

When communities face expensive water mandates and associated deadlines, the impact of the required expenditures can be extremely difficult for all who pay water bills, but particularly for those with lower incomes. In such communities, the expected benefits of the mandate should be carefully weighed against:

- Compliance deadlines (which might be amended).
- Permit limits (which might be adjusted).
- Required compliance technologies and strategies (some of which are more expensive than others).
- Other factors that influence the magnitude and timing of required investments.

When the costs of meeting a regulatory mandate are high, the affordability implications and the benefit of the activity should each be evaluated in concert with one another. The most important questions include:

- 1. Are the added benefits of more rapid and/or stringent mandates warranted given the added costs and adverse impacts on affordability, when compared to less stringent, perhaps less expensive alternatives?
- 2. Are projects with lower public health or environmental benefits driving out projects that might be of greater value to the community or the nation?
- 3. Will those who will realize most of the benefits be different than those who bear most of the costs?
- 4. Are those bearing the greatest burden economically disadvantaged and thus worthy of environmental justice consideration?

EPA's proposed Integrated Planning and Permit Policy (IPPP) provides one potential avenue by which the costs and benefits of all federal water mandates could be addressed. The IPPP process could be used to set priorities, make adjustments in requirements, and set reasonable timetables. Such adjustments would help ensure that local resources are used to secure the greatest public health and environmental benefits at an affordable cost. Moving the IPPP process forward as suggested offers important potential advantages:

- Comparing the environmental, social, and financial benefits of all water-related obligations would allow municipalities to develop priorities that reflect the totality of trade-offs and commitments facing the community.
- Considering all water-related obligations together, and assessing financial capability in light of total water-related obligations, would focus local resources where the community will get the greatest total environmental, public health, and other benefits.

It should be noted that EPA does not include drinking water mandates in the Integrated Municipal Stormwater and Wastewater Planning process, even though drinking water investments must be carried on the same customer bill as investments needed to comply with wastewater and CSO mandates. The USCM, AWWA, and WEF have recommended that EPA include consideration of drinking water investments in the Integrated Planning and Permit Program. The program should also consider necessary but nonmandatory investments in the on-going rehabilitation of water and wastewater infrastructure.

Conclusion

EPA is to be commended for addressing affordability concerns. However, the continued application of EPA's current approach is inadequate. With respect to considering the impact of rising water bills on households, a basic problem is over-reliance on median household income (MHI). Rather than focusing on MHI alone, EPA should focus on households at the lower end of the income spectrum. This examination could include households with incomes below a certain threshold; households with the lowest income levels (such as the lowest quintile or decile); households with housing costs above a certain threshold (such as 35% of income); or households experiencing other types of financial distress (such as households living in areas of high poverty or unemployment). Moreover, the trend in changing household incomes, water and wastewater consumption, employment and demographics (such as population changes) should be taken into account in evaluating how household economic burdens are likely to change over time.

With respect to assessing a community's financial capability, EPA does not consider a number of important realities facing many communities today. Alternative metrics need to be considered as part of the financial capability assessment to better account for several highly relevant factors. These include the liabilities associated with unfunded municipal pension obligations and other long-term contractual commitments. Finally, the long-term need to reinvest in aging water and wastewater infrastructure to ensure systems are sound and resilient also should be considered.

Including in EPA's analysis a number of additional and alternative measures as described in this paper would significantly improve the Agency's understanding of the affordability of federal water mandates in American communities.

Finally, although this paper focuses on EPA's analysis of residential affordability, it has to be noted that affordability impacts on other customer classes—such as commercial and industrial customers—can be dramatic. In turn, those impacts can significantly affect the economic health and vitality of a community now and into the future.

Affordability Assessment Tool

The United States Conference of Mayors, the American Water Works Association, and the Water Environment Federation have collaborated in the development of an Affordability Assessment Tool that allows our members to consider many of the alternative factors discussed in this paper and better understand the full range of affordability implications for the federal water mandates they face. To access this tool, visit usmayors.org, awwa.org, or wef.org.

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Under 18

18 to 64

65 and over



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Demographics





Race & Ethnicity



\$37,973

Per capita income

about 80 percent of the amount in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: \$48,276

about 90 percent of the amount in Pennsylvania: \$42,605

\$60,302

Median household income

about two-thirds of the amount in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: \$86,867

about 80 percent of the amount in Pennsylvania: \$73,824

Household income PA Hearing Ex I, Page 12



Poverty

20.3% Persons below poverty line

cisolis below poverty line

more than 1.5 times the rate in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: 11.5%

more than 1.5 times the rate in Pennsylvania: 12%



Transportation to work

31.1 minutes

Mean travel time to work

a little higher than the figure in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: 29.3

about 20 percent higher than the figure in Pennsylvania: 26.5



Families

[†] Margin of error is at least

10 percent of the total value.

Take care with this statistic.

Households

688,112

Number of households

the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: 2,484,152 Pennsylvania: 5,324,209

2.2

Persons per household

about 90 percent of the figure in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: 2.5

about 90 percent of the figure in Pennsylvania: 2.4

Population by household type



Marital status

[†] Margin of error is at least 10 percent of the total value. Take care with this statistic.



Fertility



[†] Margin of error is at least 10 percent of the total value. Take care with this statistic.

Women 15-50 who gave birth during past year

a little less than the rate in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: 5.1%

a little less than the rate in Pennsylvania: 5.2%





Housing

Units & Occupancy





[†] Margin of error is at least 10 percent of the total value. Take care with this statistic.

Value

\$246,600

Median value of owneroccupied housing units

about two-thirds of the amount in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: \$356,700

a little less than the amount in Pennsylvania: \$259,900

Value of owner-occupied housing units



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Geographical mobility

14.4%

[†] Margin of error is at least 10 percent of the total value. Take care with this statistic.

about 1.4 times the rate in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: 10.6%

Moved since previous year

about 1.4 times the rate in Pennsylvania: 10.6%

Population migration since previous year



Social

88%

High school grad or higher

Educational attainment

Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: 92.4%

a little less than the rate in Pennsylvania: 92.2%

35.7%

Bachelor's degree or higher

a little less than the rate in the about 80 percent of the rate in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: 42.3%

> about the same as the rate in Pennsylvania: 35.3%





Language



Persons with language other

about 1.4 times the rate in the Philadelphia-Camden-Wilmington, PA-

nearly double the rate in Pennsylvania: 13%

than English spoken at home

NJ-DE-MD Metro Area: 17.7%

Language at home, children 5-17





Place of birth

15.1% Foreign-born

[†] Margin of error is at least 10 percent of the total value.

Take care with this statistic.

[†] Margin of error is at least

10 percent of the total value.

population

about 25 percent higher than the rate in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area: 12%

nearly double the rate in Pennsylvania: 8%

Place of birth for foreign-born population



Veteran status

3.5%

Veterans by wartime service

12,404†

42,809 Total veterans 38,307 Male



This profile displays data from more than one ACS release. Charts not derived from ACS 2023 1-year data are noted with an *.

Citation: U.S. Census Bureau (2023). American Community Survey 1-year estimates. Retrieved from Census Reporter Profile page for Philadelphia, PA http://censusreporter.org/profiles/16000US4260000-philadelphia-pa/

Citation: U.S. Census Bureau (2023). American Community Survey 5-year estimates. Retrieved from Census Reporter Profile page for Philadelphia, PA http://censusreporter.org/profiles/16000US4260000-philadelphia-pa/sedimentation-census Reporter Profile page for Philadelphia, PA http://censusreporter.org/profiles/16000US4260000-philadelphia-pa/sedimentation-census Reporter Profile page for Philadelphia.pa/sedimentation-census Reporter Profile page for Philadelphia.pa/sedimentation-census Reporter Profile page for Philadelphia.pa/sedimentation-census-page-for Philadelphia-pa/sedimentation-census-page-for Philadelphia-page-for Philadelphia-pag

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Investor information

♠ / Programs and initiatives / Investor information / Bond ratings

Bond ratings

In investment, the bond credit rating represents the creditworthiness of corporate or government bonds.

Bond ratings

Bond type	Moody's	S&P	Fitch
General obligation bonds and other tax-supported debt	<u>А1 _(РDF)</u>	<u>А+ (pdf)</u>	<u>A+ (pdf)</u>
Tax revenue anticipation notes	N/A	N/A	N/A
Water and wastewater revenue bonds	<u>A1 (pdf)</u>	<u>A+ (pdf)</u>	<u>A+ (pdf)</u>
Philadelphia Gas Works revenue bonds	<u>АЗ _(PDF)</u>	A (PDF)	<u>A- (pdf)</u>
Philadelphia International Airport revenue bonds	<u>A1 (PDF)</u>	<u>A+ (pdf)</u>	<u>A+ (pdf)</u>

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			ŀ	listorical					Study Pe	eriod		
Description	Escalation	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Water - General Service Collections												Customer - 8
Total General Service Billings		266,048	261,484	275,606	290,825	330,289	357,722	358,981	355,197	351,762	350,163	348,565
Total General Service + xxxxxxxxx Billir	ngs	266,048	261,484	275,606	290,825	330,289	357,722	358,981	355,197	351,762	350,163	348,565
Collection Factors												
Current Year		84.76%	84.62%	84.13%	83.64%	84.16%	84.01%	84.01%	84.01%	84.01%	84.01%	84.01%
First Year Prior		8.89%	8.54%	10.49%	10.81%	10.86%	10.72%	10.72%	10.72%	10.72%	10.72%	10.72%
Second Year Prior		1.94%	1.92%	2.04%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%
Collections		Actual	Actual	Actual	Actual	Actual	Calculated	Calculated				
General Service		262,147	270,891	273,434	285,308	325,674	342,328	347,194	344,753	341,490	339,696	338,106
xxxxxxxxx		-	-	-	-	-	-	-	-	-	-	-
Public Fire		9,325	6,533	6,533	7,114	7,551	8,248	8,248	8,248	8,248	8,248	8,248
Private Fire		3,690	3,937	3,661	3,818	4,853	5,491	5,495	5,495	5,495	5,495	5,495
Total		275,163	281,360	283,628	296,240	338,078	356,067	360,937	358,497	355,233	353,439	351,849
										Total		
General Service	Calculated	253,273	248,894	264,719	278,792	315,618				1,361,297		
General Service	Actual	262,147	270,891	273,434	285,308	325,674				1,417,454		
General Service + Wholesale	Calculated	257,101	252,743	268,161	282,095	319,449				1,379,549		
General Service + Wholesale	Actual	265,986	274,752	276,708	288,597	329,054				1,435,097		
	Ratio	96.7%	92.0%	96.9%	97.7%	97.1%				96.1%		
Overall Annual Collection Rate (Revenu	e/Billings)	98.5%	103.6%	99.2%	98.1%	98.6%			L			

Collections - Detail						
Senior Citizens	6,453	6,564	6,538	6,491	6,484	6,483
General Service (Residential)	202,048	203,528	200,729	197,459	195,671	194,081
General Service (Commercial)	94,836	97,538	98,045	98,218	98,236	98,239
General Service (Industrial)	4,084	4,086	3,992	3,885	3,871	3,868
General Service (Public Utilities)	764	817	853	889	893	894
РНА	7,590	7,774	7,815	7,829	7,830	7,831
Charities & Schools	5,592	6,159	6,652	7,163	7,231	7,243
Hospital/University	4,717	5,191	5,589	5,998	6,052	6,061
Hand Billed	16,243	15,535	14,541	13,558	13,426	13,404
Scheduled	1	1	1	1	1	1
XXXXXXXX	-	-	-	-	-	-
XXXXXXXX	-	-	-	-	-	-
Fire Service	49	50	50	50	50	50
Private Fire (Unmetered)	5,443	5,446	5,446	5,446	5,446	5,446
Public Fire Charge (Hydrants)	8,248	8,248	8,248	8,248	8,248	8,248
XXXXXXXXX	-	-	-	-	-	-
Total	356,067	360,937	358,497	355,233	353,439	351,849

		PA Hearing Ex I, Page 18 PHILADELPHIA WATER DEPARTMENT Response to PA Interrogatory
1	PA-VIII-5.	REFERENCE: 2024 TAP-R SETTLEMENT, PARA. 36: PLEASE PROVIDE A
2		DETAILED DESCRIPTION OF ALL "INCENTIVES" FOR TAP
3		PARTICIPANTS TO PARTICIPATE IN LICAP. SEPARATELY INDICATE
4		WHICH OF THESE INCENTIVES HAVE BEEN NEWLY ADOPTED AND/OR
5		EXPANDED SINCE THE SETTLEMENT OF THE 2024 TAP-R PROCEEDING.
6		
7	RESPONSE	:
8	See re	esponse to PA-VIII-4. The existing incentive is risk of being dropped from TAP for
9	refusi	ng water conservation assistance. No other incentives have been adopted since the
10	settler	nent of the 2024 TAP-R proceeding. PWD has assigned a new staff member to
11	condu	et research of other water utilities' water conservation programs and incentives for
12	partic	ipation.
13		
14	RESPONSE	PROVIDED BY: Philadelphia Water Department
15		
16		
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		Public Interrogatory Sat #VIII 5
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			PI] HILADELPHIA W Respo	PA He ATER I onse to I	earing E DEPARTM PA Interrog	<mark>x I, I</mark> IENT gatory	Page 19
PA-VIII-15.	REFERENCE: 2024	4 TAP-R SH	ETTLEMEN	NT, PARA. 36	: CON	IFIRM (OR I	DENY.
	EACH DOLLAR O	F REDUCT	FION FROM	A WATER	BILL	FOR A	TAP	•
	PARTICIPANT RE	ESULTS IN	A DOLLA	R DECREASE	E IN T	AP CRI	EDIT	IS TO
	BE CHARGED TO	RATEPAY	ERS. IF Y	OUR RESPON	NSE IS	S ANYI	HIN	IG
	OTHER THAN AN	I UNQUAL	IFIED "CO	NFIRM," PLE	EASE	PROVI	DE A	A
	DETAILED EXPL	ANATION	OF THE BA	ASIS FOR TH	E RE	SPONSI	Ξ.	
RESPONSE:								
Qualif	ied Confirm. Since th	nere is no pi	rice signal f	or TAP custon	ners (a	as their b	oills	are
based	upon income level),	there is no g	guarantee th	at reductions i	n thei	r water b	oills	will
result	in actual savings / rec	ductions in '	TAP credits					
RESPONSE	PROVIDED BY:	Raftelis	Financial	Consultants	and	Black	&	Veatch
Management	Consulting, LLC.							

		1 8 2
1	PA-VIII-18.	BY MONTH FOR THE MOST RECENT TWELVE MONTHS AVAILABLE,
2		PLEASE PROVIDE THE FOLLOWING:
3		A. THE NUMBER OF MONTH-END RAISE YOUR HAND CUSTOMERS;
4		B. THE NUMBER OF NONPAYMENT DISCONNECT NOTICES ISSUED TO
5		CUSTOMERS WHO HAVE SINCE BEEN IDENTIFIED AS RAISE YOUR
6		HAND CUSTOMERS;
7		C. THE NUMBER OF NONPAYMENT DISCONNECTIONS TO CUSTOMERS
8		WHO HAVE SINCE BEEN IDENTIFIED AS RAISE YOUR HAND
9		CUSTOMERS;
10		D. THE NUMBER OF RECONNECTIONS AFTER A DISCONNECTION TO
11		RAISE YOUR HAND CUSTOMERS;
12		E. THE NUMBER OF BILLS ISSUED TO RAISE YOUR HAND CUSTOMERS;
13		F. THE NUMBER OF PAYMENTS RECEIVED FROM (OR ON BEHALF OF)
14		RAISE YOUR HAND CUSTOMERS;
15		G. THE DOLLARS OF BILLS FOR CURRENT SERVICE ISSUED TO RAISE
16		YOUR HAND CUSTOMERS;
17		H. THE DOLLARS OF PAYMENTS RECEIVED FROM (OR ON BEHALF OF)
18		RAISE YOUR HAND CUSTOMERS;
19		I. THE NUMBER OF RAISE YOUR HAND CUSTOMERS CHARGED A LATE
20		PAYMENT CHARGE;
21		J. THE DOLLARS OF LATE PAYMENT CHARGES BILLED TO RAISE
22		YOUR HAND CUSTOMERS.
23		K. THE TOTAL NUMBER OF RAISE YOUR HAND CUSTOMERS WITH
24		ARREARS;
25		L. THE TOTAL DOLLARS OF ARREARS BILLED TO RAISE YOUR HAND
26		CUSTOMERS.
27		
28		

RESPONSE:

The Department has objected to this information request. PWD and the Public Advocate are trying to resolve the pending discovery dispute. Notwithstanding this objection, PWD provides the following response:

A. Please see table below for available information concerning Raise Your Hand customers.

Month / Year	Number of RYH customers added	Month / Year	Number of RYH customers added
02 / 2023*	0	02 / 2024	1
03 / 2023*	0	03 / 2024	191
04 / 2023	7	04 / 2024	539
05 / 2023	511	05 / 2024	416
06/ 2023	813	06 / 2024	376
07 / 2023	625	07 / 2024	242
08 / 2023	469	08 / 2024	309
09 / 2023	268	09 / 2024	105
10 / 2023	168	10 / 2024	224
11 / 2023	82	11 / 2024	112
TOTAL 2023	2,943	TOTAL 2024	2,515

Note that the Raise Your Hand Program began in April 2023.

B. - L. After reasonable investigation, no reports exists responsive to these requests.

RESPONSE PROVIDED BY: Philadelphia Water Department

PENNSYLVANIA. PUBLIC UTILITY COMMISSION Harrisburg, PA 17105-3265

Public Meeting held January 12, 2023

Commissioners Present: Gladys Brown Dutrieuille, Chairman Stephen M. DeFrank, Vice Chairman Ralph V. Yanora Kathryn L. Zerfuss John F. Coleman, Jr.

Philadelphia Gas Works Universal Service and Energy Conservation Plan for 2023-2027 Submitted in Compliance with 52 Pa. Code § 62.4 Docket No. M-2021-3029323

ORDER

BY THE COMMISSION:

On October 29, 2021, Philadelphia Gas Works (PGW), a jurisdictional city natural gas distribution operation (CNGDO), filed its Proposed 2023-2027 Universal Service and Energy Conservation Plan (Proposed 2023 USECP). On June 16, 2022, the Pennsylvania Public Utility Commission (Commission) entered an Order (June 2022 Order), requesting additional information and stakeholder comments regarding the Proposed 2023 USECP. The June 2022 Order indicated issues that required further attention on the record, directed PGW to provide supplemental information, and set a timeline for stakeholder comments and reply comments on the Proposed 2023 USECP. PGW filed Supplemental Information in response to the June 2022 Order on July 21, 2022. The Low Income Advocates,¹ the Office of Consumer Advocate (OCA), and PGW individually filed

¹ The Low Income Advocates consist of the Tenant Union Representative Network (TURN), Action Alliance of Senior Citizens of Greater Philadelphia (Action Alliance), and the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA).

ignores the Chapter 14 definition of income and the direction of the Commission in the CAP Policy Statement (2020). OCA contends that the Chapter 14 rules govern what is considered household income for CAPs and not LIHEAP. Both OCA and the Low Income Advocates recommend the Commission direct PGW to exclude all income from minors in its calculation of household income for CRP eligibility. OCA Comments at 18, Low Income Advocates Comments at 28-30.

PGW notes that its calculation for household income mirrors the same calculation utilized by other state and federal assistance programs such as LIHEAP, which also include the unearned income of minors. PGW asserts that unearned income for minors is intended to cover their living expenses, including utilities. PGW Reply Comments at 4.

Resolution: We find that PGW's definition of household income to include unearned income of minors in the household is not consistent with the definition of household income in Section 1403 of the Public Utility Code, 66 Pa.C.S. § 1403. Further, while the statutory language is controlling, Section 69.262 of the CAP Policy Statement (2020) provides additional guidance that the unearned income of minors should be excluded from the household income calculation, 52 Pa. Code § 69.262. Accordingly, PGW is directed to exclude unearned income for minors when determining household income for CRP eligibility and to include this clarification in its Revised 2023 USECP. PGW is directed to implement this change within six months from the date of this Order.

h. Verifying Zero-Income

In the Proposed 2023 USECP, PGW states that customers applying for CRP who report zero income with no other means of financial support are asked to complete an assessment, in addition to the CRP application, to describe how they meet basic expenses for food, housing, and public utilities. Proposed 2023 UCECP at 13.

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adelphia W	ater Department		Main Brief		Append
	TABLE	C-1: PROJECTED RE Base and T (in the	VENUE AND RE TAP-R Surcharge ousands of dollar	VENUE RE e Rates rs)	QUIREMENTS
Line No.		Description	2022	2023	
1	OPERATING REVENUE	tor	266 656	260.912	
2	Water Service - Existing Ra	ting Rates	427 613	433 417	
-	Total Soprice Devenue - Ex	isting Dates	604 360	702,720	
5	Additional Service Revenue - Ex	n Doquirod	694,209	703,229	
	Percent	Months			
	Year Increase	Effective			
4	FY 2021 0.00%	10	-		
5	FY 2022 1.83%	10	10,411	12,901	
6	FY 2023 5.83%	10	,	34,110	
7	FY 2024	10		,	
8	FY 2025	10			
9	FY 2026	10			
10	Total Additional Service Re	evenue Required	10,411	47,011	
11	Total Water & Wastewate	r Service Revenue	704,679	750,241	
	Other Income (a)		* -		
12	Other Operating Revenue		21,719	21,638	
13	Debt Reserve Fund Interes	st income		-	
14	Operating Fund Interest Ir	ncome	1,230	1,249	
15	Rate Stabilization Interest	Income	1,088	982	
16	Total Revenues		728,716	774,110	
	OPERATING EXPENSES				
17	Total Operating Expenses		(517,470)	(533,064)	
	NET REVENUES				
18	Transfer From/(To) Rate S	tabilization Fund (b)	10,131	11,554	
19	NET REVENUES AFTER OP	ERATIONS	221,376	252,600	
	DEBT SERVICE				
	Senior Debt Service				
	Revenue Bonds				
20	Outstanding Bonds		(163,516)	(164,558)	
21	Pennvest Parity Bonds		(10,885)	(11,067)	
22	Projected Future Bonds		(8,000)	(30,798)	
23	Commercial Paper		(2,000)	(4,000)	
24	Total Senior Debt Service		(184,401)	(210,423)	
25	TOTAL SENIOR DEBT SERV	ICE COVERAGE (L19/L24) (C)	1.20 x	1.20 x	
26	Subordinate Debt Service		-	-	
27	Transfer to Escrow		•	-	
28	Total Debt Service on Bon	ds	(184,401)	(210,423)	
29	CAPITAL ACCOUNT DEPOS	SIT	(29,447)	(31,155)	
30	TOTAL COVERAGE (L19/(L	24+L26+L29)) (c)	1.03 x	1.04 x	

1

Phil	adelphia Wa	ater Department	Main Brief		Appendix A
		RESIDUAL FUND			
	31	Beginning of Year Balance	15,042	15,020	
	32	Interest income	150	150	
		Plus:			
	33	End of Year Revenue Fund Balance	7,529	11,022	
	34	Deposit for Transfer to City General Fund (d)	1,839	2,037	
		Less:			
	35	Transfer to Construction Fund	(7,700)	(11,100)	
	36	Transfer to City General Fund	(1,839)	(2,037)	
	37	Transfer to Debt Service Reserve Fund	-	-	
	38	End of Year Balance	15,020	15,092	
		RATE STABILIZATION FUND			
	39	Beginning of Year Balance (e)	113,988	103,857	
_	40	Deposit From/(To) Revenue Fund	(10,131)	(11,554)	
	41	End of Year Balance	103,857	92,303	

(a) includes other operating and nonoperating income, including interest income on funds and accounts transferable to the Revenue Fund and reflects

projected contra revenue credits for Affordability Program Discounts (TAP Costs).

(b) Pursuant to the General Ordinance, as of June 30 of each Fiscal Year, the City may transfer (i) from the Rate Stabilization Fund to the Revenue Fund or (ii) from the Revenue Fund to the Rate Stabilization Fund, the amount determined. The amounts presented are subject to actual results.

(c) Projected estimates are subject to actual financial results and final transfers to/from Rate Stabilization (see note (b)). The amounts presented are subject to actual results.

2

(d) Transfer of interest earnings from the Bond Reserve Account to the Residual Fund as shown in Line 34 to satisfy the requirements for the transfer to the City General Fund shown on Line 36.

(e) Beginning balance is estimated based on projected financial results. The amounts presented are subject to actual results.

TABLE C-1A: PROJECTED REVENUE AND REVENUE REQUIREMENTS BASE RATES EXCLUDING TAP-R SURCHARGE (in thousands of dollars)

	Summary to Accompany the Rate Board Determination						
Line No.	Description	2023	2024	2025			
1	Water Service Existing Pater	204 028	206.002	208 680			
1-	Water Service - Existing Nates	294,038	290,093	296,000			
2	Water Service - Existing Rates	472 292	476 637	/78 997			
2 2a	Wastewater Service - Existing Rates	472,292	476.637	478,997			
3	Total Service Revenue - Existing Rates	766.330	772,731	777.677			
3a	Total Service Revenue - Existing Rates	766,330	775,297	780,504			
	Calc % Months	,		,			
	Year Increase Effective						
4	FY 2023						
4a	FY 2023						
5	FY 2024 12.75%		80,412	99,154			
5a	FY 2024 9.64% 9.794		61,022	75,268			
6	FY 2025 8.80%		-	62,977			
6a	FY 2025 8.16% 9.794			57,015			
7							
7a							
8							
8a							
9							
9a							
10	Total Additional Service Revenue Require	-	80,412	162,131			
10a	Total Additional Service Revenue Require	-	61,022	132,283			
11	Total Water & Wastewater Service Reven	766,330	853,142	939,807			
11x	Other Income (a)						
11a	Total Water & Wastewater Service Reven	766,330	836,318	912,787			
11xa	Other Income (a)						
12	Other Operating Revenue	29,601	29,664	29,713			
12a	Other Operating Revenue	29,601	34,591	34,639			
13	Debt Reserve Fund Interest Income	-	-	-			
13a	Debt Reserve Fund Interest Income	-	-	-			
14	Operating Fund Interest Income	1,882	1,982	2,023			
14a	Operating Fund Interest Income	1,882	3,803	4,022			
15	Rate Stabilization Interest Income	1,365	1,339	1,336			
15a	Rate Stabilization Interest Income	1,365	1,339	1,336			
16	Total Revenues	799,178	886,128	972,880			
16a	Total Revenues	799,178	876,052	952,785			
	OPERATING EXPENSES						

TABLE C-1A: PROJECTED REVENUE AND REVENUE REQUIREMENTS
BASE RATES EXCLUDING TAP-R SURCHARGE
(in thousands of dollars)

Summary to Accompany the Rate Board Determination							
Line No.	Description	2023	2024	2025			
	OPERATING EXPENSES						
17	Total Operating Expenses	(564.671)	(611.326)	(654,537)			
17a	Total Operating Expenses	(564,671)	(603,166)	(638,190)			
	NET REVENUES						
18	Transfer From/(To) Rate Stabilization Fun	5,000	5,000 100				
18a	Transfer From/(To) Rate Stabilization Fun	5,000	100	600			
19	NET REVENUES AFTER OPERATIONS	239,507	274,902	318,943			
19a	NET REVENUES AFTER OPERATIONS	239,507	239,507 272,986 315,195				
	DEBT SERVICE						
20	Outstanding Bonds	(187,747)	(185,847)	(183,090)			
20a	Outstanding Bonds	(187,747)	(185,847)	(183,090)			
21	Pennvest Parity Bonds	(10,935)	(12,031)	(16,329)			
21a	Pennvest Parity Bonds	(10,935)	(12,031)	(16,329)			
22	Projected Future Bonds	-	(21,083)	(53,880)			
22a	Projected Future Bonds	-	(19,167)	(50,132)			
23	Commercial Paper	(900)	(900)	(900)			
23a	Commercial Paper	(900)	(900)	(900)			
24	WIFIA		(17)	(956)			
24a	WIFIA		(17)	(956)			
25	Total Senior Debt Service	(199,582)	(219,878)	(255,154)			
25a	Total Senior Debt Service	(199,582)	(217,961)	(251,406)			
26	TOTAL SENIOR DEBT SERVICE COVERAGE (1.20	1.25	1.25			
26a	TOTAL SENIOR DEBT SERVICE COVERAGE	1.20	1.25	1.25			
27	Subordinate Debt Service	-	-	-			
27a	Subordinate Debt Service	-	-	-			
28	Transfer to Escrow	-	-	-			
28a	Transfer to Escrow	-	-	-			
29	Total Debt Service on Bonds	(199,582)	(219,878)	(255,154)			
29a	Total Debt Service on Bonds	(199,582)	(217,961)	(251,406)			
30	CAPITAL ACCOUNT DEPOSIT	(23,383)	(24,295)	(25,242)			
30a	CAPITAL ACCOUNT DEPOSIT	(23,383)	(24,295)	(25,242)			
31	TOTAL COVERAGE (L19/(L25+L27+L30))	1.07	1.13	1.14			
31a	TOTAL COVERAGE (L19a/(L25a+L27a+L30a	1.07	1.13	1.14			

TABLE C-1A: PROJECTED REVENUE AND REVENUE REQUIREMENTS
BASE RATES EXCLUDING TAP-R SURCHARGE
(in thousands of dollars)

Summary to Accompany the Rate Board Determination						
Line No.	Description	2023	2024	2025		
32	Beginning of Year Balance	16,102	15,095	15,079		
32a	Beginning of Year Balance	16.102	15.095	15.079		
33	Interest Income	155	150	150		
33x	Plus:					
33a	Interest Income	155	150	150		
33ax	Plus:					
34	End of Year Revenue Fund Balance	16,542	30,729	38,547		
34a	End of Year Revenue Fund Balance	16,542	30,729	38,547		
34x	Additional Rev Req Needed	0	0	(1)		
35	Deposit for Transfer to City General Fund	1,945	1,999	2,026		
35x	Less:					
35a	Deposit for Transfer to City General Fund	1,945	1,999	2,026		
35ax	Less:					
36	Transfer to Construction Fund	(16,600)	(29,800)	(34,400)		
36a	Transfer to Construction Fund	(16,600)	(29,800)	(34,400)		
37	Transfer to City General Fund	(1,945)	(1,999)	(2,026)		
37a	Transfer to City General Fund	(1,945)	(1,999)	(2,026)		
38	Transfer to Debt Service Reserve Fund	(1,105)	(1,096)	(4,298)		
38a	Transfer to Debt Service Reserve Fund	(1,105)	(1,096)	(4,298)		
39	End of Year Balance	15,095	15,079	15,078		
39a	End of Year Balance	15,095	15,079	15,078		
	RATE STABILIZATION FUND					
40	Beginning of Year Balance (c)	138,989	137,760	133,625		
40a	Beginning of Year Balance (c)	138,989	137,760	133,625		
41	Deposit From/(To) Revenue Fund	(5,000)	(100)	(600)		
41a	Deposit From/(To) Revenue Fund	(5,000)	(100)	(600)		
42	Deposit From/(To) TAP-R	3,771	(4,036)	476		
42a	Deposit From/(To) TAP-R	3,771	(4,036)	476		
43	End of Year Balance	137,760	133,625	133,501		
43a	End of Year Balance	137,760	133,625	133,501		

PA Hearing Ex I, Page 29

TABLE C-1: PROJECTED REVENUE AND REVENUE REQUIREMENTS Base and TAP-R Surcharge Rates (in thousands of dollars)

Line			Fiscal Year Ending June 30,
No.	Description	2024	
	OPERATING REVENUE		
1	Water Service - Existing Rates		
2	Wastewater Service - Existing Rates		
3	Total Service Revenue - Existing Rates		
	Additional Service Revenue Required		
	Percent Months		
	Year Increase Effective		
4	FY 2024 10		
5	FY 2025 10		
6	Total Additional Service Revenue Required		
7	Total Water & Wastewater Service Revenue	801,353	
	Other Income (a)		
8	Other Operating Revenue	28,249	
9	Debt Reserve Account Interest Income		
10	Operating Fund Interest Income	8,084	
11	Rate Stabilization Interest Income		
12	Total Revenues	837,686	
	OPERATING EXPENSES		
13	Total Operating Expenses	(591,064)	
	NET REVENUES		
14	Transfer From/(To) Rate Stabilization Fund	8,200	
15	NET REVENUES AFTER OPERATIONS	254,822	
	DEBT SERVICE		
	Senior Debt Service		
	Revenue Bonds		
16	Outstanding Bonds	(185,103)	
17	PENNVEST Loans	(13,359)	
18	Projected Future Bonds	(10,073)	
19	Commercial Paper	(1,134)	
20	WIFIA	(24)	
21	Total Senior Debt Service	(209,694)	
22	TOTAL SENIOR DEBT SERVICE COVERAGE (L15/L21)	1.22 x	
23	Subordinate Debt Service		
24	Transfer to Escrow		
25	Total Debt Service on Bonds	(209,694)	
26	CAPITAL ACCOUNT DEPOSIT	(31,709)	
27	TOTAL COVERAGE (L15/(L21+L23+L26))	1.06 x	
28	End of Year Revenue Fund Balance	13,419	

TABLE C-1: PROJECTED REVENUE AND REVENUE REQUIREMENTS Base and TAP-R Surcharge Rates (in thousands of dollars)

Line			Fiscal Year Ending June 30,
No.	Description	2024	
	RESIDUAL FUND		
29	Beginning of Year Balance	16,524	
30	Interest Income	910	
	Plus:		
31	End of Year Revenue Fund Balance	13,419	
32	Deposit for Transfer to City General Fund (b)	1,687	
	Less:		
33	Transfer to Construction Fund	-	
34	Transfer to City General Fund	(1,687)	
35	Transfer to Debt Reserve Account	-	
36	End of Year Balance	30,853	
	RATE STABILIZATION FUND		
37	Beginning of Year Balance (c)	133,985	
38	Deposit From/(To) Revenue Fund	(8,200)	
	Interest	6,653	
39	End of Year Balance	132,438	

(a) Includes other operating and nonoperating income, including interest income on funds and accounts transferable to the Revenue Fund

(b) Transfer of interest earnings from the Debt Reserve Account to the Residual Fund as shown in Line 32 to satisfy the requirements for the

transfer to the City General Fund shown on Line 34.

(c) FY 2024 beginning balance is estimated based on FY 2023 results.

Sewer Wholesale		115-			PA F	Jearing Ex I Page 31
Abington	2020	2021	<u>2022</u>	<u>2023</u>	<u>2024</u>	Growth
Volume (Mcf)	89,130.84	95,624.10	90,821.23	105,126.52	123,322.31	10.73%
SS (1,000 lbs.)	867.52	1,016.17	1,109.66	1,135.58	1,350.14	
BOD (1,000 lbs.)	1,340.74	1,367.85	1,320.47	1,350.47	1,608.15	
Bensalem						
Billing Units	150 100 17	1 15 5 10 00	1 4 6 3 6 4 6 6	126 500 00	146 250 24	0.010/
Volume (Mct) Capacity (cfs)	158,136.47	145,540.02	146,384.88	136,509.23	146,359.34	-0.01%
SS (1,000 lbs.)	1,558.05	1,517.30	1,628.44	1,709.07	2,287.37	
BOD (1,000 lbs.)	1,654.47	1,573.99	1,640.03	1,738.55	2,488.79	
Bucks County						
Billing Units	076 051 40	000 500 1 6	00704604	707 464 25	077 (10 47	2 5 20/
Volume (Mct) Capacity (cfs)	876,051.40	898,599.16	907,046.84	/9/,464.35	977,619.47	2.53%
SS (1,000 lbs.)	12,255.36	10,401.53	8,964.71	10,130.17	11,049.81	
BOD (1,000 lbs.)	11,666.52	9,951.66	9,489.15	10,035.25	8,886.02	
<u>Cheltenham</u>						
Billing Units	446 472 00		200 020 17	264 504 60	400 007 05	2 010/
Volume (Mct) Capacity (cfs)	446,173.80	416,914.60	369,830.17	364,584.68	403,097.65	2.91%
SS (1,000 lbs.)	3,007.65	3,136.58	3,062.17	2,145.54	2,477.52	
BOD (1,000 lbs.)	2,615.70	2,740.23	2,690.21	1,891.00	2,176.99	
Lower Moreland						
Billing Units						
Volume (Mcf)	59,179.71	61,632.08	64,723.71	61,109.52	78,643.06	6.71%
SS (1.000 lbs.)	599.53	623.50	655.58	621.61	806.00	
BOD (1,000 lbs.)	450.38	468.31	492.52	467.29	606.61	
Lower Southampton						
Billing Units						
Volume (Mcf)	273,566.41	271,505.19	265,334.90	232,688.24	296,104.68	3.73%
SS (1.000 lbs.)	2.530.23	2.361.83	1.000.50	1.091.99	2.353.71	
BOD (1,000 lbs.)	1,875.64	1,922.08	1,100.51	1,177.12	2,015.33	
DELCORA						
Billing Units						
Volume (Mcf)	1,090,843.95	1,161,714.69	1,007,810.02	997,284.68	1,184,161.53	5.52%
SS (1.000 lbs.)	12.007.69	12,225.69	11.816.18	11.500.73	13.302.90	
BOD (1,000 lbs.)	9,904.94	10,232.88	10,469.63	10,064.28	11,375.26	
Lower Merion						
Billing Units						
Volume (Mcf)	315,879.51	323,284.48	289,764.48	269,977.36	294,528.99	0.55%
Capacity (cts)	3 291 71	3 363 04	3 048 06	2 818 16	3 059 45	
BOD (1,000 lbs.)	2,813.90	2,873.42	2,593.02	2,411.02	2,618.61	
Springfield (less Wyndmo	or)					
Billing Units						
Volume (Mcf)	107,721.52	108,417.20	112,117.47	123,250.39	144,026.89	8.71%
Capacity (cfs)	2 544 00	2 074 95	1 905 10	2 070 96	2 206 02	
BOD (1,000 lbs.)	2,250.52	2,074.83	2,041.23	2,070.90	2,000.84	
Upper Darby						
Billing Units						
Volume (Mcf)	448,654.10	480,866.30	424,340.42	421,289.83	470,540.68	3.50%
Capacity (cfs)	4 200 51	4 600 00	4 1 20 07	1 6 6 7 21	7 10 4 2 2	
55 (1,000 lds.) BOD (1,000 lds.)	4,366.51 3,722.72	4,680.00 3,990.01	4,129.87 3,520.99	4,667.31 3,611.26	7,186.33 4,435.66	
Contractical data and a	-,	-,	-,	,	,	
<u>>pringtiela (Wyndmoor)</u> Billing Units						
Volume (Mcf)	17,263.64	18,243.12	17,046.81	17,548.51	18,571.30	2.90%
Capacity (cfs)						
SS (1,000 lbs.)	203.53	208.51	233.25	184.25	121.71	
	149.20	100.03	191.00	142.42	119.52	

Source: Assumptions - 14