April 25, 2023

Via electronic mail

Water Rate Board
1515 Arch Street
17th Floor
Philadelphia, PA 19102-1595

Re: **Comments to Water Rate Board on Philadelphia Water Department's 2018 Rate Proceeding.**

Dear Water Rate Board,

On behalf of Citizens for Pennsylvania's Future (PennFuture), we write to provide comments on the above-referenced Philadelphia Water Department (PWD) rate proceeding.

PennFuture is a membership-based, non-profit, environmental organization dedicated to leading the transition to a clean energy economy in Pennsylvania and beyond. PennFuture strives to protect our air, water, and land, and to empower citizens to build sustainable communities for future generations. A main focus of PennFuture's work is to improve and protect water resources and water quality across Pennsylvania, with particular emphasis on the Delaware River Basin and Philadelphia, through public outreach and education, advocacy, and litigation.

PWD formally filed notice on January 24, 2023 of its desire to increase rates for residential and commercial ratepayers. The department requested a total increase of about 20 percent over two years for residential ratepayers. This represents a substantial increase for Philadelphia residents, who are already dealing with rising energy costs and may only be starting to feel some relief from the impact of rising inflation.

In its filing, PWD argues[1] that additional revenues are needed to meet "significantly increasing costs." The department says that this increase will generate nearly $144 million in revenue. The filing goes on to state that inflation is widespread throughout the economy and additional resources are required to pay increasing costs for operations, upgrades, repairs, improvements, and maintenance activities.

To be clear, PennFuture strongly supports additional funding for water utilities across Pennsylvania, including PWD. Water systems across the Commonwealth have fallen into disrepair due to generations of underinvestment. Our organization has advocated at every level of government to secure funding for water infrastructure to improve water quality, reduce flooding, and help Pennsylvanians access clean natural resources to provide relief from increasing heat due to climate change.

[1] PWD Exhibit 2, Summary Fact Sheet, *available at* https://www.phila.gov/media/20210115161608/PWD-Exhibit-2-Summary-Fact-Sheet.pdf.

We recognize that many of the financial challenges facing PWD are not unique to Philadelphia and are a direct result of prolonged underinvestment in our water infrastructure system at the federal level. According to the American Society of Civil Engineers (ASCE)[2], the federal government accounted for 63% of total spending in the water sector in 1977. It accounted for just 9% of total capital spending in 2017. The burden to maintain the city's water system has fallen to residents in the absence of sustainable and equitable federal funding.

Not only has the federal government often left funding for water infrastructure to local municipalities, the nature of the support it does provide has changed from the era as well. The Clean Water Act established the Construction Grants Program upon its passage in 1972. Administered by the Environmental Protection Agency, this program delivered grants directly to municipalities and helped fund much of our nation's current water infrastructure. Despite the program's early success, it was replaced by the Clean Water State Revolving Fund in 1987, which was followed by the creation of the Drinking Water State Revolving Fund in 1996. Although the state revolving funds provide critical funding to address water infrastructure needs, they are loan programs that require the state to match the allocated federal funds. This has increased state and local financial capacity requirements while placing additional burdens on paying for investments in water infrastructure on communities in need like Philadelphia.

Recognizing the constraints that exist for PWD, funding provided via the American Rescue Plan Act (ARPA) to the City of Philadelphia should serve as a critical lifeline to the department. Philadelphia received $1.4 billion from the federal government via ARPA to assist with relief efforts related to the COVID-19 pandemic and recession. It also authorized Philadelphia to invest in its water infrastructure. To date, Mayor Kenney's administration has spent roughly $600 million of these funds, leaving approximately $800 million that must be allocated by the end of 2024. And although it appears from testimony provided in connection to this proceeding[3] and as part of the City of Philadelphia's budget proceedings[4] that ARPA funding would not necessarily provide immediate relief for residents, it would significantly reduce the department's debt service in the future. This would, in turn, mitigate rising costs for those who can least afford them.

The City of Philadelphia has reiterated that it is providing support to PWD via ARPA funding: "The ARPA funds did allow the General Fund to provide additional support to the Water Fund. After the City received its American Rescue Plan Act allocation, the City was able to adjust the pension contribution allocation across funds, such that $25M/year less is coming from

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[2] 2021 Report Card for America's Infrastructure, *available* at https://infrastructurereportcard.org/cat-item/drinking-water-infrastructure/.

[3] Response to Public Advocate's Interrogatories (Set X) and Requests for Production of Documents Questions 1-25, X19 – X25, *available* at https://www.phila.gov/media/20230412175437/Public-Advocate-Discovery-Set-X-2023.04.03-FINAL.pdf.

[4] Department of Finance, responses to Councilmember Gilmore Richardson 4-14-2023, p. 1-4, *available* at http://phlcouncil.com/wp-content/uploads/2023/04/City-Council-FY24-Budget-Questions_Finance-KGR-responses.pdf.

Water (being covered by the General Fund instead). This is recurring ($125M over 5 years). This allocation is how the General Fund has been able to help the Water Fund on an ongoing basis."

This sum represents less than 10 percent of the total funding provided to Philadelphia to aid in its recovery from the COVID-19 pandemic and has had little to no impact on PWD's need for additional revenue from ratepayers who are already struggling to keep up with rising costs. The City of Philadelphia has gone on to state that the $125 million investment is all that it can provide due to revenue losses suffered due to the pandemic and the seemingly precarious state of the city's finances. This rationale, however, falls flat given that the city had a $779 million fund balance at the end of the last fiscal year. It does not appear that the fund balance is similarly restricted as ARPA in providing support to PWD for increased costs associated with operations. It appears that city government has simply made a policy choice to pass rising costs onto residents to protect its bottom line.

It is also unclear from the City's testimony provided during the budget process[5] to what extent PWD has advocated for greater assistance from the Recession, Inflation and Reopening Reserve. Testimony from the Finance Department indicates that PWD was allocated $13.9 million from this reserve in FY23 to cover the impact of inflation on costs for materials and chemicals. But, the Finance Department's testimony does not make clear whether PWD sought support from the reserve for FY24. Greater clarity around

The recent threat to the city's drinking water supply due to a toxic chemical spill highlighted the vulnerability to one of the city's most precious resources. All residents deserve access to clean water at an affordable rate. The instant proceeding and previous filings seem to indicate that PWD believes that it cannot sustain operations without significant cost increases for ratepayers regardless of funding opportunities that may be available to it. This is not a sustainable pathway to ensure that all residents have the same access to clean water.

Funds available to the city via ARPA, the general fund balance, and the Recession, Inflation and Reopening Reserve, present city government with an opportunity to increase investments in our water infrastructure system and avoid passing costs onto residents. There is no question that PWD requires additional resources to meet its obligations to city residents, but its continued reliance on ratepayers is the wrong approach.

It is incumbent on PWD and the City of Philadelphia to ensure that it is exploring every avenue to both mitigate the burden of rate increases on individuals, as well as ensure that the promises of the Green City, Clean Waters plan are being effectuated to their fullest extent. To that end, PennFuture encourages that other avenues of funding be considered, and that PWD not waver from its commitment to installing green stormwater infrastructure (GSI) and ensuring that the city and its residents maximize their return on investment through the co-benefits that GSI provides.

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[5] Department of Finance, responses to Councilmember Gilmore Richardson 4-14-2023, p. 1-2, *available* at http://phlcouncil.com/wp-content/uploads/2023/04/City-Council-FY24-Budget-Questions_Finance-KGR-responses.pdf.

I. Green Stormwater Infrastructure Is Effective And Resilient In The Face Of Climate Change

Philadelphia manages its stormwater through a hybrid approach using both green- and grey infrastructure across its combined sewer system (CSS) and municipal separate storm sewer system (MS4) areas. In the CSS, PWD is currently successfully implementing its 25-year long term control plan, a first-of-its-kind strategy based primarily on green infrastructure, known as *Green City*, *Clean Waters.* Because of the Department's long-term commitment to *Green City, Clean Waters*, it is critical that PWD have reliable, long-term funding to ensure the success of the program.

Green City, Clean Waters (GCCW) was the alternative that was chosen through a process designed to select an approach that represents the best balance among performance, cost, affordability, sustainability, social/ environmental benefits, public support and practical factors such as constructability.[6] The implementation of GCCW will not only bring Philadelphia into compliance with federal and state clean water requirements in a cost effective manner, but will also provide a host of benefits that can tangibly improve the lives of Philadelphians, including decreased heat island effect, improved air quality, high quality job creation[7], and improved public safety.[8]

Green stormwater management strategies will also create a more resilient stormwater management system in the face of climate change. PWD has seen that its GSI projects across the city are outperforming expectations in terms of volume management. This is consistent with a growing body of research literature suggesting that GSI is more effective at managing runoff volumes and peak flows than grey, centralized stormwater management approaches.[9]

II. Grey Infrastructure Is Not An Inexpensive Alternative

There has been an implication by PWD leadership and staff that green infrastructure's costs have increased, while the costs of grey infrastructure have stayed static, and that PWD should reconsider its use of GSI. However, the cost of concrete products have increased dramatically since the initial cost estimates completed during the GCCW planning process, rising

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[6] *Green City, Clean Waters* (Sept. 1, 2009) (hereinafter *Green City, Clean Waters*), at 10-1, *available at* http://www.phillywatersheds.org/ltcpu/LTCPU_Complete.pdf.

[7] Sustainable Business Network, *Green Stormwater Infrastructure (GSI): A Tool for Economic Recovery and Growth in Pennsylvania* (May 2021), *available at* https://www.sbnphiladelphia.org/wp-content/uploads/2021/06/GSI_A-Tool-for-Economic-Recovery-and-Growth-in-PA_doubleview.pdf.

[8] *E.g.*, Tom Avril, Gun violence can be reduced by clearing vacant lots, study finds, The Philadelphia Inquirer (Feb. 26, 2018), https://www.inquirer.com/philly/health/reduce-gun-violence-shooting-clean-cities-vacant-lots-penn-columbia-study-20180226.html.

[9] *See*, *e.g.*, Hopkins et al., *Lessons learned from 20 years of monitoring suburban development with distributed stormwater management in Clarksburg, Maryland, USA*, 41 Freshwater Science 3 (Sept. 2022); Miller et al., *Assessing urban rainfall-runoff response to stormwater management extent* (2021).

69.5% from 2011 to 2023.[10] Furthermore, industry projections indicate that these prices will only increase further, due to various ongoing global supply chain issues as well as climate-related issues, such as material-supply barges on the Mississippi River being limited by drought-caused low water levels.[11]

Should PWD be considering new grey infrastructure as an alternative to green infrastructure, these projects should be subject to a publicly available, robust and holistic analysis to assess that they will be both more effective at water management, as well as more cost-efficient, than their green infrastructure alternatives. The cost and burden of grey infrastructure is significant, and ultimately fails to provide the additional climate-resilience and other co-benefits of green infrastructure. Grey infrastructure is not the only choice for stormwater management, and should not be treated as the default option. PWD's successful administration of GCCW thus far is a testament to both the success and the full potential of the program, and PWD should stay the course.

III. PWD Should Consider Other Forms of Funding Before Increasing Rates

From its beginning, *Green City, Clean Waters* contemplated the necessity of installing greened acres on both public and private development, with investment in the latter ultimately dictating the long-term success of the program.[12]

PWD has taken steps to make it easier to install greened acres on private land. All new and/or redevelopment sites disturbing greater than 15,000 square feet of earth are required to infiltrate, retrain, or treat the first inch of stormwater on-site. In 2015, Philadelphia's stormwater regulations were amended to increase the runoff depth managed from 1 to 1.5 inches, decrease the release rate from 0.24 cfs/acre to 0.05 cfs/acre for slow release systems, and increase volume reducing requirement from 20% to 100%.[13] PWD also manages a stormwater grant program for non-residential landowners to install stormwater management practices.

All of these grant regulatory mechanisms advance the goals of *stormwater management* through private development. Indeed, PWD's stormwater regulations properly shift a major portion of the cost of compliance with the state and federal enforcement orders away from PWD and its ratepayers and onto private property developers. Just as developers must meet building code requirements for the design and construction of their projects, and factor those costs into their development budgets, so too must they meet PWD's stormwater management requirements as a cost of doing business. By successfully administering this regulatory program, PWD

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[10] U.S. Bureau of Labor Statistics, Mid-Atlantic Information Office, Producer Price Index, Concrete and related products, https://www.bls.gov/regions/mid-atlantic/data/producerpriceindexconcrete_us_table.htm.

[11] Sebastian Obando, *Construction's supply chain outlook: more shortages, price hikes ahead*, Construction Dive (Nov. 14, 2022) https://www.constructiondive.com/news/supply-chain-construction-building-materials-price-2023/636442/.

[12] *Green City, Clean Waters,* at 1-2 (describing PWD's vision as including "[r]equirements and incentives for green stormwater infrastructure to manage runoff at the source on private land").

[13] *Green City, Clean Waters*, Evaluation and Adaptation Plan, 2016 (hereinafter 2016 EAP), at 4-2, *available at* http://phillywatersheds.org/doc/Year5_EAPBody_website.pdf.

receives "credit" towards its own Clean Water Act compliance obligations – every "greened acre" created by development projects counts towards the 9,564 greened acres required under the CO&A.

Beyond the formal update to the stormwater regulations, PWD has worked with the City Planning Commission, the Development Services Committee, and City Council to find other cost neutral mechanisms to incentivize developers to maximize stormwater management.[14] These have included the development of two new zoning code revisions that incentivize green stormwater development in exchange for height increases or density bonuses and an expansion of the Green Roof Tax Credit. Green infrastructure created under these incentive programs also counts towards PWD's "greened acre" compliance obligations.

Finally, PWD invests directly in green infrastructure retrofits on already-developed private properties. This provides a cost-savings to ratepayers, as compared to investing only in green infrastructure on public property, because many of the most cost-effective areas to site green stormwater infrastructure projects remain on privately owned land. It's important that these regulatory changes and incentives continue and are strengthened because for these private land owners, stormwater charges on impervious surfaces alone do not create a sufficient incentive for developers to invest in building green infrastructure.[15] Nor should the burden of stormwater management costs be borne solely by ratepayers and residents. It is not the responsibility of ratepayers to subsidize private development.

The University of Maryland Environmental Finance Center released a report in 2022—*Sustainable Funding for Philadelphia's Green City, Clean Waters Plan*—that examined, among other things, methods of ensuring sustainable funding for the GCCW program.[16] These include debt financing, stormwater fees, and adjustments to tax abatement. The full report should be viewed for details, which are summarized here.

Accessing capital markets, i.e., debt financing, to fund the GSI stormwater grants program can provide the enabling conditions for a strong implementation market over the remaining phases of plan implementation. While the use of debt for this purpose is a policy determination for PWD and the City, the research team has found that there do not appear to be either legal or accounting barriers to doing so. Specifically, the City's ability to debt finance its drinking water and wastewater systems is derived primarily from certain statutes and ordinances that authorize the issuance of revenue bonds for the purpose of financing projects or improvements to the "system," which are defined broadly enough to include improvements on private property.

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[14] *Id.* at 4-6.
[15] *See* NRDC, et. al., *Financing Stormwater Retrofits in Philadelphia and Beyond* (Feb. 2012), *available at* https://www.nrdc.org/sites/default/files/StormwaterFinancing-report.pdf.
[16] UMD Finance Center, *Sustainable Funding for Philadelphia's Green City, Clean Waters Plan*, (June 2022), *available at* https://arch.umd.edu/research-creative-practice/centers/environmental-finance-center/resources/publications/sustainable-funding-philadelphias-green-city-clean-waters-plan.

Adjustments could be made to PWD's stormwater fee. The stormwater fee for residential properties (i.e., billing and collection charge to cover customer costs) is a flat fee. For non-residential/commercial properties, the fee is calculated using an equation that includes a gross area unit charge and an impervious area unit charge. Since the element of the rate structure that relates most directly to the amount of runoff generated at a site is the impervious area unit charge, PWD could seek an increase in that unit charge on non-residential properties to increase the amount of resources or funds available for the incentive programs. However, the way that all rates are calculated and allocated across all classes of ratepayers may make this proposal infeasible. Increasing all stormwater rates involves a complex set of factors addressed in the rate case setting and is not a topic that can be appropriately addressed in the context of this project.

An additional incentive strategy that could be used to generate more greened acres is tax abatement. The City already uses tax abatement for other purposes, but this could be set up and offered to landowners who implement stormwater management voluntarily. This strategy would not directly stabilize or increase PWD's funding for GSI but would instead decrease the number of greened acres they must pay for through the grants program, potentially decreasing their revenue needs. Because abatements are not currently enabled for stormwater management, this would likely require legislative action. If this strategy has not been considered in the past, it deserves further discussion to understand its potential impact.

Another strategy for reducing PWD's GSI funding needs would be to adjust their stormwater credits. Although evaluating the impacts of credits on the incentives program was an initial focus on this project, any adjustments the credit calculation directly implicates rates and the relevant PWD panel members were not able to engage with the research team on this topic, so adjustments to the credit system were not considered in more depth for this project.

IV. Conclusion

If past behavior is the best predictor of future performance, then we can expect that PWD and the City of Philadelphia will continue to place more burden on ratepayers to fund the city's water system. As time goes on, this will have significant consequences for homeowners who can no longer afford their water bills and for renters who cannot afford to pay rent in the face of increases from landlords who will try to keep up with rising utility costs. This fundamental resource will grow ever more expensive, and access will be placed out of reach for Philadelphia residents. This approach is untenable.

The City of Philadelphia has not exhausted all its financing efforts to avoid PWD passing costs onto ratepayers. This is demonstrated through its limited use of ARPA funding to invest in long-term upgrades to our aging water infrastructure system and reduce the need to fund these projects through debt service. It is demonstrated through the city's apparent reticence to utilize the general fund balance to cover immediate cost increases facing PWD. It is demonstrated in the lack of clarity around PWD's efforts to secure additional funds from the City's Recession, Inflation and Reopening Reserve for FY24. Finally, it is proven through PWD's lack of finance innovation to provide necessary support to its *Green City, Clean Waters* program.

This Board, however, can help PWD and city government identify a path that does not burden ratepayers through forcing officials to embrace innovation and investment. The fiscally

cautious approach is not always the prudent approach and the city must be reminded of this. As such, we recommend the following:

1. The Board should require greater clarity around PWD's ability to access funding from the Recession, Inflation and Reopening Reserve and what that would mean relative to the instant proceeding. If funding is available, this must be allocated to PWD to offset costs for ratepayers and subsequently reduce or eliminate the request to increase rates.
2. The Board should continue to demonstrate its interest in utilizing federal funding opportunities to reduce costs for ratepayers and, to the extent possible, require additional investment from city government utilizing ARPA funding for the financing of capital projects.
3. To the extent that the two items above do not eliminate the need for a rate increase, this Board should require that the General Fund should be utilized to account for any short-term costs that may impact PWD's operations through FY24 and FY25.
4. The Mayor or City Council should direct PWD to amend its Stormwater Management Regulations to cover city-funded projects with an earth disturbance over 5,000 square feet, rather than the current 15,000 square feet. Not only will this significantly increase Philadelphia's ability to manage stormwater but will ultimately reduce costs for ratepayers by placing the burden of responsibility on developers.
5. PWD must examine alternative financing options as it relates to its stormwater management to ensure that costs are shared equitably throughout the city, as our ability to effectively manage our stormwater impacts all. The study mentioned above is part of a growing body of literature on this topic and PennFuture is also aware of potential recommendations[17] that have been raised elsewhere in the instant proceeding. A broad examination is required to ensure that PWD meets its obligations to ensure that Philadelphians have access to clean water and ensure affordable costs for ratepayers.

These recommendations will only be acted upon if the Rate Board stands with concerned residents and other stakeholders in opposing the department's current request to increase rates by approximately 20 percent over two years. The Rate Board must do so, however, because the current path simply is not sustainable for either residents or PWD.

The department's request should be stayed or denied pending further investigation regarding the first three recommendations above. The fourth and fifth recommendations should be considered by the Rate Board to be conditions upon which future rate increases must be

[17] Direct Testimony of Lafayette K. Morgan, Jr. and Jennifer L. Rogers on behalf of the Public Advocate, p. 6-10, *available* at https://www.phila.gov/media/20230418152235/PA-St-1-Morgan-Rogers.pdf

judged. Change is needed within PWD and city government to ensure its long-term sustainability and affordability for residents.

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Thank you for your consideration of these comments.

Sincerely,

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