PHILADELPHIA WATER DEPARTMENT
REBUTTAL STATEMENT NO. 1

BEFORE THE
PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

Re: Philadelphia Water Department Proposed Charges in Rates and Charges	2022 TAP-R Adjustment Proceeding

Rebuttal Testimony

of

Raftelis Financial Consultants

on behalf of

the Philadelphia Water Department

Topics Addressed:

Projected number of TAP Participants

Dated: March 29, 2022

TABLE OF CONTENTS

I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q1. PLEASE STATE YOUR NAMES AND POSITIONS.

A1. Our names are Jon Pilkenton Davis, Henrietta Locklear and Brittany Baporis. We are consultants working at Raftelis Financial Consultants ("RFC") providing client-specific advising services for utilities, such as of the Philadelphia Water Department, also referred to in this rebuttal testimony as "PWD" or the "Department." Together we constitute a panel from RFC that is testifying on behalf of the Department.

Q2. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A2. In this rebuttal, we provide the Department's response to the adjustments, recommendations and criticisms that Mr. Lafayette Morgan has expressed in his direct testimony (PA Statement 1, Schedules LKM-1 through LKM-8, and Appendices A and B) on behalf of the Public Advocate.

We specifically address the following areas of Mr. Morgan's testimony:

- Projected number of TAP participants for the Next Rate Period

Q3. PLEASE IDENTIFY THE SCHEDULES THAT ACCOMPANY THIS REBUTTAL TESTIMONY.

A3. The following schedule accompanies this rebuttal testimony:

Schedule RFC-2.A: Resume of Brittany Baporis.

Please note that the resumes of the other panel members from RFC were included in Schedule RFC-2.

II. REBUTTAL TESTIMONY

Q4. PLEASE SUMMARIZE THE DEPARTMENT'S PROJECTION OF THE NUMBER OF TAP PARTICIPANTS IN THE NEXT RATE PERIOD.

A4. RFC prepared the projections used in the Formal Notice that show approximately 12,500 additional participants will be enrolled in TAP by November 2022. Refer to Schedules RFC-3 and RFC-4 for more details.

Q5. HAVE YOU EXAMINED THE DIRECT TESTIMONY AND SCHEDULES FILED BY PUBLIC ADVOCATE WITNESS LAFAYETTE MORGAN?

A5. Yes, we have.

Q6. PLEASE SUMMARIZE THE RECOMMENDATIONS MADE BY MR. MORGAN ON BEHALF OF THE PUBLIC ADVOCATE.

A6. The Public Advocate appears to agree with increasing the projected number of TAP participants in the Next Rate Period. There is disagreement, however, on the additional number of TAP participants that can be expected from the City's efforts to increase participation in TAP.

We would note that the change in the number of TAP participants impacts factors in the formula used to calculate TAP Rider rates for the Next Rate Period. So, changes in the number of TAP participants results in different TAP Rider rates for the Next Rate Period.

A. PROJECTED NUMBER OF TAP PARTICIPANTS

Q7. HOW DO THE PROJECTED AVERAGE MONTHLY NUMBER OF TAP PARTICIPANTS COMPARE USING THE DEPARTMENT'S PROJECTIONS VERSUS THOSE PROJECTIONS PROVIDED BY THE PUBLIC ADVOCATE FOR THE NEXT RATE PERIOD?

A7. The table below shows the projected number of TAP participants under the Department and Public Advocate proposals.

Projected Number of TAP Participants				
	Department's Proposal Schedule RFC-3		**Public Advocate's Proposal** Schedule LKM-3	
June 2022	17,148		17,148	
July 2022	18,148	5.83%*	18,251	6.43%*
August 2022	20,148	11.02%*	19,426	6.43%*
September 2022	22,398	11.17%*	20,676	6.43%*
October 2022	25,898	15.63%*	22,006	6.43%*
November 2022	29,648	14.48%*	23,422	6.43%*
December 2022 to August 2023	29,648		23,422	

Average monthly number of TAP participants (for Sept. 2022 to Aug. 2023)	28,731	23,075
* This shows the percentage change in the projected number of TAP participants from the prior month.		

Q8. DO YOU AGREE WITH MR. MORGAN'S PROJECTED NUMBER OF TAP PARTICIPANTS?

A8. No.

Q9. PLEASE STATE THE BASES FOR YOUR DISAGREEMENT WITH MR. MORGAN'S PROJECTED NUMBER OF TAP PARTICIPANTS?

A9. The Department anticipates enrolling PWD customers into TAP who have been deemed eligible for the Commonwealth of Pennsylvania administered Low-Income Household Water Assistance Program ("LIHWAP") through a proxy eligibility determination. A similar or proxy eligibility determination could be made for participants in the Low-Income Home Energy Assistance Program ("LIHEAP"), which is administered by the Pennsylvania Department of Human Service. In light of the above, the Department projects a large pool of potential new TAP participants. Mr. Morgan fails to reflect this in his analysis.

Q10. DOES IT MATTER THAT LIHEAP IS COMPOSED OF THREE GRANT PROGRAMS WHILE LIHWAP IS CURRENTLY COMPOSED OF ONLY A CRISIS GRANT?

A10. No. All LIHEAP programs utilize an eligibility criteria of 150% of Federal Poverty Level, similar to TAP. Therefore, all LIHEAP enrollees, regardless of grant type, are income-eligible for TAP and could be considered for the pool of potential applicants.

Q11. ARE THERE REASONS WHY THE DEPARTMENT WILL LIKELY ATTAIN A HIGHER LEVEL OF ENROLLMENT THAN ESTIMATED BY MR. MORGAN?

A11. Yes. First, as stated above, Mr. Morgan fails to reflect the large new pool of potential new TAP participants in his analysis.

LIHWAP New Participants — Based on materials Mr. Morgan provided with his testimony, 49,019 applicants in Philadelphia County received natural gas energy assistance between September 27, 2020 and September 9, 2021. This assistance has identical income eligibility criteria to TAP of 150% of Federal Poverty Level. In September, 2021 there were 15,852 participants in TAP, or a difference of 33,167 households receiving natural gas energy assistance compared to TAP for the same period. This means there is significant potential for new TAP participants within this pool of eligible households. Mr. Morgan offers no analysis to account for a significant increase in the pool of potential TAP participants.

The Department acknowledges that this potential new participant pool would be reduced by some amount to reflect energy assistance applicants who are customers of PGW but not customers of PWD. The Department made an allowance for this reduction in their

projections. However, this would not sufficiently constrain the pool to make Mr. Morgan's estimate appropriate.

In fact, there are two major reasons to assume higher TAP enrollment could originate from the LIHWAP grant program. First, of the 460 LIHWAP grants received as of February 25, 2022, 77% were not enrolled in TAP, despite being income eligible. Second, the average LIHWAP enrollee in Philadelphia is receiving an average benefit of about $1,400 (which is ample incentive to sign-up) and with TAP enrollment this eligible pool of recipients should increase TAP participation even though the average TAP discount is lower (at $580 per year[1]).

The Department analysis accounts for the significant increase in the TAP participant pool from LIHWAP enrollment. Early LIHWAP data also clearly demonstrates that these LIHWAP enrollees are not generally TAP participants and may be more motivated to register for LIHWAP due to the benefit they receive. In contrast, the simplistic escalation rate proffered by Mr. Morgan ignores this data and should be rejected by the Rate Board.

Other Potential Participants — Mr. Morgan also fails to reflect that many PWD customers are behind in paying their utility bills and should, in the wake of COVID-19, be willing and able to apply for assistance in paying their water (and energy) bills. According to a February 2022 report from PEW,[2] the "City has underperformed the national economy, recovering more slowly from the COVID-19 pandemic, than many other cities have.

[1] Rate Rider Reconciliation Workbook – Formal Notice https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2022-annual-rate-adjustment/#advance-notice-of-filing

[2] https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2022/02/how-the-pandemic-has-affected-philadelphias-economy-and-jobs.

Philadelphia is experiencing lingering job losses, particularly in the low-wage sectors, with Black workers and female workers hit the hardest." Due to the ongoing economic impacts of COVID-19, we believe customers are more likely to enroll in TAP.

Q12. DOES THIS PANEL BELIEVE THAT MR. MORGAN'S PROJECTED NUMBER OF TAP PARTICIPANTS, IF ACCEPTED, WOULD BE GOOD FOR PWD OR ITS CUSTOMERS?

A12. No. Mr. Morgan's proposals will underfund the Department and place additional pressure on financial reserves.

Q13. IS THE DEPARTMENT UPDATING THE PROJECTED NUMBER OF TAP PARTICIPANTS IN RESPONSE TO MR. MORGAN'S RECOMMENDATION?

A13. No. We believe that the Department's proposal is reasonable, since it takes into account both the potential pool of additional enrollees into TAP and the continuing hardships facing the Department's customers.

B. IMPLEMENTATION OF TAP RATES

Q14. HOW DO TAP RATES COMPARE UTILIZING MR. MORGAN'S PROJECTED NUMBER OF TAP PARTICIPANTS VERSUS USING THE DEPARTMENT'S PROJECTED NUMBER OF TAP PARTICIPANTS?

A14. The table below shows the proposed TAP-R surcharge rates using the TAP participation assumptions of the Department (Column 2) or the Advocate (Column 3).

Proposed TAP-R Surcharge Rates		
	Department's Proposal Schedule BV-1	**Public Advocate's Proposal** Schedule LKM-1
Water TAP-R Surcharge	$1.23 /MCF	$0.98 /MCF
Wastewater TAP-R Surcharge	$1.95 /MCF	$1.55 /MCF

Q15. DO YOU HAVE ANY COMMENTS ON THE CALCULATIONS OF THE TAP RIDER RATES USING THE ADVOCATE'S PROJECTED NUMBER OF TAP PARTICIPANTS?

A15. No.

III. CONCLUSION

Q16. WHAT IS YOUR OVERALL RECOMMENDATION WITH RESPECT TO THE 2022 TAP ADJUSTMENT?

A16. The Department's proposal takes into account the potential pool of LIHWAP and LIHEAP enrollees into TAP. The Department is taking steps to maximize the enrollment of customers in TAP. Failure to provide cost recovery for new enrollees will place additional pressure on Department's financial reserves, since TAP provides a discount to customer bills. Underfunding the participation in TAP, by using a lower number of TAP participants, will result in pressure upon the Department's financial reserves to cover the lost revenues of the additional (unprojected) participants. In turn, that will also increase the under-recovery that other customers will face in the next TAP adjustment proceeding. The difference between the Department's projections and the Public Advocate's

projection is over $3 million in lost revenues.[3] The Rate Board should approve the Department's proposal shown in Schedule BV-1 which uses approximately 12,500 additional participants in the Next Rate Period.

Q17. DO YOU HAVE ANY FINAL COMMENTS?

A17. Yes. It is our understanding that the Department is willing to discuss the settlement of some or all of its proposals in this TAP proceeding.

Q18. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A18. Yes, it does.

[3] Based on comparison of Next Rate Period Total TAP Discount in Schedule RFC-3 or TAP Billing Loss (Total) in Schedule BV-1 with Public Advocate Statement 1 at 5 (Table) and TAP Billing Loss (Total) in Schedule LKM-1.

Brittany Baporis

PROJECT ANALYST

Consultant

Specialties

- Stormwater fee & program development
- Spatial analysis
- Software testing
- Data modeling

Professional History

- Raftelis: Consultant (2020-present); Associate Consultant (2018-2019)

Education

- Bachelor of Science in Environmental Science - University of North Carolina at Chapel Hill (2018)
- Bachelor of Arts in Geography - University of North Carolina at Chapel Hill (2018)

PROFILE

Brittany has a strong background in GIS analysis, data management, and software implementation. During her education, Brittany focused on water and climate data analysis with a specific interest in spatial application. Her expertise lies in software testing, spatial analysis, data modelling, and communication. During her time with Raftelis, Brittany has worked on projects dealing with impervious area analysis, affordability, rate base development, financial modelling, funding methodology analysis, solid waste service provision, and software testing.

RELEVANT PROJECT EXPERIENCE

Philadelphia (PA)

Raftelis is working on a long-term project with the City of Philadelphia's Water Revenue Bureau (WRB) to develop and maintain an application to manage the City's Tiered Assistance Program (TAP) and to provide financial consulting services in order to work towards a more affordable water rate structure. Her involvement includes software testing for this application, CAMP, data quality control, application design input, reporting documentation, and client management and support. Additionally, Brittany has worked on rate case discovery support for the City by answering discovery questions, working with developers to determine reporting needs, and developing testimony responses.

Arlington County (VA)

Raftelis was engaged by Arlington County (County) to conduct a stormwater utility feasibility study and an implementation study. The County was especially concerned about the distribution of financial burden among its customers and asked Raftelis compare the impacts of existing Sanitary District Tax add-on, which serves as a dedicated source of funding for the County's stormwater program, with the impacts of the projected stormwater user fee. Raftelis conducted a benchmarking survey of regional peer utilities to provide a context of how stormwater programs are funded in the State of Virginia and the Mid-Atlantic. Brittany focused on evaluating the existing data the County had for its stormwater rate base and using this data to project stormwater rates for various example properties in order to demonstrate the financial burden of a fee. She then showed these impacts spatially through Census Tract and parcel-level data via fee and burden maps across the County. In a second phase of work, Brittany is helping the County consider amendments to an impervious area-based rate structure to reduce burden on low-income multi-family residential properties. To do this, she is helping generate multiple alternatives and calculate the impacts each alternative would have on customers on both a development and individual basis. Additionally, the County has determined that a software component is needed and Brittany is currently developing the software requirements.

City of Apopka (FL)

The City of Apopka and Raftelis are currently working on a stormwater rate study to update the City's rate structure from customer class-based charges to an impervious area-based stormwater fee. Raftelis is digitizing all commercial properties in the City to calculate impervious area-based fees and a sample of residential properties to determine class wide fees. Brittany preformed a statistical analysis using a regression equation to determine estimated impervious area values for all single-family residential properties in the City based on the sample properties. These estimated values were then placed into 3 tiers to create a more equitable residential rate structure. This project remains in progress and work is currently being completed to examine the applicability and equity of retaining the City's existing fixed fees by customer class, or if variable fees should be utilized exclusively with the anticipated rate structure changes.

Montgomery County (OH)

Montgomery County is engaged with Raftelis to develop a software to interface between solid waste collection data received by the County and its billing software to ensure the County is billing all customers as outlined by their rate structure. Brittany facilitates the communication between the client and the private haulers that the County relies upon to provide the solid waste data. She performs data forensics to determine the appropriate way sets of customers should be billed and ensures that the software handles this data appropriately. Additionally, Brittany is helping the County prepare to go-live in 2022 with this software and transition its billing to this updated structure.

City of Baltimore (MD)

In 2019, Raftelis completed an extension of service with the City of Baltimore to provide updates to the stormwater accounts software (SAIS) that Raftelis originally built for the City in 2013. This software interfaces with the City's existing billing system (UMAX) as well as the City-maintained GIS layers to calculate stormwater billing units, apply legislated and voluntary credits, manage inter-departmental workflows, produce financial and workflow-related reports, and manage the stormwater program on the highest level. Brittany managed the functional testing and QA of the extensive software updates that redesigned the user interface and added additional functionality. Currently, she oversees questions and requests regarding the software and functions as a liaison between the users, the developers, and the project managers, and facilitates ongoing trainings with new and existing City staff.

City of Dallas (TX)

In 2014, the City of Dallas engaged Raftelis to review their stormwater rate structure to ensure the financial stability of their Storm Drainage. In 2018, Brittany provided quality control for impervious area digitization that was originally performed by a subcontractor of Raftelis for the City of Dallas, performing updates and corrections where needed. In 2021, Brittany assisted the GIS department at the City in performing their annual parcel update. Dallas is a place with high amounts of sprawl and growth, so these parcel updates help the City recover more revenue every year. Brittany's focus was to help the City determine what changes occurred between the parcel updates and why those changes occurred to support the City's ongoing audit process.

Village of Key Biscayne (FL)

The Village of Key Biscayne (Village) manages a stormwater system within its incorporated area and is responsible for funding the continual operating, maintenance, and capital costs for stormwater service. The Village is a small community within Miami-Dade County that has a high proportion of condo units. It currently charges Multi-family, Single family, and Commercial/Non-residential customer classes based on number of units for multi-family and single-family and impervious area for non-residential/commercial utilizing an equivalent residential unit (ERU). The Village retained Raftelis to conduct a stormwater rate study to recommend an appropriate rate structure for the unique make-up of the Village and to establish a new rate that supports a financially sufficient utility into the future. To achieve these goals, Raftelis is developing the underlying data to update the ERU by measuring a sample of residential properties and evaluating the relationship between condos and single-family homes. From this, Raftelis will develop and recommend rate structure options to the Village that appropriately recover stormwater costs, enhance the equity of the fees charged, and make the fees more defensible and in line with recent trends in the industry. Brittany is developing the process for allocating impervious area between multi-family condo units and has developed presentation materials for the council.

Town of Bluffton (SC)

Raftelis has worked with the Town of Bluffton (Town) for several years to help the Town align their stormwater rate structure to the rate structure that the entire county, Beaufort County, uses to recover stormwater costs. This process requires an annual stormwater model update to input the changing stormwater cost factors and financial goals of the Town. Brittany assisted in the 2021 update process for the Town and met with Town officials on several occasions to determine the necessary updates, review changes, and communicate results to the client.

City of Largo (FL)

The City of Largo contracted Raftelis to perform an update of the City's multi-family residential properties within their stormwater rate structure and evaluate billing assumptions for this customer class. The City's data and stormwater rates were developed in 1991 and have only received ad hoc updates since then. This effort measured the impervious area on all multi-family properties in the City. Brittany's role was to oversee the management of the subconsultant that performed the digitization, QC the subconsultant's work, and incorporate this data into a model she built to calculate an estimated per unit value. She also calculated the billing differences expected from these updates, wrote the final report, and updated the information according to evolving client needs.

Pittsburgh (PA)

The Pittsburgh Water and Sewer Authority (PWSA) went live with stormwater fees and software in early 2022. In preparation for this go-live, Brittany assisted with important data updates that needed to occur to facilitate accurate and defensible stormwater fees. Once the project was undertaken, it was determined that the property lines in the GIS data were often very inaccurate and required manual intervention before the fees were live. Brittany, and others on the team, participated in a large effort to adjust parcel lines throughout Pittsburgh via GIS editing in ArcMap. These edits support the current fees PWSA is levying for stormwater.

Town of Westford (MA)

The Town of Westford enlisted Raftelis to provide financial consulting for the development of a stormwater utility, contracting the firm to perform maintenance and spatial analysis of the impervious area within the town and apply this to the rate base in order to determine a rate structure for compliance. Brittany made updates to the existing stormwater financial model and assumed ownership of the reporting for this project.

Town of North East (MD)

Raftelis was contracted to provide consulting services for the financing of stormwater compliance in the Town of North East and compare the impact of the introduction of a stormwater fee to the increase in property tax. Brittany used data on the customer base and existing information about impervious area to establish a rate base for the Town and has applied this to the Town's revenue requirements to develop a financial model that compares a stormwater fee and a property tax increase.

Lower Paxton Township (PA)

Lower Paxton Township worked with Raftelis to implement a stormwater utility in the Township to facilitate stormwater billing. Brittany performed model maintenance to inform policy decisions and maintained communication with Township leadership.

PROJECT LIST

- Philadelphia (PA) – Customer Assistance Program admin & rate case discovery support
- City of Apopka (FL) – impervious area development, rate structure design, data analysis
- Montgomery County (OH) – software design & support
- City of Baltimore (MD) – software re-design & support
- City of Dallas (TX) – software support
- Arlington County (VA) – rate structure design, affordability analysis, funding mechanism shift, software design

- City of Largo (FL) – impervious data development
- Village of Key Biscayne – rate structure design
- Town of Bluffton (SC) – annual rate update
- Pittsburgh (PA) – data development
- Town of Westford (MA) – rate structure design
- Town of North East (MD) – rate support
- City of Reno (NV) - Impervious area development
- City of Akron (OH) - Units of service estimation
- City of Boston (MA) - Data management
- City of Pittsburgh (PA) - Data analysis, stormwater fee implementation
- City of Thornton (CO) - GIS analysis
- SouthWest Water Company (AL) - Regulatory research and reporting