

**RESPONSE TO**  
**PUBLIC ADVOCATE'S INTERROGATORIES**  
**AND**  
**REQUESTS FOR PRODUCTION OF DOCUMENTS**  
**QUESTIONS 1-34**

**Dated: March 2025**

1 **PA-III-1.** FOR EACH OF THE COMPANY'S WHOLESALE WASTE WATER  
2 CUSTOMERS, PLEASE PROVIDE COPIES OF THE PROVISIONS OF EACH  
3 CONTRACT THAT IDENTIFY THE CURRENT RATES AND PWD'S  
4 ABILITY TO ADJUST THOSE RATES. ALSO EXPLAIN HOW PWD  
5 ENSURES THAT EACH WHOLESALE CUSTOMER'S RATES ARE  
6 SUFFICIENT TO RECOVER THE COSTS ASSOCIATED WITH SERVICE TO  
7 EACH CUSTOMER.

8  
9 **RESPONSE:**

10 Please see response attachment PA-III-1.

11  
12 PWD's current practice is to include an exhibit with wholesale wastewater agreements  
13 presenting the basis the then current rates for the individual customer. Some older  
14 agreements refer to rates as determined by the City's most recent rate study. PWD updates  
15 wholesale customer rates concurrent with the development of the retail cost of service study  
16 and finalizes them with the rate determination. PWD's wholesale wastewater agreements  
17 provide PWD the ability to adjust rates with advance notice to the wholesale customer  
18 (typically 90 days) in advance of the effective date of the new rates.

19  
20 The wholesale customer cost of service is developed on a utility basis, consistent with the  
21 most recent contract terms for each respective customer. Please refer to PWD Statement 7:  
22 Schedule BV-2 for additional discussion regarding wholesale customer cost allocations. The  
23 Wastewater Wholesale Cost of Service tables are presented in Appendix I of Schedule BV-  
24 2.

25  
26 **RESPONSE PROVIDED BY:** Philadelphia Water Department and Black & Veatch Management  
27 Consulting, LLC.

1 **PA-III-2.** REFERENCE PWD STATEMENT NO. 7, PAGE 12. PLEASE PROVIDE A  
2 COMPLETE COPY OF THE ANALYSIS SUPPORTING THE DEVELOPMENT  
3 OF STEP 1: THE PROJECTIONS OF GROSS BILLINGS IN EXCEL FORMAT  
4 WITH ALL FORMULAS INTACT.

5  
6 **RESPONSE:**

7 The Excel version of projected gross billings is included in the models provided to the  
8 Public Advocate and presented in PWD Exhibit 6. The workpapers for projected gross  
9 billings are also provided in PWD Exhibit-6: Finplan25\_26, Customer Worksheet. Refer  
10 to Customer-7 for projected gross water billings, Customer-15 for projected gross sewer  
11 billings, and Customer-38 for projected stormwater billings. All gross billings are  
12 presented in the context of existing rates.

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14 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-3.** PLEASE IDENTIFY THE IMPACT OF STORMWATER CREDITS ON TOTAL  
2 RESIDENTIAL, AND NON-RESIDENTIAL GA AND IA FROM THOSE USED  
3 TO SET RATES IN THE TWO PRIOR CASES.  
4

5 **RESPONSE:**

6 The table below provides the impact of stormwater credits on total residential, non-  
7 residential, and condominium GA and IA. The credit amount reflects the reduction in the  
8 billable units of service used to set rates in the two prior General Rate proceedings.  
9

10 **Total Impact of Credits on Billable Stormwater Units of Service**

		2021 Rate Proceeding		2023 Rate Proceeding	
Line	Description	FY 2022	FY 2023	FY 2024	FY 2025
	No.				
1	Impervious Area (SF)	115,807,882	121,775,789	124,669,510	128,240,750
2	Gross Area (SF)	357,324,556	371,584,613	295,890,320	301,662,590

17 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-4.** PLEASE IDENTIFY EACH STORMWATER CREDIT GA AND IA  
2 ADJUSTMENT AUTHORIZED FOR THE LAST THREE YEARS. IDENTIFY  
3 FOR EACH ADJUSTMENT, THE CUSTOMER'S GA AND IA BEFORE THE  
4 ADJUSTMENT AND AFTER THE ADJUSTMENT.

5  
6 **RESPONSE:**

7 Please see response attachment PA-III-4.

8  
9 The workbook includes a summary of all of the credit applications, based upon PWD  
10 records, that are applicable for Fiscal Year 2022 through Fiscal Year 2024 and the  
11 associated area and credit information by parcel. Many parcels have multiple credit  
12 applications during the above period primarily due to renewals, so such parcels may have  
13 multiple entries in the workbook.

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15 **RESPONSE PROVIDED BY:** Philadelphia Water Department  
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1 **PA-III-5.** PLEASE EXPLAIN IN DETAIL ANY CHANGES IN THE WATER,  
2 WASTEWATER, AND STORMWATER COST ALLOCATION AND RATE  
3 DESIGN METHODOLOGIES PROPOSED BY THE PWD SINCE THE LAST  
4 PROCEEDING WITH THE EXCEPTION OF USING MAXIMUM DAY AND  
5 HOUR DEMAND FACTORS FOR EACH CUSTOMER CLASS BASED ON  
6 THE AMI DEMAND STUDY.

7  
8 **RESPONSE:**

9 There are no significant changes in the retail cost allocation and rate design methodologies  
10 since the last proceeding.

11  
12 Note the following reference:

13 PWD Statement 7, response to Question 8 (pages 6 and 7) – “the analysis and  
14 methodology used in this COS Study are consistent with that used in analogous  
15 studies performed by Black & Veatch in support of prior PWD rate proceedings.”

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18 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-6.** FOR EACH OF THE PAST FIVE FISCAL YEARS, PLEASE PROVIDE FOR  
2 THE WATER SYSTEM:

- 3 A. SYSTEM AVERAGE DAY PRODUCTION;  
4 B. SYSTEM MAXIMUM DAY PRODUCTION; AND  
5 C. SYSTEM MAXIMUM HOUR PRODUCTION.  
6

7 **RESPONSE:**

8 System Average Day and Maximum Day Production reflect the Total Water Treatment  
9 Plant Output presented in the WCOS model provided to the Public Advocate and PWD  
10 Exhibit-6: Black & Veatch Management Consulting, LLC, Calculations Supporting  
11 Schedules BV-1 and BV-2 WCOS25\_26, Wpltallo Worksheet (page 849).  
12

13 System Maximum Hour is recorded based on the Total System Water Delivered (Total  
14 Districts) presented in PWD Exhibit-6: Black & Veatch Management Consulting, LLC,  
15 Calculations Supporting Schedules BV-1 and BV-2, WCOS25\_26, Wpltallo Worksheet  
16 (page 850). Note that the Maximum Hour Demand Factors are based on the Total System  
17 Water Delivered (Total Districts) presented in PWD Exhibit-6: Black & Veatch  
18 Management Consulting, LLC, Calculations Supporting Schedules BV-1 and BV-2,  
19 WCOS25\_26, Wpltallo Worksheet (page 850).  
20

21 A. SYSTEM AVERAGE DAY PRODUCTION

22 FY 2020 – 220.3 MGD

23 FY 2021 – 226.6 MGD

24 FY 2022 – 226.7 MGD

25 FY 2023 – 230.0 MGD

26 FY 2024 – 228.4 MGD  
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**B. SYSTEM MAXIMUM DAY PRODUCTION; AND**

FY 2020 – 259.7 MGD  
FY 2021 – 251.7 MGD  
FY 2022 – 257.9 MGD  
FY 2023 – 278.4 MGD  
FY 2024 – 260.3 MGD

**C. SYSTEM MAXIMUM HOUR PRODUCTION**

FY 2020 – 326.0 MGD  
FY 2021 – 472.7 MGD  
FY 2022 – 370.2 MGD  
FY 2023 – 324.9 MGD  
FY 2024 – 316.1 MGD

MGD = Millions of gallons per day

**RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.



1 **PA-III-7.** PLEASE PROVIDE A COPY OF PWD'S MOST RECENT LONG-TERM  
2 WATER SUPPLY PLAN.

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**RESPONSE:**

An overview of the plan is available via the following link:

<https://water.phila.gov/projects/revitalization/>

**RESPONSE PROVIDED BY:** Philadelphia Water Department

1 **PA-III-8.** PLEASE PROVIDE AN ESTIMATE OF THE QUANTITY OF WATER USED  
2 FOR PUBLIC FIREFIGHTING FOR EACH OF THE LAST THREE YEARS.  
3

4 **RESPONSE:**

5 The Department does not have an estimate on the quantity of water used for firefighting  
6 purposes for each of the last 3 years. However, for purposes of water accountability, an  
7 estimate of 55 MG/year is currently being used.  
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9 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-9.** PLEASE IDENTIFY THE ANNUAL QUANTITIES OF NON-REVENUE  
2 WATER BY TYPE FOR THE MOST RECENT THREE-YEAR PERIOD  
3 AVAILABLE. ALSO, IDENTIFY ANNUAL WATER PRODUCTION FOR THE  
4 SAME FIVE ANNUAL PERIODS.

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6 **RESPONSE:**

7 Response attachment PA-III-9 provides the standard International Water Association /  
8 AWWA water balance for the Department for the most recent three years available with  
9 key definitions. A detailed description of the water balance can be found in the AWWA  
10 M36 Manual.

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12 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.

1 **PA-III-10.** SINCE ITS LAST CASE, HAS THE PWD CONDUCTED A  
2 COMPREHENSIVE HOLISTIC REVIEW OF ITS RATE STRUCTURE FOR  
3 WATER SERVICE UNDER WHICH SEPARATE RATE SCHEDULES WERE  
4 CONSIDERED FOR CERTAIN CUSTOMER CLASSES? IF NO, WHY NOT?  
5 IF YES, PLEASE DESCRIBE THIS REVIEW IN DETAIL AND PRESENT ALL  
6 RESULTS AND FINDINGS OF THE REVIEW.

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8 **RESPONSE:**

9 The Department continues to review its overall rate structure including the rate structure for  
10 water service.

11  
12 Please refer to the response to PWD Statement 7 Question 36 on Pages 50 to 51. In addition,  
13 PWD Statement 7 Question 37 on Page 52, discusses the replacement of the Basis2 billing  
14 system and its relation to future rate structure changes.

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16 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.

1 **PA-III-11.** PLEASE PROVIDE AN ESTIMATE OF THE REVENUE REDUCTIONS  
2 RESULTING FROM STORMWATER CREDITS FOR THE LAST THREE  
3 FISCAL YEARS. INCLUDE SUPPORTING CALCULATIONS.  
4

5 **RESPONSE:**

6 Please see Table 12 on page 62 of PWD Exhibit 5, Official Statement City of Philadelphia  
7 Water and Wastewater Revenue Bonds, Series 2024C for Stormwater Credits for FY  
8 2023, FY 2022, and FY 2021.

9  
10 Page FSP-10 of Schedule FP-1 presents the Stormwater Credits for FY 2024.

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12 **RESPONSE PROVIDED BY:** Philadelphia Water Department  
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1 **PA-III-12.** PLEASE PROVIDE A COPY OF ANY STUDIES PERFORMED BY PWD  
2 THAT EVALUATE THE EXTENT TO WHICH THE STORMWATER CREDIT  
3 PROGRAM HAS REDUCED STORMWATER VOLUMES.  
4

5 **RESPONSE:**

6 After reasonable investigation, no studies have been identified that capture the information  
7 requested.  
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9 **RESPONSE PROVIDED BY:** Philadelphia Water Department  
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1 **PA-III-13.** WHAT IS THE POPULATION OF PWD’S WATER SERVICE TERRITORY?  
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3 **RESPONSE:**

4 Please see page 31 of PWD Exhibit 5, Official Statement City of Philadelphia Water and  
5 Wastewater Revenue Bonds, Series 2024C states that “based on the 2023 U.S. Census  
6 Bureau estimate, the Water System served 1,550,542 individuals with retail service.”  
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8 **RESPONSE PROVIDED BY:** Philadelphia Water Department  
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1 **PA-III-14.** IN THE WASTEWATER COST OF SERVICE STUDY, PLEASE EXPLAIN  
2 HOW THE COSTS ASSOCIATED WITH I/I ARE ALLOCATED TO EACH  
3 CUSTOMER TYPE.  
4

5 **RESPONSE:**

6 The cost of service and rate design for the current study reflects a 30 percent recovery of  
7 pumping and treatment related I/I costs through the service charge and 70 percent through  
8 the volume charge (PWD Statement 7, Schedule BV-2, page 7-36 to 7-41). Costs are  
9 allocated to customer types based upon the respective units of service. This approach is  
10 consistent with the I/I cost allocations utilized in prior cost of services studies approved by  
11 the Rate Board.  
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13 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-15.** PLEASE PROVIDE AN ESTIMATE OF THE ANNUAL COSTS INCURRED  
2 BY THE PWD TO MANAGE AND IMPLEMENT THE STORMWATER  
3 MANAGEMENT CREDIT PROGRAM BY TYPE, INCLUDING COSTS FOR  
4 CONSTRUCTION OF FACILITIES FOR FY 2022 – FY 2025. SEPARATELY  
5 IDENTIFY AMOUNTS FOR WHICH THE PWD WAS DIRECTLY  
6 RESPONSIBLE AND AMOUNTS OFFSET OR FUNDED BY OTHER  
7 SOURCES.

8  
9 **RESPONSE:**

10 Implementation costs associated with the Stormwater Management Credit Program for the  
11 noted fiscal years are included in the Department’s overall budget and included in the GSI  
12 Implementation Unit (FY 2022 to FY 2023) and the Development Services Unit (FY 2024  
13 to FY 2025) of the Planning and Environmental Services Division. The overall costs are  
14 allocated to 100% to wastewater and allocated under conveyance maintenance costs with  
15 40% allocated to sanitary and 60% to stormwater.

16  
17 The stormwater credit program itself does not result in the construction of facilities.

18  
19 Stormwater credits resulting from private stormwater management or activities meeting  
20 the requirements of Section 4.5 SWMS Credits of PWD Rates and Charges are not a  
21 capital or an operating expense. Stormwater credits result in a reduction in certain  
22 customer bills and therefore reduce revenue for the Water Department. In context of the  
23 Cost of Service Study, credits are expressed as a reduction in the billable stormwater units  
24 of service as discussed in PWD Statement 7, Schedule BV-2: Water & Wastewater Cost of  
25 Service Report and further explained in Schedule BV-4: WP-3 – Stormwater Units of  
26 Service.

27 **RESPONSE PROVIDED BY:** Philadelphia Water Department and Black & Veatch Management  
28 Consulting, LLC.

1 **PA-III-16.** PLEASE IDENTIFY THE AMOUNTS INCLUDED IN THE STORMWATER  
2 REVENUE REQUIREMENT FOR TEST YEAR 2026 FOR THE  
3 STORMWATER MANAGEMENT CREDIT PROGRAM BY TYPE, AND  
4 INDICATE WHERE THOSE COSTS ARE INCLUDED IN THE  
5 STORMWATER COST OF SERVICE STUDY. SEPARATELY IDENTIFY  
6 AMOUNTS FOR WHICH THE PWD WILL BE DIRECTLY RESPONSIBLE  
7 AND AMOUNTS OFFSET OR FUNDED BY OTHER SOURCES.

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9 **RESPONSE:**

10 Administrative costs associated with the Stormwater Management Credit Program  
11 included in the Department's overall budget and included in the Development Services  
12 Unit of the Planning and Environmental Services Division. The overall GSI  
13 Implementation and Development Services Units costs are allocated to 100% to  
14 wastewater and allocated under conveyance maintenance costs with 40% allocated to  
15 sanitary and 60% to stormwater. This process described in the Cost of Service Study (see  
16 PWD Statement 7, Schedule BV-2: Water & Wastewater Cost of Service Report)  
17 following the projection of overall revenue requirements. These costs are not isolated by  
18 "Type."

19  
20 Other than the overall miscellaneous and wholesale customer revenues, which reduce the  
21 overall net wastewater revenue requirements, there are no amounts offset or funded by  
22 other sources included in the Test Year 2026 revenue requirements. Stormwater credits  
23 provided to customers are treated as a reduction in the billable units of service, as  
24 described in the Cost of Service Study noted above and further elaborated upon in the  
25 Stormwater Units of Service white paper (see PWD Statement 7, Schedule BV-4: WP-3  
26 Stormwater Units of Service).

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28 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.

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2 **PA-III-17.** PLEASE PROVIDE AN ESTIMATE OF THE ANNUAL COSTS ASSOCIATED  
3 WITH THE GREEN ACRES RETROFIT PROGRAM BY TYPE FOR FY 2023 –  
4 FY 2025. SEPARATELY IDENTIFY AMOUNTS FOR WHICH THE PWD  
5 WAS DIRECTLY RESPONSIBLE AND AMOUNTS OFFSET OR FUNDED BY  
6 OTHER SOURCES.

7  
8 **RESPONSE:**

9 See table below for an estimate of associated costs:

10

FISCAL YEAR	PWD OPERATING COST (SMIP/GARP GRANTS INCLUDING PIDC ADMIN EXPENSE)	ACT 13 GRANT
2023	\$24,500,000	\$791,557
2024	\$19,059,205	\$570,850
2025*	\$14,500,000	\$500,000

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17 \*FY25 is budgeted. Actuals will not be available until after the close of the fiscal year.

18  
19 The above amounts are inclusive of all grant types (SMIP and GARP). The PWD is  
20 directly responsible for funding associated with these grants through the Department's  
21 operating budget.

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23 **RESPONSE PROVIDED BY:** Philadelphia Water Department  
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1 **PA-III-18.** PLEASE IDENTIFY THE AMOUNTS INCLUDED IN THE STORMWATER  
2 REVENUE REQUIREMENT FOR TEST YEAR 2026 FOR THE GREEN  
3 ACRES RETROFIT PROGRAM BY TYPE, AND INDICATE WHERE THOSE  
4 COSTS ARE INCLUDED IN THE STORMWATER COST OF SERVICE  
5 STUDY. SEPARATELY IDENTIFY AMOUNTS FOR WHICH THE PWD  
6 WILL BE DIRECTLY RESPONSIBLE AND AMOUNTS OFFSET OR  
7 FUNDED BY OTHER SOURCES.  
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9 **RESPONSE:**

10 The Water Department temporarily reduced the combined SMIP/GARP costs from the  
11 targeted \$25.0 million per year to \$15.0 million in FY 2025 and proposes to do the same  
12 in FY 2026. SMIP/GARP costs return to \$25.0 million in FY 2027. SMIP/GARP costs,  
13 which include both grant amounts and Philadelphia Industrial Development Corporation  
14 administration costs, are allocated between the sewer and stormwater revenue  
15 requirements. Approximately 60% of these costs are recovered from all stormwater  
16 customers, as described in the Cost of Service Study (see PWD Statement 7, Schedule  
17 BV-2: Water & Wastewater Cost of Service Report) following the projection of overall  
18 revenue requirements. These costs are not isolated by “Type.”  
19

20 With respect to the Cost of Service Study, SMIP/GARP costs are presented on Line 6 of  
21 Table 2-3 and Table 6-16 in Schedule BV-2 (note the same table is presented in Schedule  
22 BV-1: Table C-6). SMIP/GARP costs are reflected in the O&M expenses on Line 3 of  
23 Table 7-18. Column 4 includes the Sanitary Sewer System allocation of SMIP/GARP  
24 costs, while Column 5 includes the Stormwater System allocation of SMIP/GARP costs.  
25

26 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-19.** PLEASE PROVIDE AN ESTIMATE OF THE ANNUAL COSTS ASSOCIATED  
2 WITH GREEN CITY CLEAN WATERS BY TYPE FOR FY 2023 – FY 2025.  
3 SEPARATELY IDENTIFY AMOUNTS FOR WHICH THE PWD WAS  
4 DIRECTLY RESPONSIBLE AND AMOUNTS OFFSET OR FUNDED BY  
5 OTHER SOURCES.

6  
7 **RESPONSE:**

8 From July 1, 2011 through and including June 30, 2024, the Water Department’s capital  
9 spending for COA projects was approximately \$436 million. During the same period, the  
10 Water Department spent \$534 million from its operating budget and \$6.6 million was  
11 funded through Act 13 Marcellus Shale Grant.

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13 **RESPONSE PROVIDED BY:** Philadelphia Water Department  
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1 **PA-III-20.** PLEASE IDENTIFY THE AMOUNTS INCLUDED IN THE STORMWATER  
2 REVENUE REQUIREMENT FOR TEST YEAR 2026 FOR GREEN CITY  
3 CLEAN WATERS BY TYPE, AND INDICATE WHERE THOSE COSTS ARE  
4 INCLUDED IN THE STORMWATER COST OF SERVICE STUDY.  
5 SEPARATELY IDENTIFY AMOUNTS FOR WHICH THE PWD WILL BE  
6 DIRECTLY RESPONSIBLE AND AMOUNTS OFFSET OR FUNDED BY  
7 OTHER SOURCES.

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9 **RESPONSE:**

10 Consistent with prior rate proceedings, Green City Clean Waters costs are not isolated  
11 within the Cost of Service Study. Operating and capital revenue requirements are allocated  
12 as described in the Cost of Service Study (see PWD Statement 7, Schedule BV-2: Water  
13 & Wastewater Cost of Service Report) following the projection of overall revenue  
14 requirements. Further, these costs are not isolated by “Type.”

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16 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-21.** PLEASE PROVIDE A COMPARISON OF REVENUES AT PRESENT RATES  
2 AND AT PROPOSED RATES FOR EACH RATE CLASS INCLUDED IN THE  
3 COST OF SERVICE STUDIES FOR WATER, WASTEWATER, AND STORM  
4 WATER SERVICE. INCLUDE THE SUPPORTING CALCULATIONS FOR  
5 PROPOSED REVENUES IN EXCEL FORMAT WITH ALL FORMULAS  
6 INTACT.

7 **RESPONSE:**

8 See response attachment PA-III-21 which provides the FY 2026 and FY 2027 projected  
9 revenue under existing and proposed rates. These results are developed with the model file  
10 (Finplan25\_26.xlsx) previously provided to the Public Advocate, utilizing the projected  
11 revenue under existing rates sections and revising the rates to reflect the proposed rate  
12 schedules.

13  
14 These revenue projections reflect the anticipated collections of projected and historical  
15 billings based on the proposed and existing rate schedules and their respective effective  
16 dates. Note that the total revenue for FY 2026 of \$400.4 million is consistent with the FY  
17 2026 Total Water Service Revenue presented on Line 8 of Table 3-13 of Schedule BV-2.  
18 In addition, note that Table 4-12 of Schedule BV-2 presents the cost of service based  
19 annual net revenue requirement of \$410.2 million. This is consistent with the Total Water  
20 Service Revenue presented on Line 4 of Table 4-1 Test Year 1 (FY 2026) Annualized  
21 Revenue and Revenue Requirements and Total Cost of Service to be Derived from Rates  
22 presented on Line 13, Column 3 of Table 4-2. Since PWD's revenues are collections-  
23 based and the estimated FY 2026 revenue reflects collections on billings from FY 2026,  
24 FY 2025 and FY 2024 it is not appropriate to compare the projected collections based  
25 revenues to the cost of service by class. That is because such collections based revenue  
26 reflects the collection of billings based on rates established by prior cost of service  
27 distributions. Consistent with prior cost of service studies, the retail class based cost of  
28 service is compared to the retail billings by customer class prior to the lag factor

1 adjustment. This comparison is provided on pages 894 to 898 (WCOS, RATES-3) of  
2 PWD Exhibit 6. Note that this response is similar to our responses to PA-IV-37 during the  
3 2023 General Rate Proceeding (for the FY 2025 and FY 2026 rates) and PA-VII-19 during  
4 the 2021 General Rate Proceeding (for the FY 2023 and FY 2024 rates).

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6 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.

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1 **PA-III-22.** PLEASE DESCRIBE EACH OF THE PROGRAMS CURRENTLY IN PLACE  
2 DESIGNED TO REDUCE RESIDENTIAL STORM WATER VOLUMES.  
3 IDENTIFY THE NUMBER OF CUSTOMERS PARTICIPATING IN EACH  
4 PROGRAM AND THE ESTIMATED ANNUAL REDUCTION IN STORM  
5 WATER VOLUMES ACHIEVED UNDER EACH PROGRAM. ALSO  
6 IDENTIFY THE ANNUAL COSTS ASSOCIATED WITH EACH PROGRAM  
7 AND EXPLAIN HOW THE PROGRAM IS FUNDED.  
8

9 **RESPONSE:**

10 The Department's residential stormwater program, Raincheck which is described below, is  
11 primarily intended to promote education, awareness and acceptance with respect to  
12 stormwater management practices and technologies. It is not directly designed or intended  
13 to reduce stormwater volumes.  
14

15 About Rain Check:

16 In June 2012, the Water Department launched Rain Check, a program designed to  
17 encourage homeowners to install landscape improvements that manage stormwater.  
18 Through Rain Check, the Water Department provides educational workshops, stormwater  
19 property assessments and/or consultations, and shares the cost of implementing one of  
20 three stormwater management tools on a participant's property including: downspout  
21 planters, rain gardens, and permeable pavers. The program also provides and installs rain  
22 barrels for free. Rain Check has also stimulated the creation of green jobs. Approximately  
23 16 companies, representing over 25 individuals, have enhanced their business through  
24 part-time stormwater management work through Rain Check.  
25

26 Metrics:

27 Since July 2014, we've had 12,675 workshop attendees and have installed 5,145 rain  
28 barrels, 1,112 downspout planters, 106 rain gardens, and 442 permeable paving projects.

1 \*(metrics as of March 2025)  
2

3 Annual Reduction in Stormwater Volumes:

4 Annual Reduction in Stormwater Volumes are not tracked as they cannot be counted  
5 toward the compliance requirements of the City's Long Term Control Plan.  
6

7 Budget:

8 This Fiscal Year's budget is \$675,000.  
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10 Funding:

11 Rain Check is funded by PWD.  
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13 **RESPONSE PROVIDED BY:** Philadelphia Water Department  
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1 **PA-III-23.** PLEASE IDENTIFY THE FOLLOWING FOR FY 2025:

- 2 A. STORMWATER NON-BILLING/COLLECTION COST OF  
3 SERVICE.
- 4 B. GROSS AREA (GA) AND IMPERVIOUS AREA (IA) BILLING  
5 DETERMINANTS (500 SF.) USED FOR RATE DESIGN  
6 (INCLUSIVE OF GA/IA CREDITS); AND
- 7 C. THE AMOUNT BY WHICH THE GA AND IA BILLING  
8 DETERMINANTS IDENTIFIED IN SUBPART (B) WERE  
9 REDUCED TO REFLECT GA/IA CREDITS.

10  
11 **RESPONSE:**

12 The FY 2025 cost of service that supports the existing rates was established as a result of  
13 the 2023 Rate Determination. Based upon the final stormwater cost of service the  
14 responses to the above requests would be as follows:

- 15 A. \$204.65 Million
- 16 B. IA = 2,335,060 (500 sf) & GA = 4,271,906 (500 sf)
- 17 C. IA Credits = 128,240,750 (sf) & GA Credits = 301,662,590 (sf) / See response to PA-  
18 III-3.

19  
20 With respect to the FY 2026, the information requested is provided with the filing in PWD  
21 Statement 7 in the below referenced schedules.

- 22 A. Please see PWD Statement 7, Schedule BV-2, Table 7-21, Line 2: Impervious Area  
23 and Gross Area Costs (Excluding CAP Costs).
- 24 B. Please see PWD Statement 7, Schedule BV-2, Table 7-22, Line 2: Stormwater Units of  
25 Service (500 Square Feet).
- 26 C. Please see PWD Statement 7, Schedule BV-2, Tables 6-7 and 6-8. See response and  
27 attachment to PA-III-4 for a summary of all credit applications and the associated area  
28

1 and credit information by parcel. The Stormwater Units of Service provided in  
2 Schedule BV-2, Table 7-22, Line 2 already reflect the impact of credits.

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4 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-24.** REFERENCE PWD STATEMENT 7, PAGE 11 AND PWD STATEMENT 1,  
2 PAGE 4, LINES 1-6. PLEASE EXPLAIN WHY STATEMENT 7 SHOWS TWO  
3 DIFFERENT ANNUAL INCREASES FOR FY 2026, NONE OF WHICH  
4 MATCH THE \$78.630 MILLION IDENTIFIED IN STATEMENT 1, WHILE NO  
5 SUCH DIFFERENCE BETWEEN STATEMENT 7 AND STATEMENT 1  
6 EXIST FOR FY 2027.

7  
8 **RESPONSE:**

9 Statement 7 presents two different annual increases for FY 2026:

- 10 A. \$73.63 million (page 11, Line 5) is the FY 2026 proposed increase for base rates. This  
11 is also reflected on Line 4 of Table C-1A of Schedule BV-1.  
12 B. \$82.379 million (page 11, Line 12) is the FY 2026 proposed increase for Base and  
13 TAPR rates. This is also reflected on Line 4 of Table C-1 of Schedule BV-1.

14  
15 The \$78.630 million identified in Statement 1 is a typographical error which will be  
16 corrected by an errata sheet.

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18 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC  
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**PA-III-25.** REFERENCE PWD STATEMENT 7, PAGES 56 AND 57. PLEASE PROVIDE THE CALCULATIONS SUPPORTING THE TYPICAL INCREASES IN THE COMBINED MONTHLY WATER, SANITARY SEWER, AND STORMWATER BILLS IN EXCEL FORMAT WITH ALL FORMULAS INTACT.

**RESPONSE:**

Please refer to response attachment PA-III-25.xls. The response attachment serves as the basis for Schedule BV-1: Tables C-4 and C-5 and provides the calculations supporting the tables presented on pages 56 and 57 of Statement 7.

**RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.

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**PA-III-26.** REFERENCE SCHEDULE BV-2, TABLE E5-4. PLEASE PROVIDE THE CALCULATIONS SUPPORTING THE TYPICAL BILL IMPACTS FOR EACH CUSTOMER CLASSIFICATION FOR EACH FISCAL YEAR IN EXCEL FORMAT WITH ALL FORMULAS INTACT.

**RESPONSE:**

Please refer to response attachment PA-III-25.xls. The response attachment serves as the basis for Schedule BV-1: Tables C-4 and C-5 and provides the calculations supporting Schedule BV-2, Table ES-4.

**RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.

1 **PA-III-27.** PLEASE EXPLAIN HOW TAP-R COSTS ARE REFLECTED IN PWD'S  
2 WATER, SEWER, AND STORMWATER COST OF SERVICE STUDIES AND  
3 RECOVERED FROM CUSTOMERS.  
4

5 **RESPONSE:**

6 See response to question 15 in PWD Statement 7.  
7

8 As explained in PWD Statement 7, TAP discounts and TAP-R revenue are presented in  
9 Table C-1B to show the overall Water Fund cashflow derivation and allow the evaluation  
10 of total system revenues against the required General Ordinance requirements and Rate  
11 Board metrics.  
12

13 The cost of service analysis supporting the proposed base rates is developed based on the  
14 revenues and revenue requirements presented in Table C-1A which excludes TAP-R costs  
15 and revenues. The influence of TAP on overall FY 2024 and projected FY 2025 financial  
16 performance should be observed as noted on PWD Statement 2A (page 16, lines 19-21)  
17 and PWD Statement 7 (page 11, lines 16-25)  
18

19 TAP costs are recovered via TAP-R rates which are included in the customer volume  
20 charge. TAP-R rates are established via a separate proceeding before the Rate Board.  
21

22 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-28.** REFERENCE SCHEDULE BV-2, PAGE 2-19. PLEASE EXPLAIN HOW  
2 GROUNDWATER USAGE IS DETERMINED AND HOW CHARGES ARE  
3 ASSESSED TO CUSTOMERS.  
4

5 **RESPONSE:**

6 Groundwater quantity and charges are assessed in accordance with PWD Rates and  
7 Charges, Section 7.1.  
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9 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-29.** REFERENCE SCHEDULE BV-2, TABLES 2-14 AND 2-15, PAGES 2-20 AND  
2 2-22. PLEASE PROVIDE THE CALCULATIONS SUPPORTING TABLE 2-14  
3 AND TABLE 2-15 IN EXCEL FORMAT WITH ALL FORMULAS INTACT.  
4

5 **RESPONSE:**

6 Please refer to response attachment PA-III-25.xls. The response attachment serves as the  
7 basis for Schedule BV-1: Table C-4 and C-5 and Schedule BV-2 Tables 2-14 and 2-15.  
8

9 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-30.** REFERENCE SCHEDULE BV-4, TABLE ES-1, PAGE 5, AND PAGE 10,  
2 FIRST LINE. ARE THE AVERAGE DAY VOLUMES REFLECTED IN TABLE  
3 ES-1 AVERAGES FOR 365 DAYS OR 131 DAYS?  
4

5 **RESPONSE:**

6 The average day volumes reflected in Schedule BV-4 Table ES-1 are based on 365 days of  
7 water use. The values are developed based on the FY 2024 water service billing data.  
8

9 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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1 **PA-III-31.** REFERENCE SCHEDULE BV-4:WP-2, TABLE 2-4. PLEASE PROVIDE THE  
2 CALCULATIONS SUPPORTING TABLE 2-4 IN EXCEL FORMAT.

3

4 **RESPONSE:**

5 Please refer to response attachment PA-III-31.xls.

6

7 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.

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1 **PA-III-32.** REFERENCE SCHEDULE BV-4:WP-2, TABLE 2-5. PLEASE PROVIDE THE  
2 CALCULATIONS AND COST OF SERVICE STUDIES SUPPORTING TABLE  
3 2-5 IN EXCEL FORMAT.  
4

5 **RESPONSE:**

6 The WCOS model file from the Cost of Service Study supporting the 2023 Rate  
7 Determination was used to develop the information presented in Table 2-5. The WCOS  
8 model file will be made available to participants who execute a confidentially agreement.  
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10 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.  
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**PA-III-33.** REFERENCE THE RATE DETERMINATION (“ORDER”) IN PWD’S 2023 GENERAL RATE PROCEEDING ISSUED JUNE 21, 2023, PAGES 41-42. PAGE 41 OF THE ORDER IDENTIFIES THREE PROPOSALS PRESENTED BY PA WITNESS MIERZWA CONCERNING STORMWATER RATES AND CREDITS. PLEASE IDENTIFY THE PROGRESS PWD HAS MADE IN EVALUATING THOSE PROPOSALS, PWD’S POSITION AND PROPOSED RESOLUTION FOR EACH PROPOSAL, AND THE TIME FRAME ANTICIPATED FOR THE RESOLUTION.

**RESPONSE:** Please refer to the response to PWD Statement 7 Question 27 on Pages 43 to 44.

**RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.

1 **PA-III-34.** PLEASE EXPLAIN THE SMALLEST INCREMENT IN WHICH PWD'S  
2 BILLING SYSTEM IS CURRENTLY PROGRAMMED TO ISSUE BILLS FOR  
3 RESIDENTIAL WATER USAGE, I.E., CCFS, CFS, ETC.  
4

5 **RESPONSE:**

6 PWD and WRB's billing system issues bills using the measurement unit of centum cubic  
7 feet, also known as "CCFs," which is equal to 100 cubic feet of water or approximately  
8 748 gallons.  
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10 **RESPONSE PROVIDED BY:** Philadelphia Water Department and Water Revenue Bureau  
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