

RESPONSE TO
PUBLIC ADVOCATE’S INTERROGATORIES
AND
REQUESTS FOR PRODUCTION OF DOCUMENTS
QUESTIONS 1-21

Dated: April 2025

1 **PA-XI-1.** REFER TO PAGE 11 OF PWD STATEMENT 2A. THE PANEL DISCUSSES
2 CHANGES PWD HAS MADE TO CAPITAL FUNDING.

3 A. WHEN DID THIS CHANGE OCCUR?

4 B. PLEASE EXPLAIN THE DIFFERENCES IN FUNDING CONSTRUCTION
5 PROJECTS BY CONTRASTING THE OLD APPROACH TO FUNDING
6 VERSUS THE NEW APPROACH TO FUNDING.

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8 **RESPONSE:**

9 A. The Department adjusted its capital funding approach in the last half of calendar year
10 2024, during the planning and development of the Series 2024C Water and Wastewater
11 Revenue Bonds.

12 B. As stated on page 14 of PWD Statement 7, the new capital funding approach provides
13 project funding “in a manner that more closely aligns the progress of construction, rather
14 than contracting projects only after all funding has been secured.” Under the old
15 approach the capital program funding plan was developed in a manner to provide
16 sufficient funding to support the capital program encumbrances (executed contracts)
17 until the next anticipated bond issuance. Under the new approach the capital program
18 funding plan is developed in a manner to provide sufficient funding to support the capital
19 program spending until the next anticipated revenue bond issuance. In other words the
20 basis of the funding was changed from project encumbrances to project expenditures.
21 The new approach requires that the Department have sufficient authorization, not
22 necessarily sufficient funds in the bank, prior to encumbering projects since projects
23 take years in construction.

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25 **RESPONSE PROVIDED BY:** Philadelphia Water Department
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PA-XI-2. REFER TO PAGE 24, LINES 17 - 21 OF BLACK & VEATCH'S TESTIMONY.

A. PLEASE PROVIDE THE SPECIFIC REASON FOR INCREASING THE
SMIP/GARP COST BY \$10 MILLION IN FY 2027.

B. PLEASE IDENTIFY THE NEGATIVE CONSEQUENCES TO BE
EXPERIENCED BY PWD IF THE SMIP/GARP COSTS ARE NOT
INCREASED BY THE REQUESTED \$10 MILLION IN FY 2027.

C. PLEASE IDENTIFY THE NEGATIVE CONSEQUENCES EXPERIENCED
BY PWD FROM REDUCING THE SMIP/GARP COSTS TO \$15 MILLION.

RESPONSE:

A. The Water Department intends to restore the SMIP/GARP program to its full funding level. The budget has been temporarily reduced to aid in managing through reductions in actual revenue receipts.

B. SMIP/GARP contributes directly to the Water Department (and the City) meeting its greened acre goals as outlined in the Green City Clean Waters (GCCW) program in accordance with the Consent Order and Agreement (COA). As of June 30, 2024, the SMIP/GARP program has contributed 1,009 greened acres in support of required compliance milestones, which represents approximately 1/3 of the system greened acres. Without sufficient and stable funding, the Water Department risks potentially missing greened acres milestones. In addition, the continued fluctuation in budget leads to less certainty in potential grant awards and impacts the potential pipeline of projects seeking support via the program.

C. By reducing the SMIP/GARP budget temporarily, the Water Department has delayed the implementation of greened acres and slowed progress toward required COA milestones. In addition, the fluctuating budget has raised uncertainty amongst property owners and aggregators, who might pursue funding, provided the program is in place and they can anticipate receiving some support.

RESPONSE PROVIDED BY: Philadelphia Water Department

PA-XI-3. PLEASE PROVIDE THE SOURCE DATA FOR THE FY 2026 AND FY 2027
CPI ESCALATION FACTOR OF 3.38% AS PRESENTED ON PAGE 25 OF
BLACK & VEATCH'S TESTIMONY.

RESPONSE:

Please refer to PWD Statement 7: Schedule BV-2. Escalation factors are further discussed
in Section 1.4.2. Source data is provided in Appendix F: O&M Cost Industry Indices Data.

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

1 **PA-XI-4.** REFER TO PAGE 25 OF BLACK & VEATCH’S TESTIMONY. PLEASE
2 PROVIDE AN ITEMIZED LIST OF THE EQUIPMENT TO BE PURCHASED
3 DURING FY 2026 AND FY 2027 OF \$3.1 MILLION AND \$3.8 MILLION,
4 RESPECTIVELY. PLEASE EXPLAIN WHY THE FY 2027 AMOUNT
5 DIFFERS FROM THE AMOUNT PRESENTED IN ADJUSTMENT 4.
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7 **RESPONSE:**

8 This question misstates the text presented on page 25 of Black & Veatch’s testimony.
9 Lines 18 to 20 of page 25 of Statement 7 state: (emphasis added) “Planned increases in
10 equipment purchases of \$3.1 million in FY 2026 to **\$3.8 million in FY 2030** are included
11 per planned additions by the Water Department.” This statement is consistent with the
12 amounts presented as Adjustment 4 on pages 296 to 298 of PWD Exhibit 6.
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14 Please refer to page 1-19 of Schedule BV-2 which presents that the adjustment to
15 equipment to provide additional vehicles and equipment. Response Attachment PA-XI-4
16 provides background information regarding this adjustment.
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18 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC. and Philadelphia
19 Water Department
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PA-XI-5. PLEASE PROVIDE THE SOURCE DATA FOR THE PPI FY 2026 AND FY 2027 ESCALATION FACTOR OF 2.06% AS PRESENTED ON PAGE 25 OF BLACK & VEATCH'S TESTIMONY.

RESPONSE:

Please refer to PWD Statement 7: Schedule BV-2. Escalation factors are further discussed in Section 1.4.2. Source data is provided in Appendix F: O&M Cost Industry Indices Data.

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

1 **PA-XI-6.** REFER TO PAGE 26 OF BLACK & VEATCH'S TESTIMONY. PLEASE
2 CONFIRM THAT THE ESTIMATED INCREASE IN MATERIALS AND
3 SUPPLIES DURING FY 2026 AND FY 2027 ARE BASED ON THE 2027 CPI
4 ESCALATION FACTOR OF 3.38%. IF NOT, PLEASE SHOW HOW THEY
5 WERE DERIVED.
6

7 **RESPONSE:**

8 Lines 1 to 6 of page 26 of Statement 7, including the referenced inset box presented on
9 Lines 11 to 16 of page 25, present the escalation factors utilized for projecting Materials
10 and Supplies costs during the study period which includes identifying 3.38% as the
11 escalation factor for FY 2026 and FY 2027. In addition, these lines also refer to the
12 additional increased expenses of \$0.6 million in FY 2026 to \$0.7 million in FY 2030 for
13 Fleet Management.
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15 Please refer to page 1-19 of Schedule BV-2 which presents this additional adjustment
16 related to materials and supplies for vehicles under Fleet Management. These additional
17 expenses include the increased cost associated with changing the water fund vehicle's
18 diesel fuel to renewable diesel fuel per City policy as well as increased costs experienced
19 for vehicle parts and lubricant costs.
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21 Response Attachment PA-XI-6 provides a breakdown of the estimated fleet materials and
22 supplies cost increases included in the adjustment. Note that the rate filing reflects a
23 preliminary estimate which is less than the amount supported by this attachment.
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25 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.
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PA-XI-7. REFER TO TABLE C-7: PROJECTED CAPITAL IMPROVEMENT PROGRAM.

A. PLEASE EXPLAIN WHY THERE ARE SIGNIFICANT INCREASES IN DISTRIBUTION SYSTEM REHABILITATION EXPENDITURES DURING THE RATE YEARS FY 2026 AND FY 2027 FOLLOWED BY DECREASES IN FYS 2028 - 2030.

B. PLEASE PROVIDE THE BREAKDOWN, SHOWING THE COMPONENTS, OF THE DISTRIBUTION SYSTEM REHABILITATION EXPENDITURES FOR THE FY 2025 (\$150,100,000), FY 2026 (\$203,100,000) AND FY 2027 (\$202,100,000).

C. PLEASE PROVIDE A COPY OF PWD'S APPROVED CAPITAL BUDGETS FOR FY 2026 AND FY 2027 FOR EACH YEAR SHOWING THE PURPOSE AND REASON FOR THE PROJECTS INCLUDED IN EACH FISCAL YEAR BUDGET.

RESPONSE:

A. Distribution System Rehabilitation Appropriations increased in FY 2026 and FY 2027 when compared to FY2025 due to:

(1) the increased cost of water main replacement (i.e., cost per mile of water main went from \$2.8 million per mile to \$5.25 million per mile); and

(2) The inclusion of the lead replacement program to comply with new Federal Lead and Copper Rule Revisions.

B. See table below for breakdown of components for Distribution System Rehabilitation expenditures.

	FY2025	FY2026	FY2027
Water Reconstruction	\$120,000,000	\$168,000,000	\$168,000,000
Water Revitalization Plan	\$30,000,000	\$10,000,000	\$10,000,000

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Lead Replacement		\$25,000,000	\$24,000,000
Water Expansion	\$100,000	\$100,000	\$100,000
Total	\$150,100,000	\$203,100,000	\$202,100,000

C. See page 248 of the proposed FY 2026-2031 Capital Budget - [capital-program-rec-FY2026.pdf](#)

RESPONSE PROVIDED BY: Philadelphia Water Department

PA-XI-8. REFER TO TABLE C-7: PROJECTED CAPITAL IMPROVEMENT
PROGRAM.

A. PLEASE PROVIDE THE BREAKDOWN SHOWING THE BASES OF THE
BILLING SYSTEM EXPENDITURES FOR THE FY 2026 (\$30,00,000), FY
2027 (\$30,000,000) AND FY 2028 (\$30,000,000).

B. PLEASE PROVIDE A COPY OF PWD'S APPROVED BUDGET REQUEST
FOR EACH YEAR SHOWING THE PURPOSE AND REASON FOR THE
PROJECTED ANNUAL EXPENDITURES.

RESPONSE:

A. The total estimated cost of \$90 Million reflects the total appropriation spread
over multiple years as reflected in the Department's Capital Budget. Please
refer to the proposed FY 2026 capital budget provided in response to item B.

B. See page 250 of the proposed FY 2026-2031 Capital Budget - [capital-
program-rec-FY2026.pdf](#)

Note – the Capital Budget is an appropriations based budget. Annual figures
reflect authorized appropriations which are to be spent over several years.

RESPONSE PROVIDED BY: Philadelphia Water Department

PA-XI-9. REFER TO TABLE C-7: PROJECTED CAPITAL IMPROVEMENT PROGRAM.

A. PLEASE EXPLAIN WHY THERE ARE SIGNIFICANT INCREASES IN RECONSTRUCTION OF SEWERS EXPENDITURES DURING THE RATE YEARS FY 2026 AND FY 2027.

B. PLEASE PROVIDE THE BREAKDOWN, SHOWING THE COMPONENTS, OF THE RECONSTRUCTION OF SEWERS EXPENDITURES FOR THE FY 2025 (\$96,000,000), FY 2026 (\$140,500,000) AND FY 2027 (\$150,500,000).

C. PLEASE PROVIDE A COPY OF PWD'S APPROVED CAPITAL BUDGETS FOR FY 2026 AND FY 2027 FOR EACH YEAR SHOWING THE PURPOSE AND REASON FOR THE PROJECTS INCLUDED IN EACH FISCAL YEAR BUDGET.

RESPONSE:

A. Sewer reconstruction cost per mile has seen a steep increase over the past five years. Costs have increased from \$6.8 million to \$10 million per mile. Additionally, PWD is increasing the mileage of sewer reconstruction by one mile per year from 13 miles in 2025 to 18 miles in 2030. The growth of the sewer reconstruction is expected to continue until 20 miles per year is reached.

B.

	FY2025	FY2026	FY2027
Sewer Reconstruction	\$95,500,000	\$140,000,000	\$150,000,000
Sewer Expansion	\$500,000	\$500,000	\$500,000
Total	\$96,000,000	\$140,500,000	\$150,500,000

C. See page 246 of the proposed FY 2026-2031 Capital Budget - [capital-program-rec-FY2026.pdf](#)

RESPONSE PROVIDED BY: Philadelphia Water Department

PA-XI-10. REFER TO TABLE C-7: PROJECTED CAPITAL IMPROVEMENT
PROGRAM.

A. PLEASE PROVIDE THE SOURCE DOCUMENTS FOR THE 5.0%
INFLATION ESCALATION RATE.

B. PLEASE PROVIDE THE SUPPORTING CALCULATION FOR THE
CONTINGENCY ADJUSTMENT AMOUNT FOR FY 2026 AND FY 2027.

RESPONSE:

A. Please refer to PWD Statement 7: Schedule BV-2. Escalation factors are
further discussed in Section 1.4.6. Source data is provided in Appendix G:
Capital Cost Industry Indices. The 5.0% escalation factor is based upon the
rounded one-year average of all presented indices.

B. Contingency adjustment is based upon discussions with Water Department
Construction and Engineering staff and reflect the use of contingencies in
general capital budgeting approaches.

RESPONSE PROVIDED BY: Black & Veatch Management Consulting, LLC. And
Philadelphia Water Department

1 **PA-XI-11.** REFER TO TABLE C-7: PROJECTED CAPITAL IMPROVEMENT
2 PROGRAM. FOOTNOTE (C) DESCRIBES PROJECT EXPENSES (LINE 17)
3 AS THE ANNUAL DRAWDOWN OF CAPITAL BUDGET APPROPRIATIONS
4 BASED ON PROJECT DURATIONS AND ANNUAL ENCUMBRANCES.
5 A. DOES THIS MEAN THIS IS ACTUAL (OR EXPECTED) EXPENDITURES
6 FOR THE CAPITAL IMPROVEMENT PROGRAM FOR EACH FISCAL
7 YEAR?
8 B. ARE PROJECT EXPENSES DURING EACH FISCAL YEAR BASED ON
9 THE AMOUNT APPROPRIATED FOR THAT FISCAL YEAR OR DOES IT
10 INCORPORATE PREVIOUS YEARS.
11 C. PLEASE PROVIDE THE SUPPORTING WORKPAPERS SHOWING THE
12 DERIVATION OF THE PROJECT EXPENSES FOR FY 2026 AND FY
13 2027.

14 **RESPONSE:**

- 15 A. Yes. Project Expenses presented on Line 17 of Table C-7 represent expected actual
16 expenditures for the capital improvement program for each fiscal year.
17 B. Project Expenses presented on Line 17 of Table C-7 are based that fiscal year and
18 prior appropriations.
19 C. See response attachment PA-XI-11.
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21 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC.
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PA-XI-12. REFER TO TABLE C-7: PROJECTED CAPITAL IMPROVEMENT
PROGRAM. PLEASE PROVIDE THE SUPPORTING WORKPAPERS
SHOWING THE DERIVATION OF THE ANTICIPATED ANNUAL PROJECT
ENCUMBRANCES FOR FY 2026 AND FY 2027.

RESPONSE:

See response attachment PA-XI-11.

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

PA-XI-13. REFER TO TABLE C-8: PROJECTED FLOW OF FUNDS - CONSTRUCTION
FUND & DEBT RESERVE ACCOUNT. PLEASE EXPLAIN WHAT NET
FINANCING REQUIRED LINE REPRESENTS AND HOW THE AMOUNTS
FOR FY 2026 AND FY 2027 WERE DETERMINED.

RESPONSE:

The Net Cash Financing Required presented on Line 16 of Table C-8 is the Project
Expenses presented on Line 17 of Table C-7. See response to PA-XI-11.

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

PA-XI-14. REFER TO TABLE C-8: PROJECTED FLOW OF FUNDS - CONSTRUCTION
FUND & DEBT RESERVE ACCOUNT. PLEASE PROVIDE THE
SUPPORTING DOCUMENTATION FOR THE ASSUMED 0.60 PERCENT
ISSUANCE COST AS SHOWN IN FOOTNOTE (B).

RESPONSE:

Please refer to response attachment PA-XI-14.

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

PA-XI-15. REFER TO TABLE C-9: SUMMARY OF EXISTING AND PROPOSED DEBT SERVICE.

A. PLEASE PROVIDE SUPPORT FOR THE 5.00% INTEREST RATE USED IN CALCULATION OF THE DEBT SERVICE FOR FISCAL YEAR 2027, PRESENTED IN FOOTNOTE (C).

B. PLEASE PROVIDE SUPPORT FOR DETERMINING THE DEBT SERVICE FOR FISCAL YEAR 2027 BASED ON INTEREST ONLY.

RESPONSE:

A. The 5.00% interest rate used in the calculation of debt service for the bonds proposed to be issued in FY 2027 was based on PWD's recent Series 2024C Water & Wastewater Revenue Bond issuance and discussions with the Departments financial advisors, Acacia Financial Group, Inc. and PFM Financial Advisors LLC. Please refer to the Series 2024C series interest rates presented in PWD Exhibit 5 (page 2 of the pdf).

B. The series revenue bonds are issued with annual debt service payments consisting of two six-month interest payments and an annual principal payment. In the fiscal year of issuance, the revenue bond debt service payment will consist of a six-month interest payment and a short coupon interest payment to align the future payments with other revenue bond payments to reduce the number of payments required to be made to the fiscal agent. The projected bonds are anticipated to be issued in July with a 4-month short coupon to align with other revenue bond debt service payments.

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

PA-XI-16. REFER TO PAGE 28 OF BLACK & VEATCH'S TESTIMONY. PLEASE
PROVIDE THE SUPPORTING DOCUMENTATION FOR THE ANNUAL
PROJECT EXPENSES BELOW. SHOW THE BASES FOR EACH OF THE
ANTICIPATED PROGRAM-LEVEL PROJECT DURATIONS.

A. BILLING SYSTEM – 5 YEARS.

B. WATER CONVEYANCE – 4 YEARS.

C. SEWER COLLECTION – 4 YEARS.

D. FACILITIES IMPROVEMENTS – 6 YEARS.

RESPONSE:

Please refer to PWD Statement 7 Schedule BV-2: Cost of Service Report, Section 1.4.6.

The project durations are based upon review and discussions regarding overall program
level expenditures with Water Department staff. Durations are intended to reflect: (i)
assumed planning and design phases; (ii) ramp-up activities and construction; and (iii)
overall drawdown of construction funds over time.

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

PA-XI-17. REFER TO PAGE 28 OF BLACK & VEATCH'S TESTIMONY. IF THE BILLING SYSTEM DURATION IS BASED ON 5 YEARS, WHY DOES TABLE C-7 SHOW EXPENDITURES OVER A DURATION OF 3 YEARS?

RESPONSE:

Lines 1 to 9 of Table C-7 present the budgeted appropriations and are not the project expenditures.

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

1 **PA-XI-18.** REFER TO PAGE 30 OF BLACK & VEATCH'S TESTIMONY. THE PANEL
2 STATES: "AS BOTH WIFIA AND PENNVEST WORK ON A
3 REIMBURSEMENT BASIS, THE WATER DEPARTMENT INTENDS TO USE
4 A COMBINATION OF AVAILABLE CASH AS WELL AS THE EXISTING
5 COMMERCIAL PAPER ("CP") PROGRAM TO PROVIDE INTERIM
6 FINANCING TO PAY CONTRACTOR INVOICES WHILE AWAITING
7 REIMBURSEMENT FROM THE RESPECTIVE ENTITY. PLEASE EXPLAIN
8 AND SHOW HOW THIS HAS BEEN REFLECTED IN THE COST OF
9 SERVICE.

10
11 **RESPONSE:**

12 Commercial paper is an interim funding mechanism used to pay contractor related
13 invoices, while the Water Department awaits reimbursement from supporting entity (i.e.,
14 PennVEST or WIFIA). Commercial paper is not a source of proceeds which can be
15 utilized to finance capital projects long-term.

16
17 The cost of service reflects the estimated carrying cost of the commercial paper program
18 on an annual basis. Commercial paper interest is treated as debt service and is considered
19 parity debt.

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

PA-XI-19. REFER TO TABLE C-8: PROJECTED FLOW OF FUNDS - CONSTRUCTION
FUND & DEBT RESERVE ACCOUNT. PLEASE EXPLAIN WHY
COMMERCIAL PAPER IS NOT REFLECTED ON THIS TABLE.

RESPONSE:

Please see response to PA-XI-18.

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

PA-XI-20. REFER TO TABLE C-9: SUMMARY OF EXISTING AND PROPOSED DEBT SERVICE.

A. PLEASE EXPLAIN WHY THE COMMERCIAL PAPER AMOUNT IS UNCHANGED FROM YEAR TO YEAR.

B. PLEASE PROVIDE THE MONTHLY COMMERCIAL PAPER BALANCES FOR FY 2022 THROUGH THE MOST RECENT MONTH AVAILABLE IN FY 2025.

RESPONSE:

A. Commercial Paper interest payments are assumed to remain constant to support interim payments to contractors while the Water Department awaits reimbursement. See response to PA-XI-18.

B. Please see Response Attachment PA-XI-20.

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

PA-XI-21. REFER TO PAGE 31, LINE 19 OF BLACK & VEATCH'S TESTIMONY.
PLEASE PROVIDE THE ACTUAL MONTHLY INTEREST RATE THAT IS
APPLIED TO THE FUNDS ON WHICH PWD EARNS INTEREST INCOME
FOR FY 2022 THROUGH THE MOST RECENT MONTH AVAILABLE IN FY
2025.

RESPONSE:

Please refer to the response attachment PA-XI-21.

RESPONSE PROVIDED BY: Philadelphia Water Department