BEFORE THE
PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

<table>
<thead>
<tr>
<th>Re: Philadelphia Water Department Proposed Charges in Rates and Charges</th>
<th>2022 Special Rate Proceeding</th>
</tr>
</thead>
</table>

PHILADELPHIA WATER DEPARTMENT HEARING EXHIBIT
FOR LAFAYETTE MORGAN

April 28, 2022
### PWD Cross Examination Exhibit

<table>
<thead>
<tr>
<th>Tab 1</th>
<th>Joint Petition for Partial Settlement (dated May 5, 2021)</th>
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<tr>
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<td>Public Advocate Responses to Philadelphia Water Department Interrogatories and Requests for Production of Documents (dated April 8, 2021)</td>
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<td>Tab 3</td>
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BEFORE THE
PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

JOINT PETITION FOR PARTIAL SETTLEMENT

The Philadelphia Water Department ("PWD" or "Department")\(^1\) and the Public Advocate ("Public Advocate" or "PA") (collectively, "Joint Petitioners")\(^2\) submit this Joint Petition for Partial Settlement ("Joint Petition" or "Partial Settlement") of the above-described general rate proceeding and request that (1) Hearing Officer Marlane Chestnut ("Hearing Officer") issue a report recommending that this Partial Settlement be approved, without modification, by the Philadelphia Water, Sewer and Storm Water Rate Board ("Rate Board" or "Board"); and, (2) the Rate Board (a) issue a Rate Determination consistent with this Partial Settlement and (b) authorize the Department to file modified Rates and Charges to become effective on September 1, 2021 (for FY 2022) and September 1, 2022 (for FY 2023), consistent with the terms and conditions set forth herein.

In support of the proposed Partial Settlement, the Joint Petitioners state the following:

I. BACKGROUND

1. The Department is one of the ten operating departments of the City of Philadelphia ("City" or "Philadelphia"). It provides integrated water and wastewater services, including services for sanitary wastewater and stormwater, for accounts and properties in Philadelphia.

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\(^1\) As used herein in Part II (Terms and Conditions), “PWD” means and includes the Philadelphia Water Department and/or the Philadelphia Water Revenue Bureau, as the context may require, whereas "Department" refers exclusively to the Philadelphia Water Department.

\(^2\) PECO takes no position on the Partial Settlement. The Philadelphia Large Users Group ("PLUG") does not oppose the Partial Settlement. The individual (pro se) participants, Lance Haver and Michael Skiendzielewski, have indicated their opposition to the Partial Settlement. Other individual (pro se) participants have not expressed any opinion about the Partial Settlement.
2. On January 15, 2021, the Department filed its advance notice with Philadelphia City Council (“City Council”) and the Rate Board communicating its intent to file proposed changes in rates for water and wastewater service to become effective during the Rate Period (“Advance Notice”). On February 16, 2021, the Department filed its formal notice with the Rate Board and the Department of Records of the aforesaid application for rate relief (“Formal Notice”). The Department’s filings initiated a general rate proceeding pursuant to Section II.B of the Board’s Regulations (hereinafter, the “2021 general rate proceeding”).

3. In the Advance Notice and Formal Notice, the Department proposed changes in water, sewer, and stormwater rates and related charges to take effect on September 1, 2021 (for FY 2022) and on September 1, 2022 (for FY 2023).

4. Pursuant to the Rate Board’s Regulations, the Rate Board appointed Marlane Chestnut, Esquire (“Hearing Officer”) to preside over the rate hearings and to prepare a report. The Rate Board also appointed Community Legal Services to serve as the Public Advocate in the proceeding.

5. Legal notices related to the technical and public input hearings were timely published in local newspapers. These notices are set forth in PWD Exhibit 1 (as supplemented) and PWD Hearing Exhibit 1. PWD Exhibit 1 and PWD Hearing Exhibit 1 are posted on the Rate Board’s website.

6. Active participants in this proceeding (in addition to the Department, the Water Revenue Bureau (“WRB”) and the Public Advocate) included, the Philadelphia Large Users Group (“PLUG”), PECO Energy Company/Exelon (“PECO”), Lance Haver, Sharon Keselman, Michael Blowney, Kesrick Jones, Jr., Joseph Sherick, Juliana Martell and Michael Skiendzielewski.

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3 In November, 2012, Philadelphia voters approved an amendment to the Philadelphia Home Rule Charter to allow City Council to establish, by ordinance, an independent ratemaking board responsible for fixing and regulating rates and charges for water, sanitary sewer and stormwater services. Under the Rate Ordinance adopted by the Council, the Rate Board must approve, modify or reject water, wastewater and storm water rates proposed by the Department. The Rate Ordinance, codified under Chapter 13-100 of the Philadelphia Code, became effective January 20, 2014. The Board’s first rate proceeding was completed in 2016.

4 The Rate Period consists of two periods: Fiscal Year 2022 (“FY 2022”) beginning on September 1, 2021; Fiscal Year 2023 (“FY 2023”) beginning on September 1, 2022.

5 Rate Board Regulations, Section II.B.1.


7 The WRB, which is part of the City’s Department of Revenue, provides all billing and collection functions for charges by the Department.
7. As a part of the proceedings, the Hearing Officer convened a total of four telephonic and virtual public input hearings on March 16 and 18, 2021. An afternoon hearing and evening hearing were separately held on each date.

8. Prepared direct testimony in response to the Department’s filing was submitted on March 22, 2021 by the Public Advocate and by Lance Haver; rebuttal testimony was submitted on April 7, 2021 by PLUG and PWD.

9. The active participants in this proceeding engaged in discussions to try to achieve a settlement of some or all of the issues in this case.

10. As a result of the above discussions, the Joint Petitioners have agreed to a base rate increase, an allocation of the revenue increase, and a rate design to recover the rate increase. The parties have also made agreements with regard to several customer service and policy issues.

   Additionally, all issues presented in the proceeding have been resolved by the Partial Settlement, except for the issues identified below that are reserved for litigation. See Paragraph 11.F of this Partial Settlement.

II. TERMS AND CONDITIONS

11. The Joint Petitioners hereby respectfully request that the Hearing Officer recommend, and the Rate Board approve, the following modifications to the Department’s proposed FY 2022 and FY 2023 rates and charges, and associated cost of service, customer service and policy issues:

   A. Black Box Settlement

   This Settlement is a “black box” settlement. Under a “black box” settlement, parties do not specifically identify adjustments to projected revenues and expenses. PWD\(^8\) believes that the “black box” concept facilitates settlement agreements because it permits parties to retain their positions on important ratemaking issues for the proceeding at hand as well as for future proceedings.

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\(^8\) As used herein, “PWD” means and includes the Philadelphia Water Department and/or the Philadelphia Water Revenue Bureau, as the context may require, whereas “Department” refers exclusively to the Philadelphia Water Department.
Table C-1A: Projected Revenue and Revenue Requirements.

<table>
<thead>
<tr>
<th>Settlement Proposal</th>
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</thead>
<tbody>
<tr>
<td>(dollars in 1000s)</td>
</tr>
<tr>
<td>FY 2022</td>
</tr>
<tr>
<td>Line 10</td>
</tr>
</tbody>
</table>

(a) FY 2022

As shown on Line 5 (for FY 2022) in Appendix 1 (Table C-1A), the Settlement is designed to produce additional annual water, wastewater, and stormwater revenue of $10.411 million to become effective on September 1, 2021, for FY 2022.

That agreed-upon amount is a $38.453 million reduction from the Department’s original request of $48.864 million in additional revenues for FY 2022.

(b) FY 2023

As shown on Line 6 (for FY 2023) in Appendix 1, the Settlement is designed to produce additional incremental annual water, wastewater, and stormwater revenue of $34.110 million to become effective on September 1, 2022, for FY 2023. As shown on Line 10 (for FY 2023) in Appendix 1, the Settlement is designed to produce total additional annual water, wastewater, and stormwater revenue of $47.011 million for FY 2023.

That total amount shown on Line 10 is (a) a $45.086 million reduction from the Department’s original request of $92.096 million in annual additional revenues in FY 2023 and (b) the FY 2023 annual incremental portion of such additional revenues ($34.110 million) is subject to further adjustment/reconciliation, as described below.

(2) Reconciliation Adjustments to FY 2023.

(a) Reconciliation Procedure.

The agreed-upon FY 2023 approved rate increase includes incremental additional revenues of $34.110 million (“FY 2023 Base Rate Incremental Increase”). The FY 2023 Base Rate Incremental Increase is subject to two potential adjustments related to (i) Federal Stimulus Funding; and (ii) Changes in FY 2021 Financial Performance, as described below.
The above adjustments will be addressed in a Special Rate Reconciliation Proceeding for FY 2023.

The Special Rate Reconciliation Proceeding is intended to be simple, limited to the two adjustments defined in Paragraph 11.A.(2) (a), and analogous to the TAP-R Reconciliation Proceeding. By approving the Settlement, the Rate Board is agreeing (in advance) to the use of the Special Rate Reconciliation Proceeding. Both the Department and the Public Advocate will be deemed to be Participants in the Special Rate Reconciliation Proceeding without notification to the Rate Board.

The Department shall initiate the Special Rate Reconciliation Proceeding. Any adjustment or reconciliation will be implemented effective September 1, 2022. It is anticipated that the Department will commence the above-described Special Rate Reconciliation Proceeding by filing an Advance Notice on or before March 1, 2022. In the Department’s sole discretion, the Special Rate Reconciliation Proceeding may or may not be presented as part of the annual TAP-R Reconciliation Proceeding. In any event, the Public Advocate and other stakeholders shall be afforded a reasonable period of time to review and conduct discovery in order to evaluate the Department’s reconciliation adjustments and may submit testimony and briefs supporting the Department’s requested reduction or a different reduction to the FY 2023 Base Rate Incremental Increase.

(i) Reconciliation Framework (Federal Stimulus).

Subject to Paragraph 11.A.(2)(a) and this subparagraph (i), the FY 2023 approved rate increase is subject to reduction on a dollar-for-dollar basis via the Special Rate Reconciliation Proceeding to reflect the impact of “Stimulus Funding” (defined below) received by PWD during the “Receipt Period” (from July 1, 2021 to December 31, 2021).

- **Definition:** “Stimulus Funding” is defined as:
  - Except as excluded by the footnote below, amounts from (a) the U.S. Department of Health and Human Services (HHS) or Philadelphia Housing Development Corporation (PHDC) under the Consolidated Appropriations Act of 2021, and/or received directly by PWD; (b) any amounts allocated and/or received directly by PWD customers under the federal legislation, or other state or federal action, to alleviate potential or actual financial hardship of PWD’s customers; (c) any amounts received directly by PWD from Utility Emergency Services Fund (“UESF”) in connection with UESF’s locally funded programs including the Utility Grant Program, Water Conservation Housing Stabilization Program, and the Customer Assistance Program for Water; and (iv) any amounts adopted by City Council through the budget process and/or received directly by PWD, beyond the Receipt Period.

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9 For this purpose, “Stimulus Funding” excludes: (i) any amounts received directly by PWD from the City, HHS, PHDC or other state or local agencies administering federal funds for infrastructure or capital projects; (ii) any amounts allocated and/or received directly by PWD customers under the federal legislation, or other state or federal action, to alleviate potential or actual financial hardship of PWD’s customers; (iii) any amounts allocated and/or received directly by PWD from Utility Emergency Services Fund (“UESF”) in connection with UESF’s locally funded programs including the Utility Grant Program, Water Conservation Housing Stabilization Program, and the Customer Assistance Program for Water; and (iv) any amounts adopted by City Council through the budget process and/or received directly by PWD, beyond the Receipt Period.
enacted on December 27, 2020 ("CARES Act")\textsuperscript{10} and (b) the American Rescue Plan Act, enacted on March 11, 2021 ("ARPA")\textsuperscript{11} (collectively, the "federal legislation"), that are allocated by City Council to PWD in the FY 2022 budget and/or received directly by PWD, during the Receipt Period, in either case, that can be used to reduce operating expenses that would otherwise be paid by ratepayers.

- During the Receipt Period, any amounts received directly by PWD for reimbursement of PWD operating expenses submitted under the CARES Act.

  - **Best Efforts:** PWD will utilize its best efforts to secure Stimulus Funding.

  - **Threshold Bucket:** Downward adjustment will occur, if PWD receives $2 million or more in Stimulus Funding ("Minimum Threshold"). No adjustment will be made if less than the above Minimum Threshold is reached.

  - **Adjustment, Mechanics:** Provided the Minimum Threshold is met, an across-the-board reduction to the FY 2023 Base Rate Incremental Increase will be made in an amount equal to the Stimulus Funding received.

  - **Maximum Adjustment:** Reconciliation under this adjustment, separately or in combination with other adjustments, cannot lower the FY 2023 Base Rate Incremental Increase below zero dollars.

  (ii) **Reconciliation Framework (Changes in FY 2021 Performance).**

Subject to Paragraph 11.A.(2)(a)(i) and this subparagraph (ii), the FY 2023 Base Rate Incremental Increase is subject to reduction on a dollar-for-dollar basis via the Special Rate Reconciliation Proceeding and within the parameters described below.

- **Adjustment, Mechanics:** The Department shall file a reconciliation request for FY 2023, setting forth the amount by which it requests the Rate Board reduce the FY 2023 Base Rate Incremental Increase to share with customers the benefit of


\textsuperscript{11} Public Law No: 117-2. Section 9901 of the American Rescue Plan Act, \textit{inter alia}, provides funds to certain governmental entities that may be used, among other things, to make necessary investments in water, sewer, or broadband infrastructure. Section 2912 of American Rescue Plan Act allocates $500 million to the HHS to assist low-income households that pay a high proportion of household income for drinking water and wastewater services. The funds under Section 2912 of American Rescue Plan Act are in addition to the funds under Section 501 of the Consolidated Appropriations Act.
FY 2021 amounts above a minimum threshold\textsuperscript{12} in the Rate Stabilization Fund. The Department shall include the City’s annual financial report for such fiscal year and a statement explaining the basis for the Department’s requested reduction (which may be any amount, including zero, up to $34.110 million).

- **Maximum Adjustment:** Reconciliation under this adjustment, separately or in combination with other adjustments, cannot lower the FY 2023 Base Rate Incremental Increase below zero dollars.

**B. Rates and Rate Impacts**

Appendix 2 includes Tables C-4 (residential) and C-5 (non-residential) which show the impact of proposed rates on the bills of typical customers, if the Partial Settlement rates are approved.\textsuperscript{13} The rate impacts depicted in the above tables reflect proposed rates and charges that are based on the Joint Petitioners’ agreement with regard to cost allocation, rate structure, and rate design for the proposed increased revenues.\textsuperscript{14}

The Joint Petitioners submit that the proposed rates and charges should be approved as they are just and reasonable, comply with the ordinances governing this proceeding and provide a reasonable basis for recovery of revenues sufficient to meet the Department’s obligations.\textsuperscript{15}

**C. Cost of Service**

**(1) Cost and Benefit Allocations.**

PWD will convene stakeholder meetings to evaluate alternative ways of sharing the costs/benefits of ratepayer-funded non-residential stormwater overflow remediation projects. PWD will develop proposals prior to the next base rate proceeding.

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\textsuperscript{12} The settling parties expressly agree that participants in the Special Rate Reconciliation Proceeding may propose different “minimum thresholds” and that a “minimum threshold” has not been established in connection with the Reconciliation Framework (Changes in FY 2021 Financial Performance) set forth in Paragraph 11.A.(2)(a)(ii) above.

\textsuperscript{13} Rates and charges shown for FY 2023 are subject to reconciliation. FY 2022 and 2023 bill impacts reflect proposed TAP-R rates, as filed, and are subject to Rate Board approval.

\textsuperscript{14} Please note that the rates and charges shown for FY 2023 are subject to the reconciliation procedure in Paragraph 11.A.(2)(a).

\textsuperscript{15} See footnote 14. Rates and charges shown for FY 2023 are subject to reconciliation.
(2) **Residential Rate Structure.**

PWD will develop a proposal to evaluate tiered residential stormwater rate structures to reflect the range of residential property sizes. PWD will convene stakeholder meetings to discuss such proposal prior to its next base rate proceeding.

(3) **Rate Design, Revenue Allocation and Cost of Service.**

The rate design, revenue allocation and cost of service recommendations, proposed by the Department, are approved as a part of the Partial Settlement.

D. **Customer Service and Policy Agreements**

(1) **TAP Administration.**

(a) **TAP Recertification.**

To protect TAP participants, PWD has waived program recertification during the pandemic. This policy will continue to be in place for the near term. For the longer term, PWD will consider the merits of establishing a longer period of TAP certification for certain groups (e.g., pensioners, SSI, and LIHEAP recipients).

(b) **TAP Outreach/Participation.**

To improve outreach for TAP, PWD will evaluate new approaches to inform PWD customers of this program and other assistance programs that PWD offers. This will include outreach to customers restored since the start of COVID-19 and greater outreach in the Black community in concert with community organizations. PWD will organize and participate in community meetings, summits, or other gatherings where PWD can effectively communicate the availability of assistance for PWD customers. PWD will actively engage in meetings, summits and other gatherings where the availability of assistance can be communicated to PWD customers. PWD will also consider proposals raised at such outreach meetings.

PWD will organize and participate in community meetings concerning TAP participation, including meetings with Black community leaders and Black grassroots community members to discuss what aspects of processes related to TAP application, enrollment, and recertification can be improved upon.
(2) **Language Access.**

To improve communication with PWD customers, PWD will consider changes in its language access plans, in coordination with the City’s Office of Immigrant Affairs. This would include interacting with stakeholder groups and translating customer service-related forms/applications into various additional languages.

PWD will work with community stakeholders to determine which additional documents need to be translated. The translated written documents will be available on the City's website and other places where intake services are provided for PWD customers.

(3) **Moratorium on Utility Shut-Offs.**

To protect PWD customers during the pandemic, PWD will continue to review and evaluate the need to extend the current termination moratorium to protect public health and safety.

Prior to lifting the current moratorium, PWD, in concert with stakeholders, will evaluate the feasibility of extending the moratorium evaluating, among other considerations, public health guidance and economic conditions.

(4) **COVID-19 Protections.**

(a) **Payment Agreements.**

To protect customers, PWD will provide more flexible terms for payment arrangements to help PWD customers bring their accounts current. PWD is currently extending payment agreements for up to five years. PWD also provides income-based payment agreements up to 15 years. These policies will remain in place for the near future.

PWD will evaluate the Public Advocate’s proposals to proactively extend payment arrangements to assist customers who have fallen behind during the COVID-19 pandemic.

PWD will conduct outreach with community organizations to “enroll” customers with past due balances in suitable payment arrangements with longer repayment terms.
(b) Tenant Issues.

To address certain tenant issues raised in this proceeding (establishing tenant accounts, proof of residency), PWD will review business practices, website disclosures, and governing regulations.

PWD will specifically review its internal policies, website language, and PWD regulations regarding establishing a tenant account (e.g., provisions of regulations deeming the owner to have consented to having service placed in the tenant’s name (unless service is off at the time of application) and (ii) policies requiring other utility bills in the tenant’s name).

PWD, in conjunction with the Law Department, will review policies to facilitate tenants opting to request to transfer pre-existing arrears into his/her account.

(5) Other Issues.

PWD will provide quarterly reports to the Rate Board with regard to its progress as to the subject areas identified in this Section D. PWD will also consider proposals or recommendations made by stakeholders, community groups and customers in connection with outreach, language access, and tenant issues.

E. Miscellaneous.

(1) PWD shall withdraw its Motion in Limine to Limit or Exclude Certain Portions of the Testimony of Roger D. Colton, submitted on April 6, 2021. In so doing, PWD is not waiving its position as to the limited jurisdiction of the Rate Board.

(2) PWD will provide responses to all outstanding Public Advocate data requests that were (a) not objected to, (b) withdrawn or unanswered by agreement or (c) otherwise excluded by the hearing officer from the record in the rate proceeding. Except as provided above, responses to the aforesaid data requests shall be admitted into the record without objection, unless subject to a limitation imposed by the Hearing Officer or the Rate Board.

F. Issues Reserved for Litigation.

It is agreed and understood that the following issues are reserved for litigation: (a) the Department’s proposal for implementation of arrearage forgiveness (which was challenged by the Public Advocate who presented an alternative proposal); (b) the Department’s proposal for cost recovery of arrearage forgiveness through the TAP Rider (which was challenged by the Public Advocate who presented an
alternative proposal); and (c) those issues raised by the individuals who, as active participants, opposed the proposed increased rates and charges by the Department and who expressed opposition to the Partial Settlement.\textsuperscript{16}

12. The record of the 2021 General Rate Proceeding shall consist of all documents identified in Section II.B.6.b of the Rate Board’s Regulations and all items posted at the Rate Board website in connection with the 2021 general rate proceeding. The Joint Petitioners further agree and stipulate that this Partial Settlement, including the Appendices hereto, are part of the Hearing Record.

III. \textbf{THE PARTIAL SETTLEMENT IS REASONABLE}

13. The Joint Petitioners submit that this Partial Settlement is reasonable and in the public interest for the following reasons:

(a) The Partial Settlement provides for lower rates and charges than originally requested by the Department in the 2021 general rate proceeding.

This Partial Settlement increases rates (Table C-1A, Line 10) by $10.411 million, which is 21\% of the Department’s original request of $48.864 million in FY 2022.

This Partial Settlement increases rates (Table C-1A, Line 10) by $47.011 million, which is 51\% of the Department’s original request of $92.096 million in FY 2023.

(b) The Partial Settlement includes commitments from PWD to continue certain protections for its customers amid the COVID-19 public health and economic crisis; and other customer service and policy issues.

(c) Acceptance of the Partial Settlement will avoid the necessity of further administrative proceedings and/or court proceedings at substantial cost to Joint Petitioners, other participants and the Department’s ratepayers.

(d) The Partial Settlement will allocate agreed upon water and sewer revenue requirements in a manner that is reasonable in light of rate structure/cost of service policy decisions previously approved.

(e) The Joint Petitioners arrived at terms of Settlement after review of: (i) the rate filing for 2021 general rate proceeding submitted by the Department, (ii) extensive discovery responses, (iii) the direct and rebuttal testimony and related exhibits proffered by the participants; and following (iv) settlement negotiations.

\textsuperscript{16} The individual participants that have indicated their opposition to the Joint Settlement are Lance Haver and Michael Skiendzielewski.
The terms and conditions of the Partial Settlement constitute a carefully negotiated package representing reasonable compromises as to the majority of issues presented in the rate case.

IV. ADDITIONAL TERMS AND CONDITIONS

14. This Partial Settlement is proposed by Joint Petitioners to resolve the majority of issues presented in this proceeding and is made without admission against or prejudice to any position which any Joint Petitioner has taken in this case, might adopt during subsequent litigation or in further litigation of this case, or in future cases.

15. Each term and condition set forth in this Joint Petition, whether or not set out in a numbered paragraph, shown in a table or other graphic presentation, bolded, italicized or otherwise emphasized, or set forth in the body, a footnote, or parenthetical, or appendix, is material consideration to the entry into this Partial Settlement by the participants signing below. Any proposal by the Department that is not specifically addressed by the terms and conditions in this Joint Petition continues as proposed by the Department.

16. This Partial Settlement is conditioned upon the Rate Board’s approval of the terms and conditions contained herein without modification. If the Rate Board disapproves the Partial Settlement or modifies the terms and conditions herein, the Partial Settlement may be withdrawn, by a Joint Petitioner, upon written notice to the Rate Board and all active participants in this proceeding communicated within three business days of the entry of a final order of the Rate Board in this proceeding and, in such event, the Partial Settlement shall be of no force and effect. In the event the Rate Board disapproves the Partial Settlement, or any Joint Petitioner elects to withdraw as provided above, the Joint Petitioners reserve their respective rights to fully litigate this case, including, but not limited to, cross-examination and legal argument through submission of Briefs and Exceptions. Joint Petitioners agree that while the Partial Settlement, upon Rate Board approval, will be fully enforceable according to its terms, the Joint Petition does not expressly or implicitly represent approval of any specific claims made in this proceeding and the Joint Petitioners agree not to contend otherwise in future proceedings.

17. Joint Petitioners will make reasonable, good faith efforts to obtain approval of the Partial Settlement by the Rate Board without modification. If the Hearing Officer recommends that the Rate Board adopt the Partial Settlement, as proposed herein, the Joint Petitioners agree to waive filing exceptions. Joint Petitioners, however, do not waive their rights to file exceptions (a) with respect to any modification of the terms and conditions of Settlement or any additional matter proposed by the Hearing Officer in her report, (b) to correct an error or misstatement in the Hearing Officer’s report, or (c) to any recommendations of the Hearing Officer on any issue either (1) described in Paragraph 11.F as not being resolved by this Partial Settlement or (2) otherwise litigated in this proceeding.
V. CONCLUSION

WHEREFORE, Joint Petitioners, by their respective counsel, request the following:

1. That the Hearing Officer admit this Joint Petition into the record of this proceeding, as well as the appendices hereto.

2. That the Hearing Officer recommend the approval of the Partial Settlement by the Rate Board, as described in this Joint Petition and supporting documentation provided in the appendices hereto, including Tables C-1A, C-4 and C-5.

3. That the Rate Board approve the Partial Settlement and find the resulting rates and charges are just and reasonable and authorize the Department to file modified rates and charges related to become effective on September 1, 2021 (for FY 2022) and on September 1, 2022 (for FY 2023), consistent with the terms and conditions herein.

4. That the Rate Board enter its final Rate Determination in this matter consistent with the terms and conditions of the Partial Settlement.

[Signatures appear on next page]
The signatories to this Joint Petition for Partial Settlement indicate their acceptance of its terms and request the relief stated above.

Respectfully submitted,

/s/ Andre C. Dasent

Andre C. Dasent
Centre Square - East Tower
1500 Market Street, 12th Floor
Philadelphia, PA 19102

Carl R. Shultz
Eckert Seamans Cherin & Mellott, LLC
213 Market Street, 8th Floor
Harrisburg, PA 17101

For the Philadelphia Water Department

/s/ Robert W. Ballenger

Robert W. Ballenger
Community Legal Services, Inc.
1424 Chestnut Street
Philadelphia, PA 19102

Dated: May 5, 2021

For the Public Advocate
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<th>Description</th>
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<td>FY 2026</td>
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<td>Other Operating Revenue</td>
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<td>Debt Reserve Fund Interest Income</td>
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<td>Operating Fund Interest Income</td>
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<td>Rate Stabilization Interest Income</td>
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<td>Total Revenues</td>
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<td>Total Operating Expenses</td>
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<td>18</td>
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<td>Net Revenues After Operations</td>
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<td>Senior Debt Service</td>
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<td>22</td>
<td>Projected Future Bonds</td>
<td>(8,000)</td>
<td>(30,798)</td>
</tr>
<tr>
<td>23</td>
<td>Commercial Paper</td>
<td>(2,000)</td>
<td>(4,000)</td>
</tr>
<tr>
<td>24</td>
<td>Total Senior Debt Service</td>
<td>(184,401)</td>
<td>(210,423)</td>
</tr>
<tr>
<td>25</td>
<td>Total Senior Debt Service Coverage (L19/L24) (c)</td>
<td>1.20 x</td>
<td>1.20 x</td>
</tr>
<tr>
<td>26</td>
<td>Subordinate Debt Service</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>27</td>
<td>Transfer to Escrow</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>28</td>
<td>Total Debt Service on Bonds</td>
<td>(184,401)</td>
<td>(210,423)</td>
</tr>
<tr>
<td>29</td>
<td>Capital Account Deposit</td>
<td>(29,447)</td>
<td>(31,155)</td>
</tr>
<tr>
<td>30</td>
<td>Total Coverage (L19/(L24+L26+L29)) (c)</td>
<td>1.03 x</td>
<td>1.04 x</td>
</tr>
<tr>
<td>31</td>
<td>End of Year Revenue Fund Balance</td>
<td>7,529</td>
<td>11,022</td>
</tr>
</tbody>
</table>

(a) Includes other operating and nonoperating income, including interest income on funds and accounts transferable to the Revenue Fund.
(b) Pursuant to the General Ordinance, as of June 30 of each Fiscal Year, the City may transfer (i) from the Rate Stabilization Fund to the Revenue Fund or (ii) from the Revenue Fund to the Rate Stabilization Fund, the amount determined. The amounts presented are subject to actual results.
(c) Projected estimates are subject to actual financial results and final transfers to/from Rate Stabilization (see note (b)). The amounts presented are subject to actual results.
<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Monthly Use</th>
<th>Existing Rates</th>
<th>Proposed Rates</th>
<th>% Proposed of Existing</th>
<th>Proposed Rates</th>
<th>% Proposed of FY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8</td>
<td>0.0</td>
<td>$28.02</td>
<td>$28.96</td>
<td>3.4%</td>
<td>$30.70</td>
<td>6.0%</td>
</tr>
<tr>
<td>5/8</td>
<td>0.2</td>
<td>$43.50</td>
<td>$45.04</td>
<td>3.5%</td>
<td>$47.85</td>
<td>6.2%</td>
</tr>
<tr>
<td>5/8</td>
<td>0.3</td>
<td>$51.24</td>
<td>$53.07</td>
<td>3.6%</td>
<td>$56.43</td>
<td>6.3%</td>
</tr>
<tr>
<td>5/8</td>
<td>0.4</td>
<td>$58.98</td>
<td>$61.11</td>
<td>3.6%</td>
<td>$65.01</td>
<td>6.4%</td>
</tr>
<tr>
<td>5/8</td>
<td>0.5</td>
<td>$66.73</td>
<td>$69.15</td>
<td>3.6%</td>
<td>$73.58</td>
<td>6.4%</td>
</tr>
<tr>
<td>5/8</td>
<td>0.6</td>
<td>$74.46</td>
<td>$77.18</td>
<td>3.7%</td>
<td>$82.15</td>
<td>6.4%</td>
</tr>
<tr>
<td>5/8</td>
<td>0.7</td>
<td>$82.20</td>
<td>$85.22</td>
<td>3.7%</td>
<td>$90.73</td>
<td>6.5%</td>
</tr>
<tr>
<td>5/8</td>
<td>0.8</td>
<td>$89.94</td>
<td>$93.25</td>
<td>3.7%</td>
<td>$99.31</td>
<td>6.5%</td>
</tr>
<tr>
<td>5/8</td>
<td>1.7</td>
<td>$159.60</td>
<td>$165.59</td>
<td>3.8%</td>
<td>$176.49</td>
<td>6.6%</td>
</tr>
<tr>
<td>5/8</td>
<td>2.7</td>
<td>$232.63</td>
<td>$243.40</td>
<td>4.6%</td>
<td>$259.46</td>
<td>6.6%</td>
</tr>
<tr>
<td>5/8</td>
<td>3.3</td>
<td>$275.33</td>
<td>$289.42</td>
<td>5.1%</td>
<td>$308.52</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

Notes:
The FY 2021 figures reflect the existing base and current TAP-R rates, of $0.57/MCF for water and $0.78/MCF for sewer.
The FY 2022 figures reflect:
(1) the proposed TAP-R rates, of $0.70/MCF for water and $1.07/MCF for sewer; and
(2) the proposed FY 2022 base rates in accordance with the Settlement Agreement.
The FY 2023 figures reflect:
(1) the proposed FY 2022 TAP-R rates, of $0.70/MCF for water and $1.07/MCF for sewer; and
(2) the proposed FY 2023 base rates in accordance with the Settlement Agreement.
These rates are subject to reconciliation prior to implementation.
The TAP-R rates are subject to annual reconciliation.

Typical Senior Citizen is presented prior to discount. Eligible Senior Citizen's receive a 25% discount on their total bill.
The associated FY 2021, FY 2022, and FY 2023 bills would be $38.43, $39.80 and $42.32, respectively.

Mcf - Thousand cubic feet
### Table C-5

**COMBINED SYSTEM: COMPARISON OF EXAMPLE BILLS FOR NON-RESIDENTIAL CUSTOMERS UNDER EXISTING AND PROPOSED RATES**

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Monthly Use</th>
<th>Impervious Area</th>
<th>Gross Area</th>
<th>Existing Rates FY 2021</th>
<th>Proposed Rates FY 2022</th>
<th>% Proposed of Existing FY 2022</th>
<th>Proposed Rates FY 2023</th>
<th>% Proposed of FY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8</td>
<td>0.0</td>
<td>1,794</td>
<td>2,110</td>
<td>39.75</td>
<td>38.55</td>
<td>(3.0)</td>
<td>41.01</td>
<td>6.4</td>
</tr>
<tr>
<td>5/8</td>
<td>0.2</td>
<td>1,794</td>
<td>2,110</td>
<td>55.23</td>
<td>54.63</td>
<td>(1.1)</td>
<td>58.16</td>
<td>6.5</td>
</tr>
<tr>
<td>5/8</td>
<td>0.3</td>
<td>1,794</td>
<td>2,110</td>
<td>62.97</td>
<td>62.66</td>
<td>(0.5)</td>
<td>67.74</td>
<td>6.5</td>
</tr>
<tr>
<td>5/8</td>
<td>0.4</td>
<td>1,794</td>
<td>2,110</td>
<td>70.71</td>
<td>70.70</td>
<td>(0.0)</td>
<td>75.32</td>
<td>6.5</td>
</tr>
<tr>
<td>5/8</td>
<td>0.5</td>
<td>1,794</td>
<td>2,110</td>
<td>78.46</td>
<td>78.74</td>
<td>0.4</td>
<td>83.89</td>
<td>6.5</td>
</tr>
<tr>
<td>5/8</td>
<td>0.6</td>
<td>4,000</td>
<td>5,500</td>
<td>112.13</td>
<td>111.58</td>
<td>(0.5)</td>
<td>119.27</td>
<td>6.9</td>
</tr>
<tr>
<td>5/8</td>
<td>0.7</td>
<td>4,000</td>
<td>5,500</td>
<td>119.87</td>
<td>119.62</td>
<td>(0.2)</td>
<td>127.85</td>
<td>6.9</td>
</tr>
<tr>
<td>5/8</td>
<td>0.8</td>
<td>26,000</td>
<td>38,000</td>
<td>313.00</td>
<td>323.82</td>
<td>3.5</td>
<td>345.64</td>
<td>6.7</td>
</tr>
<tr>
<td>5/8</td>
<td>1.0</td>
<td>7,000</td>
<td>11,000</td>
<td>901.27</td>
<td>953.16</td>
<td>5.8</td>
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<td>1/2</td>
<td>1.0</td>
<td>7,700</td>
<td>7,900</td>
<td>251.68</td>
<td>252.31</td>
<td>0.2</td>
<td>269.95</td>
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<td>1/2</td>
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<td>22,500</td>
<td>24,000</td>
<td>668.22</td>
<td>678.11</td>
<td>1.5</td>
<td>726.33</td>
<td>7.1</td>
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<td>1/2</td>
<td>8.0</td>
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<td>7,900</td>
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<td>736.68</td>
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<td>24,000</td>
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<td>1,598.63</td>
<td>5.0</td>
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<td>7.6</td>
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<td>658.68</td>
<td>5.9</td>
<td>701.88</td>
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<td>16.0</td>
<td>22,500</td>
<td>24,000</td>
<td>1,478.95</td>
<td>1,550.54</td>
<td>4.8</td>
<td>1,656.12</td>
<td>6.8</td>
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<td>1/2</td>
<td>33.0</td>
<td>66,500</td>
<td>80,000</td>
<td>3,245.05</td>
<td>3,385.99</td>
<td>4.3</td>
<td>3,620.31</td>
<td>6.9</td>
</tr>
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<td>1/2</td>
<td>100.0</td>
<td>7,000</td>
<td>11,000</td>
<td>901.27</td>
<td>953.16</td>
<td>5.8</td>
<td>1,017.05</td>
<td>6.7</td>
</tr>
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<td>1/2</td>
<td>30.0</td>
<td>7,700</td>
<td>7,900</td>
<td>2,391.49</td>
<td>2,550.83</td>
<td>6.7</td>
<td>2,718.89</td>
<td>6.6</td>
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<td>170.0</td>
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<td>12,000</td>
<td>11,779.08</td>
<td>12,657.30</td>
<td>7.5</td>
<td>13,487.99</td>
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<td>1/2</td>
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<td>38,000</td>
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<td>23,608.78</td>
<td>7.4</td>
<td>25,154.47</td>
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</tr>
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<td>160,000</td>
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<td>36,379.51</td>
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<td>38,775.99</td>
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<td>11,451.84</td>
<td>7.4</td>
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<td>41,750</td>
<td>45,500</td>
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<td>35,349.72</td>
<td>7.4</td>
<td>37,660.16</td>
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<td>38,000</td>
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<td>103,738.45</td>
<td>7.4</td>
<td>110,512.79</td>
<td>6.5</td>
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<td>103,032.69</td>
<td>7.5</td>
<td>109,746.67</td>
<td>6.5</td>
</tr>
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<td>160,000</td>
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<td>7.5</td>
<td>259,109.43</td>
<td>6.5</td>
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<td>22,500</td>
<td>24,000</td>
<td>39,284.40</td>
<td>42,203.78</td>
<td>7.4</td>
<td>44,953.17</td>
<td>6.5</td>
</tr>
<tr>
<td>1/2</td>
<td>1,700</td>
<td>41,750</td>
<td>45,500</td>
<td>108,254.22</td>
<td>116,376.47</td>
<td>7.5</td>
<td>123,951.40</td>
<td>6.5</td>
</tr>
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<td>38,000</td>
<td>206,972.34</td>
<td>222,583.87</td>
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<td>237,058.81</td>
<td>6.5</td>
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<td>140,000</td>
<td>160,000</td>
<td>374,862.77</td>
<td>402,991.20</td>
<td>7.5</td>
<td>429,211.03</td>
<td>6.5</td>
</tr>
</tbody>
</table>

(a) Examples with gross area less than 5,000 square feet reflect an impervious area of 85% of the gross area consistent with PWD Regulations section 304.3.

(b) FY 2021 figures reflect existing base and current TAP-R rates, of $0.57/MCF for water and $0.78/MCF for sewer.

(c) FY 2022 figures reflect:

1. The proposed TAP-R rates, of $0.70/MCF for water and $1.07/MCF for sewer; and
2. The proposed FY 2022 base rates in accordance with the Settlement Agreement.

(d) The FY 2023 figures reflect:

1. The proposed FY 2022 TAP-R rates, of $0.70/MCF for water and $1.07/MCF for sewer; and
2. The proposed FY 2023 base rates in accordance with the Settlement Agreement. These rates are subject to reconciliation prior to implementation. The TAP-R rates are subject to annual reconciliation.

Mcf - Thousand cubic feet
sf - square feet
1. Please confirm or deny whether you agree with the terms of the Stipulation entered into between the Advocate and PWD (dated April 5, 2022).

Response:

As the Public Advocate’s witness, I was consulted regarding the Stipulation and am aware that the Public Advocate has agreed to it. My testimony is consistent with the Stipulation.
2. Is your testimony to be reconciled or read as consistent with the Stipulation?

   Response:
   As stated on page 4, line 15 of my direct testimony, the Settlement contained a reconciliation procedure to which PWD and the Public Advocate agreed. My testimony is consistent with the reconciliation procedure that was included in the Settlement. I have presented my position based upon the approach that is outlined in Paragraph 11.A.(2)(a) of the Settlement. In addition, I have not presented new adjustments, or revised the assumptions used in the 2021 rate proceeding. I have not attempted to recalculate or revise the cost of service that was used in the last proceeding or present new projections as if they are known and certain. My testimony is consistent with the Stipulation, in that it determines a minimum threshold, calculates an amount to be shared ($10.7 Million) and proposes how such amount should be shared ($6.6 Million returned to customers in reduced rates). I have utilized the updated Financial Model only for limited purposes, as provided in the Stipulation.
3. Based on the following statements from your testimony:

   Related to that is the argument that no minimum threshold was established for the RSF in the Settlement or the 2021 Rate Determination. (page 6, lines 12-13).

   Both the Public Advocate and PWD acknowledge that a minimum threshold was not defined in the 2021 Rate Determination. (page 14, lines 7-8).

Please confirm or deny whether the minimum threshold for the RSF is an issue to be litigated in this 2022 Special Rate Proceeding.

Response:

Section F of the Settlement states:

“It is agreed and understood that the following issues are reserved for litigation: (a) the Department’s proposal for implementation of arrearage forgiveness (which was challenged by the Public Advocate who presented an alternative proposal); (b) the Department’s proposal for cost recovery of arrearage forgiveness through the TAP Rider (which was challenged by the Public Advocate who presented an alternative proposal); and (c) those issues raised by the individuals who, as active participants, opposed the proposed increased rates and charges by the Department and who expressed opposition to the Partial Settlement.”

As I am not a lawyer, I am only able to confirm that Paragraph 4 of the Stipulation states that the minimum threshold must be litigated as a part of the SRP.
4. Is the term the “minimum threshold” defined in 2021 Settlement? If so, please state the definition and its location in the 2021 Settlement.

Response:

As stated on page 14, lines 7 and 8 of my direct testimony, “[b]oth the Public Advocate and PWD acknowledge that a minimum threshold was not defined in the 2021 Rate Determination.”
5. Would using a “minimum threshold” of zero conflict with or violate any provision in the 2021 Settlement, the 2021 Rate Determination, Rate Board Regulations, the Rate Ordinance, the City Charter? If so, please explain the conflict or violation.

Response:

As I am not a lawyer, I am unable to opine as to whether the use of a minimum threshold of zero would violate the identified sources as it calls for me to make a legal conclusion. However, to my knowledge, the possibility of a minimum threshold of zero was not a consideration during the Settlement discussion. I also did not consider recommending the minimum threshold of zero in my direct testimony.
6. Would using a “minimum threshold” of $120 million conflict with or violate any provision in the 2021 Settlement, the 2021 Rate Determination, Rate Board Regulations, the Rate Ordinance, the City Charter? If so, please explain the conflict or violation.

Response:

As I am not a lawyer, I am unable to opine as to whether the use of a minimum threshold of $120 million would violate the identified sources as it calls for me to make a legal conclusion. However, the use of a minimum threshold of $120 million is not specified in any of the listed sources. It should be noted that a minimum threshold of $120 million is not the Public Advocate recommendation.
7. Would using a “minimum threshold” of $135 million conflict with or violate any provision in the 2021 Settlement, the 2021 Rate Determination, Rate Board Regulations, the Rate Ordinance, the City Charter? If so, please explain the conflict or violation.

Response:

As I am not a lawyer, I am unable to opine as to whether the use of a minimum threshold of $135 million would violate the identified sources as it calls for me to make a legal conclusion. However, the use of a minimum threshold of $135 million is not specified in any of the listed sources. It should be noted that a minimum threshold of $135 million is not the Public Advocate recommendation.
8. Would using a “minimum threshold” of $150 million conflict with or violate any provision in the 2021 Settlement, the 2021 Rate Determination, Rate Board Regulations, the Rate Ordinance, the City Charter? If so, please explain the conflict or violation.

Response:

As I am not a lawyer, I am unable to opine as to whether the use of a minimum threshold of $150 million would violate the identified sources as it calls for me to make a legal conclusion. However, the use of a minimum threshold of $150 million is not specified in any of the listed sources. It should be noted that a minimum threshold of $150 million is not the Public Advocate recommendation.
9. With reference to PA Statement 1 at 19-20: Please explain how your recommendations are consistent with the Stipulation negotiated between PWD and the Advocate with regard to the calculation of the FY 2021 Financial Performance Adjustment.

Response:

On page 5, lines 1 through 21 of my direct testimony and Paragraph 11.A.(2)(a)(i) and Paragraph 11.A.(2)(a)(ii) of the Settlement contained a reconciliation procedure. My recommendations are consistent Settlement reconciliation procedure, which was not modified by the Stipulation. See also responses to Questions 2, 27 and 28.
10. Based on the “Actual FY 2021” data presented on pages 9 and 12 of your testimony and the 2021 data presented in Exhibit LKM-1:

(A) Confirm or Deny that the “Actual FY 2021” data for Operating Revenues: Water Service – Existing Rates and Operating Revenues: Wastewater Service – Existing Rates presented on pages 9 and 12 of your testimony reflect the calculated FY 2021 revenues based on the FY 2020 water and wastewater rate schedules (effective during FY 2021), actual FY 2021 billing statistics (accounts, billed volumes, billable parcels, and billable IA and GA), and the FY 2021 collection factors as provided in the B&V model supporting BV-4.

(B) Confirm or deny that the “Actual FY 2021” data for Operating Revenues: Total Service Revenue – Existing Rates presented on pages 9 and 12 or your testimony ($714,888) is greater than the FY 2021 Operating Revenues: Total Service Revenue – Existing Rates ($705,612) presented in LKM-1.

(C) Confirm or deny that the 2021 data presented in LKM-1 is consistent with the 2021 data provided in the Simple Model for the 2022 Rate Reconciliation Proceeding provided to the special rate proceeding participants by the Hearing Officer on March 22, 2022.

(D) Confirm or deny that the 2021 data for Total Revenue ($730,451) presented on Line 16 of LKM-1 and the Simple Model for the 2022 Rate Reconciliation Proceeding is consistent with Schedule ML-2 and interrogatory response PA-I-13.

Response:

A. Confirmed.

B. Confirmed. It should be noted that the FY 2021 Operating Revenues presented in LKM-1 do not represent the actual FY 2021 revenues. On page 20, lines 7 and 8 of my testimony, I also state Schedule LKM-1 was presented for illustrative purposes.

C. Confirmed. As stated above, Schedule LKM-1 was presented for illustrative proposes. I have made no representations that the amounts are the actual 2021 results.

D. Confirmed.
11. Based on the following statement on page 17 (lines 8-11) of your testimony:

“The model utilized to produce Schedule BV-4 does not use PWD’s FY 2021 financial results as supplied in response to PA-I-13. Accordingly, PWD’s consultants have used a starting point for projections that is inconsistent with PWD’s FY 2021 financial results.”

Why do you present the referenced data from the model as “Actual FY 2021” data on pages 9 and 12 of your testimony?

Response:

In the Financial Performance section Schedule ML-2, the $730,451,031 is referred to as the preliminary Final Results. Black & Veatch states on ES-1 that “The updated forecast begins with preliminary final results from FY 2021…” Given that Black & Veatch provides the cost of service projections, I assumed that its “preliminary final results” were as close as we could get in this proceeding to the actuals.
12. With reference to PA Statement 1 at 9 (Table): Please identify source information, provide work papers and an explanation as to how the information in this table was compiled.

Response:

The amounts in the “Actual 2021” are taken from the electronic worksheets for Schedule BV-4. (See Attachment 12-1). The amounts in the “Formal Notice Projection 2021” are taken from Schedule BV-1 from the Formal Notice in the 2021 rate proceeding. (See Attachment 12-2)
13. With reference to PA Statement 1 at 12 (Table): Please identify source information, provide work papers and an explanation as to how the information in this table was compiled.

Response:

The amounts in the “Actual 2021” are taken from the electronic worksheets for Schedule BV-4. (See Attachment 12-1). The amounts in the “Rate Order Projection 2021” are taken from the electronic worksheets file: “PWD_FinPlan21_23_Settlement.xlm” (See Attachment 13-1.)
PHILADELPHIA WATER DEPARTMENT
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14. With reference to PA Statement 1 at 13 (line 10): Please confirm the date when Hurricane Ida occurred.

Response:

Hurricane Ida made landfall on August 29, 2021.
15. With reference to PA Statement 1 at 15 (lines 8-10): Please confirm or deny that the 2021 Rate Determination (dated June 16, 2021) approved a “black box” Settlement of the 2021 general rate case (“2021 Settlement”).

Response:

Confirmed.
16. If Question 15 is answered in the affirmative, please define what a black box settlement represents.

Response:

A black box settlement is a settlement in which the components and the derivation of the settlement amount are not disclosed.
17. Are projections of specific revenue requirements approved in a black box settlement?

Response:

A black box settlement discloses the total revenues to be generated from the agreed upon settlement.
18. With reference to PA Statement 1 at 12 (Table): In the context of the 2021 Settlement, were specific projections approved by the Rate Board as represented in the Table (under heading “Rate Order Projections 2021”)?

Response:

The settlement proposed increases in FY 2022 and FY 2023 over FY 2021 projected revenues from rates. However, the Settlement did not disclose the specific projections of 2021 revenues on which the increases were premised.
19. With reference to PA Statement 1 at 13 (line 5): You indicate that PWD “over performed” in FY 2021. Please describe financial over performance as you mean it in your testimony.

Response:

Over perform indicates the Company achieved better financial results than it projected despite the challenges being faced.
20. With reference to PA Statement 1 at 13 (line 5): Please explain how PWD financial over performance in FY 2021 is to be measured under the terms and conditions of the 2021 Settlement.

Response:

PWD’s over performance is discussed beginning on page 8, line through page 14, line 3.
21. With reference to PA Statement 1 at 13 (line 10): Please explain why the $13.217 million Construction Fund transfer was made in FY 2021.

Response:

I did not inquire as to the specific reason for the transfer to the construction fund. Generally, the Construction Fund only may be used to pay capital expenditures, such as, the costs of acquiring or constructing new assets.
22. With reference to PA Statement 1 at 15 (line 1): Please explain your statement that the RSF “balance of concern is $120 million, not $135 million.”

Response:

On Page 3 of S&P’s Ratings Report, it is stated:

“If PWD's financial results indicate a rate covenant violation, then we would likely lower the rating. If we believe that future rate covenant compliance is likely to rely on unplanned additional rate increases to achieve revenue requirements, deplete the RSF below the targeted $120 million indicated in its current projections, or require significant capital or COA project delays, we would likely lower the rating.”
23. With reference to PA Statement 1 at 18-19: Please confirm or deny that savings related to lower pension fund contributions as identified during the 2021 rate proceeding are reflected in the following:

(A) The 2021 Settlement; and/or

(B) Schedule BV-4.

Response:

A. Denied. The Settlement was a black box.

B. Schedule BV-4 was not evaluated in depth because it was beyond the scope of this proceeding. Therefore, I am unable to affirmatively state whether the lower pension expense is included in BV-4.
24. If Question 23 is answered in the negative for either (A) and/or (B), please explain the basis for your conclusion that savings related to PWD pension fund contributions are not included in projections for FY 2022 and 2023.

Response:

Please see the response to Question 23.
25. With reference to PA Statement 1 at 19-20: Please confirm or deny that the funds in the Residual Fund balance can be utilized for purposes of debt service coverage.

Response:

The question is not clear. Balances in the Residual Fund have been “counted” for purposes of calculating debt service coverage.
26. If your response to Question 25 is in the affirmative, please explain how your proposed adjustment ($1.24 million reduction) would theoretically affect debt service coverage and the rate stabilization fund balance in FY 2021.

Response:

The adjustment I propose is to FY 2023 rates and charges and would not have any impact on FY 2021. However, in general, if funds are deposited in the Rate Stabilization Fund instead of the Residual Fund, the Rate Stabilization Fund would show a higher balance and PWD’s senior debt service coverage would be lower. I also note that according to the B&V’s Financial Plan Model, PWD’s FY 2021 senior debt service coverage rounds to 1.28x, not 1.27x ($238,197,000 / $186,158,000 = 1.27954).
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27. With reference to PA Statement 1 at 18-19: Please explain why the Residual Fund adjustment is not subject to the 50/50 split proposed for the other component of your FY 2021 Financial Performance Adjustment.

Response:
My testimony does not propose an adjustment to the Residual Fund. My testimony proposes that $6.6 million of PWD’s FY 2021 out-performance be shared with customers, taking into account multiple considerations.
28. With reference to PA Statement 1 at 18-19: Please explain how the adjustment based on the Residual Fund balance is consistent with the 2021 Settlement terms and conditions.

Response:

See Response to Question 27. The Settlement did not dictate how PWD outperformance would be shared.
29. With reference to the following statement on page 4 (lines 21-23) of your testimony:

   “When combined, the Settlement resulted in an authorization of $57.521 million increase in PWD’s rates over the two-year rate period…”

   Please provide the basis of the $57.521 million PWD rate revenue increase over the two-year rate period.

Response:

The referenced statement contains an error. As shown in the 2021 Rate Determination, page 35, the Settlement resulted in $57.422 million increase over the two-year period.
30. With reference to the following statement on page 8 (lines 3-9) of your testimony:

“The Department argued that if my recommendation were [accepted], it would force the Department to make operational cuts that will reduce customer service levels; it would delay necessary capital improvements that will result in higher incurred costs; and it would jeopardize the Department’s financial condition. Ultimately, the Department was granted only $10.4 million, or 21 percent of its request for FY 2022. Yet, as shown below, the Department has outperformed the metrics that are used to determine the adequacy of its rates.”

(A) Verify that both your recommendation and the $10.4 million granted revenue increase referenced in this statement relate to FY 2022.

(B) How would the referenced recommendation or granted revenue increase for FY 2022 impact the Department’s outperformance in FY 2021.

Response:

A. Correct.

B. It would not. The referenced statement supports that PWD will continue to outperform its projections.
31. With reference to the following statement on page 16 (lines 18-20) of your testimony:

“Black & Veatch assumes some outperformance in service revenues (just under 3% outperformance in revenues under existing rates in FY 2022 and FY 2023)…”

(A) Verify or deny that “just under 3%” outperformance in service revenues is based on a comparison of the revenues under existing (FY 2022) rates presented in BV-4 (Line 3 of Table C-1) and revenues under existing (FY 2021) rates presented in the Settlement (Line 3 of Table C-1).

(B) If your response to part A is denied, please provide the calculations supporting the “just under 3%” outperformance.

Response:

A. Confirmed.

B. See A.
With reference to the following statement on page 16 (lines 21-22) of your testimony regarding the revenue projections presented in Schedule BV-4:

“Black & Veatch estimates PWD’s FY 2022 revenues to be lower than FY 2021’s actual results…”

Verify or deny that the FY 2022 Total Service Revenue - Existing Rates (Line 3 of Table C-1) presented in BV-4 is $8.8 million greater than Total Service Revenue - Existing Rates as presented in LKM-1 for FY 2021 (line 3).

Response:

The referenced statement is based upon a comparison of service revenues as shown in B&V’s updated Financial Plan model. The model shows total service revenues of $714,888 for FY 2021 and total service revenues of $714,412 for FY 2022.
BEFORE THE
PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

In the Matter of Philadelphia Water Department’s Special Rate Proceeding:

Fiscal Year 2023

STIPULATION

The Philadelphia Water Department (“PWD” or “Department”) and the Public Advocate (“Advocate”) (the “Stipulating Parties”) hereby enter into this Stipulation to resolve their differences (areas of dispute) with regard to the 2022 Special Rate Proceeding (“SRP”). The differences between the Stipulating Parties are memorialized in the Public Advocate’s Motion to Strike (dated February 9, 2022) and the PWD Memorandum in Response to the Motion to Strike (dated February 18, 2022) filed in this proceeding. The Hearing Officer’s Order Granting in Part and Denying in Part the Advocate’s Motion to Strike, dated March 8, 2022 (“Interim Order”) decided several areas of dispute in connection with the scope of evidence permitted in support of PWD’s position regarding the FY 2021 Financial Performance Adjustment, but identified certain areas of the record (portions of PWD Statement 3 and Schedule BV-4)¹ as to which a statement in limine or other agreement would be appropriate to define the limited use of the same in this proceeding.

This Stipulation addresses the areas in dispute identified in the Interim Order related to the calculation of the FY 2021 Financial Performance Adjustment and the limited use of the

¹ PWD Statement 3, Q/A 16, 18, 19-24 and Updated Financial Outlook (Schedule BV-4).
Updated Financial Outlook (Schedule BV-4 and related testimony). The Stipulating Parties agree to have this Stipulation admitted as evidence of their agreement and further stipulate and agree as follows:

**Calculation of 2021 Financial Performance Adjustment**

The Department and Advocate agree to the following approach to calculating the FY 2021 Financial Performance Adjustment.

1. PWD and the Advocate expressly acknowledge and agree that rates and charges determined in the SRP will be calculated based on the FY 2023 Base Rate Incremental Increase (“FY 2023 incremental revenues”) agreed to in the Joint Petition for Partial Settlement and approved by the Philadelphia Water, Sewer and Storm Water Rate Board (“Board”) in the June 16, 2021 Rate Determination (“2021 Rate Determination”), subject to adjustment solely on the basis of the two reconciliation frameworks set forth on pages 41-43 thereof.²

2. The “starting point” for determining the 2021 Financial Performance Adjustment will be the actual Rate Stabilization Fund (“RSF”) balance for the beginning of FY 2022 (which is the same as the ending balance for FY 2021). The starting point is hereafter referred to as the “actual RSF starting balance.”

3. The actual RSF starting balance will be compared with the “minimum threshold” for the RSF as determined by each Stipulating Party.

4. The “minimum threshold” is undefined in the Joint Petition for Partial Settlement and the 2021 Rate Determination approving same and must be litigated as a part of the SRP.

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² The Black & Veatch Microsoft-based computer models that supported the 2021 Compliance Filing will be used for the determination of the 2022 Special Rate Proceeding.
5. Based upon the comparison of the actual RSF starting balance and the “minimum threshold” (proposed by each party), an initial determination will be made as to whether there is any amount to be shared. If not, no further calculation is needed.

6. Assuming there is an amount to be shared, the parties can submit their respective positions as to how such amount should be “shared” to reduce the FY 2023 incremental revenues ($34.110 million) approved in the 2021 Rate Determination.

7. Any amount designated for sharing cannot exceed the Maximum Adjustment ($34.110 million).

8. Any amount to be shared will be reflected as an adjustment to incremental revenues approved for FY 2023 in the 2021 Rate Determination.

9. If any adjustment will reduce FY 2023 approved incremental revenues ($34.110 million) from the 2021 Rate Determination, the resulting (net) incremental revenues must be sufficient to fulfill PWD’s required covenants with bondholders, as prescribed in the the City’s Restated Water and Wastewater Revenue Bond Ordinance of 1989, as supplemented and amended from time to time\(^3\), and legislatively mandated financial obligations as prescribed in the Rate Ordinance, Philadelphia Code, Section 13-101. Such covenants and obligations are hereinafter referred to as the “required financial metrics.”

**Use of Updated Financial Model**

In accordance the Interim Order, regarding the FY 2021 Financial Performance adjustment, the Department and Advocate agree to the following limited use of the Updated

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\(^3\) We note that the City’s Restated Water and Wastewater Revenue Bond Ordinance of 1989 (the “General Bond Ordinance”) was amended by Bill No. 171110-A (signed by the Mayor on April 24, 2018) to, among other things, include as an additional rate covenant the “90% test” contained in covenants previously made by the City only to its bond insurer.
Financial Outlook and related testimony (PWD Statement 3) based on the record presented in the Department’s direct case.

10. Schedule BV-4 can be used for the limited purpose of (i) supporting or corroborating the parties positions regarding adjustments (or absence of adjustments) proposed for FY 2023 incremental revenues and, assuming an adjustment is made to FY 2023 incremental revenues, (ii) establishing whether such resulting revenues (net of the adjustment) will be sufficient to meet the required financial metrics and maintain the utility’s financial stability (to avoid negative rating action).

11. PWD testimony describing the Updated Financial Outlook can likewise be used for the limited purpose of supporting or corroborating the parties’ positions regarding adjustments (or absence of adjustments) proposed for FY 2023 incremental revenues.

12. The Stipulating Parties have not agreed to any limitations on the presentation of their respective cases via rebuttal and/or rejoinder testimony — which has not been presented as of this date.

AGREED TO BY:

/s/ Robert W. Ballenger
Robert Ballenger, Esquire
Kinteshia Scott, Esquire
For the Public Advocate
Dated: 4/5/2022

AGREED TO BY:

/s/ Andre C. Dasent
Andre C. Dasent, Esquire
Carl R. Shultz, Esquire
For the Philadelphia Water Department
Dated: 4/5/2022
Schedule ML-3

Rating Agency Reports

- S&P
- Moody’s
- Fitch
Summary:
Philadelphia; Water/Sewer

Primary Credit Analyst:
Scott D Garrigan, New York + 1 (312) 233 7014; scott.garrigan@spglobal.com

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Rating Action

S&P Global Ratings assigned its 'A+' long-term rating to Philadelphia's series 2021C water and wastewater revenue bonds. At the same time, we affirmed our 'A+' long-term ratings and underlying ratings (SPURs) on the city's existing $2.3 billion of water and wastewater revenue bonds. The outlook on the ratings is stable.

The city will use the series 2021C bond proceeds to finance capital improvements to its water and wastewater systems.

Securing debt service are net revenues of the water and sewer fund, which include (net of operating expenses) rates and charges of the system, transfers from the rate stabilization fund (RSF), and interest earnings. Rates must be set to generate revenues and charges plus transfers from the RSF that represent at least 1.2x annual debt service on senior revenue bonds and 1.0x coverage when including all subordinate debt (if outstanding, which currently they are not) and certain other transfers. The city can issue additional debt as long as it is complying with the rate covenant at the time of issuance and net revenue projections are sufficient to provide for rate covenant compliance for the two fiscal years following the debt issuance. There is an additional test that requires that the city maintain net system revenues (excluding transfers from the RSF) totaling at least 90% of operating requirements (90% test). This provides additional bondholder protection, in our view, since this effectively limits how much the system can rely on draws from the RSF. This provision also applies to the additional bonds test.

Credit overview

Our 'A+' rating reflects our view that the service territory benefits from serving a large metropolitan center that serves as an anchor for employment throughout the region, despite facing ongoing headwinds due to challenges keeping its utility rates affordable for all its ratepayers. While the city's Rate Board has historically supported rate increases to maintain ample capacity for Philadelphia Water Board's (PWD's) operations and capital needs, we foresee future challenges that could place downward pressure on PWD's financial position, most notably funding of a large capital improvement program (CIP) while concentrating on rate affordability. However, we believe that the city has flexibility in dealing with future revenue pressures, and because of this the rating outlook is stable. Examples of this flexibility include the following:

• The ability to reprioritize its CIP, as it has demonstrated during 2020 and 2021 due to the COVID-19 pandemic.
• Less than 25% of the six-year CIP 2022-2027 is related to regulatory mandates of its Consent Order and Agreement
(COA) with the Pennsylvania Dept. of Environmental Protection (PADEP). In addition, we have observed a good degree of cooperation between state and local officials regarding COA implementation, which we would expect to continue.

- Significant legally unrestricted balances that generally hover around or exceed $200 million, including a RSF, that should help to support PWD's liquidity needs. The city plans to use about $365 million of cash generated from net operating revenues over the 2022-2027 period to support its $3.5 billion CIP, but the funding will come from the residual generated from the 1.2x in annual debt service coverage (DSC) that PWD's projections indicate it will be at or higher through the 2027 forecast period.

- Management’s demonstrated strengths at mitigating environmental, social, and governmental (ESG) risks through assistance programs, commitment to a significant amount of green infrastructure, and consistent communications of financial trends with the Rate Board.

To meet the 1.2x DSC covenant, PWD relies on approval of future rate increases that generate an 8.4% increase in revenues, not accounting for any positive variances that could occur to offset this revenue requirement. Setting rates to the legal minimum leaves very little cushion for future revenue deviations, which could threaten compliance in any given year without additional unplanned use of the RSF.

We also note that while PWD has a certain degree of flexibility in how much funding it dedicates toward capital projects in any one year, the CIP is large. A component of the plan is the 25-year $4.5 billion COA project cost, involving about $3.5 billion of capex and $1.0 billion in operating & maintenance costs. Deferral of capital could result in infrastructure under-investment, creating additional risks.

The stable outlook is predicated on the city being able to maintain rate covenant compliance without significant deviations in year-end unrestricted cash and investments (including the RSF). However, the outlook incorporates some planned spend-down in the RSF as indicated in PWD's current projections.

**Stable Outlook**

**Downside scenario**
If PWD's financial results indicate a rate covenant violation, then we would likely lower the rating. If we believe that future rate covenant compliance is likely to rely on unplanned additional rate increases to achieve revenue requirements, deplete the RSF below the targeted $120 million indicated in its current projections, or require significant capital or COA project delays, we would likely lower the rating.

**Upside scenario**
Because of the headwinds and uncertainties related to future financial performance that the city is currently facing, we do not foresee an upgrade in at least the next several years. In time, if the city's financial performance significantly and consistently exceeds current projections, we could raise the rating.

**Environmental, social and governance factors**
We note that because of the ongoing corrective action plan measures and the attention that must be paid to affordability metrics, both environmental and social factors carry outsized credit relevance. The moratorium on
shutoffs and disconnects, implemented in March 2020, has been extended through April 2022. To financially support its customers, the city has an industry-recognized, multifaceted customer bill-pay assistance program for qualifying customers, including payment programs, bill reductions, and a dedicated surcharge on usage to provide dedicated funding for a portion of the program. The average monthly residential water and sewer bill is about $70.

Although the system is older and the CIP will reflect reinvestment needs, it still has ample and reliable raw water supply and treatment capacity. We note that in some aspects it even compares favorably versus peers, such as readiness for potential state rulemaking on currently unregulated contaminants, and that it converts 100% of its biosolids for Class A beneficial land application usage.

The CIP, although daunting, is supported by operational and financial management that is highly aligned, establishing prioritization among non-mandated projects and to the extent reasonably possible, includes resilience measures toward climate change and overall risk management that we view as comparable with peer very large systems.

PWD benefits from strong and proactive management, which is deliberately targeting affordability concerns as it works though its substantial capital needs. Combined water and sewer rates are just over 2.0% of local incomes (including the stormwater fee), but we believe requests for increases may be pressured given current recessionary conditions and social risks compared to other water utilities stemming from the elevated county poverty rate and the need for the Rate Board to approve all rate increases. Management has continued to advertise its Tiered Assistance Program (TAP), which provides rate relief to low-income customers.

Related Research

• Through The ESG Lens 2.0: A Deeper Dive Into U.S. Public Finance Credit Factors, April 28, 2020

Ratings Detail (As Of September 17, 2021)

| Philadelphia wtr and wastewtr rev rfdg bnds (Federally Taxable) ser 2021B due 06/01/2051 | A+/Stable | Affirmed |
| Philadelphia wtr & swr (AGM) | A+(SPUR)/Stable | Affirmed |
| Philadelphia wtr & swr (BAM) | A+(SPUR)/Stable | Affirmed |
| Philadelphia wtr & swr (BAM) (SECMKT) | A+(SPUR)/Stable | Affirmed |

Many issues are enhanced by bond insurance.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings’ public website at www.standardandpoors.com. Use the Ratings search box located in the left column.
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New York, September 17, 2021 -- Moody's Investors Service has assigned an A1 rating to the City of Philadelphia Water & Sewer Enterprise, PA's $229.3 million Water and Wastewater Revenue Bonds, Series 2021C. Concurrently, Moody's maintains the A1 rating on roughly $2.23 billion of parity debt outstanding as of April 30, 2021. The outlook is stable.

RATINGS RATIONALE

The A1 rating speaks to Philadelphia Water and Sewer Enterprise, PA's (or Philadelphia Water Department (PWD), or "the department") satisfactory current financial position, with revenues supported by its large and diverse service area - primarily the city of Philadelphia (A2 stable) and its immediate suburbs. The rating also reflects the department's sizeable consent order and the system's aging infrastructure, both of which require significant ongoing capital investment. The A1 rating incorporates our expectation of substantial future debt issuance in the coming years to support the department's capital improvement plan.

The Water Department’s conservative financial forecasts continue to project moderate revenue pressure in the near term due to the continued effects of the coronavirus pandemic, particularly high residential customer delinquencies. Higher than average delinquencies are expected to persist until the end of the city's water shut-off moratorium, anticipated in April 2022. Favorably, actual results for fiscal 2021 outperformed budget expectations by a healthy margin. Of concern, however, is the department's continued projections for fairly narrow "legally enacted" debt service coverage. Also of material concern is the rate board's continued limitations on the department's revenue raising ability, which serves to materially curtail management's operating flexibility. While these financial challenges do not pose an immediate risk to the department's credit profile, prolonged economic stress in the customer base, coupled with continued limitations on the department's operating flexibility, could present downward rating pressure.

We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety. Philadelphia Water and Sewer Enterprise has faced both fiscal and operating challenges as a result of the coronavirus, and continues to capably manage through the pandemic's after-effects.

RATING OUTLOOK

The outlook is stable given consistent historical results and our expectation that management will continue to act to maintain structural operating balance and meet coverage covenants despite near-term revenue pressures. Annual debt service requirements are currently manageable, with several consecutive years of decline embedded in the current schedule. This should serve to keep costs reasonable, even with annual new money issuances to support the department's sizeable CIP. Engineer and financial consultant reports are required for each bond issuance, also adding to operational stability and comprehensive debt planning. Incorporated into the stable outlook is an expectation that the department will use its rate stabilization reserve to meet debt service coverage covenants in fiscal 2021 and 2022. However, we also anticipate that the reserve usage will be modest, temporary, consistent with rate covenants, and still in line with the current rating.

FACTORS THAT COULD LEAD TO AN UPGRADE OF THE RATING

- Considerable improvement in debt service coverage
- Service area expansion / revenue growth beyond expected rate increases

FACTORS THAT COULD LEAD TO A DOWNGRADE OF THE RATING

- Failure to meet bond coverage covenants
- Inability to increase rates commensurate with coverage requirements and in line with the department's
internal standards

- Appropriation of reserves beyond current expectations

LEGAL SECURITY

The bonds are special obligations of the city of Philadelphia, secured equally and ratably with the city's outstanding Water and Wastewater Revenue bonds. All Water and Wastewater Revenue bonds are secured by a pledge of and security interest in all Project Revenues derived from the city's water and wastewater systems.

USE OF PROCEEDS

Proceeds from the Series 2021C bonds will be used to support capital improvements to the system's infrastructure.

PROFILE

The Philadelphia Water & Sewer Enterprise provides water and sewer treatment service to the city of Philadelphia and some of its surrounding suburbs. PWD's customer base includes approximately 480,000 active water accounts and 545,000 active wastewater accounts.

METHODOLOGY


REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found at: https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_79004.

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

The rating has been disclosed to the rated entity or its designated agent(s) and issued with no amendment resulting from that disclosure.

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Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Moody's general principles for assessing environmental, social and governance (ESG) risks in our credit analysis can be found at http://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1288435.

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Fitch Rates Philadelphia (PA) Water and Wastewater Revs 'A+'; Outlook Stable

Fitch Ratings - New York - 16 Sep 2021: Fitch Ratings has assigned an 'A+' rating to the following Philadelphia, PA (the city) revenue bonds:

--Approximately $228.7 million water and wastewater revenue bonds, series 2021C.

The bonds are anticipated to be sold via negotiation the week of Sept. 27. Proceeds will be used to fund a portion of the capital improvement program and pay issuance costs.

The Rating Outlook is Stable.

ANALYTICAL CONCLUSION

Fitch's 'A+' rating reflects the Philadelphia Water Department's water and wastewater system's (PWD or the system) leverage profile within the context of its strong revenue defensibility and very low operating risk profile. The rating and Outlook incorporate Fitch's expectations that PWD will secure rate adjustments sufficient to maintain the current financial profile, while continuing to implement its substantial capital improvement plan (CIP).

Revenue defensibility reflects the system's role as an essential service provider within a well-defined service territory, stable demographic trends, and a rate setting process that constrains rate flexibility. The operating risk profile incorporates investment needs that are expected to remain elevated for the foreseeable future as the system faces long-term asset rehabilitation needs and continues progress toward addressing combined sewer overflows.

Fitch's analysis incorporates a base and stress scenario, which includes the system's CIP and anticipated debt issuance as well as expectations for revenue that reflect the continuing impact of the coronavirus and the recently approved rate package. Leverage, as measured by net adjusted debt to adjusted funds available for debt service, was approximately 8.9x in fiscal 2020. Fitch expects additional debt issuance and compressed financial margins over the next few years will lead to an increase in the leverage ratio.

Leverage should remain below 10x over the next five years but is dependent on key assumptions, including continuing approval of rates to support operations and the CIP and management of debt issuance that minimizes the impact on leverage.

CREDIT PROFILE

The Philadelphia Water Department provides potable water to all of the nearly 1.6 million residents of the city as well as a small wholesale customer that serves accounts in neighboring Montgomery and Delaware Counties. The wastewater service area, which includes the city as well as portions of the surrounding counties through wholesale contracts, serves a larger population estimated at nearly 2.3 million. The retail customer base is highly diverse, comprising predominantly residential users. The 10 largest customers
comprised 9.2% of fiscal 2020 revenue including the city and Philadelphia Housing Authority, which together account for about 4.6% of revenue.

Operations are stable and system capacity is robust. Average daily water demand is comfortably below permitted water supply and capacity at all treatment facilities remains well within existing permit limits. Raw water supplies from the Delaware and Schuylkill rivers are sufficient for the foreseeable future.

The city continues to operate under a consent order and agreement (COA) signed in 2011 with the Pennsylvania Department of Environmental Protection (DEP). The COA requires PWD to address combined sewer overflows (CSO) over a 25-year period ending in 2036. Recent estimated total cost of the program, which began in 2012, is approximately $4.5 billion ($3.5 billion capital-related, $1.0 billion O&M). Terms of the agreement, including total cost and timeline are considered by Fitch to be generally favorable for the city when compared with potential alternative and likely more costly strategies.

The city, citing force majeure due to coronavirus disruptions, requested an extension to complete the 10-year COA compliance obligations, which include certain milestones for greened acreage and lower CSO flows. The DEP granted the city an extension to December 2021 for performance standards and until May 30, 2022 for delivery of the 10-year Evaluation and Adoption Plan. The city had anticipated meeting the milestone prior to the pandemic and anticipates meeting revised compliance milestones.

Fitch considers the system to be a related entity to the city (IDR A-/Stable) for rating purposes given the city's oversight of the system, including its management of operations and the rate setting process. The credit quality of the city does not currently constrain the bond rating. However, as a result of being a related entity, the issue ratings could be affected by a decline in the general credit quality of the city as outlined in Fitch's U.S. Public Finance Tax-Supported Criteria.

Coronavirus Considerations

The city imposed a moratorium on shut-offs and disconnections in April 2020 to help offset economic hardships due to the coronavirus and has extended the moratorium until April 2022. The number of accounts eligible for shut-off is just over 68,700 in August 2021 across all customer classes, an approximately 5% decline since May 2021. The PWD withdrew its rate proceeding in February 2020, foregoing a rate increase in fiscal 2021. PWD will continue to utilize cost containment measures and the use of rate stabilization funds to maintain system financial metrics.

KEY RATING DRIVERS

Revenue Defensibility 'a'

Monopolistic Service Provider, Limited Rate Flexibility

PWD provides essential utility services to a stable service area that serves as the economic hub for the region. The customer base is diverse, and demographic indicators are midrange and stable. The rate approval process has proven somewhat arduous and rate affordability and cost recovery remain a concern, limiting overall revenue defensibility.

Operating Risks 'aa'

Very Low Operating Cost Burden, Elevated Capital Needs
The operating cost burden remains very low, approximating $2,700 per million gallons (mg) of demand in fiscal 2020. While expected to rise, the cost burden should remain well within the $6,500 per mg threshold for the current assessment. Rising annual capex trends and sizable long-term capital reinvestment plans should continue to lower PWD's currently elevated life cycle ratio, which was 48% in fiscal 2020.

Financial Profile 'a'

Strong Financial Profile, Leverage to Rise

The strong financial profile reflects the system's current leverage position, about 8.9x in fiscal 2020 and a liquidity profile that is neutral to the assessment. Recent updates to anticipated, though as yet audited, fiscal 2021 information indicate stable to improved results compared those previously anticipated, despite the absence of a rate adjustment in the recently completed fiscal year. Over time, leverage is expected to rise but financial metrics should remain consistent with the current assessment and rating, should revenue expectations hold.

Asymmetric Additive Risk Considerations

No asymmetric additive risk considerations affect this rating.

RATING SENSITIVITIES

Factors that could, individually or collectively, lead to positive rating action/upgrade:

--Leverage is sustained below 8.0x through Fitch's base and stress cases, in the context of the current revenue defensibility and operating risk assessments.

--Improvement in revenue defensibility assessment driven by improved subfactor assessments for both service area characteristics and rate flexibility.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

--Leverage is sustained above 10x through Fitch's base and stress cases.

--Failure to secure rate increases sufficient to maintain the current financial profile.

--Deterioration in the revenue defensibility assessment, raising the hurdle for leverage at the current rating.

--Deterioration in the city's credit quality may lead to negative rating action.

Best/Worst Case Rating Scenario

International scale credit ratings of Sovereigns, Public Finance and Infrastructure issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of three notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit https://www.fitchratings.com/site/re/10111579.
SECURITY

The bonds are secured by a senior lien on combined net revenues of the Philadelphia Water Department’s water and sewer system.

For additional Information, please see Fitch's Rating Action Commentary dated June 11, 2021.

Date of Relevant Committee

10 June 2021

Sources of Information

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg

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Rating Actions

<table>
<thead>
<tr>
<th>ENTITY/DEBT</th>
<th>RATING</th>
<th>RECOVERY</th>
<th>PRIOR</th>
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<tbody>
<tr>
<td>Philadelphia (PA) [Water, Sewer]</td>
<td></td>
<td>A+ •</td>
<td>Affirmed</td>
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</table>

- Philadelphia (PA) /Water & Sewer Revenues/1 LT

RATINGS KEY OUTLOOK WATCH

POSITIVE •
NEGATIVE •
EVOLVING •
STABLE

Applicable Criteria

Public Sector, Revenue-Supported Entities Rating Criteria - Effective from February 23, 2021 to September 1, 2021 (pub.23 Feb 2021) (including rating assumption sensitivity)

U.S. Water and Sewer Rating Criteria (pub.18 Mar 2021) (including rating assumption sensitivity)

Additional Disclosures

Solicitation Status

Endorsement Status

Philadelphia (PA) EU Endorsed, UK Endorsed
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BEFORE THE
PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

Philadelphia Water Department
Fiscal Years 2022 - 2023 Rates

SCHEDULES ACCOMPANYING THE DIRECT TESTIMONY
OF
LAFAYETTE K. MORGAN, JR.

ON BEHALF OF THE PUBLIC ADVOCATE

March 22, 2021
PHILADELPHIA WATER DEPARTMENT
Revenue Requirement and Operating Results
For the Rate Years Ending June 30, 2022 and 2023
($000s)

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Description</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Water Service - Existing Rates</td>
<td>$281,601</td>
<td>$283,150</td>
<td>$284,253</td>
</tr>
<tr>
<td>2a</td>
<td>Wastewater Service - Existing Rates</td>
<td>445,071</td>
<td>446,710</td>
<td>446,762</td>
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<tr>
<td>3a</td>
<td>Total Service Revenue - Existing Rates</td>
<td>$726,672</td>
<td>$729,860</td>
<td>$731,016</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Rate Increase /(Decrease)</th>
<th>Year</th>
<th>Calc % Increase</th>
<th>Months Effective</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
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</thead>
<tbody>
<tr>
<td>4a</td>
<td>FY 2021</td>
<td>0.00%</td>
<td>9.81</td>
<td>$</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5a</td>
<td>FY 2022</td>
<td>-1.64%</td>
<td>9.81 (a)</td>
<td>(9,796)</td>
<td>(12,001)</td>
<td></td>
</tr>
<tr>
<td>6a</td>
<td>FY 2023</td>
<td>2.08%</td>
<td>9.81 (a)</td>
<td>-</td>
<td>12,207</td>
<td></td>
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<tr>
<td>7a</td>
<td>FY 2024</td>
<td>18.64%</td>
<td>9.81 (a)</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8a</td>
<td>FY 2025</td>
<td>5.18%</td>
<td>9.81 (a)</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>9a</td>
<td>FY 2026</td>
<td>8.26%</td>
<td>9.81 (a)</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

| 10a                      | Total Additional Service Revenue Required | $ (9,796) | $          | 206   |
| 11a                      | Total Water & Wastewater Service Revenue | 726,672   | 720,064   | 731,222|
| 11a                      | Other Income (b)                         | -         | -         | -     |
| 12a                      | Other Operating Revenue                  | 45,633    | 29,192    | 29,111|
| 13a                      | Debt Reserve Fund Interest Income        | -         | -         | -     |
| 14a                      | Operating Fund Interest Income           | 1,071     | 1,280     | 1,316 |
| 15a                      | Rate Stabilization Interest Income       | 1,298     | 1,089     | 1,092 |

| 16a                      | Total Revenues                           | $774,674  | $751,625  | $762,741|

| OPERATING EXPENSES       | 17a Total Operating Expenses              | $ (524,653)| $ (531,981)| $ (544,956)|

| NET REVENUES            | 18a Transfer From/(To) Rate Stabilization Fund | $ (25,000)| $          | -     | $28,000|
| 19a NET REVENUES AFTER OPERATIONS | $ 225,021 | $ 219,644 | $245,785 |

| DEBT SERVICE            | 20a Outstanding Bonds                     | $ (175,726)| $ (163,516)| $ (164,558)|
| 21a Penninvest Parity Bonds | (10,651) | (10,885) | (11,067) |
| 22a Projected Future Bonds | -     | (5,961) | (24,441) |
| 23a Commercial Paper     | -     | (2,000) | (4,000) |

| 24a Total Senior Debt Service | $ (186,377)| $ (182,362)| $ (204,066)|
| 25a TOTAL SENIOR DEBT SERVICE COVERAGE | 1.21 | 1.20 | 1.20 |
| 26a Subordinate Debt Service | -     | -     | -     |
| 27a Transfer to Escrow     | -     | -     | -     |
| 28a Total Debt Service on Bonds | $ (186,377)| $ (182,362)| $ (204,066)|
| 29a CAPITAL ACCOUNT DEPOSIT | (27,833)| (29,447)| (29,308) |
| 30a TOTAL COVERAGE (L19a/(L24a+L26a+L29a)) | 1.05 | 1.04 | 1.05 |
### PHILADELPHIA WATER DEPARTMENT

Revenue Requirement and Operating Results

For the Rate Years Ending June 30, 2022 and 2023

($000s)

<table>
<thead>
<tr>
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<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RESIDUAL FUND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31a</td>
<td>Beginning of Year Balance</td>
<td>$16,261</td>
<td>$15,064</td>
<td>$15,049</td>
</tr>
<tr>
<td>32a</td>
<td>Interest Income</td>
<td>156</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>32xa</td>
<td>Plus:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33a</td>
<td>End of Year Revenue Fund Balance</td>
<td>9,448</td>
<td>7,835</td>
<td>12,410</td>
</tr>
<tr>
<td>34a</td>
<td>Deposit for Transfer to City General Fund (c)</td>
<td>1,855</td>
<td>1,847</td>
<td>2,076</td>
</tr>
<tr>
<td>34xa</td>
<td>Less:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35a</td>
<td>Transfer to Construction Fund</td>
<td>(10,800)</td>
<td>(8,000)</td>
<td>(12,600)</td>
</tr>
<tr>
<td>36a</td>
<td>Transfer to City General Fund</td>
<td>(1,855)</td>
<td>(1,847)</td>
<td>(2,076)</td>
</tr>
<tr>
<td>37a</td>
<td>Transfer to Debt Service Reserve Fund</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>38a</td>
<td>End of Year Balance</td>
<td>$15,064</td>
<td>$15,049</td>
<td>$15,009</td>
</tr>
<tr>
<td></td>
<td>RATE STABILIZATION FUND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39a</td>
<td>Beginning of Year Balance (d)</td>
<td>$150,652</td>
<td>$175,652</td>
<td>$175,652</td>
</tr>
<tr>
<td>40a</td>
<td>Deposit From/(To) Revenue Fund</td>
<td>25,000</td>
<td>-</td>
<td>(28,000)</td>
</tr>
<tr>
<td>41a</td>
<td>End of Year Balance</td>
<td>$175,652</td>
<td>$175,652</td>
<td>$147,652</td>
</tr>
</tbody>
</table>

Calculation of Additional Service Revenue Required:

<table>
<thead>
<tr>
<th>Description</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Operating Expenses, 17a</td>
<td>$531,981</td>
<td>$544,956</td>
<td></td>
</tr>
<tr>
<td>Total Senior Debt Service, 24a</td>
<td>182,362</td>
<td>204,066</td>
<td></td>
</tr>
<tr>
<td>CAPITAL ACCOUNT DEPOSIT, 29a</td>
<td>29,447</td>
<td>29,308</td>
<td></td>
</tr>
<tr>
<td>Transfer to Construction Fund, 35a</td>
<td>8,000</td>
<td>12,600</td>
<td></td>
</tr>
<tr>
<td>Transfer to Escrow, 27a</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Change in Residual Fund</td>
<td>(165)</td>
<td>(190)</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$751,625</td>
<td>$790,741</td>
<td></td>
</tr>
<tr>
<td>Deposit From/(To) Revenue Fund, 40a</td>
<td>-</td>
<td>(28,000)</td>
<td></td>
</tr>
<tr>
<td>Other Op Revenue, DSRF + Operating + RSF l</td>
<td>(31,561)</td>
<td>(31,519)</td>
<td></td>
</tr>
<tr>
<td><strong>Net Revenue Needs</strong></td>
<td>$720,064</td>
<td>$731,222</td>
<td></td>
</tr>
<tr>
<td>Total Service Revenue - Existing Rates</td>
<td>729,860</td>
<td>731,016</td>
<td></td>
</tr>
<tr>
<td><strong>Total Additional Service Revenue Required, 1</strong></td>
<td>$ (9,796)</td>
<td>$ 206</td>
<td></td>
</tr>
<tr>
<td><strong>Net Additional Service Revenue Required</strong></td>
<td>$ (9,796)</td>
<td>$ 206</td>
<td></td>
</tr>
</tbody>
</table>

(a) The projected rate increases shown on lines 7a, 8a and 9a are the result of PWD assumptions and do not reflect any adjustments.

(b) Includes other operating and nonoperating income, including interest income on funds and accounts transferable to the Revenue Fund. Debt Service Reserve Fund Release in FY 2021 is included in Other Operating Revenue line item.

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

(d) FY 2021 beginning balance is estimated based on preliminary FY 2020 results.
# PHILADELPHIA WATER DEPARTMENT

Revenue Requirement Effect of Adjustments
For the Rate Years Ending June 30, 2022 and 2023
($000s)

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Description</th>
<th>FY 2022</th>
<th>FY 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Reflect Growth Rate</td>
<td>$3,225</td>
<td>$4,956</td>
</tr>
<tr>
<td>3</td>
<td>Adjust Volume Escalators</td>
<td>5,593</td>
<td>9,448</td>
</tr>
<tr>
<td>4</td>
<td>Adjust Volume per Account</td>
<td>7,105</td>
<td>7,249</td>
</tr>
<tr>
<td>5</td>
<td>Adjust Collection Factors</td>
<td>26,903</td>
<td>13,344</td>
</tr>
<tr>
<td>6</td>
<td>Adjust Wholesale Customer Volumes</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Adjust O&amp;M Escalation Rate</td>
<td>$(2,094)</td>
<td>$(2,753)</td>
</tr>
<tr>
<td>10</td>
<td>Adjust Actual to Budget Factors</td>
<td>(612)</td>
<td>(676)</td>
</tr>
<tr>
<td>11</td>
<td>Adjust SMIP/GARP</td>
<td>(10,000)</td>
<td>(10,000)</td>
</tr>
<tr>
<td>12</td>
<td>Rate Case Adjustment</td>
<td>(1,033)</td>
<td>(1,047)</td>
</tr>
<tr>
<td>13</td>
<td>Adjust Interest Rates</td>
<td>-</td>
<td>(12,718)</td>
</tr>
</tbody>
</table>
### FY 2021 BRING DOWN OF 2021 RATE PROCEEDING LKM TESTIMONY SCHEDULE LKM-1

<table>
<thead>
<tr>
<th>Line No</th>
<th>Description</th>
<th>SCHEDULE LKM-1</th>
<th>Actual Results (PA-I-13)</th>
<th>Difference LKM Vs. Actuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>11a</td>
<td>Total Water &amp; Wastewater Service Revenue</td>
<td>726,672</td>
<td>705,612</td>
<td>(21,060)</td>
</tr>
<tr>
<td>12a to 15a</td>
<td>Other Income</td>
<td>48,002</td>
<td>24,839</td>
<td>(23,163)</td>
</tr>
<tr>
<td>16a</td>
<td>Total Revenues</td>
<td>774,674</td>
<td>730,451</td>
<td>(44,223)</td>
</tr>
<tr>
<td>17a</td>
<td>Total Operating Expense</td>
<td>(524,653)</td>
<td>(521,096)</td>
<td>3,557</td>
</tr>
<tr>
<td>18a</td>
<td>Transfer From/(To) Rate Stabilization Fund</td>
<td>(25,000)</td>
<td>27,000</td>
<td>52,000</td>
</tr>
<tr>
<td>19a</td>
<td>Net Revenues after Operations</td>
<td>225,021</td>
<td>236,355</td>
<td>11,334</td>
</tr>
<tr>
<td>24a</td>
<td>Total Senior Debt Service</td>
<td>(186,377)</td>
<td>(186,312)</td>
<td>65</td>
</tr>
<tr>
<td>26a</td>
<td>Total Subordinate Debt Service</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>27a</td>
<td>Transfer to Escrow</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Net Revenues after Debt Service (Line 19a Less Lines 24a, 26a, 27a)</td>
<td>38,644</td>
<td>50,043</td>
<td>11,399</td>
</tr>
<tr>
<td>29a</td>
<td>Capital Account Deposit</td>
<td>(27,833)</td>
<td>(27,833)</td>
<td>0</td>
</tr>
<tr>
<td>33a</td>
<td>Residual Fund Deposit from Water Operating</td>
<td>9,448</td>
<td>22,210</td>
<td>12,762</td>
</tr>
<tr>
<td>34a</td>
<td>Residual Fund Deposit from Interest Earnings on DSRF</td>
<td>1,855</td>
<td>1,556</td>
<td>(299)</td>
</tr>
<tr>
<td>35a</td>
<td>Transfer to Construction Fund (discretionary Transfer to the capital Fund)</td>
<td>(10,800)</td>
<td>(22,210)</td>
<td>(11,410)</td>
</tr>
<tr>
<td>36a</td>
<td>Transfer to City General Fund (SCOOP)</td>
<td>(1,855)</td>
<td>(1,556)</td>
<td>299</td>
</tr>
<tr>
<td>37a</td>
<td>Transfer to Debt Service Reserve Fund</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>38a</td>
<td>Residual Fund End of Year Balance</td>
<td>15,064</td>
<td>16,305</td>
<td>1,240</td>
</tr>
<tr>
<td>41a</td>
<td>Rate Stabilization Fund End of Year Balance</td>
<td>175,652</td>
<td>124,661</td>
<td>(50,991)</td>
</tr>
<tr>
<td></td>
<td><strong>Debt Service Coverage Ratios:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30a</td>
<td>Total Coverage</td>
<td>1.05</td>
<td>1.10</td>
<td>0.05</td>
</tr>
<tr>
<td>25a</td>
<td>Total Senior Debt Service Coverage</td>
<td>1.21</td>
<td>1.27</td>
<td>0.06</td>
</tr>
</tbody>
</table>

- Presented in thousand dollars

DSRF - Debt Service Reserve Fund