PENNSYLVANIA AMERICAN WATER

Susan Simms Marsh
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VIA E-Mail

November 6, 2020

Rosemary Chiavetta, Secretary
Commonwealth of Pennsylvania
Pennsylvania Public Utility Commission
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

Re: General Base Rate Filing for Water Operations
Docket No. R-2020-3019369

General Base Rate Filing for Wastewater Operations
Docket No. R-2020-3019371

Dear Secretary Chiavetta:

On April 29, 2020, Pennsylvania-American Water Company, filed a General Base Rate Filing for its water and wastewater operations.

Inadvertently, the public version of the currently posted Volume 07 – Filing Requirements VI-XI on the Commission's website contains confidential information. The Company respectfully requests that it be removed from the Commission's website and the enclosed revised public version of Volume 07 – Filing Requirements VI-XI be made available on the Commission's website.

A copy of the correspondence is being provided to the parties that received the rate filing on April 20, 2020, as indicated on the enclosed Certificate of Service.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Susan Simms Marsh

Susan Simms Marsh

Enclosures

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket Nos. R-2020-3019369 (Water) R-2020-3019371 (Wastewater)
	:	
Pennsylvania American Water Company	:	

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true and correct copy of the foregoing document upon the following persons, in the manner indicated below:

VIA E-MAIL

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Susan Simms Marsh

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Dated: November 6, 2020

VOLUME 7

PENNSYLVANIA-AMERICAN WATER COMPANY

2020 GENERAL BASE RATE CASE
R-2020-3019369 (WATER)
R-2020-3019371 (WASTEWATER)

FILING REQUIREMENTS
VI, VII, VIII, IX, X, XI

Volume 7

Table of Contents

MFR Description

FR VI. DEPRECIATION

1 Depreciation method
2 Retirement rate method of analysis is utilized
3 Surviving original cost
4 Calculated depreciation reserve used for rate making purposes
5 Schedule by account and depreciable rough showing survivor curve
6 Gross Salvage exhibit

Pennsylvania-American Water Company
VI. Depreciation

1. Provide a description of the depreciation methods used to calculate annual depreciation amounts and depreciation reserves, together with a discussion of the factors which were considered in arriving at estimates of service life and dispersion by account. Supply a comprehensive statement of any changes made in method of depreciation. Provide dates of all field inspections and facilities visited.

2. Set forth, in exhibit form, charts depicting the original and estimated survivor curves and a tabular presentation of the original life table plotted on the chart for each account where the retirement rate method of analysis is utilized.

3. Provide the surviving original cost at historic test year-end by vintage by account and include applicable depreciation reserves and accruals. These calculations should be provided for plant in service as well as other categories of plant, including contributions in aid of construction and customers' advances for construction.

4. Provide a comparison of the calculated depreciation reserve used for ratemaking purposes v. the book reserve by account at the end of the test year, if they differ.

5. Supply a schedule by account and depreciable group showing the survivor curve and annual accrual rate estimated to be appropriate:

   a. For the purposes of this filing.
   b. For the purposes of the most recent rate increase filing prior to the current proceedings.

6. Provide an exhibit showing gross salvage, cost of removal, and net salvage for the 5 most recent calendar or fiscal years by account.

Answer:

Please refer to the direct testimony and accompanying exhibits of John J. Spanos (PAWC Statement No. 11) for the above filing requirements.

MFR Description

FR VII. RATE OF RETURN

1	Capitalization and capitalization rates
2	Prospectus for the company and the parent
3	Projected capital requirements
4	Schedule of debt and preferred stock of company
5	Financial data of company and parent
6	AFUDC charged by company
7	Provisions of charter and indentures
8	Projected revenues, expenses, and capital
9	Long term debt re-acquisitions
10	Compensating bank balance requirements
11	Bank notes payable
12	Stock offerings
13	Corporate relationship to affiliates
14	Utility plans to make a formal claim for a specified allowable rate of return
15	Copies of company documents listed (Fin Reports)
16	Monthly balance sheets (2 years)
17	Bond rating history
18	Bond rating reports
19	Presentations by company and parent management
20	Securities insurance
21	Company plans to refinance high cost long term debt or preferred stock
22	Securities analyst report copies
23	List of common equity infusion from parent
24	Company common dividend payments
25	Year-by-year common financial projections
26	Five-year construction budget
27	Capital structure budget
28	Company information by month
29	Identify all debt
30	Summary statement of all stock dividends, splits, or par value changes
31	Claim of filing utility
32	Financial data of company

FR VII.1

Pennsylvania-American Water Company
VII. Rate of Return

1. Provide capitalization and capitalization ratios for the last five-year period and projected through the next two years (with short-term debt and without short-term debt) for the Company, Parent and Consolidated System.

   a. Provide year-end interest coverages before and after taxes for the last three years and at latest date, including Indenture and Securities and Exchange Commission (SEC) bases, for the Company, Parent and Consolidated System.

   b. Provide year-end preferred stock dividend coverages for the last three years and at latest date, including Charter and SEC bases.

Answer:

Please refer to the direct testimony of Ann Bulkley, PAWC Statement No. 13, and accompanying Exhibit No. 13-A.

FR VII.2

Pennsylvania-American Water Company
VII. Rate of Return

2. Provide latest Prospectus for the Company and the Parent.

Answer: Please refer to the Investor Relations / Financial Reports / SEC Filings section of the American Water internet site (http://amwater.com). Open the 2019 group and click on the document named “424B2” filed on May 7, 2019.

FR VII.3

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

3. Supply projected capital requirements and the sources of Company, Parent and Consolidated System for the historic test year and each of three (3) comparable future years.

Answer:

Following are the historic total-company capital requirements for 2019, and the projected total-company capital requirements for 2020, 2021, and 2022.

Description	**2019**	**2020**	**2021**	**2022**
Bank Loans	**114,723,817**	**109,023,000**	**99,918,000**	**99,405,000**
Long-Term Debt	**1,668,828,227**	**1,783,684,919**	**1,843,330,069**	**1,953,418,618**
Preferred Stock	**4,051,500**	**2,851,500**	**1,651,500**	**451,500**
Common Equity	**2,036,296,182**	**2,188,014,182**	**2,277,049,182**	**2,402,899,182**

FR VII.4

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

4. Provide a schedule of debt and preferred stock of Company, Parent and Consolidated System as of historic test year-end and latest date, detailing for each issue (if applicable):

a. Date of issue
b. Date of maturity
c. Amount issued
d. Amount outstanding
e. Amount retired
f. Amount required
g. Gain on reacquisition
h. Coupon rate
i. Discount or premium at issuance
j. Issuance expenses
k. Net proceeds
l. Sinking Fund requirements
m. Effective interest rate
n. Dividend rate
o. Effective cost rate
p. Total average weighted effective Cost Rate

Answer: Please refer to Exhibit No. 13-A for the information as of December 31, 2019. Exhibit No. 13-A contains the schedules supporting the testimony of Ann E. Bulkley, the Company's rate of return witness.

FR VII.5

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

5. Supply financial data of Company and/or Parent for last five years:

a. Earnings-price ratio (average)
b. Earnings-book value ratio (per share basis) (avg. book value)
c. Dividend yield (average)
d. Earnings per share (dollar)
e. Dividends per share (dollars)
f. Average book value per share yearly
g. Average yearly market price per share (monthly high-low basis)
h. Pre-tax funded debt interest coverage
i. Post-tax funded debt interest coverage
j. Market price-book value ratio

Answer:

Please see attached.

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FR VII.05

	American Water Works Company, Inc.	**2015**	**2016**	**2017**	**2018**	**2019**
(1)	Earnings (excluding Goodwill)	2.64	2.84	3.03	3.30	3.61
(2)	Dividend Paid per Common Share	1.33	1.47	1.62	1.78	1.96
(3)	Common Shareholders Equity (in thousands)	5,049,000	5,218,000	5,385,000	5,864,000	6,121,000
(4)	Diluted Average Shares Outstanding (in thousands)	180,000	179,000	179,000	180,000	181,000
a	Price to earnings ratio	20.56	25.67	26.62	26.00	31.19
b	Book value to earnings ratio	10.63	10.26	9.93	9.87	9.37
c	Dividend yield	2.45%	2.01%	2.01%	2.07%	1.74%
d	Earnings per share (dollars)	2.64	2.84	3.03	3.30	3.61
e	Dividends paid per common share (dollars)	1.33	1.47	1.62	1.78	1.96
f	Book value per share	28.05	29.15	30.08	32.58	33.82
g	Average yearly market price per share (monthly high-low basis)	54.28	72.90	80.65	85.79	112.61
h	Pre-tax funded debt interest coverage	3.54	3.37	3.67	3.25	3.18
i	Post-tax funded debt interest coverage	2.55	2.44	2.25	2.62	2.63
j	Market price-book value ratio	193.53%	250.07%	268.09%	263.34%	332.99%

FR VII.6

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

6. Provide AFUDC charged by company at historic test year-end and latest date, explain method by which rate was calculated and provide workpaper showing derivation of the Company's current AFUDC rate.

Answer: The Company is using the AFUDC methodology proposed by the OTS and adopted by the Commission in PAWC's rate proceeding at Docket No. R-922428. Attached please see a memo dated May 7, 1993, which explains the calculations necessary to derive the AFUDC rate. Also attached is the detailed AFUDC rate calculation for the month of December 2019.

ATTACHMENT A

Attachment - A

Pennsylvania-American Water Company

800 West Hershey Park Drive • P.O. Box 888 • Hershey, PA 17033-0888
(717) 533-5000

TO: J. L. Nader

FROM: Pete Mecca

DATE: May 7, 1993

RE: Revised Calculation of AFUDC

In order to comply with a recent PUC order, it will be necessary to modify the method of calculating AFUDC for inclusion into rate base.

The new calculation shall be as follows:

Short Term Debt Portion

A. Daily Short Term Debt Outstanding + Beginning Balance
Number Of Days In Month + 1

÷

B. Average Balance In CWIP Prior To Transfers To Plant For The Month

X

C. Federal Funds Rate At Month End + Applicable Basis Points

Other Capital Portion

+

D. 1 - % Calculated In A. Above

X

E. Cost Of Capital Allowed In Latest Rate Case

PENNSYLVANIA-AMERICAN WATER COMPANY
AFUDC CALCULATION BASED ON SHORT TERM DEBT
FOR: Dec-19

FR VII.06

A	Average Daily Borrowing : (Provided by Treasury)			$ 57,285,165
B	Beginning balance of CWIP		152,245,729	
C	Ending Balance prior to Transfer		198,081,094	
D	Average CWIP balance			175,163,411
E	Short term debt % (A / D)			32.70%
			WA Debt Rate	
F	AMERICAN WATER CAPITAL CORPORATION		1.9024%	
G	Weighted ST Debt Rate			1.9024%
H	Short term debt % X Adj Fed Funds Rate (E x G)			0.622158% STD
I	1 - % calculated in E			67.2962%
J	Long Term Debt Rate	Last Rate Case R-2017-2595853 December 7, 2017		2.3600%
K	Long Term Debt Rate X 1 - % Calculated in E (J x I)			1.5882% LTD
L	Total Debt % (H + K)			2.2103% DEBT
M	Equity Rate allowed in latest rate case	Last Rate Case R-2017-2595853 December 7, 2017		5.3900%
N	Equity Rate X 1 - % Calculated in E (M X I)			3.6273% EQUITY
O	AFUDC Rate per annum (M + I)			5.8376%

	DEBT	EQUITY	TOTAL
AFUDC rate per month	0.1842%	0.3023%	0.4865%
AFUDC rate per half-month	0.0921%	0.1511%	0.2432%
AFUDC rate per quarter-month	0.0460%	0.0756%	0.1216%

FR VII.7

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

7. Set forth provisions of Company's and Parent's charter and indentures, if applicable, which describe coverage requirements, limits on proportions of types of capital outstanding, and restrictions on dividend payouts.

Answer: Coverage Requirements*:

The Thirty-Fourth Supplemental Indenture dated as of December 1, 2019, supplemental to The Indenture of Mortgage dated May 1, 1968, states that so long as any of the bonds of the 2019 Series Band C are outstanding, without the consent of the registered owners of at least sixty-six and two-thirds per cent (66-2/3%) in principal amount of the bonds of the 2019 Series Band B and the Bands of the 2019 Series C then outstanding, the Company shall not issue and the Trustee shall not authenticate additional bonds under Section 2.03 and Section 2.04 of the Original Indenture unless the net income of the Company has been equal to at least one and one-half times the aggregate annual interest charges on all Long Term Debt outstanding immediately after such bonds are issued.

The Company shall meet the requirements of this Section by delivering to the Trustee (together with the resolutions, opinions, certificates and instruments provided for in Section 2.03 and section 2.04 of the original indenture) a “Certificate of Required Net Income for Debt” which shall state in substance that the net income of the Company, calculated as hereinafter provided, for a period of twelve consecutive calendar months within the fifteen calendar months immediately preceding the first day of the month in which the additional bonds are to be issued by the Trustee has been equal to at least one and one-half times the aggregate annual interest charges on all Long Term Debt of the Company to be outstanding immediately after such bonds are issued; provided, however, that in all calculations of such net income effect shall be given to the issue or retirement of any indebtedness that will be accomplished prior to or on the date of such issue and there shall be excepted from such Long Term Debt any thereof for the payment or redemption of which moneys in the necessary amounts have been irrevocably set aside by the Company or deposited with the Trustee or other holder of a mortgage or other lien securing any such Long Term Debt.

Limits:

The Thirty-Fourth Supplemental Indenture dated as of December 1, 2019, supplemental to The Indenture of Mortgage dated May 1, 1968, limits the issuance of bonds, so that the principal amount of all the outstanding long-term debt does not exceed 65% of the total capitalization of the Company.

Dividend Restriction:

The Thirty-Fourth Supplemental Indenture dated as of December 1, 2019, states that so long as any bonds of the 2009 Series A are outstanding, without the consent of the registered owners of a least sixty-six and two-thirds per cent (66-2/3%)in principal amount of the bonds of the 2019 Series B and the Bands of the 2019 Series C then outstanding, if any, no dividends shall be declared or paid on any shares of Common Stock of the Company (except dividends payable solely in the shares of its Common Stock), nor shall any shares of Common Stock of the Company be purchased or otherwise acquired by the Company, if immediately after or as the result of any such declaration, payment, purchase or other acquisition, the sum of the aggregate of the capital of the Company attributable to its Common Stock plus the amount of all surplus accounts of the Company would be reduced to less than $42,000,000. In determining the aggregate of the capital of the Company attributable to its Common Stock and the amount of all surplus accounts for the purpose hereof, any write-up or write-down of assets or write-off of the excess over original cost of property made on the books of the Company subsequent to December 31, 1980, shall be disregarded.

* Covenant requirement contained in all subsequent outstanding supplemental indentures.

FR VII.8

Pennsylvania-American Water Company
VII. Rate of Return

8. Attach copies of the summaries of the Company's projected revenues, expenses and capital budgets for the next two years.

Answer: Please see below for a summary of the total Company's water and wastewater projected revenues, expenses and capital budget for 2020 and 2021.

DESCRIPTION	2020 (Thousands)	2021 (Thousands)
Revenues	$ 738,953	$ 798,150
Operating & Maintenance Expense	227,260	244,669
Depreciation and Amortization	148,482	150,091
Taxes Other than Income	14,034	15,060
Income Taxes	81,334	78,237
Utility Operating Income	267,843	310,093
Income Deductions	67,659	72,867
Net Income to Common	$ 200,184	$ 237,226

DESCRIPTION	2020	2021
Capital Expenditures	$ 388,417	$ 343,970
Contributions	(3,500)	(3,500)
Advances	(6,000)	(6,000)
Refunds	5,000	5,000
Total	$ 383,917	$ 339,470

FR VII.9

Pennsylvania-American Water Company
VII. Rate of Return

9. Describe long-term debt reacquisitions by Company and Parent as follows:

   a. Reacquisitions by issue by year.

   b. Total gain on reacquisitions by issue by year.

   c. Accounting of gain for income tax and book purposes.

Answer:

During the 2017-2019 period Pennsylvania-American Water refinanced the following bonds.

	Transaction Dates		Interest Rates		Maturity Dates		Fees and Expenses		
Amount Refinanced	**Redeemed-Old**	**Issued - New**	**Old**	**New**	**Old**	**New**	**Make-Whole Premium**	**Issuance Costs**	**Bond Discount**
$55,165,000	9/13/2017	9/13/2017	5.77%	2.95%	12/21/2021	9/1/2027	$6,044,656		
$36,245,000	9/13/2017	9/13/2017	5.62%	2.95%	12/21/2018	9/1/2027	$3,971,514		
$91,410,000							$10,016,170	$822,827	$333,692
$37,540,000	9/11/2018*	9/11/2018	2.20%	3.75%	3/29/2019	9/1/2028	$2,293,113		
$80,000,000	9/11/2018	9/11/2018	5.77%	3.75%	3/29/2022	9/1/2028	$4,886,762		
$117,540,000							$7,179,875	$1,021,937	$23,697
$80,000,000	6/21/2019	6/21/2019	6.20%	3.00%	4/1/2039	4/1/2039		$1,346,286	
$13,165,000	12/12/2019	12/12/2019	5.50%	2.45%	12/1/2039	12/1/2039		$249,491	
$80,000,000	12/12/2019	12/12/2019	5.50%	2.45%	12/1/2039	12/1/2039		$1,014,178	
$173,165,000								$2,609,956	

Notes:
Does not include bonds that matured and were replaced with AWCC debt
Amount refinanced for Make Whole transactions does not include Make-Whole premium
* This issuance fixed out a short-term note with a 10-year bond

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission

FR VII.10

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

10. Provide the following information concerning compensating bank balances requirements for the actual test year:

   a. Name of each bank
   b. Address of each bank
   c. Type of accounts with each bank (checking, savings, escrow, other services, etc.)
   d. Average Daily Balance in each account
   e. Amount and percentage requirements for compensating bank balances at each bank
   f. Average daily compensating bank balance at each bank
   g. Documents from each bank explaining compensating bank balance requirements
   h. Interest earned on each type of account

Answer:

a. BNY Mellon

b. The Bank of New York Mellon
500 Ross Street
Suite 1260
Pittsburgh, PA 15262-0001

c. Lockbox account

d-h. No compensating bank balances were required during the test year.

FR VII.11

Pennsylvania-American Water Company
VII. Rate of Return

11. Provide the following information concerning bank notes payable for the actual per book test year:
    a. Line of Credit at each bank.
    b. Average daily balances of notes payable to each bank, by name of bank.
    c. Interest rate charged on each bank note (Prime rate, formula)
    d. Purpose of each bank note (for example, construction, fuel storage, working capital, debt retirement).
    e. Prospective future need for this type of financing.

Answer:

a. Pennsylvania-American has a short-term credit facility with American Water Capital Corp. (AWCC) that is renewed each year.

b. The average daily short-term debt balance with AWCC in 2019 was $40,940,414.

c. The average interest rate on short-term borrowings was 2.47% for the year ending 12/31/19.

d. Pennsylvania-American uses the short-term credit facility with AWCC to finance its day-to-day working capital needs.

e. Pennsylvania-American will require this type of borrowing in the foreseeable future to meet working capital needs.

FR VII.12

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

12. Submit details on Company or Parent common stock offerings for the past five years to present as follow:

    a. Date of Prospectus.
    b. Date of offering.
    c. Record date.
    d. Offering period including dates and number of days.
    e. Amount and number of shares of offering.
    f. Offering ratio, if rights offering.
    g. Percent subscribed.
    h. Offering price.
    i. Gross proceeds per share.
    j. Expenses per share.
    k. Net proceeds per share in i and j above.
    l. Market price per share.
        1. At record date.
        2. At offering date.
        3. One month after close of offering.
    m. Average market price during offering.
        1. Price per share.
        2. Rights per share—average value of rights.
    n. Latest reported earnings per share at time of offering.
    o. Latest reported dividends at time of offering.

Answer:

Please see the table on the following page.

Parent (AWK) Stock Offerings

	2018
a. Date of Prospectus	April 11, 2018
b. Date of Offering	April 12, 2018
c. Record Date	N/A
d. Offering Period (days)	1 day
e. # Of Shares	2,320,000
f. Offering Ratio	N/A
g. Percent Subscribed	N/A
h. Offering Price	$80.50
i. Gross Proceeds/Share	$79.36
j. Expenses/Share	$0.35
k. Net Proceeds/Share	$79.01
l. Market Price/Share	
(1). At Record Date	N/A
(2). At Offering Date	$80.50
(3). One Month After Close	$88.48
m. Average Market Price	
(1). Price/Share	N/A
(2). Rights/Share	N/A
n. Reported Earnings at Offering	$3.03
o. Reported Dividends at Offering	$0.415

Pennsylvania American Water Company
Data Requirements of the Pennsylvania Public Utility Commission

FR VII.13

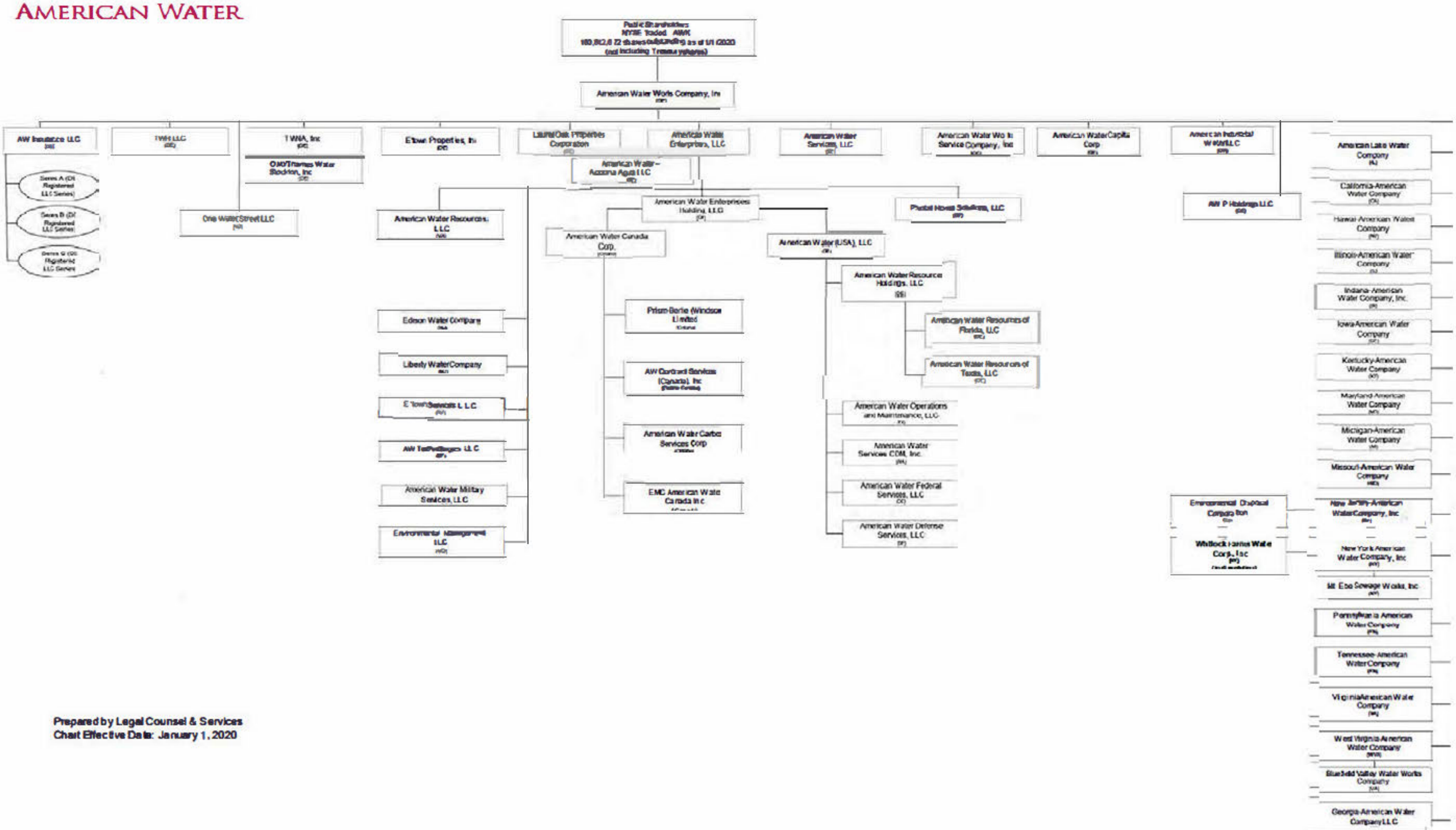
Pennsylvania American Water Company
VII. Rate of Return

13. Attach chart explaining Company's corporate relationship to its affiliates showing system structure.

Answer: Please see the attachment.

AMERICAN WATER

Organizational Chart – American Water Works Company, Inc.



Prepared by Legal Counsel & Services
Chart Effective Date: January 1, 2020

FR VII.14

Pennsylvania-American Water Company
VII. Rate of Return

14. If the utility plans to make a formal claim for a specified allowable rate of return, provide the following data in statement or exhibit form:

a. Claimed capitalization and capitalization ratios with supporting data.
b. Claimed cost of long-term debt with supporting data.
c. Claimed cost of short-term debt with supporting data.
d. Claimed cost of total debt with supporting data.
e. Claimed cost of preferred stock with supporting data.
f. Claimed cost of common equity with supporting data.

Answer: Please refer to Exhibit No. 13-A, which contains the schedules supporting the testimony of Ann E. Bulkley, the Company's rate of return witness.

FR VII.15

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

15. Supply copies of the following documents for the Company and, if applicable, its parent:

    a. Most recent Annual Report to shareholders including any statistical supplements;
    b. Most recent SEC Form 10K;
    c. All SEC Form 10Q reports issued within the preceding 12 months of the date of submittal of the rate increase request.

Answer:

a. Please see attached for Pennsylvania American's 2018 and 2017 annual reports. Pennsylvania American's 2019 annual report will be provided when it becomes available. The Parent company annual report can be accessed through the Investor Relations section of the American Water internet site (www.amwater.com). See Financial Reports \ Annual Reports & Proxy Statements.

b. Parent company – see the Investor Relations \ SEC Filings section of the American Water internet site (www.amwater.com).

c. See response to part b above.

Pennsylvania-American Water Company

(A wholly-owned subsidiary of
American Water Works Company, Inc.)
Financial Statements

As of and for the years ended December 31, 2018 and 2017

Report of Independent Auditors

To the Board of Directors of
Pennsylvania-American Water Company

We have audited the accompanying financial statements of Pennsylvania-American Water Company, which comprise the balance sheets as of December 31, 2018 and 2017, and the related statements of income, of cash flows and of changes in common stockholder's equity for the years then ended.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Pennsylvania-American Water Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

PricewaterhouseCoopers LLP

April 12, 2019

PENNSYLVANIA-AMERICAN WATER COMPANY
Balance Sheets
For the Years Ended December 31, 2018 and 2017
(Dollars in thousands)

Assets

	2018	2017
Property, plant and equipment, net		
Utility plant - at original cost, net of accumulated depreciation	$ 4,563,051	$ 4,308,808
Utility plant acquisition adjustments	12,584	12,949
Non-utility property, net of accumulated depreciation	248	255
Total property, plant and equipment	4,575,883	4,322,012
Current assets		
Cash	4,766	3,583
Accounts receivable	68,251	64,274
Allowance for uncollectible accounts	(13,389)	(11,885)
Unbilled utility revenues	34,994	36,659
Accounts receivable - affiliated company	9,878	—
State income tax receivable	6,604	1,481
Materials and supplies	9,334	9,321
Other	3,809	3,850
Total current assets	124,247	107,283
Regulatory and other long-term assets		
Regulatory assets	111,051	97,443
Goodwill	76,124	76,064
Prepaid pension expense	10,460	14,548
Other	1,251	417
Total regulatory and other long-term assets	198,886	188,472
Total assets	$ 4,899,016	$ 4,617,767

The accompanying notes are an integral part of these financial statements

PENNSYLVANIA-AMERICAN WATER COMPANY
Balance Sheets
For the Years Ended December 31, 2018 and 2017
(Dollars in thousands)

Capitalization and Liabilities

	2018	2017
Capitalization		
Common stockholder's equity	$ 1,852,195	$ 1,604,607
Long-term debt, excluding current portion		
Long-term debt, excluding current portion	1,556,795	1,251,741
Redeemable preferred stock at redemption value	3,874	5,252
Total capitalization	3,412,864	2,861,600
Current liabilities		
Notes payable - affiliated company	77,958	321,689
Current portion long-term debt	6,738	117,443
Accounts payable	95,452	86,106
Accounts payable - affiliated company	13,941	10,481
Federal income tax payable - affiliated company	—	8,623
Accrued taxes	2,783	—
Accrued interest	20,029	16,277
Refunds due to customers	2,339	2,271
Other	29,903	29,077
Total current liabilities	249,143	591,967
Regulatory and other long-term liabilities		
Regulatory liabilities	356,091	329,940
Advances for construction	62,814	67,898
Deferred income taxes, net	571,216	532,362
Deferred investment tax credits	4,672	4,905
Accrued postretirement benefit expense	3,357	6,397
Other tax liabilities	39,030	28,669
Other	449	642
Total regulatory and other long-term liabilities	1,037,629	970,813
Contributions in aid of construction	199,380	193,387
Commitments and contingencies (see Note 16)	—	—
Total capitalization and liabilities	$ 4,899,016	$ 4,617,767

The accompanying notes are an integral part of these financial statements

PENNSYLVANIA-AMERICAN WATER COMPANY
Statements of Income
For the Years Ended December 31, 2018 and 2017
(Dollars in thousands)

	2018	2017
Operating revenues	$ 689,215	$ 661,088
Operating expenses (income)		
Operation and maintenance	216,812	192,130
Depreciation	112,496	102,896
Amortization	12,069	11,947
General taxes	12,846	9,936
Gain on asset dispositions and purchases	(19)	(4,843)
Total operating expenses, net	354,204	312,066
Operating income	335,011	349,022
Other income (expenses)		
Interest on long-term debt	(72,205)	(67,083)
Interest on short-term debt - affiliated company	(5,760)	(4,171)
Allowance for other funds used during construction	2,701	—
Allowance for borrowed funds used during construction	3,522	1,053
Amortization of debt issuance costs	(1,548)	(1,264)
Non-operating benefit costs, net	4,113	(2,993)
Other, net	(453)	(419)
Total other expenses	(69,630)	(74,877)
Income before income taxes	265,381	274,145
Provision for income taxes	76,309	113,441
Net income	$ 189,072	$ 160,704

The accompanying notes are an integral part of these financial statements

PENNSYLVANIA-AMERICAN WATER COMPANY
Statements of Cash Flows
For the Years Ended December 31, 2018 and 2017
(Dollars in thousands)

	2018	2017
Cash flows from operating activities		
Net income	$ 189,072	$ 160,704
Adjustments to reconcile net cash flows provided by operating activities		
Depreciation and amortization	124,565	114,843
Amortization of debt issuance costs	1,548	1,264
Provision for deferred income taxes	47,852	67,934
Amortization of deferred investment tax credits	(234)	(234)
Provision for losses on accounts receivable	10,222	6,351
Allowance for other funds used during construction	(2,701)	—
Gain on asset dispositions and acquisitions	(19)	(4,843)
Pension and non-pension postretirement benefits	4,068	11,614
Other, net	21,954	(7,823)
Changes in assets and liabilities		
Accounts receivable and unbilled revenues	(10,729)	(10,983)
Accounts receivable - affiliated company	(9,878)	—
Federal income tax from affiliated company	(817)	(4,067)
State income taxes	(5,123)	(3,336)
Other current assets	28	5,366
Pension and non-pension postretirement benefit contributions	(3,820)	(8,240)
Accounts payable	(5,181)	9,486
Accounts payable - affiliated company	6,268	4,628
Accrued interest	3,752	3,861
Accrued taxes	2,783	—
Other current liabilities	1,703	(9,704)
Net cash provided by operating activities	375,313	336,821
Cash flows from investing activities		
Capital expenditures	(349,674)	(308,463)
Acquisitions	—	(159,839)
Removal costs from property, plant and equipment retirements, net	(16,333)	(15,020)
Proceeds from the disposition of property, plant and equipment	—	1,886
Net cash used in investing activities	(366,007)	(481,436)
Cash flows from financing activities		
Proceeds from issuance of long-term debt	1,059	7,049
Proceeds from issuance of long-term debt - affiliated company	426,948	341,426
Repayment of long-term debt	(5,585)	(38,392)
Repayment of long-term debt - affiliated company	(228,195)	(91,410)
Debt issuance costs	(5,359)	(3,318)
Make-whole premium on early debt retirement	(7,180)	(10,016)
Net repayments of notes payables - affiliated company	(243,731)	(66,825)
Advances and contributions, net of refunds of $4,808 in 2018 and $4,038 in 2017	(3,000)	(395)
Capital contributions	196,000	125,000
Redemption of preferred stock	(1,200)	(1,200)
Dividends paid	(137,879)	(116,489)
Net cash (used in) provided by financing activities	(8,122)	145,430
Net increase in cash	1,184	815
Cash at beginning of year	3,582	2,767
Cash at end of year	$ 4,766	$ 3,582
Cash paid (received) during the year for		
Interest, net of capitalized amount	$ 62,688	$ 62,824
Income taxes	$ (2,472)	$ (22,141)
Non-cash investing activity		
Capital expenditures acquired on account but unpaid as of year end	$ 65,085	$ 49,577
Non-cash financing activity		
Capital contributions by stockholder (see Note 12)	$ 395	$ 319

The accompanying notes are an integral part of these financial statements

PENNSYLVANIA-AMERICAN WATER COMPANY
Statements of Changes in Common Stockholder's Equity
For the Years Ended December 31, 2018 and 2017
(Dollars in thousands)

	Common Stock		Paid-in	Retained	
	Shares	**Par Value**	**Capital**	**Earnings**	**Total**
Balance at December 31, 2016	3,910,343	$ 21,507	$ 870,246	$ 542,943	$ 1,434,696
Net income				160,704	160,704
Capital contributions			125,319		125,319
Cumulative effect of change in accounting principle				377	377
Dividends				(116,489)	(116,489)
Balance at December 31, 2017	3,910,343	$ 21,507	$ 995,565	$ 587,535	$ 1,604,607
Net income	—	—	—	189,072	189,072
Capital contributions	—	—	196,395	—	196,395
Dividends	—	—	—	(137,879)	(137,879)
Balance at December 31, 2018	3,910,343	$ 21,507	$ 1,191,960	$ 638,728	$ 1,852,195

The accompanying notes are an integral part of these financial statements

PENNSYLVANIA-AMERICAN WATER COMPANY
Notes to Financial Statements
December 31, 2018 and 2017
(Dollars in thousands)

Note 1: Organization and Operation

Pennsylvania-American Water Company (the “Company”) provides water and wastewater service in the Commonwealth of Pennsylvania. As a public utility operating in Pennsylvania, the Company functions under rules and regulations prescribed by the Pennsylvania Public Utility Commission (the “Commission”). The Company is a wholly-owned subsidiary of American Water Works Company, Inc. (“AWW”).

Note 2: Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States (“GAAP”) requires management to make estimates, assumptions and judgements that affect the Company's financial condition, results of operations and cash flows. Actual results could differ from these estimates, judgements and assumptions. The Company considers its critical accounting estimates to include: the application of regulatory accounting principles and the related determination and estimation of regulatory assets and liabilities; assumptions used in impairment testing of goodwill and other long-lived assets, including regulatory assets; revenue recognition and the estimates used in the calculation of unbilled revenue; accounting for income taxes and the recently enacted Tax Cuts and Jobs Act (the "TCJA"); benefit plan assumptions; and the judgements and estimates used in the determining loss contingencies. The Company’s critical accounting estimates that are particularly sensitive to change in the near term are amounts reported for regulatory assets and liabilities, goodwill, income taxes, benefit plan assumptions and contingency-related obligations.

Regulation

The Commission generally authorizes revenue at levels intended to recover the estimated costs of providing service, plus a return on net investments, or rate base. The Commission may also approve accounting treatments, long-term financing programs and cost of capital, capital expenditures, O&M expenses, taxes, transactions and affiliate relationships, reorganizations and mergers, and acquisitions, along with imposing certain penalties or granting certain incentives. Due to timing and other differences in the collection of utility revenue, an incurred cost that would otherwise be charged as an expense could be deferred as a regulatory asset if it is probable that such cost is recoverable through future rates. Conversely, GAAP requires the creation of a regulatory liability for amounts collected in rates to recover costs expected to be incurred in the future, or amounts collected in excess of costs incurred and refundable to customers.

Property, Plant and Equipment

Property, plant and equipment consist primarily of utility plant. Additions to utility plant and replacement of retirement units of utility plant are capitalized and include costs such as materials, direct labor, payroll taxes and benefits, indirect items such as engineering and supervision, transportation and an allowance for funds used during construction (“AFUDC”). Costs for repair, maintenance and minor replacements are charged to O&M expense as incurred.

The cost of property, plant and equipment is depreciated using the straight-line average remaining life group method. The Company records depreciation in conformity with amounts approved by the Commission after regulatory review of the information the Company submits to support its estimates of the assets’ remaining useful lives.

When units of property, plant and equipment are replaced, retired or abandoned, the recorded value is credited against the asset and charged to accumulated depreciation. To the extent the Company recovers cost of removal or other retirement costs through rates after the retirement costs are incurred, a regulatory asset is recorded. In some cases, the Company recovers retirement costs through rates during the life of the associated asset and before the costs are incurred. These amounts result in a regulatory liability being reported based on the amounts previously recovered through customer rates, until the costs to retire those assets are incurred.

The costs incurred to acquire and internally develop computer software for internal use are capitalized as a unit of property. The carrying value of these costs amounted to $56,388 and $63,609 as of December 31, 2018 and 2017, respectively.

Nonutility property consists primarily of buildings and equipment utilized by the Company for internal operations. This property is stated at cost, net of accumulated depreciation, which is calculated using the straight-line method over the useful lives of the assets.

Cash

Substantially all of the Company’s cash is invested in interest-bearing accounts.

Accounts Receivable

The majority of the Company’s accounts receivable is due from utility customers and represents amounts billed to the Company’s customers on a cycle basis. Credit is extended based on the guidelines of the Commission and collateral is generally not required.

Allowance for Uncollectible Accounts

Allowance for uncollectible accounts is maintained for estimated probable losses resulting from the Company’s inability to collect receivables from customers. Accounts that are outstanding longer than the payment terms are considered past due. A number of factors are considered in determining the allowance for uncollectible accounts, including the length of time receivables are past due and previous loss history. The Company generally writes off accounts when they become uncollectible or are over a certain number of days outstanding.

Unbilled Revenues

Unbilled revenues are accrued when service has been provided but has not been billed to customers.

Materials and Supplies

Materials and supplies are stated at the lower of cost or net realizable value. Cost is determined using the average cost method.

Goodwill

Goodwill represents the excess of the purchase price paid over the estimated fair value of the assets acquired and liabilities assumed in the acquisition of a business. The Company has recorded $76,124 and $76,064 of goodwill at December 31, 2018 and 2017, respectively. Goodwill is not amortized, but is tested for impairment at least annually or on an interim basis if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value.

The Company's annual impairment testing is performed as of November 30 of each year, in conjunction with the completion of the Company's annual business plan. The Company assesses qualitative factors to determine whether quantitative testing is necessary. If it is determined, based upon qualitative factors, that the estimated fair value of a reporting unit is more likely than not, greater than its carrying value, no further testing is required. If the Company bypasses the qualitative assessment, or performs the qualitative assessment and determines that the estimated fair value of a reporting unit is more likely than not, less than its carrying value, a quantitative, fair value-based test is performed. This quantitative testing compares the estimated fair value of the reporting unit to its respective net carrying value, including goodwill, on the measurement date. An impairment loss will be recognized in the amount equal to the excess of the reporting unit's carrying value compared to its estimated fair value, limited to the total amount of goodwill allocated to that reporting unit.

Application of the goodwill impairment test requires management judgment, including the identification of reporting units and determining the fair value of the reporting unit. Management estimates fair value using a combination of a discounted cash flow analysis and market multiples analysis. Significant assumptions used in these fair value analyses include, but are not limited to, forecasts of future operating results, discount and growth rates, capital expenditures, tax rates, working capital, weighted average cost of capital and projected terminal values.

Advances for Construction and Contributions in Aid of Construction

The Company may receive advances for construction ("advances") and contributions in aid of construction ("contributions") from customers, home builders, real estate developers and others to fund construction necessary to extend service to new areas. Advances are refundable for limited periods of time as new customers begin to receive service or other contractual obligations are fulfilled.

Advances that are no longer refundable are reclassified to contributions. Contributions are permanent collections of plant assets or cash for a particular construction project. For rate-making purposes, the amount of such contributions generally serves as a rate base reduction since the contributions represents non-investor supplied funds.

The Company depreciates utility plant funded by contributions and amortizes its contributions balance as a reduction to depreciation expense, producing a result which is functionally equivalent to reducing the original cost of the utility plant for the contributions. Amortization of contributions in aid of construction was $4,576 and $4,529 for the years ended December 31, 2018 and 2017, respectively. For the years ended December 31, 2018 and 2017, non-cash advances and contributions received were $7,441 and $5,221, respectively.

Revenue Recognition

On January 1, 2018, the Company adopted Accounting Standards Codification Topic 606, *Revenue From Contracts With Customers,* and all related amendments (collectively, "ASC 606"), using the modified retrospective approach, applied to contracts which were not completed as of January 1, 2018. Under this approach, periods prior to the adoption date have not been restated and continue to be reported under the accounting standards in effect for those periods.

Under ASC 606, a performance obligation is a promise within a contract to transfer a distinct good or service, or a series of distinct goods and services, to a customer. Revenue is recognized when performance obligations are satisfied and the customer obtains control of promised goods or services. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled to receive in exchange for goods or services. Under ASC 606, a contract's transaction price is allocated to each distinct performance obligation. To determine revenue recognition for arrangements that the Company determines are within the scope of ASC 606, the Company performs the following five steps: (i) identifies the contracts with a customer; (ii) identifies the performance obligations within the contract, including whether any performance obligations are distinct and capable of being distinct in the context of the contract; (iii) determines the transaction price; (iv) allocates the transaction price to the performance obligations in the contract; and (v) recognizes revenue when, or as, the Company satisfies each performance obligation.

Revenue is generated primarily from water and wastewater services delivered to customers. These contracts contain a single performance obligation, the delivery of water and/or wastewater services, as the promise to transfer the individual good or service is not separately identifiable from other promises within the contracts and, therefore, is not distinct. Customer payments for contracts are generally due within 30 days of billing. Revenues are recognized over time, as services are provided. There are generally no significant financing components or variable consideration. Revenues include amounts billed to customers on a cycle basis and unbilled amounts calculated based on estimated usage from the date of the meter reading associated with the latest customer bill, to the end of the accounting period. The amounts that the Company has a right to invoice are determined by each customer's actual usage, an indicator that the invoice amount corresponds directly to the value transferred to the customer.

Income Taxes

AWW and its subsidiaries participate in a consolidated federal income tax return for U.S. tax purposes. Members of the consolidated group are charged with the amount of federal income tax expense determined as if they filed separate returns. Federal income tax expense for financial reporting purposes is provided on a separate return basis.

Certain income and expense items are accounted for in different time periods for financial reporting than for income tax reporting purposes. The Company provides deferred income taxes on the difference between the tax basis of assets and liabilities and the amounts at which they are carried in the financial statements. These deferred income taxes are based on the enacted tax rates expected to be in effect when these temporary differences are projected to reverse. In addition, regulatory assets and liabilities are recognized for the effect on revenues expected to be realized as the tax effects of temporary differences, previously flowed through to customers, reverse.

Investment tax credits have been deferred and are being amortized to income over the average estimated service lives of the related assets.

Allowance for Funds Used During Construction ("AFUDC")

AFUDC is a non-cash credit to income with a corresponding charge to utility plant that represents the cost of borrowed funds or a return on equity funds devoted to plant under construction. AFUDC is recorded to the extent permitted by the Commission.

New Accounting Standards

The following accounting standards were adopted by the Company in 2018:

Revenue from Contracts with Customers

In May 2014, the FASB issued a new revenue recognition standard that replaced existing revenue recognition guidance in GAAP, including most industry-specific guidance. The core principle of the new guidance is that an entity will recognize revenue for the transfer of goods or services to customers equal to the amount that it expects to be entitled to receive for those goods or services. The guidance also requires additional disclosures about the nature, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments. The new standard was effective January 1, 2018 for the Company and has been early adopted on a modified retrospective basis. The adoption had no material impact to the financial statements as there are no material changes to the timing or recognition of revenue.

Clarifying the Definition of a Business

In January 2017, the FASB issued guidance that clarifies the definition of a business with the objective of assisting entities with evaluating whether transactions should be accounted for as acquisitions, or disposals, of assets or businesses. The company early adopted the new standard effective January 1, 2018. The effect on the Company's financial statements will be dependent on the acquisitions that close subsequent to adoption.

Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

In March 2017, the FASB issued guidance that updates the authoritative guidance which requires the service cost component of net periodic benefit cost to be presented in the same income statement line item(s) as other employee compensation costs arising from services rendered during the period. The remaining components of net period benefit cost are required to be presented separately from the service cost component in an income statement line item outside of operating income. Also, the guidance only allows for the service cost component to be eligible for capitalization. The updated guidance does not impact the accounting for net periodic benefit costs as regulatory assets or liabilities. The Company early adopted the new standard effective January 1, 2018. The Company presented in the current period, and reclassified in the prior periods, net periodic benefit costs, other than the service cost component, in non-operating benefit costs, net on the Statements of Income.

Simplification of Goodwill Testing Impairment

In January 2017, the FASB issued guidance that updates the authoritative guidance which simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the amendments in the update, an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge should be recognized for the amount by which the carrying value exceeds the reporting unit's fair value, however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. An entity still has the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. The Company early adopted the new standard effective August 31, 2018.

Cloud Computing Service Arrangements

In August 2018, the FASB Updated the accounting and disclosure guidance for cloud computing arrangements that are service contracts. Under this guidance, implementation costs incurred in cloud computing arrangements and in developing or obtaining internal-use software follow the same capitalization requirements. The accounting for the service element of the arrangement remains unchanged. The Company early adopted the new standard effective September 30, 2018. The adoption had no material impact on the Financial Statements.

The following recently issued accounting standards have not yet been adopted by the Company at December 31, 2018:

Accounting for Leases

In December 2018, the FASB updated the accounting and disclosure guidance for leasing arrangements. Under this guidance, a lessee will be required to recognize the following for all leases, excluding short-term leases, at the commencement date: (i) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and (ii) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Under the guidance, lessor accounting is largely unchanged. A package of optional transition practical expedients allows an entity not to reassess under the new guidance: (i) whether any existing contracts are or contain leases; (ii) lease classification; and (iii) initial direct costs. Additional optional transition practical expedients are available which allow an entity not to evaluate existing land easements if the easements were not previously accounted for as leases, and to apply the new lease standard at the adoption date and recognize a cumulative-effect adjustment in the opening balance of retained earnings in the period of adoption. This guidance is effective January 1, 2020 for the Company. The Company plans to early adopt January 1, 2019 on a modified retrospective basis. The Company is currently evaluating the effect on its financial statements.

Measurement of Credit Losses

In June 2016, the FASB issued guidance that updates the accounting guidance on reporting credit losses for financial assets held at amortized cost basis and available-for-sale debt securities. Under this guidance, expected credit losses are required to be measured based on historical experience, current conditions and reasonable and supportable forecasts that affect the collectability of the reported amount of financial assets. Also, this guidance requires that credit losses on available-for-sale debt securities be presented as an allowance rather than as a direct write-down. The new standard is effective January 1, 2021 for the Company. Early adoption is permitted, but not before January 1, 2019 for the Company. The Company is currently evaluating the impact on the financial statements, as well as the timing of adoption.

Disclosure Requirements for Fair Value Measurement

In August 2018, the FASB updated the disclosure requirements for fair value measurement. The guidance removes the requirements to disclose transfers between Level 1 and Level 2 measurements, the timing of transfers between levels, and the valuation processes for Level 3 measurements. Disclosure of transfers into and out of Level 3 measurements will be required. The guidance adds disclosure requirements for the change in unrealized gains and losses in other comprehensive income for recurring Level 3 measurements, as well as the range and weighted average of significant unobservable inputs used to develop Level 3 measurements. The new standard is effective January 1, 2020 for the Company. Early adoption is permitted. The Company is currently evaluating the impact on the financial statements, as well as the timing of adoption.

(Dollars in thousands)

Note 3: Disaggregated Revenues

The following table provides operating revenues disaggregated for the year ended December 31, 2018:

	Revenues from Contracts with Customers	Other Revenues Not from Contracts with Customers (a)	Total Operating Revenues
Water services:			
Residential	$ 399,378	$ —	$ 399,378
Commercial	152,469	—	152,469
Industrial	28,657	—	28,657
Fire service	12,199	—	12,199
Public and other	19,361	—	19,361
Sales for resale	2,264	—	2,264
Total water services	614,328	—	614,328
Wastewater services:			
Residential	33,540	—	33,540
Commercial	13,391	—	13,391
Industrial	1,701	—	1,701
Public and other	11,186	—	11,186
Total wastewater services	59,818	—	59,818
Miscellaneous utility charges	12,836	—	12,836
Lease contract revenue	—	1,542	1,542
Other	—	691	691
Total operating revenues	$ 686,982	$ 2,233	$ 689,215

(a) Includes revenues associated with lease contracts and intercompany rent which are outside the scope of ASC 606 and accounted for under other existing GAAP.

Note 4: Acquisitions

The Company had no acquisitions during 2018.

In 2017, the Company completed an acquisition of one wastewater system for an aggregate purchase price of $159,801. The acquired operations provided services to approximately 22,000 customers at the time of the acquisition. The purchase was accounted for as a business acquisition, and the difference between the purchase price and the fair value of assets acquired, less assumed liabilities, was recorded as goodwill at the date of the acquisitions. Assets acquired, principally utility plant, totaled $158,000, including $795 of goodwill and $1,006 of estimated unbilled revenues. During 2018 the Company re-evaluated the amount of estimated unbilled revenue acquired based upon the actual billings rendered to customers. As a result, Goodwill was increased to $855 and unbilled revenue was lowered to $821. Subject to the terms of the purchase contract, the Company received proceeds of $125 from the seller due to the actual billings being less than the amount of unbilled revenue estimated at the closing date.

(Dollars in thousands)

Note 5: Utility Plant

The components of utility plant by category at December 31 were as follows:

	Range of Remaining Useful Life	2018	2017
Utility Plant:			
Land and other non-depreciable assets	—	$ 31,060	$ 31,443
Sources of supply	37 to 85 Years	225,862	212,389
Treatment and pumping	25 to 57 Years	753,155	653,481
Transmission and distribution	19 to 149 Years	2,892,638	2,736,563
Services, meters and fire hydrants	18 to 59 Years	865,535	846,821
General structures and equipment	5 to 47 Years	324,885	282,582
Wastewater	8 to 86 Years	846,355	828,444
Construction work in progress	—	54,515	115,560
		5,994,005	5,707,283
Less: Accumulated depreciation		(1,430,954)	(1,398,475)
Utility Plant - at original cost, net		$ 4,563,051	$ 4,308,808

The provision for depreciation expressed as a percentage of the aggregate average depreciable asset balances was 2.60% and 2.58% in 2018 and 2017, respectively.

Note 6: Regulatory Assets and Liabilities

Regulatory Assets

Regulatory assets represent costs that are expected to be fully recovered from customers in future rates. Except for cost of removal, regulatory assets are excluded from the Company’s rate base and generally do not earn a return.

The components of regulatory assets at December 31 were as follows:

	2018	2017
Cost of removal	$ 70,788	$ 65,558
Debt and preferred stock expense	15,914	13,090
Make-whole premium	15,621	9,682
Other	8,728	9,113
Total regulatory assets	$ 111,051	$ 97,443

(Dollars in thousands)

Cost of removal represents retirement costs expected to be recovered through future customer rates during the lives of the associated assets.

Debt expense is amortized over the lives of the respective issues. Call premiums on the redemption of long-term debt, as well as unamortized debt expense, are deferred and amortized to the extent they will be recovered through future service rates. Expenses of preferred stock issues without sinking fund provisions are amortized over 30 years from the date of issue, whereas expenses of issues with sinking fund provisions are charged to operations as shares are retired.

In 2018, as a result of the Company's prepayment of the 2.20% Series E Senior Notes due in 2019 ("Series E Senior Notes") and 5.77% Series F Senior Notes due in 2022 ("Series F Senior Notes") and payment of a make-whole premium to the holders thereof $7,180, the Company recorded a regulatory asset that the Company believes is probable of recovery in future rates. Approximately $239 of the early debt extinguishment costs allocable to the Company was amortized in 2018.

In 2017, as a result of the Company's prepayment of the 5.62% Series C Senior Notes due in 2018 ("Series C Senior Notes") and 5.77% Series D Senior Notes due in 2021 ("Series D Senior Notes") and payment of a make-whole premium amount to the holders thereof of $10,016, the Company recorded a regulatory asset that the Company believes is probable of recovery in future rates. Approximately $1,002 and $334 of the early debt extinguishment costs allocable to the Company was amortized in 2018 and 2017, respectively.

Other regulatory assets are comprised principally of purchase premiums recoverable through rates, deferred vacation pay and deferred rate case expense.

Regulatory Liabilities

Regulatory liabilities represent amounts that are expected to be refunded to customers in future rates, items deferred pending Commission guidance, or amounts recovered from customers in advance of incurring the costs.

The components of regulatory liabilities at December 31 were as follows:

	2018	**2017**
Income taxes recoverable through rates	$ 337,948	$ 309,711
Pension expense	17,626	19,584
Gain on acquisitions	517	645
Total regulatory liabilities	$ 356,091	$ 329,940

Income taxes recoverable through rates relate to deferred taxes that will likely be refunded to the Company's customers. On December 22, 2017, the Tax Cuts and Jobs Act (the "TCJA") was signed into law, which, among other things, enacted significant and complex changes to the Internal Revenue Code of 1986, including a reduction in the maximum U.S. federal corporate income tax rate from 35% to 21% as of January 1, 2018. The TCJA created significant excess deferred taxes that the Company believes should be refunded to customers. In addition, the Company has recorded a $22,363 reserve against previously billed revenue as it generally expects its regulated customers to benefit from the tax savings resulting from the TCJA. The Company believes it is probable these amounts will be refunded to customers through future rates, and as such, the amounts are recorded to a regulatory liability.

(Dollars in thousands)

Pension costs that are less than amounts recovered in rates are deferred as a regulatory liability.

Gains on acquisitions are deferred pending regulatory approval. Upon receipt of an order, gains are released to income, amortized to income over time or are subject to customer sharing, per the direction of the Commission.

Note 7: Long-Term Debt

The components of long-term debt at December 31 were as follows:

	Rate	Weighted Average Rate	Maturity Date	2018	2017
Mortgage bonds	5.50% - 9.69%	6.98%	2021 - 2039	$ 401,165	$ 401,165
Government loans	1.00% - 3.24%	1.92%	2019 - 2041	61,706	66,233
Notes payable to affiliated company	2.95% - 5.77%	3.97%	2021 - 2048	1,100,924	902,171
Cumulative preferred stock with					
mandatory redemption requirements	8.49% - 9.75%	8.58%	2019 - 2036	5,252	6,452
Long-term debt				1,569,047	1,376,021
Less: Unamortized debt premium, net				(1,640)	(1,585)
Less: Current portion				(6,738)	(117,443)
Total long-term debt				$ 1,560,669	$ 1,256,993

The general mortgage bonds are issued in series. No bonds senior to the general mortgage bonds may be issued so long as the general mortgage bonds are outstanding. Based on the calculation methodology specified by the debt agreements, the amount of bonds authorized is limited, as long-term debt cannot exceed 65% of total capitalization, and adjusted net income of the Company must be equal to or greater than 1.5 times the aggregate annual interest charges on all long-term debt of the Company. At December 31, 2018, long-term debt was 46% of total capitalization and net income excluding gains or losses on property sales, amortization of debt issuance costs, interest on long-term debt, and provision for income taxes was 4.87 times the aggregate annual interest charges on all long-term debt. Mortgage bonds are collateralized by utility plant.

The general mortgage bond indentures contain clauses restricting the declaration of common stock dividends and other distributions on capital stock if common stockholder’s equity falls below a specified amount. There were no restrictions at December 31, 2018 and 2017.

During 2017, the Company paid down mortgage bond debt of $33,000 at a rate of 7.08%.

The Commonwealth of Pennsylvania offers water facility loans through the Pennsylvania Infrastructure Investment Authority (“Pennvest”). These low-interest government loans cover the design, engineering, and construction of public and private owned drinking water treatment, storage and distribution facilities. The water facility loans are available to communities or private firms. The loan disbursements are based upon reimbursable expenditures for a specific approved project. The existing Pennvest loans are secured primarily through a lien on Company revenues, subordinate to the Company's mortgage indenture. The Company makes monthly payments of principal and interest on these water facility loans.

During 2018, the Company issued $1,059 of Pennvest debt at a rate of 1.00% due in 2032. During 2017, the Company issued $7,049 of Pennvest debt at rates ranging between 1.00% and 1.44% due in 2036 and 2037. The proceeds were used to fund certain capital improvement projects.

During 2018, the Company paid down $5,586 of Pennvest debt at rates ranging from 1.00% to 3.24% due between 2018 and 2041. During 2017, the Company paid down $5,392 of Pennvest debt at rates ranging from 1.00% to 3.24%, due between 2018 and 2041.

The long-term notes payable to affiliated company are unsecured and were issued to American Water Capital Corporation ("AWCC"), a subsidiary of AWW, for the principal amount. AWCC provided the funding for these notes by issuing senior notes to institutional investors at an amount equal to the principal amount.

In 2018, the Company issued $74,739 of long term notes payable to AWCC at a rate of 3.75% due in 2028 and $227,489 of long term notes payable to AWCC at a rate of 4.20% due in 2048 and $124,720 of long term notes payable to AWCC at a rate of 3.75% due in 2028. In 2018, the Company used proceeds from the offering to: (i) prepay $37,540 of its outstanding 2.20% Series E Senior Notes due March 29, 2019 and $80,000 of its outstanding 5.77% Series F Senior Notes due March 29, 2022; (ii) repay $110,655 of its outstanding 5.62% and 6.25% Senior Notes due 2018 at maturity; (iii) repay short-term debt; and (iv) for general corporate purposes.

In 2017, the Company issued $101,426 of long term notes payable to AWCC at a rate of 2.95% due in 2027 and $240,000 of long term notes payable to AWCC at a rate of 3.75% due in 2047. In 2017, the Company used proceeds from the offering to: (i) prepay $36,245 of its outstanding Series C Senior Notes and $55,165 of outstanding Series D Senior Notes; (ii) repay short-term debt; and (iii) for general corporate purposes.

In 2018, the Company made a prepayment of Series E and F Senior Notes and paid a make-whole premium to the holders. As a result, the Company recorded a regulatory asset for $7,180 for early debt extinguishment costs and amortized $239 of those costs in 2018.

In 2017, the Company made a prepayment of the Series C and D Senior Notes and paid a make-whole premium to the holders. As a result, the Company recorded a regulatory asset for $10,016 for early debt extinguishment costs and amortized $1,002 and $334 of those costs in 2018 and 2017, respectively.

Maturities of long-term debt, including sinking fund payments, will amount to $6,738 in 2019, $6,355 in 2020, $71,567 in 2021, $17,386 in 2022, $3,722 in 2023 and $1,463,279 thereafter.

The 9.75% series and the 9.35% series preferred stock with mandatory redemption requirements provide for annual sinking fund payments at the option of the holder, and do not contain call premiums. The 8.49% series provides for annual sinking fund payments of $1,200 and contains provisions for redemption at various prices on 30 day notice, at the option of the Company.

(Dollars in thousands)

Note 8: Short-Term Debt

The Company maintained a line of credit through AWCC of $400,000 at December 31, 2018 and 2017. The Company may borrow from, or invest in, the line of credit. No compensating balances are required under the agreements. Funds were primarily used for short-term operating needs. There were $77,958 and $321,689 of outstanding borrowings at December 31, 2018 and 2017, respectively. The weighted average annual interest rate on these borrowings was 2.38% and 1.27% in 2018 and 2017, respectively. Short-term debt is presented as notes payable-affiliated company in the accompanying balance sheets at December 31, 2018 and 2017.

At December 31, 2018 and 2017, the Company had $5,092 and $4,125 outstanding stand-by letters of credit, respectively. If drawn, the stand-by letters of credit would reduce the available borrowings under the Company's AWCC credit line.

Note 9: General Taxes

Components of general taxes for the years presented in the Statements of Income were as follows:

	2018	2017
Property	$ 4,769	$ 2,667
Payroll	4,497	4,167
Public Utility Commission assessment	3,580	3,102
Total general taxes	$ 12,846	$ 9,936

Note 10: Income Taxes

Components of income tax expense for the years presented in the statements of income were as follows:

	2018	2017
State income taxes:		
Current	$ 12,378	$ 12,130
Deferred	12,403	12,772
	$ 24,781	$ 24,902
Federal income taxes:		
Current	$ 16,313	$ 33,611
Deferred	35,449	55,162
Amortization of deferred investment tax credits	(234)	(234)
Total income taxes	$ 76,309	$ 113,441

On December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act (the "TCJA"). Substantially all of the provisions of the TCJA are effective for taxable years beginning after December 31, 2017. The TCJA includes significant changes to the Internal Revenue Code of 1986, as amended (the "Code"), including amendments which significantly change the taxation of regulated public utilities. The significant changes that impact the Company included in the TCJA are reductions in the corporate federal income tax rate from 35% to

21%, and several technical provisions including, among others, limiting the utilization of net operating losses (“NOLs”) arising after December 31, 2017 to 80% of taxable income with an indefinite carryforward.

Changes in the Code from the TCJA had a material impact on our financial statements in 2017 and 2018. Under GAAP, specifically Accounting Standards Codification (“ASC”) Topic 740, Income Taxes, the tax effects of changes in tax laws must be recognized in the period in which the law is enacted. ASC 740 also requires deferred income tax assets and liabilities to be measured at the enacted tax rate expected to apply when temporary differences are to be realized or settled. Thus, at the date of enactment, the Company’s deferred income taxes were re-measured based upon the new tax rate. For the Company’s regulated entities, substantially all of the change in deferred income taxes are recorded as either an offset to a regulatory asset or liability because changes are expected to be recovered by or refunded to customers. With respect to excess accumulated deferred income taxes, regulators have considered the issue and have agreed with our overall timeline of passing the excess back to customers beginning no earlier than 2019, when the Company is able to produce the normalization schedule using the average rate assumption (ARAM) method.

The staff of the U.S. Securities and Exchange Commission (the “SEC”) has recognized the complexity of reflecting the impacts of the TCJA, and on December 22, 2017 issued guidance in Staff Accounting Bulletin 118 (“SAB 118”) which clarifies accounting for income taxes under ASC 740 if information is not yet available or complete and provides for up to a one year period in which to complete the required analyses and accounting. SAB 118 describes three scenarios or buckets associated with a company’s status of accounting for income tax reform: (1) a company is complete with its accounting for certain effects of tax reform, (2) a company is able to determine a reasonable estimate for certain effects of tax reform and records that estimate as a provisional amount, or (3) a company is not able to determine a reasonable estimate and therefore continues to apply ASC 740, based on the provisions of the tax laws that were in effect immediately prior to the TCJA being enacted. The Company has made an accounting policy election to apply the guidance under SEC's SAB 118 as allowed by FASB for non-public entities and made a reasonable estimate for the measurement and accounting of certain effects of the TCJA which have been reflected in the December 31, 2017 financial statements.

Based on SAB 118, the Company has made a reasonable estimate for the measurement and accounting of certain effects of the TCJA which have been reflected in the December 31, 2017 financial statements. The total re-measurement exclusive of ASC 740 amounts resulting from the gross-up is $318,604. Of that amount $318,739 was recorded to a regulatory liability. The re-measurement of deferred income taxes at the new federal tax rate increased the 2017 deferred income tax provision by $130 for the year ending December 31, 2017. During 2018, the Company continued to refine its estimates made during 2017 based on the new guidance. As a result, the Company has recorded approximately $682 of an income tax expense. As of December 31, 2018, the Company has completed its analysis of the estimated impact of the TCJA on its federal and state income taxes based on information available to date. These estimates may be revised in the future for changes in the income tax laws, additional regulatory guidance, changes to forecasted financial conditions, and the tax return filings with the tax authorities.

There are several proposed regulations issued during 2018 providing guidance and clarifications to the TCJA. On March 23, 2018, President Trump signed the Consolidated Appropriations Act of 2018 (the “CAA”). The CAA corrects and clarifies some aspects of the TCJA related to bonus depreciation eligibility. Specifically, property that was acquired, or the construction began, prior to September 27, 2017, is eligible for bonus depreciation. This clarification allowed the Company to benefit from additional bonus depreciation deductions on the 2017 tax return. On November 26, 2018, the U.S. Department of the Treasury released proposed regulations concerning interest expense limitation rules. The TCJA revised and broadened the existing interest expense limitation regulations. The Company has considered all the rules set forth in the proposed regulation including allocated interest expense and interest income based on the relative amounts of the Company's adjusted basis in the assets used in its excepted and non-excepted trades or business, or our Regulated Businesses and Market-Based Businesses. Based on our interpretation of the new guidance, the Company reasonably believes the deductibility of its interest expense will not be limited under the new regulations.

The primary components of the net deferred tax liability of $571,216 and $532,362 at December 31, 2018 and 2017 include basis differences in utility plant, partially offset by advances and contributions and net operating losses ("NOLs").

No valuation allowances were required on deferred tax assets at December 31, 2018 and 2017, as management believes it is more likely than not that deferred tax assets will be realized.

As of December 31, 2018 and 2017, the Company had state net operating loss carryforward of $0 and $18,702, respectively.

As of December 31, 2018 and 2017, the Company's reserve for uncertain tax positions is $46,756 and $47,276, respectively, excluding accrued interest and penalties of $1,388 and $988, respectively. The Company does not expect a material change in this estimate in the next twelve months. The reserve could increase or decrease for such things as the expiration of statutes of limitations, audit settlement, and tax examination activities.

The Company recognizes interest and penalties related to income tax matters in income tax expense. The Company recognized interest expense of $402 and $358 for 2018 and 2017, respectively.

The Company files income tax returns in the United States federal and state jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal examinations by tax authorities for years before 2015.

Note 11: Employee Benefit Plans

Savings Plan for Employees

The Company maintains a 401(k) Savings Plan, sponsored by AWW, allowing employees to save for retirement on a tax-deferred basis. Employees can make contributions that are invested at their direction in one or more funds. The Company makes matching contributions that are based on a percentage of an employee's contribution, subject to certain limitations. Due to the Company's discontinuing new entrants into the defined benefit pension plan, on January 1, 2006 the Company began providing an additional 5.25% of base pay as a defined contribution benefit for union employees hired on or after January 1, 2001 and for non-union employees hired on or after January 1, 2006. The Company expensed contributions to the plans of $2,991 and $2,657 for 2018 and 2017, respectively. All of the Company's contributions are invested in one or more funds at the direction of the employee.

Pension Benefits

The Company participates in a Company-funded defined benefit pension plan, sponsored by AWW, covering eligible employees hired before January 1, 2006. Benefits under the plan are based on an employee's years of service and compensation. The pension plan was closed for most employees hired on or after January 1, 2006. Union employees hired on or after January 1, 2001 had their accrued benefit frozen and will be able to receive this benefit as a lump sum upon termination or retirement. Pension cost of the Company is based on an allocation from AWW of the total cost related to the plan. The allocation is based upon the Company's participants' pensionable earnings as a percentage of AWW's total plan pensionable earnings. Information regarding accumulated and projected benefit obligations is not prepared at the subsidiary level. The Company was allocated costs of $7,909 and $10,226 in 2018 and 2017, respectively.

AWW's funding practice is to contribute at least the greater of the minimum amount required by the Employee Retirement Income Security Act of 1974 or the normal cost. Further, AWW will consider additional contributions if needed to avoid "at risk" status and benefit restrictions under the Pension Protection Act of 2006. AWW may also consider increased contributions based on other financial requirements and the plan's funded position. The Company's pension contributions are based on an allocation from AWW of the total contributions related to the plan. Contributions are allocated to the Company from AWW based upon the Company's participants' pensionable earnings as a percentage of AWW's total plan pensionable earnings. The Company made contributions of $3,820 and $6,852 in 2018 and 2017, respectively. The Company expects to contribute $5,307 to the AWW plan in 2019.

Postretirement Benefits Other Than Pensions

The Company participates in a Company-funded plan, sponsored by AWW that provides varying levels of medical and life insurance to eligible retirees. The retiree welfare plans are closed for union employees hired on or after January 1, 2006, and for non-union employees hired on or after January 1, 2002.

Costs of the Company are based on an allocation from AWW of the total cost related to the plan. The allocation is based upon the Company's covered participants as a percentage of AWW's total plan covered participants. Information regarding accumulated and projected benefit obligations is not prepared at the subsidiary level. The Company was allocated a benefit of $3,841 and costs of $1,388 in 2018 and 2017, respectively.

The Company made contributions to trust funds established for these postretirement benefits of $0 and $1,388 in 2018 and 2017, respectively. No contribution to the plan is required in 2019.

Note 12: Stock-Based Compensation

Stock Options and Restricted Stock Units

In 2018 and 2017, AWW granted restricted stock units, both with and without performance conditions and certain market thresholds to certain employees of the Company under the AWW 2017 Omnibus Equity Compensation Plan ("Omnibus Plan"). The restricted stock units without performance conditions vest ratably over the three-year service period beginning January 1 of the year of the grant. The restricted stock units with performance conditions and separately, market thresholds, vest ratably over the three-year performance period beginning January 1 of each year (the "Performance Period"). Distribution of the performance shares is contingent upon the achievement of internal performance measures and, separately, certain market thresholds over the Performance Period. The non-qualified stock options vest ratably over a three-year service period beginning January 1 of the year of the grant.

(Dollars in thousands)

The grant date fair value of restricted stock units that vest ratably and have market and/or performance conditions are amortized through expense over the requisite service period using the graded-vesting method. Restricted stock units without performance conditions and non-qualified stock options are amortized through expense over the requisite service period using the straight-line method.

The Company's share based compensation plan cost is based on the total costs of the Company's employees and an allocation of costs from employees of American Water Service Company, Inc. who participate in the AWW Omnibus Plan. The Company recorded compensation expense of $276 and $216 included in operation and maintenance expense for the years ended December 31, 2018 and 2017, respectively. As the Company does not reimburse the cost of the awards to AWW, the offsetting entry to paid-in-capital is a capital contribution from AWW.

Employee Stock Purchase Plan

Under AWW's Nonqualified Employee Stock Purchase Plan ("ESPP"), the Company's employees can use payroll deductions to acquire AWW common stock at a discount. Prior to February 5, 2019, the purchase price of common stock acquired under ESPP was the lesser of 90% of the fair market value of either the beginning or the end of each three-month purchase period. On July 27, 2018, the ESPP was amended, effective February 5, 2019, to permit employee participants to acquire Company common stock at 85% of the fair market value of the common stock at the end of the purchase period. AWW's ESPP is considered compensatory. The Company's costs are based on an allocation from AWW of the total cost for the Company's employees in the plan. Compensation costs of $119 and $103 were included in operation and maintenance expense for the years ended December 31, 2018 and 2017, respectively. As the Company does not reimburse the cost of the awards to AWW, the compensation cost is recorded as a capital contribution from AWW.

Note 13: Related Party Transactions

American Water Works Service Company, Inc. ("AWWS"), a subsidiary of AWW, provides certain management services to the Company (administration, accounting, data processing, engineering, etc.) and other operating water companies in the AWW system, on an at-cost, not-for-profit basis in accordance with a management and service agreement.

Purchases of such services by the Company were accounted for as follows:

	2018	2017
Included in operation and maintenance expense as a charge against income	$ 42,910	$ 39,949
Capitalized primarily in utility plant	18,148	12,531
	$ 61,058	$ 52,480

AWWS leases space in office buildings owned by the Company. Rent received under the terms of the leases was $890 and $885 in 2018 and 2017, respectively.

The Company provides billing and collection services to a subsidiary of American Water Enterprises ("AWE"), which is a subsidiary of AWW and AWE offers customer protection plans that provide water line, sewer line and in-home protection. The Company recorded revenue of $691 in 2018 and $638 in 2017 related to the billing and collection services.

The Company maintains a line of credit through AWCC. The Company also participates in AWCC's centralized treasury function, whereby the Company transfers its cash to AWCC and the Company's checks are issued out of AWCC. Under this arrangement, available cash is used to pay-down the line of credit and issued checks increase the Company's line of credit balance. The Company paid AWCC fees of $2,037 in 2018 and $899 in 2017, and recorded interest expense on short-term borrowings of $5,760 in 2018 and $4,171 in 2017. Interest expense on long-term debt with AWCC amounted to $40,280 and $34,943 in 2018 and 2017, respectively. Accrued interest expense included amounts due to AWCC of $12,539 and $8,758 for 2018 and 2017, respectively.

The Company received capital contributions in the form of cash of $196,000 and $125,000 from AWW in 2018 and 2017, respectively. The Company also received non-cash capital contributions of $395 and $319 from AWW in 2018 and 2017, respectively.

The Company pays dividends to AWW on a quarterly basis. The amount of the dividend is based on a percentage of net income adjusted for certain items.

The Company has three board members that have relationships with three vendors used by the Company. The aggregate expenditures to these vendors totaled $1,071 and $1,267 during the years ended December 31, 2018 and 2017, respectively.

Note 14: Fair Values of Financial Instruments

Fair Value Measurements

To increase consistency and comparability in fair value measurements, FASB guidance establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three levels as follows:

- Level 1 - Quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access as of the reporting date. Financial assets and liabilities utilizing Level 1 inputs include active exchange-trade equity securities, exchange-based derivatives, mutual funds, and money market funds.

- Level 2 - Inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data. Financial assets and liabilities utilizing Level 2 inputs include fixed income securities, non-exchanged-based derivatives, commingled investment funds not subject to purchase, and sale restrictions and fair-value hedges.

- Level 3 - Unobservable inputs, such as internally-developed pricing models for the asset or liability due to little or no market activity for the asset or liability. Financial assets and liabilities utilizing Level 3 inputs include infrequently-traded non-exchange-based derivatives and commingled investment funds subject to purchase and sale restrictions.

(Dollars in thousands)

The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments:

Current assets and current liabilities: The carrying amounts reported in the balance sheets for current assets and current liabilities approximate their fair values.

Preferred stock with mandatory redemption requirements and long-term debt: The fair values of the Company's long-term debt are determined by a valuation model which is based on a conventional discounted cash flow methodology and utilizes assumptions of current market rates. As the majority of the Company's debts do not trade in active markets, the Company calculated a base yield curve using a risk-free rate (a U.S. Treasury securities yield curve) plus a credit spread that is based on the following two factors: an average of AWCC's own publicly-traded debt securities and the current market rates for U.S. Utility debt securities based on an internal quantitative credit assessment of the Company. The Company used these yield curve assumptions to derive a base yield for Level 2 and Level 3 securities. Additionally, the Company adjusted the base yield for specific features of the debt securities including call features, coupon tax treatment and collateral for the Level 3 instruments.

The carrying amounts and fair values of the financial instruments at December 31 were as follows:

		At Fair Value as of December 31, 2018			
	Carrying Amount	**Level 1**	**Level 2**	**Level 3**	**Total**
Preferred stock with mandatory redemption requirements, including current portion	$ 5,252	—	$ —	$ 5,740	$ 5,740
Long-term debt, including current portion	1,562,155	—	1,072,846	529,329	1,602,175

		At Fair Value as of December 31, 2017			
	Carrying Amount	**Level 1**	**Level 2**	**Level 3**	**Total**
Preferred stock with mandatory redemption requirements, including current portion	$ 6,452	—	$ —	$ 9,216	$ 9,216
Long-term debt, including current portion	1,367,984	—	952,322	562,752	1,515,074

Recurring Fair Value Measurements

The Company had immaterial amounts of assets and liabilities measured and recorded at fair value on a recurring basis as of December 31, 2018 and 2017.

Note 15: Leases

The Company has entered into operating leases involving certain facilities and equipment. Rental expenses under operating leases were $977 and $983 in 2018 and 2017, respectively. The operating leases have various expiration dates.

At December 31, 2018, the minimum annual future rental commitments under operating leases that have initial or remaining non-cancelable lease terms in excess of one year are $289 in 2019, $186 in year 2020, $126 in year 2021, $20 in year 2022, $2 in year 2023, and $0 thereafter.

Note 16: Commitments and Contingencies

Commitments have been made in connection with certain construction programs. The estimated capital expenditures required under legally binding contracts amounted to $51,016 at December 31, 2018.

The Company maintains agreements with other water purveyors for the purchase of water to supplement its water supply. The Company purchased $2,809 and $2,473 of water under these agreements during 2018 and 2017, respectively. Certain agreements stipulate the purchase of minimum quantities of water through various dates. The annual future commitments related to the minimum quantities of water purchased under these agreements are $1,833 in 2019, $1,849 in 2020, $1,840 in 2021, $1,806 in 2022, $1,806 in 2023, and $32,793 thereafter.

The Company maintains agreements with third party energy suppliers to purchase minimum quantities of energy. The Company paid $11,723 and $2,631 under these agreements during 2018 and 2017, respectively. The annual future commitments related to minimum quantities of energy purchased under these agreements are $10,891 in 2019, $8,423 in 2020, $8,423 in 2021, and none thereafter.

The Company has a commitment with Chester County Water Resources Authority for the Company's share of operation and maintenance costs of a dam. The Company paid $35 and $39 under this agreement during 2018 and 2017, respectively. The annual future commitments under this agreement are $38 in 2019 through 2023, and $766 thereafter.

The Company has various other agreements with commitments. The Company paid $10 and $9 under these agreements during 2018 and 2017, respectively. The annual future commitment under these agreements are $9 in 2019 through 2021, and none thereafter.

The Company is routinely involved in legal actions incident to the normal conduct of its business. At December 31, 2018 the Company has accrued $280 as probable costs and it is reasonably possible that additional losses could range up to $1,270. For certain matters, the Company is unable to estimate possible losses. The Company believes that damages or settlements, if any, recovered by plaintiffs in such claims or actions, will not have a material adverse effect on the Company's financial position, results of operations or cash flows.

Note 17: Subsequent Events

The Company performed an evaluation of subsequent events for the accompanying financial statements through April 12, 2019, the date this report was issued and determined that the following circumstances warranted disclosure in the financial statements as of December 31, 2018.

On March 6, 2019, the Company completed the acquisition of the Sadsbury Township wastewater system for an aggregate purchase price of $8,600. The acquired operations provides services to approximately 1,100 (unaudited) customers at the time of the acquisition.

FR VII.16

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

16. Supply copies of the Company's balance sheets for each month/quarter for the last two years.

Answer: Please see the response to FR XI.01.

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission

FR VII.17

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

17. Provide the bond rating history for the Company and, if applicable, its parent from the major credit rating agencies for the last five years.

Answer:

The long-term debt issuer ratings, and their effective dates, for Pennsylvania-American Water Company for the last five years are as follows:

Effective Dates	Standard & Poor's	Moody's
5/7/2015 – 12/31/2019	A	
5/24/2013 – 5/6/2015	A-	
8/7/2015 – 12/31/2019		A3 (affirmed)
5/29/2013 – 8/6/2015		A3

The long-term debt issuer ratings, and their effective dates, for American Water Works Company, Inc. and American Water Capital Corp. for the last five years are as follows:

Effective Dates	Standard & Poor's	Moody's
5/7/2015 – 12/31/2019	A	
5/24/2013 – 5/6/2015	A-	
4/1/2019 – 12/31/2019		Baa1
8/7/2015 – 3/31/2019		A3
5/29/2013 – 8/6/2015		Baa1

FR VII.18

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

18. Provide copies of all bond rating reports relating to the Company and, if applicable, its parent for the past two years.

Answer:

Please see attached.

S&P Global Ratings

Research

Pennsylvania-American Water Co.

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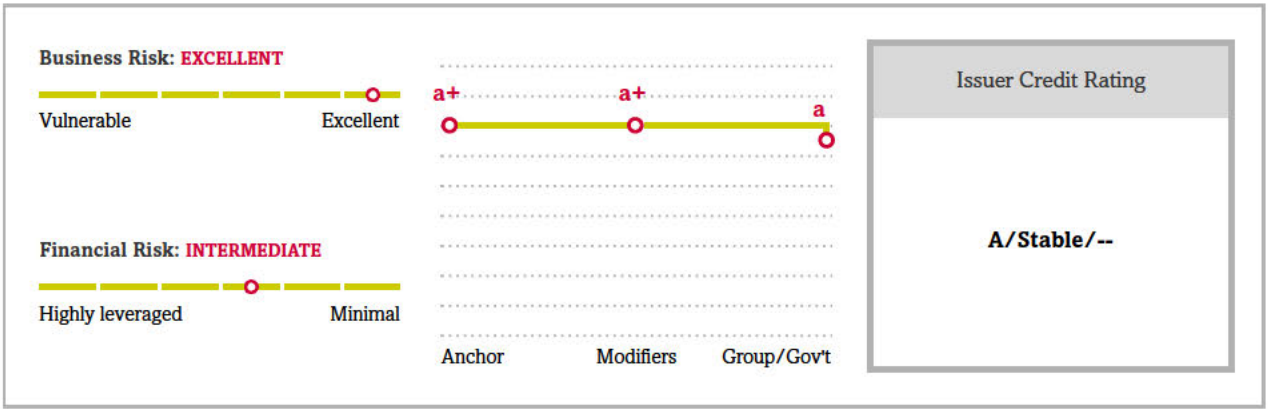
Table Of Contents

Pennsylvania-American Water Co.



Credit Highlights

Overview

Key strengths	Key risks
Low-risk, rate-regulated water distribution operations.	Forecast negative discretionary cash flow indicates external funding needs.
Operates under a generally constructive regulatory framework.	A lack of regulatory diversity makes the company dependent on the Pennsylvania Public Utility Commission (PPUC) to maintain its operating cash flows.
Numerous regulatory mechanisms, including future test years and infrastructure replacement surcharges, help mitigate regulatory lag.	

Our assessment of Pennsylvania-American Water Co. (PA-AWK) as a core subsidiary of American Water Works Co. Inc. (AWK) underpins the rating. Because PA-AWK is a core subsidiary of AWK's group and there are insufficient measures that insulate our issuer credit rating (ICR) on PA-AWK from our rating on AWK, our ICR on PA-AWK is in line with our group credit profile for AWK.

We expect PA-AWK to effectively manage regulatory risk, bolstering its business risk profile. Although the company is dependent on the PPUC to sustain its operating cash flows, it benefits from numerous constructive mechanisms that mitigate regulatory lag, such as future tests years and infrastructure replacement surcharges.

Forecast credit metrics remain well entrenched in the intermediate financial risk profile category. We forecast that PA-AWK's funds from operations (FFO) to debt will average in the 18%-21% range throughout the forecast period.

Outlook: Stable

The stable outlook on Pennsylvania-American Water Co. (PA-AWK) reflects our outlook on its parent, American Water Works Co. Inc. (AWK). The stable outlook on AWK reflects our expectation that the company will continue to focus its strategic growth on its regulated water distribution operations, maintaining the regulated businesses at 90%-95% of its consolidated EBITDA. In addition, we expect that AWK will continue to effectively manage its regulatory risk while maintaining financial measures at the lower end of its financial risk profile category. Under our base-case scenario, we expect AWK's annual adjusted FFO to debt to average in the 13%-15% range.

Downside scenario

We could lower our ratings on AWK and its subsidiaries if the company's nonregulated operations increase such that they consistently contribute a disproportionate amount of its consolidated EBITDA or if its nonregulated operations become riskier than we currently expect. In addition, a deterioration in its management of regulatory risk or its financial measures relative to our base-case expectations (specifically FFO to debt consistently below 13%) could lead us to lower our ratings.

Upside scenario

We could raise our ratings on AWK and its subsidiaries if its adjusted FFO to debt remains consistently above 16% while it continues to effectively manage its regulatory risk. This could occur if AWK achieves better-than-expected rate-case outcomes while prudently managing expenses and funding its capital expenditure and acquisitions by issuing more equity and less debt.

Our Base-Case Scenario

Assumptions

- Periodic rate-case filings;
- Continued use of existing regulatory mechanisms;
- Annual projected capital spending that averages about $340 million;
- Projected dividends averaging about $165 million annually;
- Regulated volume growth, primarily through small tuck-in acquisitions;
- Negative discretionary cash flow;
- Negative cash flow impact from the revised U.S. tax code; and

Key Metrics

	2018A	2019E	2020E
FFO to debt (%)	24.0	19.0-22.0	18.0-21.0
Debt to EBITDA (x)	3.6	3.5-4.5	3.5-4.5
OCF to debt (%)	22.5	19.0-22.0	18.0-21.0

A--Actual. E--Estimate FFO--Funds from operations. OCF--Operating cash flow.

- All debt maturities are assumed to be refinanced.

Company Description

PA-AWK operates as a regulated water and wastewater utility company in the Commonwealth of Pennsylvania. It provides water, wastewater, and related services to about 725,000 customers and is a wholly owned subsidiary of AWK.

Business Risk: Excellent

Our assessment of PA-AWK's business risk incorporates its low-risk, rate-regulated water and wastewater utility operations that provide an essential service, its effective management of regulatory risk, and its moderate-size customer base.

Although the company only operates in a single jurisdiction and is dependent on the PPUC to sustain its cash flows, we view its management of regulatory risk as above-average relative to that of its peers. PA-AWK benefits from various regulatory mechanisms, such as forward-looking test years, infrastructure replacement surcharges, expense mechanisms, and returns on construction work in progress. Overall, these mechanisms support the company's ability to earn close to, or at, its authorized returns. PA-AWK also benefits from consolidated tariffs that socialize costs across its system, which limit rate increases across many of its customers' bills.

Further supporting the company's business risk profile is the reliability and safety of its operations. Historically, PA-AWK has consistently complied with all necessary safety standards and continues to invest heavily in its system.

Financial Risk: Intermediate

We assess PA-AWK's financial measures using our low-volatility table, which largely reflects our view of the company's low-risk regulated water and wastewater utility operations and its effective management of regulatory risk. Under our base-case scenario, we expect PA-AWK's FFO to debt to average in the 18%-21% range. Our base case assumes periodic rate-case filings, the continued use of existing regulatory mechanisms, tuck-in acquisitions, projected capital spending of about $340 million annually, projected dividends averaging about $165 million annually, and the refinancing of all debt maturities.

Liquidity: Adequate

We assess PA-AWK as having adequate liquidity, which reflects our expectation that the company's liquidity sources will be more than 1.1x its uses over the next 12 months, even if its EBITDA declines by 10%. Under our stress scenario, we do not expect that PA-AWK would require access to the capital markets during this period to meet its liquidity needs. The company likely has the ability to absorb a high-impact, low-probability event with limited need for refinancing. Moreover, it has sound relationships with its banks, a generally satisfactory standing in the credit markets, and maintains generally prudent risk-management practices.

Principal Liquidity Sources	Principal Liquidity Uses
• Minimal cash on hand; • Credit facility availability of about $320 million; and • FFO of about $385 million.	• Long-term debt maturities of about $7 million; • Combined spending on capital expenditure and acquisitions of about $420 million; and • Dividends of about $145 million.

Environmental, Social, And Governance

As a provider of water and wastewater utility services with a supply that largely depends on the natural resources surrounding its service territory, the company is required to be a good steward of the environment while adhering to federal and state water-quality regulations. From a social perspective, we view the company's long track record of providing safe and reliable water services to its customers as a key factor that could enable it to maintain social cohesion, even though affordability of its steadily increasing rates and charges remain an area that we will watch closely. Governance factors are neutral to our rating on PA-AWK.

Group Influence

We consider PA-AWK to be a core subsidiary of AWK. This reflects our view that the company is highly unlikely to be sold, has a strong long-term commitment from senior management, is successful at what it does, and contributes materially to the group. There are insufficient measures in place to insulate our ICR on PA-AWK from our rating on its parent. Therefore, our ICR on PA-AWK is in line with our 'a' group credit profile for AWK.

Issue Ratings - Recovery Analysis

- We assign recovery ratings to first-mortgage bonds (FMB), which--depending on the rating category and the extent of the collateral coverage--can result in issue ratings being notched above our ICR on a utility. The FMBs issued by U.S. utilities are a form of secured utility bond (SUB) that qualify for a recovery rating as defined in our criteria (see "Collateral Coverage And Issue Notching Rules for '1+' And '1' Recovery Ratings on Senior Bonds Secured by Utility Real Property," published Feb. 14, 2013).
- The recovery methodology is supported by the ample historical record of 100% recovery for secured bondholders in utility bankruptcies in the U.S. and our view that the factors that enhanced those recoveries (limited size of the

creditor class and the durable value of utility rate-based assets during and after a reorganization given the essential service provided and the high replacement cost) will persist.

- Under our SUB criteria, we calculate a ratio of our estimate of the value of the collateral pledged to bondholders relative to the amount of FMBs outstanding. FMB ratings can exceed an ICR on a utility by up to one notch in the 'A' category, two notches in the 'BBB' category, and three notches in speculative-grade categories, depending on the calculated ratio.
- PA-AWK's FMBs benefit from a first-priority lien on substantially all of the utility's real property owned or subsequently acquired. Collateral coverage of over 1.5x supports a recovery rating of '1+' and an issue-level rating one notch above the ICR.

Ratings Score Snapshot

Issuer Credit Rating

A/Stable/--

Business risk: Excellent

- **Country risk:** Very low
- **Industry risk:** Very low
- **Competitive position:** Excellent

Financial risk: Intermediate

- **Cash flow/leverage:** Intermediate

Anchor: a+

Modifiers

- **Diversification/portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Satisfactory (no impact)
- **Comparable rating analysis:** Neutral (no impact)

Stand-alone credit profile : a+

- **Group credit profile:** a
- **Entity status within group:** Core (-1 notch from SACP)

Related Criteria

- Criteria - Corporates - General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017

- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria - Corporates - Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Insurance - General: Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	**Intermediate**	Significant	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	**a+/a**	a-	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

Ratings Detail (As Of December 13, 2019)*

Pennsylvania-American Water Co.		
Issuer Credit Rating		A/Stable/--
Issuer Credit Ratings History		
07-May-2015	*Foreign Currency*	A/Stable/--
02-Jun-2014		A-/Positive/--
24-May-2013		A-/Stable/--
07-May-2015	*Local Currency*	A/Stable/--
02-Jun-2014		A-/Positive/--
24-May-2013		A-/Stable/--
Related Entities		
American Water Capital Corp.		
Issuer Credit Rating		A/Stable/A-1

Ratings Detail (As Of December 13, 2019)*(cont.)	
Commercial Paper	
Local Currency	A-1
Senior Unsecured	A
American Water Works Co. Inc.	
Issuer Credit Rating	A/Stable/A-1
New Jersey-American Water Co.	
Issuer Credit Rating	A/Stable/--

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

MOODY'S
INVESTORS SERVICE

CREDIT OPINION
29 August 2019

Update

Rate this Research

RATINGS

Pennsylvania-American Water Company

Domicile	Pennsylvania, United States
Long Term Rating	A3
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Pennsylvania-American Water Company

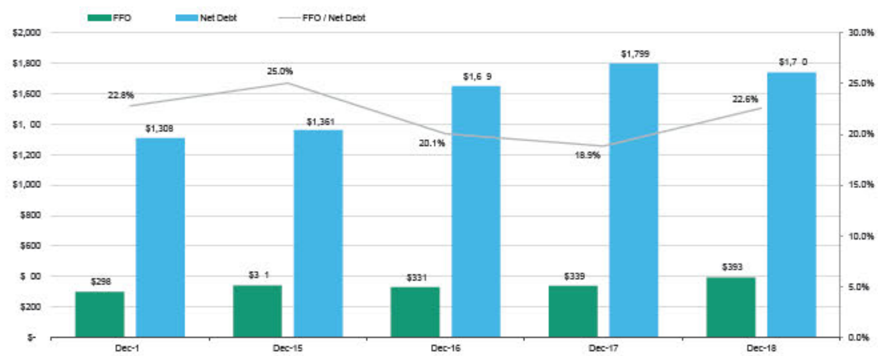
Update to credit analysis

Summary

Pennsylvania-American Water Company's (PAWC) credit profile benefits from 1) its low business risk as a regulated water utility, 2) cost recovery mechanisms afforded by the Pennsylvania Public Utilities Commission (PUC) and 3) equity and liquidity support from its large, diversified parent company, American Water Works, Inc. (Baa1 stable) and the family financing vehicle American Water Capital Corp. (AWCC Baa1 stable).

PAWC's credit is constrained by cash flow metrics that are declining due to federal tax reform (e.g., funds from operations (FFO) to net debt migrating toward 17% by 2020) and a high dividend payout to help support the corporate dividend and debt service.

Exhibit 1
Historical FFO, net debt, and FFO to net debt
$ in millions



Source: Moody's Financial Metrics

Credit strengths

» Lower-risk business profile as a water distribution utility

» Predictable cash flow provided by rate-making framework

» Legislative support for acquisition cost recovery

» New law ("Act 58") that could significantly enhance capital and operating cost recovery

Credit challenges

» Declining financial metrics due to federal tax reform

» Capital intensive industry with aging infrastructure

» Liquidity and dividend policies linked to parent

» Acquisition premiums could result in rate fatigue for customers experiencing higher bills

Rating outlook

Despite declining financial metrics resulting from federal tax reform and a high dividend payout ratio, the stable outlook reflects our expectation that sustained levels of FFO to net debt around 17% and retained cash flow (RCF) to net debt above 10% are sufficient to maintain PAWC's credit profile.

Factors that could lead to an upgrade

» Material improvement in the regulatory support offered to the company

» FFO to net debt over 20% and RCF to net debt over 15% on a sustainable basis

Factors that could lead to a downgrade

» A material decline in the degree of regulatory or parental support

» FFO to net debt around 15% or RCF to Net Debt around 10%, for an extended period

Key indicators

Exhibit 2
Pennsylvania-American Water Company - Private

	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
FFO Interest Coverage	5.5x	6.2x	6.0x	5.7x	6.4x
Debt / Capitalisation	40.1%	38.9%	42.4%	46.9%	42 8%
FFO / Net Debt	22.8%	25.0%	20.1%	18.9%	22.6%
RCF / Net Debt	15.0%	19.4%	11.4%	12.4%	14.7%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
Source: Moody's Financial Metrics

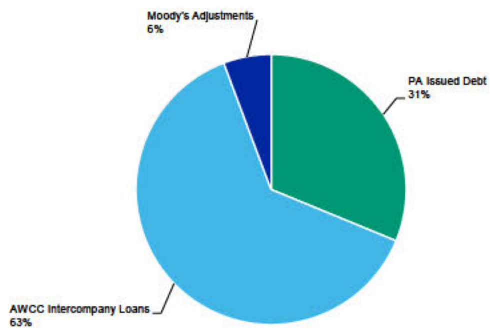
Profile

Headquartered in Mechanicsburg, Pennsylvania, Pennsylvania American Water Company (PAWC) is one of the largest operating subsidiaries of its parent, American Water, accounting for roughly 20% of consolidated revenues in 2018.

PAWC provides water and wastewater related services to customers throughout Pennsylvania and is regulated by the Pennsylvania Public Utility Commission (PUC).

Exhibit 3

PAWC's debt profile consists primarily of its own first mortgage bonds, loans from its parent and Moody's standard debt adjustments.
As of 31 December 2018



Source: Moody's Financial Metrics

Detailed credit considerations

An already supportive regulatory framework could be improved through Act 58

We view the Pennsylvania regulatory environment as one of the more supportive in the US, thanks to the use of a fully projected future test year for rate making purposes and the use of a Distribution System Improvement Charge (DSIC); both of which improve the real-time recovery of costs and provide enhanced stability and predictability to the company's cash flow. These are the primary drivers for PAWC's credit quality.

In June 2018, Act 58 was signed into law, which permits the PUC to approve an application by a utility to establish alternative rates and rate mechanisms. The potential mechanisms outlined in an August 2018 tentative implementation order include items such as: decoupling mechanisms, performance-based rates, formula rates, multi-year rate plans or any combination thereof.

In general, each of the Act 58 rate mechanisms is supportive to credit, since they enhance the predictability of cash flow. Should PAWC be allowed to implement any combination of these alternative rate mechanisms, it could result in improved financials and credit quality. We note that these mechanisms can only be implemented via general rate proceeding and since PAWC recently completed a general rate case, it will likely be some time before the utility can benefit from the new law.

PAWC's last general rate case order resulted in a rate base of nearly $3.2 billion, with a 53.75% equity layer and allowed ROE of 10.0%. The rates went into effect on 1 January 2018 and included a recently acquired wastewater system in Scranton. The inclusion of this system (and subsequent system acquisitions, such as McKeesport) in rates is an important credit aspect of PUC regulation, since PAWC expects to remain acquisitive going forward.

Declining financial metrics due to federal tax reform and the support of a growing corporate dividend

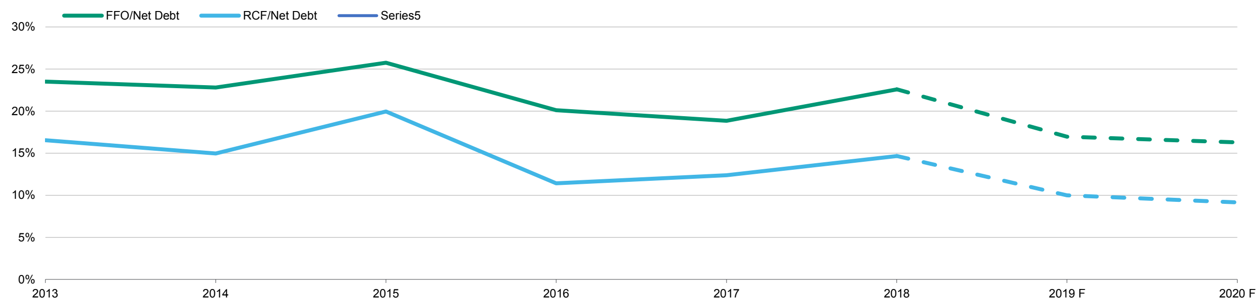
The December 2017 passage of the Tax Cuts and Jobs Act resulted in a cut to the federal corporate tax rate to 21%, from 35%, and the elimination of bonus depreciation for regulated utilities. The combination of these two factors has reduced the amount of deferred taxes that PAWC generates, and causing the FFO to net debt metric to migrate toward the 17-18% range, down from levels that were consistently above 20%. That said, a ratio of 17% FFO to net debt is still appropriate for the company's credit profile.

Furthermore, PAWC's ratio of retained cash flow (RCF) to net debt will also be pressured, since the parent company has a dividend growth target approaching 10%. While American Water utility subsidiaries are not legally obligated to support stand-alone debt issued by AWCC or the corporate dividend, it is our opinion that they do functionally provide support since they are the primary source of assets and cash flow generation.

Therefore, as one of the largest American Water subsidiaries, we expect that a significant portion of the corporate dividend growth will come from PAWC's cash flow which will exacerbate the cash depletion from tax reform. We expect that PAWC's dividend payout will continue to remain between 70% and 75%. Any sustained increase in this ratio would be credit negative.

Exhibit 4 shows our expectations for FFO to net debt and RCF to net debt for PAWC over the next three years.

Exhibit 4
Trend in FFO to net debt and RCF to net debt (2013-2020)



*Forecasted metrics are based on Moody's assumptions
Source: Moody's Financial Metrics

Acquisitions are supported by Pennsylvania legislation, but contain longer-term rate fatigue risks for legacy customers

PAWC has been very active in its acquisition of larger municipal wastewater systems, of late - a trend we expect to continue due to Pennsylvania's Legislative Act 12 of 2016. Act 12 offers an alternative framework for asset valuation, providing municipalities with a new opportunity to relieve fiscal distress and a chance to avoid capital investment, while providing clarity for cost recovery approval for regulated investor-owned utilities (IOUs) like PAWC.

Pennsylvania law also allows for a single rate across multiple service territories and water and wastewater systems; allowing an IOU to spread full acquisition costs (including premiums paid above book value of the acquired system) across all of its customers. This means that all customers experience a small rate increase versus a few customers experiencing a very large rate increase, when an acquired system is added to rate base.

However, this also means that legacy customer bills are increasing due to IOU capital spent on third-party acquisitions and not for capital investment in their own system. Longer-term, as additional acquisitions are made, we see the potential for heightened political risk if the recovery of IOU acquisition costs and premiums drives customer push-back on increasing costs or results in legacy customer rate fatigue.

PAWC's most significant M&A transaction includes the 2016 acquisition of the Scranton Sewer Authority wastewater system (adding around 31,000 customers) and its acquisition of the City of McKeesport's wastewater system (approximately 22,000 customers). The Mckeesport system will not be included in rates until PAWC's next base rate case.

Credit profile influenced by American Water ownership

PAWC's credit is also influenced by AWCC, the American Water finance subsidiary where all parent-level debt financing, including credit lines, are maintained. AWCC's credit profile is derived from a "support agreement" from American Water and debt service from American Water utility subsidiaries. This interdependency, which helps support an estimated $1.7 billion of holding company debt at AWCC, creates linkage between the credit profiles of PAWC, AWCC and American Water.

PAWC's financial metrics are also influenced by the financial policies of its parent, American Water. For example, PAWC is one of American Water's largest subsidiaries and is therefore a material source of dividends to service AWCC's debt. As such, PAWC's payout ratio is consistently above 70% and we view it to be relatively fixed in nature.

American Water's stable outlook incorporates our view that financial metrics that will continue to decline over the next 12-18 months, but that funds from operations (FFO) to net debt and retained cash flow (RCF) to net debt will plateau at around 14% and 10%, respectively, thereafter, for the holding company.

Solid environmental positioning versus broader utility industry

As a regulated water company, PAWC has low carbon transition risk within the utility sector, especially when compared to electric and gas utility peers. However, the company is not immune to climate change risks, which are generally highest for the sector in terms of water supply variability and exposure to natural and man-made disasters, including flooding and soil/water pollution. These and other severe weather conditions could disrupt operations, change water usage patterns and have a negative financial impact on the company.

Liquidity analysis

PAWC's stand-alone liquidity is insufficient to meet near-term needs; however, we expect that the parent will provide sufficient liquidity to fund any near-term cash needs of the utility.

External liquidity is provided by a contractual intercompany line of credit with AWCC for $400 million. As of 31 December 2018, the facility had approximately $78 million outstanding including roughly $5 million of letters of credit outstanding. AWCC issued over $1.3 billion of long-term debt in August 2019, part of which was used to pay down PAWC short-term debt. Upon Board approval, PAWC has the ability to increase its line of credit limit with AWCC or obtain long-term debt or equity investments through AWCC to provide sufficient liquidity.

AWCC maintains a $2.25 billion revolving credit agreement, which expires in March 2024. The facility supports a $2.1 billion commercial paper program, has same-day drawing availability and no ongoing material adverse change clause. The lone financial covenant is maximum debt to capitalization ratio of 70%. On 30 June 2019, AWCC's ratio was in compliance at around 60%.

PAWC's next material external debt maturity is in September 2026 when $150 million matures.

Rating methodology and scorecard

Exhibit 5

Rating Factors

Pennsylvania-American Water Company

Regulated Water Utilities Industry Scorecard [1][2]	Current FY 12/31/2018		Moody's 12-18 Month Forward View As of Date Published [3]	
Factor 1 Business Profile(50%)	**Measure**	**Score**	**Measure**	**Score**
a) Stability and Predictability of Regulatory Environment	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Sufficiency & Timeliness)	A	A	A	A
d) Revenue Risk	Baa	Baa	Baa	Baa
e) Scale and Complexity of Capital Programme & Asset Condition Risk	Baa	Baa	Baa	Baa
Factor 2 Financial Policy (10%)				
a) Financial Policy	A	A	A	A
Factor 3 Leverage and Coverage (40%)				
a) FFO Interest Coverage (3 Year Avg)	6 0x	A	4.8x - 5.2x	A
b) Debt / Capitalisation (3 Year Avg)	44.0%	A	48% - 52%	A
c) FFO / Net Debt (3 Year Avg)	20.5%	A	15% - 19%	A
d) RCF / Net Debt (3 Year Avg)	12.8%	A	8% - 12%	A
Rating				
Indicated Outcome from Scorecard Factors 1-3		A2		A2
Rating Lift				
a) Indicated Outcome from Scorecard		A2		A2
b) Actual Rating Assigned		A3		A3

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
[2] As of 12/31/2018(L)
[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures
Source: Moody's Financial Metrics

Ratings

Exhibit 6

Category	Moody's Rating
PENNSYLVANIA-AMERICAN WATER COMPANY	
Outlook	Stable
Issuer Rating	A3
Bkd Senior Secured	A1
ULT PARENT: AMERICAN WATER WORKS COMPANY, INC.	
Outlook	Stable
Issuer Rating	Baa1

Source: Moody's Investors Service

REPORT NUMBER 1191056

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CREDIT OPINION

31 August 2018

Update

Rate this Research

RATINGS

Pennsylvania-American Water Company

Domicile	Pennsylvania, United States
Long Term Rating	A3
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Pennsylvania-American Water Company

Update to credit analysis

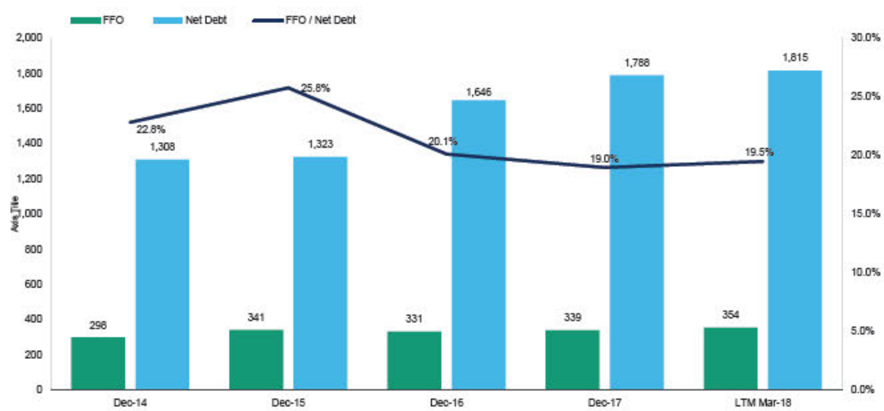
Summary

Pennsylvania-American Water Company's (PAWC) credit profile benefits from 1) its low business risk as a regulated water utility, 2) cost recovery mechanisms afforded by the Pennsylvania Public Utilities Commission (PUC) and 3) equity and liquidity support from its large, diversified parent company, American Water Works, Inc. (A3 negative) and the family financing vehicle American Water Capital Corp. (AWCC A3 negative).

PAWC's credit is constrained by cash flow metrics that are declining due to federal tax reform (e.g., funds from operations (FFO) to net debt migrating toward 17% by 2020) and a high dividend payout to help support the corporate dividend and debt service.

Exhibit 1

Historical FFO, net debt, and FFO to net debt
$ in millions



Source: Moody's Financial Metrics

Credit strengths

» Lower-risk business profile as a water distribution utility

» Predictable cash flow provided by rate-making framework

» Legislative support for acquisition cost recovery

» New law ("Act 58") that could significantly enhance capital and operating cost recovery

Credit challenges

» Declining financial metrics due to federal tax reform

» Capital intensive industry with aging infrastructure

» Liquidity and dividend policies linked to parent

» Acquisition premiums could result in rate fatigue for customers experiencing higher bills

Rating outlook

The stable outlook considers declining financial metrics resulting from federal tax reform and a high dividend payout ratio; however, sustained levels of FFO to net debt around 17% and retained cash flow (RCF) to net debt above 10% are sufficient to maintain PAWC's credit profile.

Factors that could lead to an upgrade

» Material improvement in the regulatory support offered to the company (e.g., provisions allowed in Act 58)

» Sustainable FFO to net debt in excess of 20% and RCF to net debt over 15%

Factors that could lead to a downgrade

» A material decline in the degree of regulatory or parental support

» FFO to net debt around 15% or RCF to Net Debt at 10%, for an extended period

Key indicators

Exhibit 2

Pennsylvania-American Water Company - Private

	Dec-14	Dec-15	Dec-16	Dec-17	LTM Mar-18
FFO Interest Coverage	5.5x	6.2x	6.0x	5.7x	5.8x
Debt / Capitalisation	40.1%	38 3%	42.4%	46.7%	46 6%
FFO / Net Debt	22.8%	25 8%	20.1%	19.0%	19 5%
RCF / Net Debt	15.0%	20 0%	11.4%	12.4%	12 9%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
Source: Moody's Financial Metrics

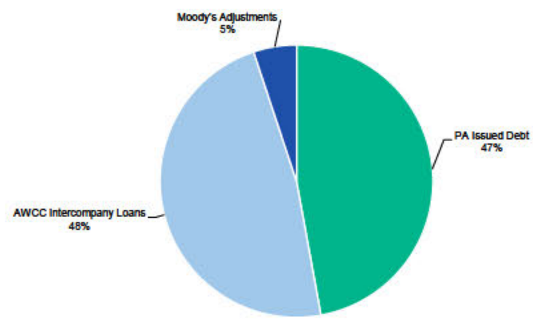
Profile

Headquartered in Hershey, Pennsylvania, Pennsylvania American Water Company (PAWC) is one of the largest operating subsidiaries of its parent, American Water, accounting for roughly 20% of consolidated revenues in 2017.

PAWC provides water and wastewater related services to customers throughout Pennsylvania and is regulated by the Pennsylvania Public Utility Commission (PUC).

Exhibit 3

PAWC's debt profile consists primarily of its own first mortgage bonds, loans from its parent and Moody's standard debt adjustments.
As of 31 December 2017



Source: Moody's Financial Metrics

Detailed credit considerations

An already supportive regulatory framework could be improved through Act 58

We view the Pennsylvania regulatory environment as one of the more supportive in the US, thanks to the use of a fully projected future test year for rate making purposes and the use of a Distribution System Improvement Charge (DSIC); both of which improve the real-time recovery of costs and provide enhanced stability and predictability to the company's cash flow. These are the primary drivers for PAWC's credit quality.

In June, Act 58 was signed into law, which permits the PUC to approve an application by a utility to establish alternative rates and rate mechanisms. The potential mechanisms outlined in an August 2018 tentative implementation order include items such as: decoupling mechanisms, performance-based rates, formula rates, multi-year rate plans or any combination thereof.

In general, each of the Act 58 rate mechanisms is supportive to credit, since it enhances the predictability of cash flow. Should PAWC be allowed to implement any combination of these alternative rate mechanisms, it could result in improved financials and credit profile. We note that these mechanisms can only be implemented via general rate proceeding and since PAWC recently completed a general rate case, it will likely be some time before the utility can benefit from the new law.

PAWC's last general rate case order resulted in a rate base of nearly $3.2 billion, with a 53.75% equity layer and allowed ROE of 10.0%. The rates went into effect on 1 January of 2018 and included a recently acquired wastewater systems in Scranton. The inclusion of this system (and subsequent system acquisitions, such as McKeesport) into rates is an important credit aspect of PUC regulation, since PAWC expects to remain acquisitive going forward.

Declining financial metrics due to federal tax reform and the support of a growing corporate dividend

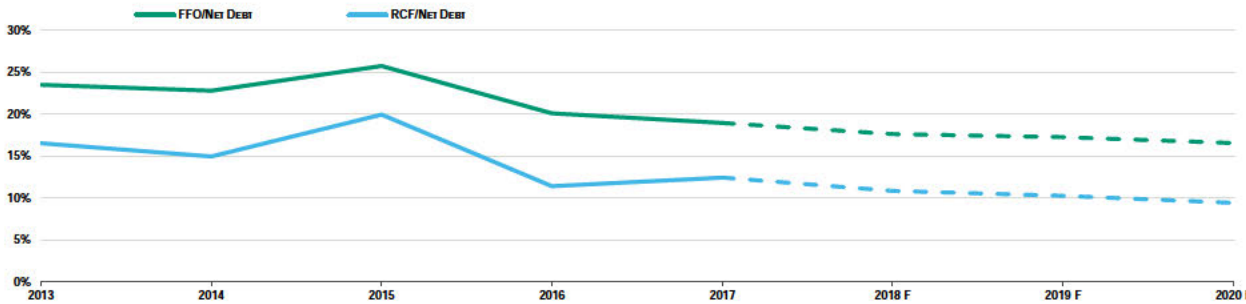
The December 2017 passage of Tax Cuts and Jobs Act resulted in a cut to the federal corporate tax rate to 21%, from 35%, and the elimination of bonus depreciation for regulated utilities. The combination of these two factors will reduce the amount of deferred taxes that PAWC generates going forward, and will result in the FFO to net debt metric migrating toward the 17-18% range, down from levels that were consistently above 20%.

Furthermore, PAWC's ratio of retained cash flow (RCF) to net debt will also be pressured, since the parent company has a dividend growth target approaching 10%. While American Water utility subsidiaries are not legally obligated to support standalone debt issued by AWCC or the corporate dividend, it is our opinion that they do functionally provide support since they are the primary source of assets and cash flow generation.

Therefore, as one of the largest American Water subsidiaries, we expect that a significant portion of the corporate dividend growth will come from PAWC's cash flow which will exacerbate the cash depletion from tax reform. We expect that PAWC's dividend payout will continue to remain between 70% and 75%. Any sustained increase in this ratio would be credit negative.

Exhibit 4 shows our expectations for FFO to net debt and RCF to net debt for PAWC over the next three years.

Exhibit 4
Trend in FFO to net debt and RCF to net debt (2013-2020)



*Forecasted metrics are based on Moody's assumptions
Source: Moody's Financial Metrics

While these trends are credit negative, FFO to net debt in the high teens will still support PAWC's current credit profile.

Acquisitions are supported by Pennsylvania legislation, but contain longer-term rate fatigue risks for legacy customers

PAWC has been very active in its acquisition of larger municipal wastewater systems, of late - a trend we expect to continue due to Pennsylvania's legislative Act 12 of 2016. Act 12 offers an alternative framework for asset valuation, providing municipalities with a new opportunity to relieve fiscal distress and a chance to avoid capital investment, while providing clarity for cost recovery approval for regulated investor-owned utilities (IOUs) like PAWC.

Pennsylvania law also allows for a single rate across multiple service territories and water and wastewater systems; therefore an IOU can spread full acquisition costs (including premiums paid above book value of the acquired system) across all of its customers. This means that all customers see a small rate increase versus a few customers seeing a very large rate increase, when an acquired system is added to rate base.

However, this also means that legacy customer bills are increasing due to IOU capital spent on third-party acquisitions and not for capital investment in their own system. Longer-term, as additional acquisitions are made, we see the potential for heightened political risk if the recovery of IOU acquisition costs and premiums drives customer push-back on increasing costs or results in legacy customer rate fatigue.

PAWC's most significant M&A transaction includes the 2016 acquisition of the Scranton Sewer Authority wastewater system (adding around 31,000 customers) and its acquisition of the City of McKeesport's wastewater system (approximately 22,000 customers). The Mckeesport system will not be included in rates until PAWC's next base rate case.

Credit profile influenced by American Water ownership

PAWC's credit is also influenced by AWCC, the American Water finance subsidiary where all parent-level debt financing, including credit lines, are maintained. AWCC's credit profile is derived from a "support agreement" from American Water and debt service from American Water utility subsidiaries. This interdependency, which helps support an estimated $1.6 billion of holding company debt at AWCC, creates linkage between the ratings of PAWC, AWCC and American Water.

PAWC's financial metrics are also influenced by the financial policies of its parent, American Water. For example, PAWC is one of American Water's largest subsidiaries and is therefore a material source of dividends to service AWCC's debt. As such, PAWC's payout ratio is consistently above 70% and we view it to be relatively fixed in nature.

American Water's negative outlook reflects financial metrics that had been expected to decline due to debt-funded growth and now a trajectory that will decline further due to Federal tax reform. We expect FFO to net debt metrics to decline to around 15% over the next 12-18 months.

American Water's credit profile could be maintained if FFO to net debt and RCF to net debt were to stabilize around 16% and 11%, respectively, and without an increase in parent debt levels (currently at approaching 25% of consolidated debt).

Liquidity analysis

PAWC's stand-alone liquidity is insufficient to meet near-term needs; however, we expect that the parent will provide enough liquidity to fund any near-term cash needs of the utility.

External liquidity is provided by a contractual intercompany line of credit with AWCC for $400 million. As of 30 June 2018, the facility was fully drawn including roughly $4 million of letters of credit outstanding; however, AWCC issued over $1.3 billion of long-term debt in August, part of which was used to pay down PAWC short-term debt. Upon Board approval, PAWC has the ability to increase its line of credit limit with AWCC or obtain long-term debt or equity investments through AWCC to provide sufficient liquidity.

AWCC maintains a $2.25 billion revolving credit agreement, which expires in March 2023. The facility supports a $2.1 billion commercial paper program, has same-day drawing availability and no ongoing material adverse change clause. The lone financial covenant is maximum debt to capitalization ratio of 70%.

PAWC's next material external maturity is in September 2026 when $150 million matures.

Rating methodology and scorecard factors

Exhibit 5

Rating Factors				
Pennsylvania-American Water Company -Private				
Regulated Water Utilities Industry Grid [1][2]	Current LTM 3/31/2018		Moody's 12-18 Month Forward View As of Date Published [3]	
Factor 1 : Business Profile(50%)	**Measure**	**Score**	**Measure**	**Score**
a) Stability and Predictability of Regulatory Environment	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Sufficiency & Timeliness)	A	A	A	A
d) Revenue Risk	Baa	Baa	Baa	Baa
e) Scale and Complexity of Capital Programme & Asset Condition Risk	Baa	Baa	Baa	Baa
Factor 2 : Financial Policy (10%)				
a) Financial Policy	A	A	A	A
Factor 3 : Leverage and Coverage (40%)				
a) FFO Interest Coverage (3 Year Avg)	6.0x	A	4.8x - 5.2x	A
b) Debt / Capitalisation (3 Year Avg)	42.5%	A	48% - 52%	A
c) FFO / Net Debt (3 Year Avg)	21.5%	A	15% - 19%	A
d) RCF / Net Debt (3 Year Avg)	14.5%	A	8% - 12%	A
Rating:				
Indicated Rating from Grid Factors 1-3		A2		A2
Rating Lift				
a) Indicated Rating from Grid		A2		A2
b) Actual Rating Assigned		A3		A3

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
[2] As of 3/31/2018(L)
[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures
Source: Moody's Financial Metrics

Ratings

Exhibit 6

Category	Moody's Rating
PENNSYLVANIA-AMERICAN WATER COMPANY	
Outlook	Stable
Issuer Rating	A3
Bkd Senior Secured	A1
ULT PARENT: AMERICAN WATER WORKS COMPANY, INC.	
Outlook	Negative
Issuer Rating	A3

Source: Moody's Investors Service

REPORT NUMBER 1138669

MOODY'S
INVESTORS SERVICE

S&P Global Ratings

Research

Summary:

Pennsylvania-American Water Co.

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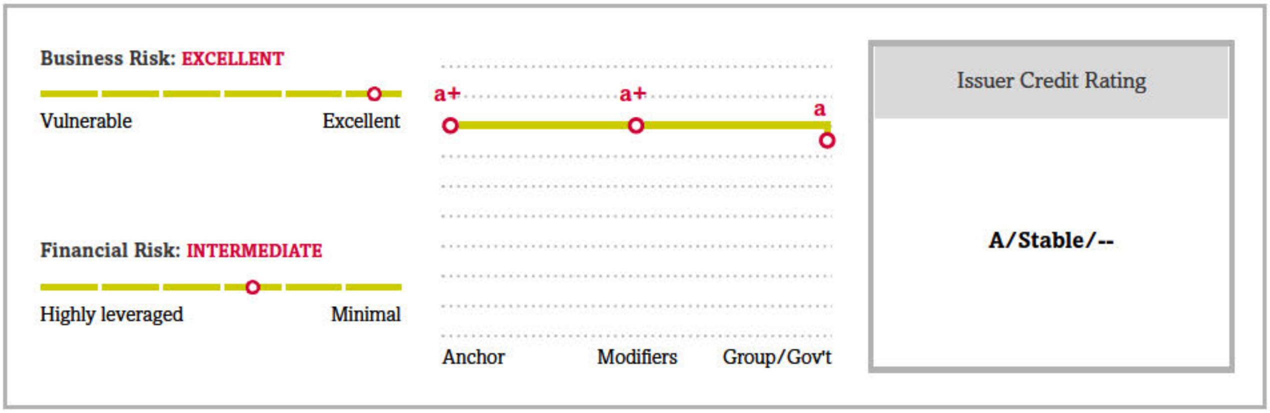
Table Of Contents

Summary:

Pennsylvania-American Water Co.



Rationale

Business Risk: Excellent	Financial Risk: Intermediate
• Low-risk, rate-regulated water utility operating under a generally constructive regulatory framework in Pennsylvania; • Moderate size customer base with limited geographic diversity; and • Effective management of regulatory risk in Pennsylvania.	• Use of most-relaxed financial benchmark ratios relative to the typical corporate issuer, reflecting the company's low-risk, regulated business and ability to effectively manage of regulatory risk; • Core financial metrics are consistent with the middle of the range for the company's financial risk profile; • We expect the effects of the revised U.S. corporate tax code to be mostly manageable for the company, in part reflecting cushion in the company's current financial measures; and • Negative discretionary cash flow due to higher capital spending and common stock dividends.

Outlook: Stable

The stable outlook on Pennsylvania-American Water Co. (PAW) reflects the outlook on its parent, American Water Works Co. Inc. (AWK). The stable outlook on AWK reflects S&P Global Ratings' expectation that the company will continue to focus its strategic growth on its regulated water distribution operations, maintaining the regulated businesses between 90%-95% of consolidated EBITDA. In addition, we expect the company will continue to manage regulatory risk effectively, maintaining financial measures at the lower end of its financial risk profile category. Under our base-case scenario forecast, we expect annual adjusted funds from operations (FFO) to debt to average around 13%-14%.

Downside scenario

We could lower the ratings on AWK and subsidiaries including PAW if the nonregulated operations increased such that they consistently contribute disproportionally to the consolidated EBITDA or the nonregulated operations become riskier than our current assessment. In addition, deteriorating management of regulatory risk or financial measures lower than our base-case expectations, specifically FFO to debt consistently below 13%, could also lead to lower ratings.

Upside scenario

We could raise the ratings on AWK and its subsidiaries including PAW if adjusted FFO to debt consistently exceeds 16%. This could occur if the company consistently managed its regulatory risk and achieved higher-than-expected rate-case outcomes, along with continued prudently managed expenses and use of lower debt and more equity to fund capital expenditures and acquisitions.

Our Base-Case Scenario

Assumptions

- Continued use of regulatory mechanisms such as general rate increases and riders in Pennsylvania;
- Modest customer growth;
- Moderately negative cash flow impact from revised U.S. tax code;
- Average capital spending of about $340 million annually;
- Dividends payments of about $135 million annually; and
- All debt maturities are refinanced.

Key Metrics

	2017A	2018E	2019E
FFO/debt (%)	20.0	18.0-20.0	17.0-19.0
Debt/EBITDA (x)	3.7	4.0-4.5	4.0-4.5
OCF/debt (%)	19.8	18.0-22.0	18.0-20.0

A--Actual. E--Estimated. FFO--Funds from operations. OCF--Operating cash flow.

Company Description

Pennsylvania-American Water Co. Inc. operates as a regulated water utility company in the state of Pennsylvania. It provides water, wastewater, and related services to about 720,000 customers. The company is a wholly owned subsidiary of American Water Works Co. Inc.

Business Risk: Excellent

Our assessment of PAW's business risk profile reflects the utility's low-risk, rate-regulated water distribution business that provides an essential service in Pennsylvania. The utility demonstrates efficient operating safety record and strong service reliability. PAW has limited geographic diversity since it only operates in Pennsylvania and has moderate customer size, providing water to about 720,000 customers. However, the predominance of PAW's residential and commercial customers provide cash flow stability and predictability.

The company benefits from a generally stable and constructive regulatory framework in Pennsylvania. The regulatory commission allows for steady and timely cost recovery through infrastructure riders and other regulatory mechanisms such as a distribution system improvement charge, allowing the company to earn a return on equity close to its authorized returns. In our view, the business risk profile is at the stronger end of the assessment, based on a service territory with above-average growth and economic conditions, the predictability and stability of the regulatory framework in Pennsylvania, and the company's proven ability to manage regulatory risk.

Financial Risk: Intermediate

We assess PAW's financial measures using our most relaxed financial benchmarks compared to the typical corporate issuer reflecting the company's lower-risk, regulated water distribution business, and effective management of regulatory risk. Under our base-case scenario which incorporates recently approved rate increase of $62 million, rate recovery through other regulatory mechanisms, moderately negative cash flow impact due to tax reforms in 2018, dividends of about $135 million, and capital expenditure of about $340 million annually, we expect the company's FFO to largely remain in the middle of the financial risk category with FFO to debt of about 17%-19%.

Liquidity: Adequate

PAW has adequate liquidity and can more than cover its needs for the next 12 months, even if EBITDA declines by 10%. We expect the company's liquidity sources over the next 12 months will exceed uses by more than 1.1x. PAW's liquidity benefits from the company's ability to absorb a high-impact, low-probability event with limited need for refinancing, well-established relationships with banks, a satisfactory standing in the credit markets, and manageable debt maturities over the next few years.

Principal Liquidity Sources	Principal Liquidity Uses
• Credit facility availability of $400 million; and • Cash FFO of about $360 million.	• Debt maturities of about $505 million; • Maintenance capital spending of about $215 million; and • Dividends of roughly $135 million.

Group Influence

We consider PAW to be a core subsidiary of AWK. This reflects our view that PAW is highly unlikely to be sold, has a strong long-term commitment from senior management, is successful at what it does, and contributes meaningfully to the group. There are no meaningful insulation measures in place that protect PAW from its parent and therefore our issuer credit rating (ICR) on PAW is in line with AWK's group credit profile of 'a'.

Ratings Score Snapshot

Issuer Credit Rating

A/Stable/--

Business risk: Excellent

- **Country risk:** Very low
- **Industry risk:** Very low
- **Competitive position:** Excellent

Financial risk: Intermediate

- **Cash flow/Leverage:** Intermediate

Anchor: a+

Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Satisfactory (no impact)
- **Comparable rating analysis:** Neutral (no impact)

Stand-alone credit profile : a+

- **Group credit profile:** a
- **Entity status within group:** Core (-1 notch from SACP)

Issue Ratings--Recovery Analysis

- We assign recovery ratings to first-mortgage bonds (FMB), which, depending on the rating category and the extent of the collateral coverage, can result in issue ratings being notched above an issuer credit rating on a utility. The FMBs issued by U.S. utilities are a form of "secured utility bond" (SUB) that qualifies for a recovery rating as defined in our criteria (see "Collateral Coverage And Issue Notching Rules for '1+' And '1' Recovery Ratings on Senior Bonds Secured by Utility Real Property," published Feb. 14, 2013).
- The recovery methodology is supported by the ample historical record of 100% recovery for secured bondholders in utility bankruptcies in the U.S. and our view that the factors that enhanced those recoveries (limited size of the creditor class and the durable value of utility rate-based assets during and after a reorganization given the essential service provided and the high replacement cost) will persist.
- Under our SUB criteria, we calculate a ratio of our estimate of the value of the collateral pledged to bondholders relative to the amount of FMBs outstanding. FMB ratings can exceed an issuer credit rating on a utility by up to one notch in the 'A' category, two notches in the 'BBB' category, and three notches in speculative-grade categories, depending on the calculated ratio.
- PAW's FMBs benefit from a first-priority lien on substantially all of the utility's real property owned or subsequently acquired. Collateral coverage of over 1.5x supports a recovery rating of '1+' and an issue rating one notch above the issuer credit rating.

Related Criteria

- Criteria - Corporates - General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria - Corporates - Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012

- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Insurance - General: Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	**Intermediate**	Significant	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	**a+/a**	a-	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

S&P Global Ratings

Research

American Water Works Co. Inc.

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Table Of Contents

Table Of Contents (cont.)

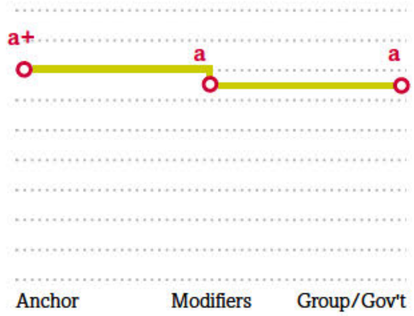
American Water Works Co. Inc.

Business Risk: EXCELLENT

Vulnerable — Excellent

Financial Risk: INTERMEDIATE

Highly leveraged — Minimal



Issuer Credit Rating

A/Stable/A-1

Credit Highlights

Overview

Key Strengths	Key Risks
The vast majority of American Water Work's (AWK's) cash flows are derived from lower-risk, rate-regulated water-utility operations.	The combination of AWK's large capital spending, acquisitions in 2018, and the effects of tax reform have moderately weakened the company's financial measures, which we expect to remain at the lower end of the range for the rating.
AWK benefits from significant geographic and regulatory diversity as the largest investor-owned water-utility company in the U.S.	Forecasted negative discretionary cash flow indicates external funding needs, which will likely be funded with additional leverage.
The company manages regulatory risk effectively, as demonstrated by its implementation of numerous constructive regulatory mechanisms.	The recoverability of costs for the company's non-utility operations is less certain than for its regulated utilities.

S&P Global Ratings' assessment of AWK's business risk underpins the rating. Based on its effective management of regulatory risk and geographic and regulatory diversity as the largest investor-owned water-utility company in the U.S., we assess AWK's business-risk profile as being in the higher half of the range for its business-risk-profile category.

The company's non-utility operations marginally affect the rating. Although the company grew its largest non-utility segment--the Homeowner Services Group--through its acquisition of Pivotal Home Solutions in 2018, we do not view these operations as core to the company's overall strategy. We expect AWK to continue to mainly focus on lower-risk, regulated utility operations, contributing about 90%-95% of its consolidated EBITDA.

We expect AWK's financial measures to remain at the lower end of the range for the financial-risk-profile category. We forecast funds from operations (FFO) to debt to average 13%-15% throughout the forecast period.

Outlook: Stable

The stable outlook on AWK and its subsidiaries reflects our expectation that the company will continue to focus its strategic growth on its regulated water distribution operations, maintaining the regulated businesses at 90%-95% of consolidated EBITDA. In addition, we expect the company will continue to manage regulatory risk effectively, maintaining financial measures at the lower end of its financial-risk-profile category. Under our base-case scenario forecast, we expect annual adjusted FFO to debt averaging about 13%-15%.

Downside scenario

We could lower the ratings on AWK and subsidiaries if AWK's nonregulated operations increased such that they consistently contribute disproportionately to its consolidated EBITDA, or if the nonregulated operations become riskier than we currently expect. In addition, deteriorating management of regulatory risk or financial measures lower than our base-case expectations, specifically FFO to debt consistently below 13%, could also lead to lower ratings.

Upside scenario

We could raise the ratings if adjusted FFO to debt consistently remains over 16% while the company continues to effectively manage its regulatory risk. This could occur if the company achieves better-than-expected rate-case outcomes while prudently managing expenses and funding its capital expenditures (capex) and acquisitions in a manner that reflects the issuance of more equity and less debt.

Our Base-Case Scenario

Assumptions	Key Metrics
• Numerous rate-case filings throughout the company's regulatory jurisdictions; • Continued use of existing regulatory mechanisms; • Regulated volume growth, primarily through small tuck-in acquisitions; • A full year of operations for Pivotal in 2019; • Marginal growth of the company's non-utility operations; • Combined spending on capex and regulated acquisitions that averages about $1.8 billion annually; • Dividend growth that averages 5%-10% annually; • No issuances of common equity; • Negative discretionary cash flow; and • All debt maturities are assumed to be refinanced.	See table below. A--Actual E--Estimate CFO--Cash flow from operations.

	2018A	2019E	2020E
FFO to debt (%)	15.2	14.0-16.0	13.5-15.5
Debt to EBITDA (x)	5.1	4.5-5.5	4.5-5.5
CFO to debt (%)	15.8	14.0-16.0	13.0-15.0

A--Actual E--Estimate CFO--Cash flow from operations.

Company Description

AWK is the largest and most geographically diverse publicly traded water and wastewater utility in the U.S., as measured by both operating revenues and population served. Through its regulated utility subsidiaries, the company serves about 3.4 million customers across 16 states. About 88% of fiscal-year 2018 regulated utility revenues were from New Jersey (about 24%), Pennsylvania (about 23%), Missouri (about 11%), Illinois (about 10%), California (about 7%), Indiana (about 7%), and West Virginia (about 5%). AWK's regulated utility operations accounted for approximately 93% of the company's consolidated EBITDA in 2018, and we expect this contribution to stay at 90%-95%. The company's non-utility businesses, which contributed the remainder of the company's EBITDA, primarily consist of the company's Homeowner Services Group, Military Services Group, and Keystone Clearwater Solutions LLC.

Through its Homeowner Services Group (inclusive of the company's 2018 acquisition of Pivotal), the largest component of the company's non-utility operations, AWK provides various home- warranty-protection programs to about 1.5 million customers. These protect against repair costs for interior and exterior water and sewer lines (over half of all contracts), interior gas and electric lines, heating and cooling systems, and water heaters and other home appliances as well as power-surge protection and other related services.

The company's Military Services Group operates on 14 military installations under 50-year contracts with the U.S. government. The scope of the Military Services Group's contracts generally includes the operation and maintenance

(O&M) costs of each military installation's water and wastewater systems and a capital program focused on asset replacement and, in certain instances, systems expansion. Keystone is a water-service and management-solutions company that serves shale-natural-gas exploration and production customers in the Appalachian Basin, specifically through water-transfer services. In addition, a small portion of AWK's non-utility business focuses on O&M contracts with municipal, commercial, and industrial customers to operate and manage their water and wastewater facilities and provide other related services. However, the company expects to sell or not renew the majority of its remaining O&M contracts over the near term.

Business Risk: Excellent

We assess AWK's business-risk profile as being at the higher half of the range for the category as compared to that of its peers. This reflects our view of the company's monopolistic, lower-risk regulated water and wastewater utility operations, which provide an essential service to a large and geographically diverse customer base. AWK's regulatory diversity, with utility operations in 16 states, also supports its business risk, as it can better withstand adverse regulatory outcomes in one jurisdiction than if its operations were more concentrated, especially if it effectively manages its regulatory risk throughout the rest of its service territories. Furthermore, the company effectively manages its regulatory risk in its numerous jurisdictions and benefits from constructive mechanisms, such as:

- Infrastructure replacement surcharges (in 10 jurisdictions, including six of its seven largest);
- Expense mechanisms (in nine jurisdictions, including five of its seven largest);
- Future or hybrid test years (in 14 jurisdictions, including its seven largest);
- Returns on construction work in progress(in seven jurisdictions, including three of its seven largest);
- Revenue- stability mechanisms that protect revenues against reduced sales volumes (in three jurisdictions, including one of its seven largest); and
- Consolidated tariffs (in 12 jurisdictions, including its seven largest).

Although about 42% of AWK's 3.4 million regulated customers reside in New Jersey and Pennsylvania, this customer concentration does not dampen our view of the company's business risk, as the company effectively manages its regulatory risk in these states and benefits from having nearly 2 million additional customers in its other jurisdictions. Furthermore, we view the risk of AWK being materially exposed to the wildfire risks associated with inverse condemnation in California as being remote, given the nature of its water-distribution operations. However, we continue to monitor AWK's exposure to wildfire risks in California, and our view of this exposure continues to evolve. Therefore, our future assessment of this exposure could be subject to reevaluation.

Historically, the company's water and wastewater operations have been reliable and safe, and they have consistently complied with all necessary safety standards. AWK also benefits from a large array of water- supply sources across its jurisdictions, which supports our view of the company's ability to maintain reliable water supply for its customers. The company's sources are as follows: reservoirs, lakes, rivers, or streams (67%); wells and aquifers (26%); and third-party suppliers (the remaining 7%).

Although not the focus of our business-risk assessment, AWK's non-utility operations introduce some marginal risk to the company. This is because in our view, the recoverability of costs for the company's non-utility operations is less certain than for its regulated utilities. However, these risks are mitigated by other factors, including low customer turnover at the Homeowner Services Group line, warranty caps and exclusions for the majority of the Homeowner Services Group's customers, long-term (50-year) contracts that cover O&M costs and capex for the Military Services Group, and the businesses' low capital commitments. We do not expect material growth of these businesses as a proportion of the consolidated company.

Peer comparison

Table 1

American Water Works Co. Inc.--Peer Comparison

	American Water Works Co. Inc.	California Water Service Co.	Connecticut Water Service Inc.	ITC Holdings Corp.	Middlesex Water Co.
Rating as of June 5, 2019	A/Stable/A-1	A+/Stable/--	A-/Stable/--	A-/Negative/A-2	A/Stable/--
	--Fiscal year ended Dec. 31, 2018--				
(Mil. $)					
Revenues	3,440.0	656.9	117.7	1,156.0	138.1
EBITDA	1,717.0	202.9	58.1	827.0	54.7
FFO	1,328.6	167.7	46.2	607.8	43.4
Interest expense	368.4	38.8	11.1	233.2	7.7
Cash interest paid	350.4	35.1	11.5	232.2	6.6
Cash flow from operations	1,383.6	165.4	33.0	644.8	45.7
Capital expenditures	1,573.0	259.5	56.6	760.0	71.7
Free operating cash flow	(189.4)	(94.2)	(23.5)	(115.2)	(26.0)
Dividends paid	319.5	34.6	14.9	200.0	15.0
Discretionary cash flow	(561.9)	(128.8)	(39.2)	(315.2)	(41.0)
Cash and short-term investments	130.0	33.8	2.9	6.0	3.7
Gross available cash	130.0	33.8	2.9	6.0	3.7
Debt	8,741.2	975.5	327.1	5,392.3	237.0
Preferred stock	4.0	0.0	0.0	0.0	1.2
Equity	5,868.0	659.3	294.1	2,051.0	250.0
Adjusted ratios					
EBITDA margin (%)	49.9	30.9	49.3	71.5	39.6
Return on capital (%)	8.3	7.8	6.2	9.2	7.8
EBITDA interest coverage (x)	4.7	5.2	5.3	3.5	7.1
FFO cash interest coverage (x)	4.8	5.8	5.0	3.6	7.6
Debt/EBITDA (x)	5.1	4.8	5.6	6.5	4.3
FFO/debt (%)	15.2	17.2	14.1	11.3	18.3
Cash flow from operations/debt (%)	15.8	16.9	10.1	12.0	19.3
Free operating cash flow/debt (%)	(2.2)	(9.7)	(7.2)	(2.1)	(11.0)

Table 1

American Water Works Co. Inc.--Peer Comparison (cont.)					
	American Water Works Co. Inc.	California Water Service Co.	Connecticut Water Service Inc.	ITC Holdings Corp.	Middlesex Water Co.
Discretionary cash flow/debt (%)	(6.4)	(13.2)	(12.0)	(5.8)	(17.3)
Debt/debt and equity (%)	59.8	59.7	52.7	72.4	48.7

FFO--Funds from operations.

Financial Risk: Intermediate

We assess AWK's financial measures using our low-volatility table, which largely reflects our view of the company's low-risk regulated water and wastewater utility operations and its effective management of regulatory risk. Under our base-case scenario, we expect FFO to debt to average about 13%-15%, indicative of minimal financial cushion for the current financial-risk profile and consistent with the use of our negative comparable rating-analysis modifier. Our base case assumes numerous rate-case filings throughout the company's many jurisdictions, continued use of existing regulatory mechanisms, combined spending on capex and regulated acquisitions that averages about $1.8 billion annually, dividend growth that averages 5%-10% annually, no issuances of common equity, and refinancing of all debt maturities.

Financial summary

Table 2

American Water Works Co. Inc.--Yearly Data					
	--Fiscal year ended Dec. 31--				
	2018	2017	2016	2015	2014
Rating history	A/Stable/A-1	A/Stable/A-1	A/Stable/A-1	A/Stable/A-1	A-/Positive/A-2
(Mil. $)					
Revenues	3,440.0	3,357.0	3,302.0	3,159.0	3,011.3
EBITDA	1,717.0	1,759.5	1,579.5	1,552.5	1,437.8
FFO	1,328.6	1,378.4	1,225.4	1,218.0	1,109.0
Interest expense	368.4	355.1	350.1	334.5	315.2
Cash interest paid	350.4	351.1	338.1	322.5	312.9
Cash flow from operations	1,383.6	1,450.4	1,278.4	1,179.0	1,100.5
Capital expenditures	1,573.0	1,426.0	1,305.0	1,152.0	950.3
Free operating cash flow	(189.4)	24.4	(26.6)	27.0	150.2
Dividends paid	319.5	289.5	261.5	239.5	216.8
Discretionary cash flow	(561.9)	(319.1)	(353.1)	(338.5)	(68.3)
Cash and short-term investments	130.0	55.0	75.0	45.0	23.1
Gross available cash	130.0	55.0	75.0	45.0	23.1
Debt	8,741.2	8,070.0	7,499.8	6,908.5	6,339.0
Preferred stock	4.0	5.0	5.0	6.0	7.8
Equity	5,868.0	5,390.0	5,223.0	5,055.0	4,923.3

Table 2

American Water Works Co. Inc.--Yearly Data (cont.)					
	--Fiscal year ended Dec. 31--				
	2018	2017	2016	2015	2014
Adjusted ratios					
EBITDA margin (%)	49.9	52.4	47.8	49.1	47.7
Return on capital (%)	8.3	9.7	9.1	9.7	9.1
EBITDA interest coverage (x)	4.7	5.0	4.5	4.6	4.6
FFO cash interest coverage (x)	4.8	4.9	4.6	4.8	4.5
Debt/EBITDA (x)	5.1	4.6	4.7	4.4	4.4
FFO/debt (%)	15.2	17.1	16.3	17.6	17.5
Cash flow from operations/debt (%)	15.8	18.0	17.0	17.1	17.4
Free operating cash flow/debt (%)	(2.2)	0.3	(0.4)	0.4	2.4
Discretionary cash flow/debt (%)	(6.4)	(4.0)	(4.7)	(4.9)	(1.1)
Debt/debt and equity (%)	59.8	60.0	58.9	57.7	56.3

FFO--Funds from operations.

Liquidity: Adequate

We base our 'A-1' short-term rating on AWK on our issuer credit rating on the company.

AWK has adequate liquidity, reflecting our expectation that the company's liquidity sources will exceed uses by more than 1.1x over the next 12 months, even if EBITDA declines by 10%. Under our stress scenario, we do not expect that AWK would require access to the capital markets during that period to meet its liquidity needs. AWK likely has the ability to absorb a high-impact, low-probability event with limited need for refinancing. Moreover, it has sound relationships with banks, has a generally satisfactory standing in the credit markets, and maintains generally prudent risk-management practices.

Principal Liquidity Sources	Principal Liquidity Uses
• FFO of about $1.45 billion over the next 12 months; • Credit facility availability of about $1.05 billion; and • Cash on hand of about $65 million.	• Combined spending on capex and regulated acquisitions of about $1.75 billion over the next 12 months; • Dividends of about $350 million-$400 million over the next 12 months; and • Long-term debt maturities of about $70 million over the next 12 months.

Debt maturities

- 2019: $72 million

- 2020: $32 million
- 2021: $303 million
- 2022: $26 million
- 2023: $159 million

Other Credit Considerations

We assess the comparative-rating-analysis modifier as negative, reflecting our view of the company's financial measures, which we expect to remain at the lower end of the range for the current financial-risk profile.

Environmental, Social, And Governance

As a provider of water and wastewater utility services with a supply that largely depends on the natural resources surrounding its service territory, the requirement to be good stewards of the environment while adhering to federal and state water-quality regulations remains a key mandate. From a social perspective, we view the company's long track record of providing safe and reliable water services to its customers as a key factor that could enable it to maintain social cohesion, even though affordability of steadily increasing rates and charges to the customer remain an area that we continue to watch closely. Governance factors are neutral to the credit rating. AWK has an independent board of directors, which we view as doing capable risk oversight on behalf of all stakeholders.

Group Influence

We assess AWK as the parent company of a group that includes New Jersey American Water Co., Pennsylvania American Water Co., and American Water Capital Corp. (AWCC). As a result, AWK's stand-alone credit profile of 'a' becomes the group credit profile, leading to our 'A' issuer credit rating on AWK.

Issue Ratings - Subordination Risk Analysis

Capital structure

AWK's capital structure consists of about $8.8 billion - $9.0 billion of debt, out of which about $7.5 billion - $7.7 billion is issued at AWCC and about $1.3 billion at operating subsidiaries.

Analytical conclusions

The senior unsecured debt at AWK's finance entity, AWCC, is rated the same as the issuer credit rating because subsidiary debt does not exceed 50% of AWK's consolidated debt, after which point AWCC's debt could be considered structurally subordinated.

Reconciliation

Table 3

Reconciliation Of American Water Works Co. Inc.'s Reported Amounts With S&P Global Ratings' Adjusted Amounts (Mil. $)

--Fiscal year ended Dec. 31, 2018--

American Water Works Co. Inc.'s reported amounts

	Debt	Shareholders' equity	EBITDA	Operating income	Interest expense	S&P Global Ratings' adjusted EBITDA	Cash flow from operations	Dividends	Capital expenditure
	8,611.0	5,864.0	1,704.0	1,102.0	350.0	1,717.0	1,386.0	319.0	1,586.0
S&P Global Ratings' adjustments									
Cash taxes paid	--	--	--	--	--	(38.0)	--	--	--
Cash taxes paid - Other	--	--	--	--	--	--	--	--	--
Cash interest paid	--	--	--	--	--	(332.0)	--	--	--
Operating leases	87.2	--	16.0	5.9	5.9	(5.9)	10.1	--	--
Intermediate hybrids reported as debt	(4.0)	4.0	--	--	(0.5)	0.5	0.5	0.5	--
Postretirement benefit obligations/deferred compensation	177.0	--	--	--	--	--	--	--	--
Accessible cash and liquid investments	(130.0)	--	--	--	--	--	--	--	--
Capitalized interest	--	--	--	--	13.0	(13.0)	(13.0)	--	(13.0)
Share-based compensation expense	--	--	17.0	--	--	--	--	--	--
Nonoperating income (expense)	--	--	--	19.0	--	--	--	--	--
EBITDA - Gain/(loss) on disposals of PP&E	--	--	(20.0)	(20.0)	--	--	--	--	--
D&A - Impairment charges/(reversals)	--	--	--	57.0	--	--	--	--	--
Total adjustments	130.2	4.0	13.0	61.9	18.4	(388.4)	(2.4)	0.5	(13.0)

S&P Global Ratings' adjusted amounts

	Debt	Equity	EBITDA	EBIT	Interest expense	Funds from operations	Cash flow from operations	Dividends paid	Capital expenditures
	8,741.2	5,868.0	1,717.0	1,163.9	368.4	1,328.6	1,383.6	319.5	1,573.0

Ratings Score Snapshot

Issuer Credit Rating

A/Stable/A-1

Business risk: Excellent

- **Country risk:** Very low
- **Industry risk:** Very low
- **Competitive position:** Excellent

Financial risk: Intermediate

- **Cash flow/Leverage:** Intermediate

Anchor: a+

Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Satisfactory (no impact)
- **Comparable rating analysis:** Negative (-1 notch)

Stand-alone credit profile : a

- **Group credit profile:** a

Related Criteria

- Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Corporate Methodology, Nov. 19, 2013
- Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- Methodology: Industry Risk, Nov. 19, 2013
- Group Rating Methodology, Nov. 19, 2013
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By

Utility Real Property, Feb. 14, 2013

- Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	**Intermediate**	Significant	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	**a+/a**	a-	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

Ratings Detail (As Of June 7, 2019)*

American Water Works Co. Inc.	
Issuer Credit Rating	A/Stable/A-1
Issuer Credit Ratings History	
07-May-2015	A/Stable/A-1
02-Jun-2014	A-/Positive/A-2
24-May-2013	A-/Stable/A-2
Related Entities	
American Water Capital Corp.	
Issuer Credit Rating	A/Stable/A-1
Commercial Paper	
Local Currency	A-1
Senior Unsecured	A
New Jersey-American Water Co.	
Issuer Credit Rating	A/Stable/--
Pennsylvania-American Water Co.	
Issuer Credit Rating	A/Stable/--

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

MOODY'S
INVESTORS SERVICE

CREDIT OPINION
3 April 2019

Update

Rate this Research

RATINGS

American Water Works Company, Inc.

Domicile	Camden, New Jersey, United States
Long Term Rating	Baa1
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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American Water Works Company, Inc.

Update following downgrade

Summary

American Water Works Company, Inc.'s (American Water, or AWK) credit profile is supported by 1) its market position as the largest US investor-owned water utility holding company, 2) strong regulatory and operational diversity across 16 states, 3) improving regulatory support as more states adopt cost recovery trackers.

The company's credit is constrained by 1) increasing leverage due to financial policies that target up to $8.6 billion of capex, dividend growth approaching 10% and no planned equity issuances over the next five years, 2) cash flow pressures from federal tax reform and 3) structurally subordinated holding company debt that is about 25% of total consolidated debt.

Exhibit 1

Historical and projected FFO, Net Debt and FFO to Net Debt ($ MM)

Source: Moody's Investors Service and Moody's projection assumptions

Credit strengths

» Diversity of holdings with 16 regulated water utilities

» Supportive regulatory environments with timely cost recovery mechanisms

» Support agreement at AWCC not a "guarantee" but provides sufficient credit substitution

Credit challenges

» Financial metrics will weaken due to increasing leverage and cash flow leakage from tax reform

» Financial policies evidence an increased risk tolerance

» High capital spending and regulated acquisitions expected to continue

Rating outlook

American Water's stable outlook incorporates our view that financial metrics that will continue to decline over the next 12-18 months, but that funds from operations (FFO) to net debt and retained cash flow (RCF) to net debt will plateau at around 14% and 10%, respectively, thereafter.

Factors that could lead to an upgrade

» FFO to net debt metric is sustainable at above 15%, while maintaining its current business risk profile

» Improved credit profiles of a majority of its operating subsidiaries, such as those in Pennsylvania and New Jersey

Factors that could lead to a downgrade

» FFO to net debt or RCF to net debt around 12% and 7%, respectively

» Less supportive regulatory provisions (especially in Pennsylvania or New Jersey)

» Operational concerns such as water supply constraints or asset failure

Key indicators

Exhibit 2

American Water Works Company, Inc. [1]

	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
FFO Interest Coverage	4.7x	4.7x	4.6x	4.8x	4.9x
Debt / Capitalisation	47.7%	48.6%	49.6%	54.2%	54.6%
FFO / Net Debt	18.0%	17.4%	16.2%	16.7%	15.9%
RCF / Net Debt	14.6%	13.9%	12.8%	13.2%	12.3%

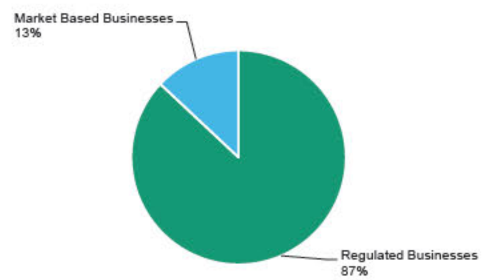
[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
Source: Moody's Financial Metrics

Profile

Headquartered in Camden, New Jersey, American Water Works Company, Inc. (AWK) is the largest investor-owned provider of water, wastewater and related services in North America, with operations serving more than 14 million people across 46 states and the District of Columbia in the US and a Canadian province.

Exhibit 3

The vast majority of American Water's operating revenue is derived from low-risk regulated utilities



Source: American Water Works, Inc.

American Water is a holding company and does not have any direct debt obligations; rather, it primarily issues debt through its non-operating financing subsidiary American Water Capital Corp. (AWCC) which has a support agreement with American Water.

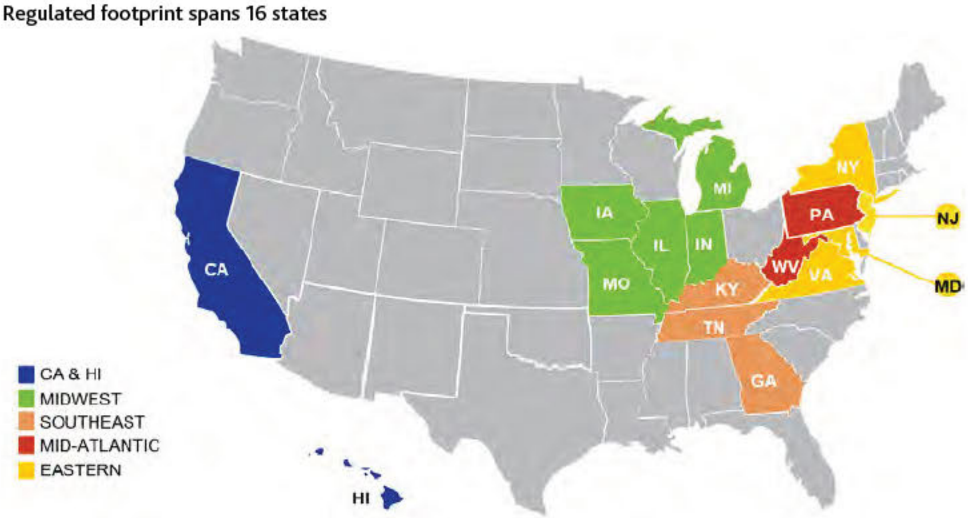
Detailed credit considerations

Broad utility diversity underpins strong credit quality

The company's regulated operations span across 16 states and account for around 87% of consolidated operating revenue. The exhibit below shows the states in which AWK has regulated utility operations. This diversity and the company's size (roughly $19 billion of market capitalization, which is roughly 3x the amount of the next largest water utility holding company) are core credit strengths.

Exhibit 4

Regulated footprint spans 16 states



Source: American Water 2018 Investor Day Presentation

Supportive regulatory treatment for capital and operating cost recovery

Over the past several years, we have observed improving regulatory trends in the US, which include the increased prevalence of automatic cost recovery provisions such as revenue decoupling and infrastructure replacement mechanisms, as well as the willingness to adopt more forward-looking test year data in rate making. This trend has helped to expedite cost recovery (and reduce regulatory lag) and improve fixed cost recovery across AWK's various utility service territories. The exhibit below provides detail around some of the more important cost recovery features that are allowed in states that American Water serves.

Exhibit 5

Credit supportive cost recovery mechanisms exist in many of the states that American Water serves

Cost Recovery Feature	States In-Use
Future Test Year	CA, HI, IA, L, IN, KY, NY, PA, TN, VA
Infrastructure Replacement	IA, IL, N, MO, NJ, NY, PA, TN, VA, WV
Plant Recovery Mechanisms	CA, IL, KY, NY, PA, TN, VA
Decoupling	CA, IL, NY

Recovery feature names are per Moody's description
Source: American Water 10-K, Moody's

One of the more significant cost recovery features is the ability to make discrete rate filings in order to recover the cost of replacing aging infrastructure. Often called distribution system improvement charges (DSIC), these mechanisms provide AWK with timely recovery of capital expenditures on an ongoing basis. This helps to transition cash outlfow for investment into cash inflow in customer rates in a relatively quick manner.

For example, we estimate that around 60% of AWK's annual capex transitions into rate base and generating cash flow in the following year. Given the relatively high turnover of capex to rate base, we regard the capital and cost recovery of American Water as strong and having improved as these DSIC-type mechanisms have become more prominent across the US.

Exhibit 6

American Water's rate base and capital expenditures

Increased proportion of capital expenditures transitions into rate base

$ million	2014	2015	2016	2017	2018
Capital expenditures	956	1,160	1,311	1,434	1,586
Rate base*	9,398	9,987	10,694	11,637	12,647
Rate base growth % from previous year		6%	7%	9%	9%
Change in rate base as % of Capex		51%	54%	66%	64%

* According to YE 2018 earnings presentation, the expected Rate base CAGR through 2023 is ~7-8%. We use mid-point.
Source: American Water's latest 10-K and investor's presentation

We also view the company's capital spending as low-risk, despite ongoing annual capex (excluding acquisitions) representing around 8% of net property plant and equipment in any given year. This is because the majority of capital projects are small and focused on pipeline replacement, rather than construction of more complex assets, like the desalination plant that its California subsidiary is attempting to build. For example, a single project spend of around $40 million is considered “large” for the company and requires additional management scrutiny for approval. The $40 million amount equates to just over 2% of the company's $1.7 billion capital budget.

Lastly, the water industry often has difficulty insuring fixed cost recovery since a high percentage (often 70% or more) is recovered in the volumetric charge on customer bills. This can be problematic in a declining-use environment, which is the case for most areas of the US. American Water has some degree of insulation from this risk through decoupling mechanisms in three states and water use adjustments in others. Additionally, filing a general rate case every 2-3 years in most jurisdictions – coupled with its broad diversity of states – helps to keep consolidated revenues stable and predictable. We also note that the company has low revenue concentration from commercial or industrial customers compared to similarly rated global peers.

Debt-funded growth and tax reform weigh on financial metrics

American Water's financial metrics have been on a slow decline for multiple years as the company has funded its growing capital plans primarily with debt. At the same time, the corporate dividend has been growing at around 10% per annum, resulting in growing negative free cash flow deficits. For example, free cash flow deficits have increased at a compound annual growth rate (CAGR) of around 62%, debt has grown at over 9% CAGR and FFO at roughly a 6% CAGR.

Currently, the company is also challenged by cash flow growth pressures due to 2017 federal tax reform, which will make the company a cash tax payer in the short-term and reduce the cash contribution from deferred taxes that have historically contributed around 25% of FFO. By way of stark contrast, the company's 2017 FFO of around $1.3 billion benefitted from about $462 million of deferred taxes (about 35%), compared to 2018 FFO of nearly $1.4 billion benefitted from only $195 million of deferred taxes (around 14%).

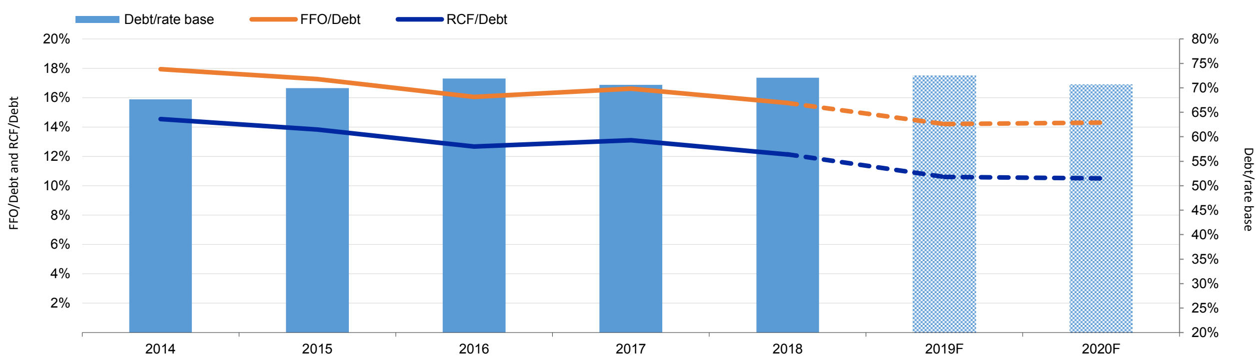
Moreover, the company will have to begin to refund excess deferred tax liabilities to customers, which management expects to have an ongoing negative cash flow impact through 2021. The combination of these two factors will mitigate some of the cash benefits the company would otherwise receive from rider mechanism cost recovery and general rate cases.

Going forward, the company has stated that it requires no incremental equity issuance to help fund over $8.0 billion of capital growth through 2023 and what we assume to be the maintenance of its 10% dividend growth rate. These policies will continue to leverage the business and will also pressure key credit metrics, with FFO to net debt falling to around 14% and RCF to net debt to about 10%.

Exhibit 7

American Water's FFO to debt, RCF to debt and debt to rate base

Key credit metrics under pressure as leverage increases



Source: American Water's latest 10-K, investor's presentation and Moody's projection assumptions

Market-based business exposure is growing

We generally view American Water's market-based business (MBBs) operations neutral to the credit of the company since they are small, largely self-funding and contribute positive cash flow, but also carry higher risk in most cases, since they depend on market prices for cost recovery and are subject to greater competition.

This segment is also growing to be a more notable driver of consolidated financial performance than in the past. For instance, management estimates that the contribution of unregulated operations is expected to grow to around 14% of consolidated net income by 2023, up from around 9% in 2017. Furthermore, the company issued $183 million of debt in 2018 as part of an unregulated acquisition. Below is a brief description of each business and how we view each from a credit perspective.

Homeowner Services (HOS)

Following the $365 million 2018 acquisition of Pivotal Home Solutions, HOS has become the largest and fastest growing market-based business for American Water. The business provides warranty protection type services to residential and small commercial customers for a variety of appliances and utility service lines. The term of the contracts is typically 3-5 years and the company reports that around 87% of customers are retained in any given year. The segment has roughly 3 million contracts serving 1.5 million customers.

American Water roughly doubled the size of this business in 2018, through the $365 million acquisition of Pivotal Home Solutions, which increased the customer base and product offering compared to legacy HOS assets. It also increased holding company debt by $183 million, which makes the transaction negative for credit, since it increases the size of non-core utility assets and leverage. Although the company expects that HOS cash will service the incremental debt, with a combined revenue of $277 million in 2017, it is likely that the company has speculative grade type characteristics, even at a 15% cash flow CAGR through 2023.

Military Services Group (MSG)

We view the MBO segment as the lowest-risk and most regulated like of American Water's market based businesses. These operations are of higher credit quality than the others since they consist of 50-year contracts with the federal government, a highly credit worthy counterparty. The contracts are typically for O&M services and limited capital improvements which are also recoverable. These contracts are typically subject to price redetermination every two or three years, which also supports ongoing cash flow in a rising price environment. American Water's current average contract life is around 42 years with revenue over the full life of approximately $4.3 billion.

Keystone Clearwater and Contracted Operations

In 2018, American Water made material cuts to the scope of other unregulated businesses, which we view as credit positive. One strategic decision included the exit of certain business lines (i.e., pipe construction and water trucking) within its highest-risk Keystone Clearwater Solutions, LLC segment, which resulted in an impairment of $54 million. The remaining business line involves the transfer of water for exploration and production companies.

Another cut was the sale of 22 of 33 contracts within its Contracted Operations Group (i.e., contracts to operate the water and wastewater assets were sold to Veolia Environment S.A. for $27 million). The pairing down of these lower margin businesses is also credit supportive, with the remaining contracts located in areas close to existing regulated service territories.

Solid environmental positioning versus broader utility industry

As a regulated water utility holding company, AWK has a low carbon transition risk within the utility sector, especially when compared to electric and gas utility peers. However, the company is not immune to climate change risks, which are generally highest for the sector in terms of supply variability and exposure to natural and man-made disasters, including flooding and soil/water pollution. These and other severe weather conditions could disrupt operations, change water usage patterns and have negative financial impacts on the company.

Despite experiencing severe weather events over the past decade, such as hurricanes in the northeast, severe droughts in the west and tornados in the central US, AWK's consolidated financial and operational performance remained stable throughout these events, due in part to its size and diversity.

Liquidity analysis

American Water's liquidity is adequate when considering its access to external sources. Internal FFO of about $1.4 billion per annum will lag the pace of capital spending (around $1.7 billion per year) and growing dividends ($319 million in 2018). As a result, the roughly $600 million of negative free cash flow we expect in 2019 will be supplemented through a bank credit facility.

External liquidity is managed through its financing subsidiary, AWCC, with a $2.25 billion revolving credit facility valid till March 2023. This credit facility provides support to the company's commercial paper program (CP) program which amounts to $2.1 billion, and can support up to $150 million in letters of credit. Although there are no restrictions on revolver borrowings related to CP outstanding, we expect the company to leave ample cushion under the revolver to effectively backstop any CP borrowings. The facility has same-day drawing availability and no ongoing material adverse change clause. The lone financial covenant is a maximum debt to capitalization ratio of 70%. As of 31 December 2018, the company's ratio was in compliance at 59%.

At 31 December 2018, $81 million in letters of credit and $954 million of commercial paper and credit facility borrowings were outstanding, leaving around $2.17 billion available under the facility.

In August 2018, AWCC issued $1.325 billion of senior notes. This issuance included the sale of $625 million at 3.75% due in 2028 and $700 million at 4.20% due in 2048. AWCC used the resulting proceeds to fund American Water and its regulated operating subsidiaries, repay $191 million of notes due December 2018, and prepay $100 million due in each 2019 and 2022.

AWCC has no material long-term maturities till 2021, when $303 million is due. AWCC's next debt obligations are $49.5 million of senior unsecured bonds due in May 2019.

Structural considerations

AWK has approximately $7.7 billion of consolidated reported long-term debt, roughly $6.3 billion of which was issued at AWCC. The majority of AWCC's debt (approximately $4.6 billion) has been advanced via inter-company notes to various regulated utility subsidiaries and is part of their respective regulated capital structures. Since this intercompany debt receives regulatory approved cost recovery, we do not consider this as true “holding company” debt that depends on upstream dividends for interest and principal payments. In total, we estimate that non-utility debt is around 25% of AWK's consolidated debt outstanding.

The debt issued to fund the Pivotal acquisition in 2018 can also be viewed in one of two ways. Because Pivotal's assets are unlevered, the cash flow generated by this business can be considered as a source of debt service for the $183 million of debt issued by AWCC as part of acquisition financing; however, since the debt is not the direct or legal obligation of Pivotal's assets, we sensitize our capital structure calculations to include this debt as part of the parent, as well.

AWCC, a Delaware corporation, is the wholly-owned finance subsidiary of American Water, whose purpose is to streamline the financing function, create cash management efficiencies, and often obtain a lower cost of capital for American Water's regulated water utility subsidiaries. The source of upstream debt service funding comes from the regulated utility operations, which make cash principal and interest payments directly to AWCC. We expect any additional up-streamed cash flows, in the form of dividends to AWK, will be limited to maintain the respective regulatory allowed equity capitalization for each utility (generally around 50%).

AWCC's Baa1 senior unsecured rating is the same as its parent, American Water, which provides credit enhancement through a support agreement between American Water and AWCC. The features contained in the support agreement that support Moody's view of credit substitution include: 1) no termination of the support agreement until all debt shall have been irrevocably paid in full, without all lenders' (including debt trustees) consent, 2) American Water has agreed to make timely payment of interest, principal or premium on any debt issued by AWCC, if AWCC is unable to make such payments, 3) the aforementioned payment is in the form of cash or liquid assets and not merely collection, 4) American Water waives any claims related to a failure or delay by AWCC in enforcing its rights under the support agreement, 5) the support agreement is binding on any successors of American Water, 6) the lender may proceed directly against American Water to obtain payment of defaulted interest, principle or premium, and 7) any changes to the support agreement that adversely affect lenders must be approved by such parties. Furthermore, American Water has committed to own, during the term of the support agreement, all of the voting stock of AWCC and to ensure that a positive tangible net worth at AWCC will be maintained at all times. The support agreement is governed by the laws of the state of New York, which we view to be hospitable to the enforcement of guarantees.

Although the support agreement has many attributes of what a guarantee provides, we note that it is not specifically or legally considered a guarantee. Also, debt at AWCC does not benefit from any explicit upstream guarantees from the regulated utility subsidiaries nor does the debt obligations of the subsidiaries benefit from any explicit downstream guarantee from American Water or AWCC. Nevertheless, given the agreement's stated protections, and that a significant amount of AWCC's debt has been incurred to finance rate base, we effectively view the support agreement structure as being similar to a guarantee in our credit analysis and have made no notching differentiation between the two entities.

Rating methodology and scorecard factors

Exhibit 8
Rating Factors
American Water Works Company, Inc.

Regulated Water Utilities Industry Grid [1 [2]	Current FY 12/31/2018		Moody's 12-18 Month Forward View As of Date Published [3]	
Factor 1 : Business Profile(50%)	**Measure**	**Score**	**Measure**	**Score**
a) Stability and Predictability of Regulatory Environment	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Sufficiency & Timeliness)	Baa	Baa	A	A
d) Revenue Risk	Baa	Baa	A	A
e) Scale and Complexity of Capital Programme & Asset Condi ion Risk	Baa	Baa	A	A
Factor 2 : Financial Policy (10%)				
a) Financial Policy	Ba	Ba	Ba	Ba
Factor 3 : Leverage and Coverage (40%)				
a) FFO Interest Coverage (3 Year Avg)	4.6x	A	4x - 4.5x	Baa
b) Debt / Capitalisation (3 Year Avg)	52.8%	A	50% - 60%	Baa
c) FFO / Net Debt (3 Year Avg)	16.3%	A	13% - 15%	Baa
d) RCF / Net Debt (3 Year Avg)	12.7%	A	9% - 11%	A
Rating:				
Indicated Rating from Grid Factors 1-3		A3		Baa1
Rating Lift	**0**	**0**	**0**	**0**
a) Indicated Rating from Grid		A3		Baa1
b) Actual Rating Assigned		Baa1		Baa1

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
[2] As of 12/31/2018
[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.
Source: Moody's Financial Metrics

Appendix

Exhibit 9

Cash flow and credit metrics [1]

CF Metrics	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
As Adjusted					
FFO	**1,140**	**1,205**	**1,235**	**1,365**	**1,426**
+/- Other	(20)	4	70	(4)	(39)
CFO Pre-WC	**1,120**	**1,209**	**1,305**	**1,361**	**1,387**
+/- ΔWC	3	(13)	9	123	30
CFO	**1,123**	**1,196**	**1,314**	**1,484**	**1,417**
- Div	216	239	261	289	319
- Capex	974	1,177	1,332	1,460	1,617
FCF	**(67)**	**(220)**	**(279)**	**(265)**	**(519)**
(CFO Pre-W/C) / Debt	17.6%	17.3%	17.0%	16.6%	15.2%
(CFO Pre-W/C - Dividends) / Debt	14.2%	13.9%	13.6%	13.0%	11.7%
FFO / Net Debt	18.0%	17.4%	16.2%	16.7%	15.9%
RCF / Net Debt	14.6%	13.9%	12.8%	13.2%	12.3%
Revenue	3,011	3,159	3,302	3,357	3,440
Cost of Good Sold	-	-	-	-	-
Interest Expense	319	336	354	373	381
Net Income	408	418	463	426	492
Total Assets	16,149	17,342	18,577	19,583	21,328
Total Liabilities	11,209	12,277	13,351	14,202	15,473
Total Equity	4,940	5,065	5,226	5,381	5,855

[1] All figures & ratios calculated using Moody's estimates & standard adjustments.
Source: Moody's Financial Metrics

Exhibit 10

Peer comparison table [1]

	American Water Works Company, Inc. Baa1 Stable			Severn Trent Plc Baa1 Negative			United Utilities PLC Baa1 Stable		
(in US millions)	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Mar-17	FYE Mar-18	LTM Sept-18	FYE Mar-16	FYE Mar-17	FYE Mar-18
Revenue	3,302	3,357	3,440	2,142	2,247	2,320	2,608	2,228	2,302
FFO	1,235	1,365	1,426	993	1,036	1,040	1,374	1,181	1,292
Total Debt	7,690	8,215	9,118	7,297	8,561	8,089	9,087	8,356	10,426
FFO Interest Coverage	4.6x	4 8x	4 9x	4 3x	4.1x	4 2x	5 5x	4.7x	4.5x
Debt / Capitalisation	49.6%	54.2%	54.6%	79 2%	78 8%	77.4%	54 2%	55 2%	56 9%
FFO / Net Debt	16.2%	16.7%	15 9%	13 0%	12 9%	12 5%	14 9%	14 0%	14.1%
RCF / Net Debt	12.8%	13.2%	12 3%	9 8%	9.6%	9 2%	10.7%	10 0%	10 2%

[1] All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months
Source: Moody's Financial Metrics

Ratings

Exhibit 11

Category	Moody's Rating
AMERICAN WATER WORKS COMPANY, INC.	
Outlook	Stable
Issuer Rating	Baa1
AMERICAN WATER CAPITAL CORP.	
Outlook	Stable
Issuer Rating	Baa1
Senior Unsecured	Baa1
Commercial Paper	P-2
NEW JERSEY-AMERICAN WATER COMPANY, INC.	
Outlook	Stable
Issuer Rating	A3
Bkd Senior Secured	A1
PENNSYLVANIA-AMERICAN WATER COMPANY	
Outlook	Stable
Issuer Rating	A3
Bkd Senior Secured	A1

Source: Moody's Investors Service

REPORT NUMBER 1165365

MOODY'S INVESTORS SERVICE

S&P Global Ratings

Research

Research Update:

American Water Works Co. Inc. And Subsidiaries 'A' Ratings Affirmed; Outlooks Remain Stable

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Table Of Contents

Research Update:

American Water Works Co. Inc. And Subsidiaries 'A' Ratings Affirmed; Outlooks Remain Stable

Overview

- We expect American Water Works Co. Inc. (AWK) to strategically maintain its regulated water and wastewater operations between 90%-95% of the company's consolidated EBITDA.
- In our view, AWK's business risk now reflects the higher half of the range of its business risk profile category when compared to peers incorporating the company's strategic commitment, its large and diversified customer base, and effective management of regulatory risk. This will offset marginally weaker financial measures.
- We are affirming our 'A' issuer credit rating on AWK and subsidiaries Pennsylvania-American Water Co. (PAW) and New Jersey-American Water Co. (NJAW). The outlook on all entities remains stable.
- The stable outlook on AWK and subsidiaries reflects our expectation that the company will continue to focus its strategic growth on its regulated water distribution operations, maintaining the regulated businesses between 90%-95% of EBITDA. In addition, we expect the company will continue to manage regulatory risk effectively, maintaining marginally weaker financial measures consistent with the lower end of its financial risk profile category.

Rating Action

On June 11, 2018, S&P Global Ratings affirmed its 'A' issuer credit ratings on American Water Works Co. Inc. (AWK) and subsidiaries Pennsylvania–American Water Co. (PAW) and New Jersey-American Water Co. (NJAW). The outlooks are stable.

We also affirmed the 'A' unsecured debt rating on American Water Capital Corp. (AWCC), 'A-1' short-term rating at AWCC and AWK, and A+' ratings on PAW's and NJAW's secured debt.

Rationale

The ratings affirmation reflects our expectations that the company's strong commitment to maintain its low-risk, regulated operations between 90%-95% of AWK's consolidated EBITDA offsets marginally weaker financial measures.

We assess AWK's business risk profile at the higher half of the range for its business risk profile category, compared to peers. This reflects the company's monopolistic and lower-risk, regulated water distribution and wastewater business providing an essential service in regulatory jurisdictions that we generally view as supportive of credit quality. AWK's operations benefits from constructive mechanisms such as the distribution system investment charge (DSIC) and infrastructure replacement surcharges in a number of its jurisdictions, which allow for the recovery of high capital spending outside of a traditional rate-case proceeding and reduces regulatory lag. In addition, some of the key jurisdictions benefit from forward-looking test years and revenue stabilization mechanisms, which help the company to earn close to its allowed return on equity (ROE) year-over-year. The company's geographic diversity and solid operating efficiency further supports its business risk profile.

AWK, largest in size and diversity among all water companies in the U.S., serves approximately 3.4 million water and wastewater customers across 16 states, out of which New Jersey, Pennsylvania, and Illinois are largest by customer base and revenue contribution. New Jersey, Pennsylvania, and Illinois account for about 25%, 22%, and 10% of the company's revenues and customer base, respectively. AWK's water and wastewater operations are reliable, safe, and consistently comply with all necessary safety standards. The businesses also focus strongly on controlling expenses leading to O&M efficiency ratios in line with industry peers.

AWK's nonregulated businesses largely consist of its Homeowner Services Group and its Military Services Group. All other divisions (Contract Operations and Keystone Clearwater Solutions) contribute minimally to the nonregulated operations.

Over time, the company has streamlined its nonregulated operations and improved its competitiveness. In general, AWK's nonregulated businesses are diversified, affiliated to regulated service jurisdictions, have modest capital spending requirements, and are stable cash flow contributors. The Homeowner Services business (the largest among the nonregulated operations) runs a home warranty business offering water and sewer protection contracts to homeowners. Although the business is subject to competition, there is low customer turnover largely because the charges are part of utility water bills for a significant number of customers, which has helped retain customers. The company recently acquired Pivotal Home Solutions (Pivotal) for $363.7 million. The acquisition of Pivotal, in addition to increasing the number of contracts for Homeowner Services Group, also diversifies company's exposure by introducing new type of contracts (gas line, plumbing, heating, ventilation, and air conditioning, etc.). The Military Services business, the second-largest component of nonregulated operations, shares several utility-like risk characteristics. The business has similar operations profile featuring long-term contract lengths (50 years) with U.S. military bases with contract prices that cover operation and maintenance (O&M) costs, capital program and system expansion costs. These factors, collectively, somewhat reduce our perception of risk associated with AWK's nonregulated businesses. On a forward-looking basis, we expect that the EBITDA contribution from nonregulated operations will not deviate materially from its current contribution (about 8% of consolidated AWK's EBITDA).

We assess AWK's financial risk profile using our most relaxed financial ratio benchmarks compared to those used for a typical corporate issuer, reflecting the company's low-risk, regulated water distribution operations and its overall effective management of regulatory risk. Under our base-case scenario, we expect AWK's consolidated financial measures to weaken over the next couple of years primarily due to the tax reform, loss of bonus depreciation, and higher capital spending. Specifically for 2018, our base case assumes single-digit EBITDA growth, $1.9 billion of capital spending, $320 million of dividends, and consistent regulatory recoveries through rate cases and use of cash smoothing mechanisms. We expect funds from operations (FFO) to total debt to be at the lower end of the range for the company's current financial risk profile category, at about 13%-14% over next three years. Previously, FFO to debt was about 17%. The weaker financial measures are indicative of minimal cushion at its current rating level and is consistent with our assessment of the comparable rating analysis modifier as negative.

Liquidity

AWK has adequate liquidity and can more than cover its needs for the next 12 months, even if EBITDA declines by 10%. We expect the company's liquidity sources over the next 12 months will exceed uses by more than 1.1x. AWK's liquidity benefits from the company's ability to absorb a high-impact, low-probability event with limited need for refinancing, well-established relationships with banks, a satisfactory standing in the credit markets, and manageable debt maturities over the next few years.

Principal liquidity sources:

- FFO of $1.3 billion;
- Committed equity issuance proceeds of about $183.3 million; and;
- Assumed credit facility availability of about $2.2 billion.

Principal liquidity uses:

- Debt maturities, including outstanding short-term debt of about $1.2 billion;
- Maintenance capital spending of about $1 billion;
- Cash dividends of about $320 million; and
- Committed acquisitions of about $363 million.

Other Credit Considerations

We assess the comparative rating analysis modifier as negative, reflecting financial measures that we expect to weaken and remain at the lower end of the company's current financial risk profile category.

Group Influence

We assess AWK as the parent of a group that includes New Jersey American Water Co., Pennsylvania American Water Co., and American Water Capital Corp. (AWCC). As a result, AWK's stand-alone credit profile of 'a' becomes the group credit profile, leading to our 'A' issuer credit rating on AWK.

Outlook

The stable outlook on AWK and subsidiaries reflects our expectation that the company will continue to focus its strategic growth on its regulated water distribution operations, maintaining the regulated businesses between 90%-95% of consolidated EBITDA. In addition, we expect the company will continue to manage regulatory risk effectively, maintaining financial measures at the lower end of its financial risk profile category. Under our base-case scenario forecast, we expect annual adjusted FFO to debt averaging around 13%-14%.

Downside scenario

We could lower the ratings on AWK and subsidiaries if the nonregulated operations increased such that they consistently contribute disproportionally to the consolidated EBITDA or the nonregulated operations become riskier than our current assessment. In addition, deteriorating management of regulatory risk or financial measures lower than our base-case expectations, specifically FFO to debt consistently below 13% could also lead to lower ratings.

Upside scenario

We could raise the ratings if adjusted FFO to debt consistently remains over 16%. This could occur if the company consistently managed its regulatory risk and achieved higher-than-expected rate-case outcomes, along with continued prudently managed expenses and use of lower debt and more equity to fund capital expenditures and acquisitions.

Ratings Score Snapshot

Corporate Credit Rating: A/Stable/A-1

Business risk: Excellent
- Country risk: Very low
- Industry risk: Very low
- Competitive position: Excellent

Financial risk: Intermediate

- Cash flow/Leverage: Intermediate

Anchor: a+

Modifiers
- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Negative (-1 notch)

Stand-alone credit profile: a
- Group credit profile: a

Issue Ratings--Subordination Risk Analysis

We base our 'A-1' short-term rating on AWCC and AWK on the companies' respective issuer credit rating.

Capital structure

AWK's capital structure consists of about $6.8 billion of debt, out of which about $5.4 billion is issued at AWCC and about $1.3 billion is issued at operating subsidiaries.

Analytical conclusions

The senior unsecured debt at AWK's finance entity, AWCC, is rated the same as the issuer credit rating because subsidiary debt does not exceed 50% of AWK's consolidated debt after which point AWCC's debt could be considered structurally subordinated.

Related Criteria

- Criteria - Corporates - General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings , April 7, 2017
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013

- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria - Corporates - Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Insurance - General: Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Ratings List

Ratings Affirmed

American Water Works Co. Inc.	
American Water Capital Corp.	
Corporate Credit Rating	A/Stable/A-1
New Jersey-American Water Co.	
Pennsylvania-American Water Co.	
Corporate Credit Rating	A/Stable/--
American Water Capital Corp.	
Senior Unsecured	A
Commercial Paper	A-1

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.

MOODY'S
INVESTORS SERVICE

CREDIT OPINION
16 February 2018

Update

Rate this Research

RATINGS

American Water Works Company, Inc.

Domicile	Voorhees, New Jersey, United States
Long Term Rating	A3
Type	LT Issuer Rating - Dom Curr
Outlook	Negative

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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EMEA	44-20-7772-5454

American Water Works Company, Inc.

Update following negative outlook

Summary

American Water Work Company, Inc.'s (American Water, or AWK, A3 negative) credit profile is supported by 1) its market position as the largest US investor-owned water utility holding company, 2) strong regulatory and operational diversity across 16 states, 3) improving regulatory support as more states adopt cost recovery trackers.

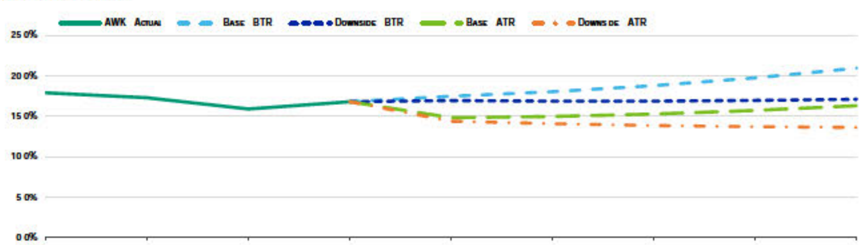
The company's credit is constrained by 1) increasing leverage due to financial policies that target over $8.0 billion of capex, dividend growth approaching 10% and no planned equity issuances over the next five years, 2) a new tax law that will result in cash flow leakage and 3) subordinated holding company debt that is about 23% of total consolidated debt.

In the exhibit below, we show four Moody's projection scenarios for American Water's funds from operations (FFO) to net debt ratio. The analysis compares our view of cash flow production "before tax reform" (BTR) and "after tax reform" (ATR), using assumptions based upon our interpretation of American Water's five year guidance drivers, as a base case, and a downside scenario that cuts earnings growth in half. While we do not currently view AWK's credit profile according to the downside scenario, it is a sensitivity analysis that attempts to capture the possibility for unforeseen developments, such as lower growth, regulatory challenges, higher than expected outflows from tax reform, underperformance of unregulated operations, etc. Other assumptions behind these scenarios are noted in the footnote below.

Exhibit 1

Our FFO to net debt expectations, for AWK, are now lower as a result of tax reform

FFO to net debt



All scenarios include: 10% dividend growth; 100% debt financing of negative free cash flow; 2% cash tax rate.
The "Base" scenario and "Downside" scenario reflect consolidated net income CAGRs of 9.0% and 4.5%, respectively. The CAGRs are based off of LTM 3Q17 figures.
BTR assumed a 40% effective tax rate 2018-2022, ATR assumed a 25% effective tax rate 2018-2022.
Source: American Water Works, Inc. SEC filings, Moody's Investors Service projection assumptions

Credit strengths

» Diversity of holdings with 16 regulated water utilities

» Supportive regulatory environments with timely recovery mechanisms

» Support agreement at AWCC not a "guarantee" but provides sufficient credit substitution

Credit challenges

» Financial metrics will weaken due to increasing leverage and cash flow leakage

» Financial policies evidence an increased risk tolerance

» High capital expenditures and more sizeable regulated acquisitions will continue

Rating outlook

American Water's negative outlook reflects financial metrics that had been expected to decline due to debt-funded growth and now a trajectory that will decline further due to Federal tax reform. We expect FFO to net debt metrics to decline to around 15% over the next 12-18 months.

American Water's credit profile could be maintained if FFO to net debt and RCF to net debt were to stabilize around 16% and 11%, respectively, and without an increase in parent debt levels (currently at approaching 25% of consolidated debt).

Factors that could lead to an upgrade

» FFO to net debt metrics at 20%, on a sustainable basis, while maintaining its current business risk profile

» RCF to debt around 15%

» Improved credit profiles of a majority of its operating subsidiaries

Factors that could lead to a downgrade

» Less supportive regulatory provisions (especially in Pennsylvania or New Jersey)

» Increased financial risk, such as the stand-alone AWCC debt increasing toward 25% of consolidated debt or consolidated FFO to debt around 15% for a sustained period.

» Operational concerns such as supply or asset failure

Key indicators

Exhibit 2

American Water Works indicators

	Dec-13	Dec-14	Dec-15	Dec-16	LTM Sep-17
FFO Interest Coverage	4.2x	4.6x	4.6x	4.5x	4.6x
Debt / Capitalisation	48.1%	47.7%	48.6%	49.6%	48.8%
FFO / Net Debt	17.7%	18.0%	17.4%	16.0%	17.0%
RCF / Net Debt	15.2%	14.6%	13.9%	12.6%	13.4%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
Source: Moody's Financial Metrics

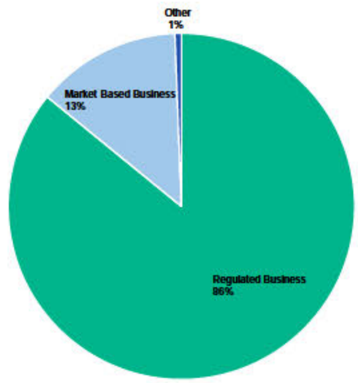
This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Profile

Headquartered in Voorhees, New Jersey, American Water Works Company, Inc. is the largest investor-owned provider of water, wastewater and related services in North America, with operations serving an estimated 15 million people across 46 states and the District of Columbia in the US and a Canadian province. The company's regulated operations span across 16 states and accounts for just under 90% of consolidated operating revenue. The exhibit below shows the relative contribution and growth of revenue from its core utility segment and unregulated operations.

Exhibit 3

The vast majority of American Water's operating revenue is derived from low-risk regulated utilities



Source: American Water Works Company, Inc. 2016 10K

American Water is a holding company and does not have any direct debt obligations; rather, it primarily issues debt through its non-operating financing subsidiary American Water Capital Corp, which has a support agreement with American Water.

Detailed credit considerations

Financial metric decline will continue due to debt-funded growth and increasing dividend

American Water's debt is expected to increase due to the financial policies in its 5-year plan. Through 2022, the company expects to spend \$8.0-\$8.6 billion in capex, provide dividend growth approaching 10% and issue no additional equity. We view these policies as management evidencing a higher financial risk tolerance, and we project funds from operations (FFO) to net debt ratios will continue to drop from the 18% posted in 2014 (17% through LTM 3Q17) to a sustainable 16%, as a result.

With over \$8.0 billion in capex, we estimate that American Water's reported debt will be around \$10 billion by 2022 and will continue to outpace the growth of FFO. Similarly, we expect that a dividend growth rate approaching 10% will also roughly double the pace of FFO growth that we expect over this time.

Cash leakage from tax reform will further pressure financial ratios

We see tax reform as having a negative credit impact due to cash leakage resulting from a lower tax rate, which will reduce deferred tax contribution to cash flow, and customer refunds from excess deferred tax liabilities. We estimate that the deferred tax cash flow benefit will be cut in half as a result of the Federal tax rate move to 21% and that the excess liabilities will be returned to customers over time.

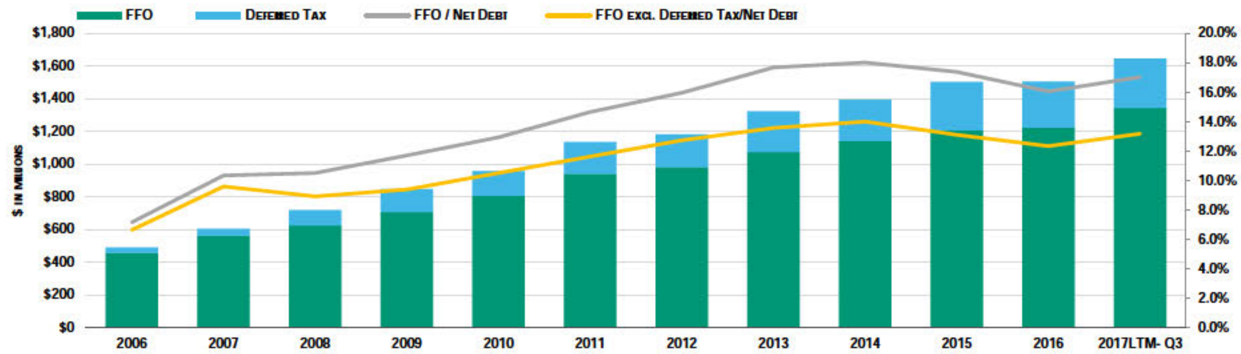
For American Water, we estimate that losing around \$150 million of cash flow to deferred taxes, will further pressure FFO to debt to around 15% over the next several years. 15% is a level that we have highlighted as potentially impacting the credit profile of American Water. In the two exhibits below

Over the past 10 years, American Water, like most of the utility sector, has benefitted from various tax offsets that have kept cash tax payments low. Federal policies, like bonus depreciation, has resulted in a significant amount of temporary tax savings, resulting in higher increased deferred tax balances.

The impacts from bonus depreciation and other tax policies have provided significant boosts to cash flow, as seen in the exhibit below. For American Water, the deferred tax contribution to FFO has grown from a negligible amount in 2006, to around 23% through LTM 3Q17.

Exhibit 4

Deferred Tax has become a large boost to American Water's cash flow in recent years.



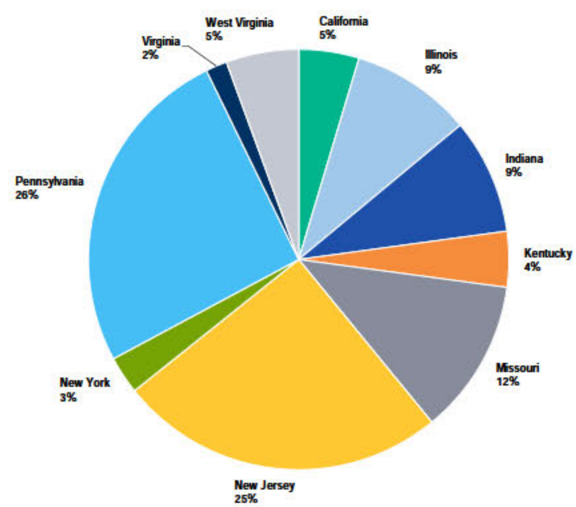
Source: American Water Works, Inc. financial statements, Moody's Financial Metrics

Broad utility diversity and improving regulatory support

AWK is a holding company with around 87% of its revenue produced by low-risk water utility companies, spanning 16 states. AWK's credit strength reflects the size, scale of this diversity, along with the monopoly service characteristics of water utilities that offer stable and predictable cost recovery and cash flow coverage of debt and interest.

Exhibit 5

American Water has a very diverse asset base, with utility operations in 16 different states.



Source: American Water Works Company, Inc. 2016 10K

Over the past several years, we have observed improving regulatory trends in the US, which include the increased prevalence of automatic cost recovery provisions such as revenue decoupling and infrastructure replacement mechanisms, as well as the willingness to adopt more forward-looking test year data in rate making. This trend has helped to expedite cost recovery (and reduce regulatory lag) and improve fixed cost recovery across AWK's various utility service territories.

One of the more significant cost recovery features is the ability to make discrete rate filings in order to recover the costs of replacing aging infrastructure. Often called distribution system improvement charges (DSIC), these mechanisms provide AWK timely recovery of capital expenditures on an ongoing basis. Another important cost recovery feature is the use of declining usage adjustments (or "decoupling mechanisms" that target a specific gross profit needed to cover fixed operating costs, regardless of the volume of water sold) which are available in the rates of nine state, including AWK's six largest jurisdictions.

The exhibit below provides detail around some of the more important cost recovery features that are allowed in states that American Water serves.

Exhibit 6
Credit supportive cost recovery mechanisms exist in many of the states that American Water serves.

Cost Recovery Feature	States In-Use
Future Test Year	CA, HI, IL, IN, KY, NY, PA, TN, VA
Inrastructure Replacement	IL, IN, MO, NJ, NY, PA, TN, WV
Plant Recovery Mechanisms	CA, IL, KY, NY, PA, TN, VA
Decoupling	CA, IL, NY

Recovery feature names are per Moody's description
Source: American Water 10K, Moody's

The broad improvement in regulatory cost recovery, across all jurisdictions, has allowed AWK and AWCC ratings to overcome the limited structural subordination that exists at its operating companies, and has resulted in a ratings level on-par with its largest subsidiaries: New Jersey American Water (NJ-AWC A3 stable) and Pennsylvania American Water (PAWC A3 stable).

Most unregulated businesses are utility-like and relatively small

Non-regulated operations are generally higher risk versus utility operations, since they depend on market prices for cost recovery and are subject to greater competition; however, AWK's contracted services (e.g., O&M agreements with municipalities) or homeowner services activities are within the core competencies of water system operations. In fact, once contracts are obtained for military base operations, they offer a stable and predictable source of revenue and cash flow for 50 years. Therefore, we do not view these business lines as negatively impacting the overall credit of AWK. Furthermore, these segments have not, to date, required a significant amount of capital or reliance on credit support from the parent.

Similarly, the company's growing homeowner services and a contract services groups operate and maintains water and wastewater facilities for residential, municipal and corporate customers. These contracts are of shorter duration, but are not viewed as high risk.

On the other hand, we view the company's ownership of Keystone Clearwater Solutions (Keystone; unrated - a provider of water services to support hydraulic fractionation of shale gas plays) as higher risk, since the revenue is more volume based, short-term and derived from a speculative credit grade Exploration and Production (E&P) industry that bases decisions on commodity prices. Furthermore, we think there is reputational risks that AWK takes on, as they intermingle operations with E&P companies that carry a higher level of environmental exposure.

Despite these negatives, Keystone is very small compared to AWK and has little bearing on the company's credit profile. Should more of AWK's unregulated investments carry this type of risk profile, or grow to be a meaningful portion of the business (i.e. above 15% of operations), AWK's credit would be negatively affected.

Liquidity analysis

American Water's liquidity is managed through its financing subsidiary, AWCC, which extended its $1.75 billion credit facility to expire in June 2020. This credit facility provides support to the company's $1.6 billion commercial paper (CP) program (P-2). Although there are no restrictions for revolver borrowings, related to CP outstanding, we expect the company to leave ample cushion under the revolver to effectively backstop any CP borrowings. The facility has same-day drawing availability and no ongoing material adverse change clause. The lone financial covenant is maximum debt to capitalization ratio of 70%. As of 30 September 2017, the company's ratio was in compliance at 58%.

At 30 September 2017, $86 million in letters of credit outstanding and $103 million of commercial paper outstanding, leaving around $1.56 billion available under the facility.

In August 2017, AWCC issued $600 million 2.95% Senior Notes due 2027 and $750 million of 3.75% Senior Notes due 2047. The use of proceeds is to (1) repay $524 million of AWCC notes upon maturity in October 2017; (2) prepay $138 million of 5.62% AWCC debt due December 2018 and $181 million aggregate principal of 5.77% AWCC notes due December 2021; and (3) repay AWCC's CP obligations and for general corporate purposes.

The next material long-term debt maturities for American Water include AWCC obligations of $110 million due in May of 2018 and $191 million due in December of 2018.

Structural considerations

Following the aforementioned debt issuance in August 2017, AWK has approximately $7.4 billion of consolidated reported long-term debt, roughly $6.0 billion of which was issued at AWCC. The majority of AWCC's debt (approximately $4.0 billion) has been advanced via inter-company notes to various regulated utility subsidiaries and is part of their respective regulated capital structures. We estimate that about $2.0 billion of AWCC obligations are strictly holding company debt, which we view to be subordinate to the debt which supports the operating companies, since it only has utility dividend distributions as cash sources available for its debt service. Negative credit implications would ensue for AWCC and American Water if the holding company debt to consolidated debt ratio (currently at about 23%) grows to around 25%.

AWCC, a Delaware corporation, is the wholly-owned finance subsidiary of American Water, whose purpose is to streamline the financing function, create cash management efficiencies, and often obtain lower the cost of capital for American Water's regulated water utility subsidiaries. The source of upstream debt service funding comes from the regulated utility operations, which make cash principal and interest payments directly to AWCC. We expect any additional up-streamed cash flows, in the form of dividends to AWK, will be limited to maintain the respective regulatory allowed equity capitalization for each utility (generally around 50%).

AWCC's A3 senior unsecured rating is equalized with its parent, American Water, which provides credit enhancement through a support agreement between American Water and AWCC. The features contained in the support agreement, that support Moody's view of credit substitution include: 1) no termination of the support agreement until all debt shall have been irrevocably paid in full, without all lenders' (including debt trustees) consent, 2) American Water has agreed to make timely payment of interest, principal or premium on any debt issued by AWCC, if AWCC is unable to make such payments 3) the aforementioned payment is in the form of cash or liquid assets and not merely collection, 4) American Water waives any claims related to a failure or delay by AWCC in enforcing its rights under the support agreement, 5) the support agreement is binding on any successors of American Water, 6) the lender may proceed directly against American Water to obtain payment of defaulted interest, principle or premium, and 7) any changes to the support agreement that adversely affect lenders must be approved by such parties. Furthermore, American Water has committed to own, during the term of the support agreement, all of the voting stock of AWCC and to ensure that a positive tangible net worth at AWCC will be maintained at all times and the support agreement is governed by the laws of the state of New York, which we view to be hospitable to the enforcement of guarantees.

Although the support agreement has many attributes of what a guarantee provides, we note that it is not specifically or legally considered a guarantee. Also, debt at AWCC does not benefit from any explicit upstream guarantees from the regulated utility subsidiaries nor does the debt obligations of the subsidiaries benefit from any explicit downstream guarantee from American Water or AWCC. Nevertheless, given the agreement's stated protections, and that a significant amount of AWCC's debt has been incurred to finance rate base, we effectively view the support agreement structure as being similar to a guarantee for rating purposes and have made no notching differentiation between the two entities.

Rating methodology and scorecard factors

Exhibit 7

Rating Factors				
American Water Works Company, Inc.				
Regulated Water Utilities Industry Grid [1][2]	Current LTM 9/30/2017		Moody's 12-18 Month Forward View As of Date Published [3]	
Factor 1 : Business Profile(50%)	**Measure**	**Score**	**Measure**	**Score**
a) Stability and Predictability of Regulatory Environment	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Sufficiency & Timeliness)	Baa	Baa	Baa	Baa
d) Revenue Risk	Baa	Baa	Baa	Baa
e) Scale and Complexity of Capital Programme & Asset Condition Risk	Baa	Baa	Baa	Baa
Factor 2 : Financial Policy (10%)				
a) Financial Policy	Ba	Ba	Ba	Ba
Factor 3 : Leverage and Coverage (40%)				
a) FFO Interest Coverage (3 Year Avg)	4.6x	A	4x - 5x	A
b) Debt / Capitalisation (3 Year Avg)	48.2%	A	46% - 56%	A
c) FFO / Net Debt (3 Year Avg)	17.2%	A	14% - 17%	A
d) RCF / Net Debt (3 Year Avg)	13.6%	A	10% - 14%	A
Rating:				
Indicated Rating from Grid Factors 1-3		A3		A3
Rating Lift	**0**	**0**		**0**
a) Indicated Rating from Grid		A3		A3
b) Actual Rating Assigned		A3		A3

[1]All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
[2]As of 9/30/2017(L)
[3]This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.
Source: Moody's Financial Metrics

Appendix

Exhibit 8

Cash flow ad credit measures[1]

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	LTM 09/30/2017
FFO	**$983**	**$1,072**	**$1,140**	**$1,205**	**$1,222**	**$1,343**
- Div	$213	$149	$216	$239	$261	$282
RCF	**$769**	**$923**	**$924**	**$966**	**$961**	**$1,061**
FFO	$983	$1,072	$1,140	$1,205	$1,222	$1,343
+/- ΔWC	$39	-$137	$3	-$13	$9	-$77
+/- Other	$23	$12	-$20	$4	$70	$76
CFO	**$1,044**	**$947**	**$1,123**	**$1,196**	**$1,301**	**$1,342**
- Div	$213	$149	$216	$239	$261	$282
- Capex	$952	$999	$974	$1,177	$1,332	$1,368
FCF	**-$121**	**-$202**	**-$67**	**-$220**	**-$292**	**-$308**
Debt / EBITDA	**4.4x**	**4.3x**	**4.4x**	**4.5x**	**4.8x**	**4.5x**
EBITDA / Interest	**4.0x**	**4.2x**	**4.5x**	**4.7x**	**4.5x**	**4.7x**
FFO / Net Debt	**15.9%**	**17.7%**	**18.0%**	**17.4%**	**16.0%**	**17.0%**
RCF / Net Debt	**12.5%**	**15.2%**	**14.6%**	**13.9%**	**12.6%**	**13.4%**

[1]All figures & ratios calculated using Moody's estimates & standard adjustments.
Source: Moody's Financial Metrics

Exhibit 9

Peer comparison table[1]

	American Water Works Company, Inc. A3 Negative			Severn Trent Plc Baa1 Negative			United Utilities PLC Baa1 Stable		
(in US millions)	FYE Dec-15	FYE Dec-16	LTM Sep-17	FYE Mar-15	FYE Mar-16	FYE Mar-17	FYE Mar-15	FYE Mar-16	FYE Mar-17
Revenue	$3,159	$3,302	$3,338	$2,905	$2,644	$2,378	$2,774	$2,608	$2,228
Funds from Operations	$1,205	$1,222	$1,343	$1,150	$1,055	$995	$1,514	$1,383	$1,229
Net Debt	$6,940	$7,615	$7,894	$7,841	$7,461	$7,287	$8,648	$8,780	$8,046
(FFO + Interest Expense) / Interest Expense	4 6x	4 5x	4.6x	3.7x	4.1x	4 3x	5.1x	5 5x	4 9x
FFO / Net Debt	17.4%	16 0%	17 0%	13.5%	13 5%	13.1%	16.1%	15.0%	14 6%
RCF / Net Debt	13 9%	12.6%	13.4%	9.7%	9.7%	9.8%	11 8%	10.8%	10 5%
FCF / Debt	-3.1%	-3 8%	-3 9%	-1 0%	-0 5%	-0.4%	-4 2%	-3.7%	-1 6%

[1]All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months.

Source: Moody's Financial Metrics

Ratings

Exhibit 10

Category	Moody's Rating
AMERICAN WATER WORKS COMPANY, INC.	
Outlook	Negative
Issuer Rating	A3
AMERICAN WATER CAPITAL CORP.	
Outlook	Negative
Issuer Rating	A3
Senior Unsecured	A3
Commercial Paper	P-2
NEW JERSEY-AMERICAN WATER COMPANY, INC.	
Outlook	Stable
Issuer Rating	A3
PENNSYLVANIA-AMERICAN WATER COMPANY	
Outlook	Stable
Issuer Rating	A3
Bkd Senior Secured	A1

Source: Moody's Investors Service

REPORT NUMBER 1109572

MOODY'S
INVESTORS SERVICE

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission

FR VII.19

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

19. Supply copies of all presentations by the Company's and, if applicable, its parent's management and securities analysts during the past 2 years, including presentations of financial projections.

Answer: For the Company's presentations please refer to the Investor Relations section of the American Water internet site (http://amwater.com). Click on "Presentations".

Regarding securities analysts' reports, please see the attachment. Note that these documents are confidential and proprietary and, accordingly, the attachment has been marked "CONFIDENTIAL AND PROPRIETARY". In addition, please note the following Research Report Disclaimer:

"The attached reports on American Water Works Company, Inc. included in this response represent the opinions of third-party companies. American Water neither endorses the material, nor undertakes an obligation to publicly update any subsequent distributions by these or other research companies."

The attachment contains the most recently-published security analyst reports relating to American Water Works that were available as of March 27, 2020. Due to the voluminous nature of providing all of the reports herein, the remaining analyst reports will be made available on request.

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The Company understands that, pursuant to 52 Pa, Code Section 5.423(b), the material provided in the sealed envelopes will not be disclosed pending the issuance of an order or other action by the Commission on the Company's request. The Company will, however, provide this information to a party to this proceeding pursuant to the execution of a suitable confidentiality agreement. This response contains confidential information which can be found in Volume 6d.

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission

FR VII.20

Pennsylvania-American Water Company
VII. Rate of Return

20. Please provide a listing of all securities issuances for the Company and, if applicable, its parent projected for the next two years. The response shall identify for each projected issuance date, dollar amount, type of security, and effective cost rate.

Answer:

Pennsylvania-American Water expects to utilize long-term debt placed through AWCC to meet its financing needs during the 2020-2022 period. Shown below are the planned long-term debt issuances for each year, based on the Company's projected capital investment.

Projected Long-Term Debt Issuances

Month/Year	Source	Amount	Rate	Term
May 2020	AWCC	$ 120,000,000	3.53%	30-Year
May 2021	AWCC	$ 130,000,000	3.56%	30-Year
May 2022	AWCC	$ 115,000,000	3.59%	30-Year

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission

FR VII.21

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

21. Please identify any plan by the Company to refinance high cost long-term debt or preferred stock.

Answer:

The Company currently has no plans to refinance long-term debt or preferred stock.

FR VII.22

Pennsylvania-American Water Company
VII. Rate of Return

22. Please provide copies of all securities analysts' reports relating to the Company and its parent, or both, issued within the past 2 years.

Answer:

Please see the Company's response to FR VII.19.

FR VII.23

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

23. If applicable, please supply a listing of all common equity infusions from the parent to the Company over the past five years. In each case, identify date and dollar amount.

Answer:

YEAR	AMOUNT ($000)	DATE
2019	$130,000	08/30/19
2018	$196,000	09/27/18
2017	$125,000	12/28/17
2016	$0	N/A
2015	$75,000	08/31/15

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Common Dividend Payments

FR VII.24

Pennsylvania-American Water Company
VII. Rate of Return

24. If applicable, please identify the Company's common dividend payments to its parent for each of the last five years.

Answer:

YEAR	AMOUNT ($000's)
2019	$132,600
2018	137,879
2017	116,489
2016	111,484
2015	108,121

FR VII.25

Pennsylvania-American Water Company
VII. Rate of Return

25. Provide the latest year-by-year financial projections for the Company for the next five years. Also, please indicate the date these projections were prepared; whether approved by management; and whether the projections have been submitted to bond rating agencies. The information will be treated in a confidential manner, if requested by the Company in writing, as set forth in 52 PA Code § 5.423.

Answer:

Below is the approved budget for 2020 and projections for 2021 through 2024 for the Company's water and wastewater operations.

DESCRIPTION	2020 (Thousands)	2021 (Thousands)	2022 (Thousands)	2023 (Thousands)	2024 (Thousands)
Revenues	$ 738,953	$ 798,150	$ 839,428	$ 880,595	$ 943,821
Operating & Maintenance Expense	227,260	244,669	252,392	261,352	269,736
Depreciation and Amortization	148,482	150,091	158,697	167,161	184,190
Taxes Other than Income	14,034	15,060	15,723	16,422	17,141
Income Taxes	81,334	78,237	83,564	88,923	104,484
Utility Operating Income	267,843	310,093	329,053	346,736	368,270
Income Deductions	67,659	72,867	75,047	79,540	84,804
Net Income to Common	$ 200,184	$ 237,226	$ 254,006	$ 267,197	$ 283,466

FR VII.26

Pennsylvania-American Water Company
VII. Rate of Return

26. Please provide the Company's five-year construction budget.

Answer: Below is the Company’s construction plan net of customer contributions and advances.

2020	$383,917,421
2021	339,470,199
2022	382,381,306
2023	397,098,974
2024	401,348,675

FR VII.27

Pennsylvania-American Water Company
VII. Rate of Return

27. Please identify the Company's and, if applicable, its parent's capital structure targets (percentages of capital types). Provide the complete basis for the capital structure targets.

Answer: Pennsylvania-American strives to maintain a common equity to total permanent capital ratio of approximately 55%. This target is based upon the goal to maintain a capital structure that will exhibit financial strength and stability to investors and credit rating agencies, support existing credit ratings, and provide the Company reasonable assurance of access to the debt and equity capital it requires to operate, at a reasonable cost.

The parent's capital structure targets are not applicable to the Company.

FR VII.28

Pennsylvania-American Water Company
VII. Rate of Return

28. For each month, of the most recent 24 months, please supply the Company's

a. Short-term debt balance;
b. Short-term debt interest rate;
c. Balance of construction work in progress; and
d. Balance of construction work in progress which is eligible for AFUDC accrual.

Answer:

a.-b.

	Short-Term Debt			
	2018		2019	
	Balance	Interest Rate	Balance	Interest Rate
Jan	$ 321,981,363	1.7339%	$ 77,148,346	2.8416%
Feb	318,218,863	1.7841%	78,513,158	2.8369%
Mar	349,839,955	2.0647%	118,045,485	2.8043%
Apr	341,172,526	2.3466%	117,950,368	2.7777%
May	403,483,711	2.3224%	1,685,547	2.7323%
June	405,780,050	2.3587%	23,865,693	2.6510%
July	455,336,793	2.3951%	19,747,974	2.5587%
Aug	143,528,385	2.3883%	(10,451)	2.3297%
Sept	16,538,215	2.3516%	552,722	2.2373%
Oct	7,272,577	2.3966%	54,144,591	2.1492%
Nov	(1,786,296)	2.5428%	63,469,057	1.9024%
Dec	76,419,576	2.7784%	114,723,817	1.8494%

c.

CWIP Balances

	2018 Balance	2019 Balance
Jan	$122,515,223	$ 59,029,984
Feb	127,736,699	60,417,706
Mar	138,605,411	63,362,806
Apr	155,135,595	68,407,589
May	173,180,281	78,311,603
Jun	190,392,570	97,296,364
Jul	202,488,385	112,166,162
Aug	222,654,544	112,402,301
Sep	238,077,820	142,608,841
Oct	253,240,385	153,671,597
Nov	251,797,990	95,868,628
Dec	54,514,920	87,251,946

d.

CWIP Eligible for AFUDC

	2018 Balance	2019 Balance
Jan	$ 104,229,667	$ 45,281,686
Feb	111,648,994	49,173,812
Mar	120,519,055	52,668,534
Apr	132,496,399	55,029,434
May	149,364,528	58,973,450
Jun	161,288,420	62,254,330
Jul	178,608,324	73,724,556
Aug	192,649,170	85,242,838
Sep	203,725,285	84,498,174
Oct	216,217,946	102,802,456
Nov	230,062,540	114,634,839
Dec	233,128,354	67,961,388

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission

FR VII.29

Pennsylvania-American Water Company
VII. Rate of Return

29. Fully identify all debt, other than instruments traded in public markets, owed to all shareholders, corporate officers, or members of the board of directors, its affiliates, parent company, or subsidiaries.

Answer: The debt owed to the Company's financing affiliate (AWCC) is listed below:

Inside Debt at December 31, 2019

Short-Term Debt - Inside

Description	Rate	Principal	Affiliate
Short-Term Notes Payable - AWCC *	Variable	$114,723,817	AWCC
Total Inside Short-term Debt		**$114,723,817**	

Long Term Debt - Inside

Description	Rate	Principal	Issued	Maturity	Affiliate
5.77% 14 Year LTD series	5.77%	45,135,000	1/31/2007	12/21/2021	AWCC
5.05% 26 Year LTD series	5.05%	50,500,000	11/21/2011	10/15/2037	AWCC
4.30% 30 Year LTD series	4.30%	45,000,000	12/17/2012	12/1/2042	AWCC
4.30% 30 Year LTD series	4.30%	23,015,000	12/21/2012	12/1/2042	AWCC
3.85% 10 Year LTD series	3.85%	67,000,000	11/20/2013	3/1/2024	AWCC
3.40% 10.5 Year LTD series	3.40%	36,200,000	8/14/2014	3/1/2025	AWCC
4.30% 28 Year LTD series	4.30%	65,700,000	8/14/2014	12/1/2042	AWCC
3.75% 30 Year LTD series	3.75%	240,000,000	8/10/2017	9/1/2047	AWCC
2.95% 10 Year LTD series	2.95%	101,426,171	9/13/2017	9/1/2027	AWCC
3.75% 10 Year LTD series	3.75%	74,739,360	8/9/2018	9/1/2028	AWCC
4.20% 30 Year LTD series	4.20%	227,489,000	8/9/2018	9/1/2048	AWCC
3.75% 10 Year LTD series	3.75%	124,719,875	9/11/2018	9/1/2028	AWCC
3.45% 10 Year LTD series	**3.45**%	**110,000,000**	**5**/23/2019	6/1/2029	AWCC

* Consists of outstanding commercial paper backed by revolving credit facility

FR VII.30

Pennsylvania-American Water Company
VII. Rate of Return

30. Provide a summary statement of all stock dividends, splits, or par value changes during the two (2) year calendar period preceding the rate case filing.

Answer:

Stock Dividends for American Water Works Company, Inc.:

	1Q	2Q	3Q	4Q	Total
Fiscal year ended December 31, 2018					
Dividends paid per common share	$0.415	$0.455	$0.455	$0.455	$1.780
Dividends declared per common share	0.000	0.455	0.455	0.910	1.820
Fiscal year ended December 31, 2019					
Dividends paid per common share	$0.455	$0.500	$0.500	$0.500	$1.955
Dividends declared per common share	0.000	0.500	0.500	1.000	2.000

There were no splits or par value changes in 2018 and 2019.

FR VII.31

Pennsylvania-American Water Company
<u>VII. Rate of Return</u>

31. If a claim of the filing utility is based on utilization of the capital structure or capital costs of the parent company and consolidated system, the reasons for this claim must be fully stated and supported.

Answer: Not applicable.

FR VII.32

Pennsylvania-American Water Company
VII. Rate of Return

32. To the extent not provided elsewhere, supply financial data of the Company and parent, if applicable, for the last five (5) years.

a. Times interest earned ratio--pre and post tax basis.
b. Preferred stock dividend coverage ratio--post tax basis.
c. Times fixed charges earned ratio--pre tax basis.
d. Dividend payout ratio.
e. AFUDC as a percent of earnings available for common equity.
f. Construction work in progress as a percent of net utility plant.
g. Effective income tax rate.
h. Internal cash generations as a percent of total capital requirements.

Answer: Please refer to Exhibit No. 13-A, which contains the schedules supporting the testimony of Ann E. Bulkley, the Company’s rate of return witness.

MFR Description

FR VIII. RATE STRUCTURE AND COST OF SERVICE

1 Cost of service study

2 Special rate contracts

Pennsylvania-American Water Company
<u>VIII. Cost of Service</u>

1. Provide a complete, fully allocated, cost of service study if an interval of three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water or wastewater rate structure is fair and equitable to all classifications of water or wastewater customers (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

    a. A description of the allocation methods used. A comparison of the allocated cost of service by class with the present and proposed revenues. A cost of service schedule showing the rate of return produced by present and proposed rates by class of service.

    b. Indicate if the method used for establishing the allocation factors in the cost of service study deviates from the previous study submitted in the last rate case. If yes, indicate which allocation factors were changed and discuss the reason for the changes.

    c. Supply the average day, the maximum day, and the maximum hour deliveries to the system adjusted for storage for the historic test year and two prior years. Also, provide workpapers, analyses, comparative data or other documentation supporting the estimated maximum day and peak hour demands by customer class reflected in the company's cost of service study.

    d. Explain thoroughly the methodology employed if the company distinguishes between transmission and distribution or collection mains in its allocation of costs.

    e. Provide a detailed explanation of how storage is utilized to meet base, maximum day and maximum hour demands.

    f. Provide workpapers, calculations and supporting documentation which develop the equivalent meters and equivalent service line weights reflected in the company's cost of service study.

g. Provide all workpapers and supporting documentation for the fire flow requirement and duration utilized in the cost of service study.

h. Provide a breakdown of the number and size of private fire services according to the general water service class of customer.

i. Provide a calculation of the company's base cost of water or wastewater per unit of consumption or usage.

j. Provide a detailed cost analysis that supports the company's customer charges, by meter size, showing all direct and indirect costs included.

2. Provide a listing of negotiated special rate contracts which includes a comparison of revenues under special rate contracts and under tariff rates. Provide the cost of service treatment of any deficiency in revenues resulting for the negotiated special rate contracts. Special rates are defined as rates not contained in the currently-effective tariff.

Answer:

Please refer to the direct testimony and accompanying exhibits of Constance E. Heppenstall (PAWC Statement No. 12) for the above filing requirements.

MFR Description

FR IX. QUALITY OF SERVICE

1 Violation of the PA Safe Drinking Water Act
2 Compliance with 52 Pa. Code
3 Service interruptions over 24 hours
4 Company policy of tracking and responding to customer complaints
5 Compliance with 52 Pa. Code regarding mapping of distribution system
6 Company efforts in water conservation summary
7 Company policy regarding meter requirements, replacements, and testing

FR IX.1

Pennsylvania-American Water Company
<u>IX. Quality of Service</u>

1. Indicate whether the Company is in violation of any provision of the Pennsylvania Safe Drinking Water Act (SDWA) or any rule, regulation or order, or any condition of any permit, variance or exemption granted by the Pennsylvania Department of Environmental Protection (PA-DEP), or its predecessor.

RESPONSE: Pennsylvania American Water Company is not in violation of any provision of the SDWA or any rule, regulation or order, or any condition of any permit, variance or exemption granted by the Pennsylvania Department of Environmental Protection (PA-DEP), or its predecessor.

a. Provide information indicating whether the Company is in compliance with SDWA provisions at 25 Pa. Code, §109.407 regarding general public notification requirements.

(i) Provide a copy of each public notification given in accordance with this section since the last rate proceeding.

RESPONSE: PAWC complies with all requirements of public notification as specified in the SDWA under 25 Pa. Code §109.407. PAWC provides notification to the public on main line breaks, hydrant shears, etc., where public health concerns dictate the issuance of a boil water advisory. PAWC has not attached individual copies of all notifications related to such events since 2017.

(ii) Provide a detailed explanation of all actions taken to remedy an acute violation, and/or to comply with the requirements prescribed by a variance or exemption.

RESPONSE: The Company had three safe drinking water violations pursuant to the PA Safe Drinking Water Act in 2019. The violations occurred in our Royersford, Glen Alsace, and Norristown systems. Only one violation was a treatment technique violation requiring a boil water advisory to the public. Only the Norristown monitoring violation will require public notification. That notification will be made with the Consumer Confidence Report (“CCR”) to be issued in May 2020.

(iii) State whether any fines or penalties were assessed by PA-DEP, and indicate the amounts paid by the Company.

RESPONSE: The Pa DEP did not assess any penalties or fines for these violations.

b. (i) Provide the most recent copies of all annual consumer confidence reports issued pursuant to the SDWA Amendments of 1996 during calendar year 2019.

RESPONSE: All 2019 CCR's are posted on the company's website at https://amwater.com/paaw/, under water quality reports. Individual systems can be located by utilizing the zip code of the water system. The 2020 CCR's are in the process of being completed and will be posted to the company website by the annual July 1st deadline. If a specific CCR is desired for any year prior to 2019, PAWC can produce that document upon request.

(ii) Provide any annual consumer confidence reports which reflect violations of state and Federal drinking water requirements.

RESPONSE: The 2019 CCR's for the Royersford and Norristown systems will include references to their associated violations. The violation which occurred in the Glen Alsace system will not be included in the Glen Alsace CCR because the notification was already provided.

(iii) Explain how these violations were resolved.

RESPONSE: The failure to collect a scheduled VOC sample in the Norristown system resulted in a monitoring violation which was corrected when the VOC sample was collected the following month. This monitoring issue was the result of an employee's failure to follow established sample scheduling procedures.

The Royersford system violation was the result of a failure to report chlorine values from an EPA Method 334 calibrated chorine analyzer. The chlorine analyzer was repaired and properly calibrated and the issue was corrected.

The safe drinking water violation which occurred in the Glen Alsace system occurred when a chlorine feed pump stopped working properly. The automated shut down parameters programmed into the chlorine analyzer were improperly set, allowing the chlorine values to drop without sending a plant shut-down signal to SCADA. SCADA alarms have since been re-programmed and all parameter set points were locked to ensure that no re-programming could occur without authorization.

Pennsylvania-American Water Company
IX. Quality of Service

2. Indicate whether the Company is in compliance with 52 Pa. Code, § 65.6(a) regarding normal operating pressure standards, with 52 Pa. Code, § 65.6 (d) regarding pressure surveys at regular intervals.

   a. Provide details on any water pressure problems, lasting longer than five days, which had occurred since the last rate proceeding in any part of the water transmission and distribution system.

   b. Describe any action taken on a temporary basis, and the long term solutions developed to address any water pressure problems.

Answer:

   a. In the McMurray District, Pennsylvania American Water has an area near the Lincoln Heights Tank where several customers had chronic low pressure. A project is on-going to install a new water main to put these customers on a higher gradient. The main replacement is part of a larger project and is anticipated to be in-service in 2020. In the Indiana District, PAWC has an area that experiences chronic high pressure. A new pressure reducing valve station is planned to bring this area within normal operating pressures in 2021.

   b. While not reaching the level specified in part a, above, water flow or pressure concerns were identified as a primary reason for approximately 36 waterline replacement or dead-end looping projects in the 2018 and 2019 DSIC cycles. These projects totaled approximately 45,000 linear feet.

FR IX.3
Pennsylvania-American Water Company
IX. Quality of Service

3. Provide support to demonstrate that water or wastewater service is being furnished on a continuous basis by supplying a summary of the Company's records of each service interruption greater than 24 hours since the last rate proceeding.

Answer:

Northeast Region

Lehman Pike District
3/3/18 – 3/4/18 (40 customers)
A winter storm hit eastern PA causing wide spread power outages. Road closures due to the storm delayed placing a mobile generator at the location. A generator was placed at the location on 3/4/18. A boil water advisory was issued.

Wilkes-Barre/Scranton

11/28/17 – 12/11/17 (1 customer)
An 18" water main broke along Route 29 near Harvey's Creek. An entire section of pipe was replaced under the creek which resulted in (1) customer being without water more than 24 hours.

7/14/18 – 7/16/18 (146 customers)
An 8" water main broke along Woodlawn Avenue in Mountain Top. A temporary main was used until repairs could be completed.

9/18/19 – 9/19/19 (1 customer)
A 24" water main broke on Sans Souci Parkway in a parking lot. Due to the main being 10 feet deep, repairs lasted longer than 24 hours.

1/25/2020 – 1/26/2020 (322 customers)
A 24" water main broke along St. Mary's Road in Ashley. The leak was promptly repaired.

Southwest Region

McMurray District
9/19/18 – 9/20/18 (approximately 400 customers)
Contractor working for PennDOT damaged the 20” transmission main on East McMurray RD. Customers in high points of Canonsburg and Cecil experienced low pressure/no water during this time as repairs were effected. Complaints filed with the PUC were mostly from Forest Dr/Lucia Dr in West Canonsburg.

2/12/19 – 2/27/19 (60 customers)
A 12” main line pulled apart by slide on Alamae Lakes Rd. Domestic service provided via a portable water buffalo while main line was relocated above slide area.

8/24/19 – 9/10/19 (20 customers)
A break on 6” plastic main in Hanover Township required new section of main to be relocated/installed. A temporary water station was provided by a until main line sampling passed DEP testing.

1/3/20 – 1/4/20 (approximately 1,760 customers affected; not all were without some service)
Main line leak repair on 24” transmission main located on RT19N in North Strabane Township. For contractor to effect repairs, shut down required additional valves being operated which widened the original area affected. Customers in North Strabane and Canonsburg experienced low pressure and highest elevations had no water until repairs were completed and main line filled and placed back in service.

Connellsville District
1/17/20 – 1/18/20 (4 customers)
The Springfield Pike area was without service due to the failure of a pressure-reducing valve. Water was temporarily supplied by a portable water buffalo.

Pittsburgh Region

11/13/18 – (30 customers)
A 30” main broke on Lock Joint Pipe along McNeilly Road in Pittsburgh. The leak was promptly repaired.

3/23/19 – (160 customers)
A 30” Ductile Iron main split along Thoms Run Road in Collier Township. A cut in valve was added during repairs to minimize impact to customers for future shut-down. A water buffalo was provided to provide temporary water service to customers.

4/20/19 – (171 customers)
A 24” water main broke along Washington Pike in Collier Township. Repairs were temporarily delayed due waiting for the electric company to shut power off so repairs could be done safely. The Company installed a 24’’ valve to minimize impact to

customers for future shutdown. A water buffalo was provided to provide temporary water service to customers.

9/21/19 – (30 customers)
A 24” Ductile Iron main broke causing outages to customers along Agnew Street. The leak was promptly repaired.

FR IX.4

Pennsylvania-American Water Company
<u>IX. Quality of Service</u>

4. Provide a discussion of the Company's policy, or provide a copy of the policy if in written form, on tracking and responding to customer complaints.

   a. Provide a summary report demonstrating the Company's compliance with 52 Pa. Code, §65.3 regarding the full and prompt investigation of service or facility complaints and the record keeping requirements of such complaints.

Answer:

a. Please see attached.

Introduction

The Pennsylvania Public Utility Commission has set specific guidelines for AW to resolve any customer dispute within 30 days from the creation of the original contact by obtaining verbal satisfaction, or issuing a Utility Company Report. If a dispute is not correctly identified it could result in the company being penalized with a justified infraction (violation). This type of infraction may potentially include the company paying fines. As CSRs, it is important that we properly identify a customer dispute and follow the dispute process to remain in compliance with PUC Regulations and to avoid infractions.

Objectives

After completing this training session, you will be able to complete the following objectives:

- Identify a customer's issue
- Resolve the issue, if possible
- Determine if the unresolved issue is a dispute
- Escalate the dispute if you cannot resolve it

Key Terms

- Public Utility Commission (PUC)
- ART (Account Resolution Team)
- Complaint
- Dispute
- Utility Company Report

What is a Dispute? - Pennsylvania Regulations

<u>Dispute</u>: A grievance of an applicant, ratepayer or occupant about a utility's application of a provision covered in this chapter, including subjects such as credit determinations, deposit requirements, the accuracy of meter readings or bill amounts, or the proper party to be charged. If, at the conclusion of an initial contact or, when applicable, a follow-up response, the applicant, ratepayer or occupant indicates satisfaction with the resulting resolution or explanation, the contact will not be considered a dispute.

With that being said:

The Pennsylvania Public Utility Commission regulations considers any contact made between American Water and its customers to be a dispute if; at the conclusion of a call, a Pennsylvania customer has not indicated satisfaction about the issue in question. Once a dispute is identified, we have 30 days to either obtain verbal satisfaction from the customer or send the customer a letter called a "Utility Company Report."

In order for us to resolve issues within the timeframe allowed by the Pennsylvania Regulations, we have outlined a process that will enable CSRs to successfully handle any situation that may arise.

The following points have been identified to guide CSRs in determining the best course of action based upon the issue presented by the customer:

1. Identify the issue that the customer has raised.
2. Resolve the customer's issue so that no dispute exists.
3. Identify special circumstances.
4. Follow up on unresolved issues that become disputes.
   - Place locks on accounts
   - Issue service orders when appropriate
   - Create BPEM cases when appropriate
   - Send CSC – Sup Emails when appropriate

Identifying a Potential Dispute

Any issue that you resolve with the customer over the phone and that customer expresses satisfaction with the resolution of their issue, is not considered to be a dispute. Your customer service skills may be all that is required. Remember that a conversation can go both ways. What you say and how you say it has a very strong influence on the customer's experience. The explanation of a process may at first not be what the customer wants to hear; however, after further discussion the customer fully understands our position and/or policy and it begins to make sense to him/her. Only when the customer does not express satisfaction with the resolution of the issue or the outcome of their contact with you, is there a dispute.

Note: If possible, we always want to resolve the customer’s issue on the first contact. If you are not able to resolve the customer’s issue and as a result you create a service order, BPEM case, send a Sup Email, and/or place locks on an account, the customer’s issue is **considered a dispute,** as resolution is pending based on follow up from other departments. In this case, <u>we consider the customer not satisfied</u>.

Below are some common examples of issues that CSRs routinely resolve on the first contact:

- A customer needed an extra day to pay their bill and they are concerned about getting charged a late fee. You realize that this is an ATP situation. To avoid the late fee and follow proper ATP procedures, you update ATP and offer an installment plan.
- A customer didn't understand the DSIC service charge on their bill. After the explanation the customer was satisfied.
- A customer calls to complain about a high bill. After asking probing questions, the customer realizes that they put new grass in their yard and the additional watering over the previous billing period caused the high bill. The customer understands why the bill is high, and is satisfied after setting up an installment plan.

If a dispute exists at the end of your call, you have the following options:

1. If required, issue a service order to resolve the customer's issue,
2. If required, create a BPEM case for another department to review and follow up on the customer's issue,
3. If required, send a CSC – Sup Email for local investigation or follow up,
4. If a bill or payment is in dispute, place a 30-day dunning lock on the account with the **Bill Inquiry/Dispute** reason**,** as well as a 30-day **Calculate Interest > Late Payment Charge** lock,

   - Or -
5. If none of the above options are applicable to the customer's issue, escalate the call to a Team Supervisor.

Once an issue has become a dispute, we have 30 days to attempt to resolve the issue to the customer's satisfaction. As CSRs, our objective is to identify disputes and forward them to the appropriate department. Other groups then follow up on each of these issues to reach resolution within 30 days.

Specific Example Circumstances

High Bill Complaints & Expansion Tanks

In the case where a customer is concerned about a high bill, launch the High Bill Script in SAP. The Script includes a reminder to ask the customer if they have an expansion tank and check valve installed in their home. Please use the table below to determine your course of action:

Situation	Do you have an expansion tank?	Do you have a check valve?	Take Action
Expansion Tank and Check Valve Present	Yes	Yes	Follow normal high bill process. **Remember**; offer the leak kit before issuing a service order.
Expansion Tank with **NO** Check Valve	Yes	No	Issue an ILK with S/O comments “Check for expansion tank and/or check valve.”
Expansion Tank and Check Valve UNKNOWN	Unknown	Unknown	Issue an ILK with S/O comments. “Check for expansion tank and/or check valve.”
NO Expansion Tank or a Check Valve	No	No	Follow normal high bill process. **Remember**; offer the leak kit before issuing a service order.

If the answers to the High Bill Script probing questions indicate that the high usage cannot be explained, we attempt to gain customer satisfaction by directing the customer to amwater.com to view the leak detection kit. If the customer is not willing to review the leak kit information, or if they have reviewed the leak kit information and investigated with no leaks found, the issue has become a dispute.

Ensure the High Bill Script has been completed and issue an ILK service order for field investigation. Place a 30-day dunning lock on the account with the **Bill Inquiry/Dispute** reason, as well as a 30-day **Calculate Interest > Late Payment Charge** lock. The Account Resolution Team has the responsibility to follow up on all ILK service orders and will attempt to resolve the customer’s issue.

****Note**:** Once the customer has been disconnected for non-payment, they can no longer dispute a high bill. However, if there are extenuating circumstances, escalate to a Team Supervisor.

Late Charges

If a customer is requesting credit for a late fee, follow normal process. CSRs have the authorization and ability to apply a credit for a late fee based on account research.

Estimated Reads

In the case where a customer refuses to pay a bill because the latest read has been estimated and the meter is read monthly, under the appropriate circumstances issue an RCE/REO service order depending on the meter location. In addition, place a 30-day dunning lock on the account with the **Bill Inquiry/Dispute** reason**,** as well as a 30-day **Calculate Interest > Late Payment Charge** lock and create a BPEM for ART to review the customer's issue.

Local Field Operations Issues (NSIs and Loss Control)

NSI requests, Loss Control issues complaints and inquiries, and low pressure issues should continue to be handled using the current processes.

- When a customer calls regarding follow-up of an existing problem that was supposed to be handled by Local Operations, send an LODS BPEM case.
- If a customer has called three (3) times regarding the same issue, escalate the request to your Team Supervisor via a Supervisor Follow-Up BPEM.

Local Field Operations Issues (Restoration and Water Quality)

Restoration and Water Quality complaints and inquiries and handled using the following process in PA.

For a <u>new</u> Restoration request:

- The CSR will complete the AW Restoration Notification and will advise the customer someone will be in contact with them within 3 business days.
- An Operations Specialist reviews all notifications created within the last 48 business hours on a daily basis.
- If a notification has no documentation and/or no indication of customer satisfaction, the Operations Specialist will reach out to the field and will contact the customer.
- If it has been more than 3 business days from the initial contact, the Operations Specialist will follow the account to complete the dispute process.

For a customer following up on an outstanding restoration notification (<u>no contact has been made within 3 business days, or customer has called 3 or more times</u>):

- Escalate the request to your Team Supervisor via a Supervisor Follow-Up BPEM.
- The Team Supervisor will escalate the issue to an Operations Specialist, who will contact the customer.

For a customer following up on an <u>Incomplete or unsatisfactory completion</u> of a Restoration or WQ issue:

- The CSR will create a notification that references the prior notification and will advise the customer that someone will be in contact with them within 3 business days.
- Escalate the request to your Team Supervisor and include the new notification number in the Supervisor Follow-Up BPEM case.

- The Team Supervisor will escalate the issue to an Operations Specialist, who will contact the customer.

Leak Adjustment Requests

If a customer is requesting a leak adjustment complete the following:

   - Use the CRM Leak Adjustment Tool to determine if the account is eligible for an adjustment on the highest consumption bill.

The CRM Leak Adjustment Tool should be used on every leak adjustment request in PA. The Tool is programmed with adjustment guidelines that have been provided by the State. In Pennsylvania, <u>there are no other considerations that can be taken into account</u> for a leak adjustment.

If a customer is unhappy with their denial or with the amount provided by the tool, provide the customer with the information on how the adjustment is calculated. Leak adjustments are provided as a courtesy to the customer, and are based on:

- ✓ Leak adjustment type
- ✓ Average consumption
- ✓ Calculation provided by the State (example: 40% or 50% of usage over the average consumption)

As part of Customer Obsession, use empathy and educate the customer on the "why" behind the company's position regarding their adjustment.

Do not send a BPEM case to the Account Resolution Team requesting an adjustment to be reviewed due to a denial or amount provided. The only BPEM cases ART should receive regarding this matter is if the customer would like to dispute this decision and the dispute requires information in writing via the Utility Company Report (UCR).

ATP – Negotiation Guidelines

If a customer is not satisfied with the options provided that are within the ATP Negotiation Guidelines, document "not satisfied" in the Interaction Record. As long as you provided correct options and made the proper documentation there is nothing else the company is required to do. ATP disputes follow a different PA Regulation than other disputes, such as billing, local field, or other disputes.

Common ATP disputes include: installment plan disputes, catch up amount disputes, disconnection/reconnection disputes, medical certificate eligibility.

Assessing Satisfaction

At the end of the call we are required to ask, **"Have I satisfied all your concerns today?"** We will continue to ask this question, because it is a requirement to document the customer's satisfaction (or lack thereof) in the Interaction Record comments. However, when dealing with a potential dispute, it is very important that we determine and document if the customer is satisfied with the <u>resolution of the issue</u>.

In a sense, one question is being asked to satisfy two different concepts:

1. the customer’s satisfaction with the way that you have treated them
2. the customer’s satisfaction with the resolution of the issue they have raised

Example: Customer says, “You were great, but I’m not satisfied that I still have this high bill”

This is considered a dispute, and your Interaction Record comments should indicate that the customer was not satisfied.

You should include in your Interaction Record comments: *Satisfied with information provided, not satisfied with open issue.*

As stated earlier, it is important that we recognize that the customer’s issue is **considered a dispute** if resolution of their issue is pending based on follow up from other departments. In this case, <u>we consider the customer not satisfied</u>, regardless of their satisfaction with the way you handled the call.

Understanding and properly documenting this in Interaction Record comments is very important in situations in which the customer contacts the PUC. If Interaction Record comments simply indicate “Satisfied” and the customer contacts the PUC with an unresolved issue, American Water is in violation of PUC Regulations.

Note: If the customer hangs up before satisfaction can be assessed, escalate to a Team Supervisor via a CS - Supervisor Follow up BPEM Case. Clearly note the reason for the customer’s call and that the customer disconnected the call prior to satisfaction being assessed.

Documenting Interaction Record Comments

When entering notes in your Interaction Record, it is important to include detailed notes about the customer's reason for calling, and what actions were taken to attempt to resolve the customer's issue. Additionally, as explained above, properly noting the assessment of customer satisfaction is a major component of IR comments.

In situations in which a customer raises a dispute, the following components must be included in your Interaction Record comments:

- What the customer is disputing/not happy with/what they called about
- What steps you took to resolve the issue (scheduled service order, created BPEM, sent email, placed locks), and that you discussed these actions with the customer
- That you explained to the customer that they are still responsible for their current bill, or if their current bill is in dispute that they are responsible for their current charges going forward
- Assessment of satisfaction

Due to the importance of having detailed notes for disputes, the following suggested template has been created. Whether or not this template is used, it is important to remember that the above components are required.

(Customer name) called about / is disputing: Actions taken to resolve the dispute (include if ATP was updated and the category): Advised customer that they are still responsible for (current bill) (current charges going forward) and offered payment. Satisfied with the information provided, not satisfied with open issue.

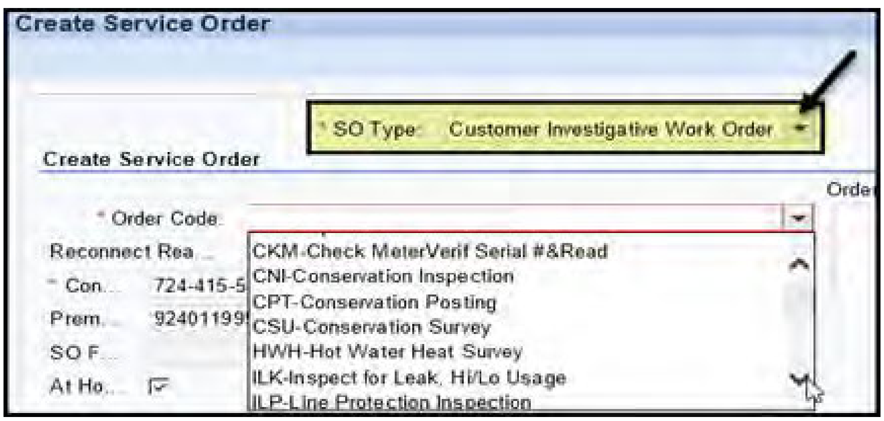
Follow up Survey

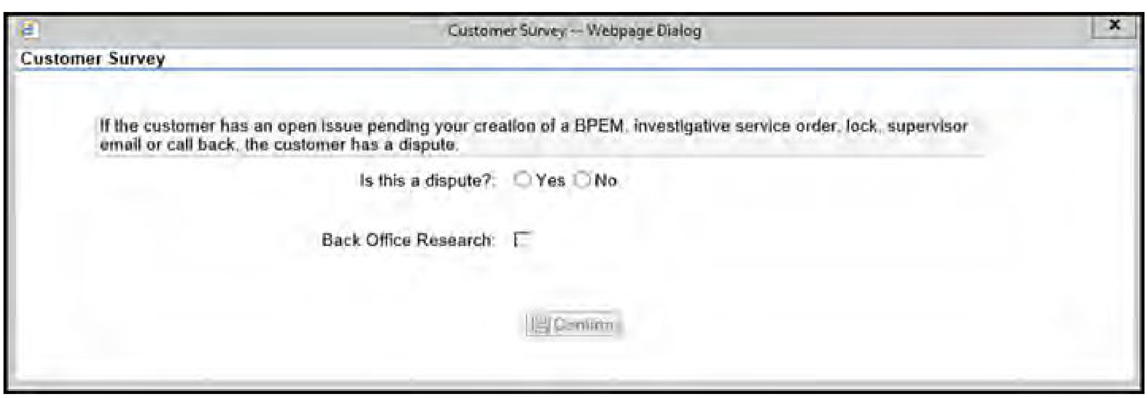
A survey is built in SAP to pop up when the **Save** button is clicked <u>after creating an Interaction Record</u>. This survey captures the reason the customer called to help ensure proper follow up is completed and to avoid unnecessary PUC complaints. This pop up will ensure a BPEM to PA Customer Advocacy is created and Dunning Locks are placed on the account. Customer Advocacy will follow up on customer disputes ensure timely resolution.

Note: **Assessing satisfaction at the end of a Pennsylvania call and documenting in interaction record comments is a requirement for all calls and has NOT changed with this enhancement.**

As you know, a dispute exists on a PA account if any one or more of the following actions are required/needed to move the account to resolution:

- BPEM was created
- Lock(s) entered
- Supervisor email or call back required/needed
- Investigative service order was generated (ILK, CKM, etc.)





See the table below for what actions occur depending on answers selected in the PA Survey:

If PA Survey is marked as noted below…	Then…
Is this a dispute? = **YES** Back Office Research = **blank**	• **PA State Customer Advocacy** BPEM Case automatically generates • A 30-day **Dunning > Bill Inquiry/Dispute** lock automatically generates • A 30-day **Calculate Interest > Late Payment Charge** lock automatically generates
Is this a dispute? = **NO** Back Office Research = **blank**	• BPEM case does not automatically generate • No lock(s) automatically generate
Back Office Research = **Check marked** **Back Office Research checkbox is to be utilized ONLY <u>when no customer contact (i.e. phone call) exists</u> and account research is required.** **Examples of research needed before a customer call back is made may be (but not all-inclusive):** • Collections Team review of Installment Plan/ATP history prior to creating an IP. • Supervisor accesses the account in CRM to review service order, BPEM case, and IR comments. • Contacting the FRCC for additional information and then updating the account with new details in an IR or service order. When Back Office Research is marked, no additional information is required in the PA Survey.	• BPEM case does not automatically generate • No lock(s) automatically generate

Handling Existing Disputes / BPEMs

If a customer has questions about an open BPEM, or wants to know status of an open BPEM:

1. Review the open BPEM for any updated information and provide the customer with any new information.
2. If no new information, inform the customer that the issue is being addressed and they will receive a letter with the decision.
3. If the customer still has questions about an open BPEM that is still within the 30 days and they request a callback, send a BPEM to CS – Account Resolution Team Follow up and include a good call back phone number where the customer can be reached between the hours of 8:00am-5:00pm CST, Monday-Friday.
4. If the BPEM is close to being 30 days old or is past 30 days, escalate the customer's issue to CS – Escalation Account Resolution Follow-Up BPEM.
5. If the customer is not satisfied, is very unsatisfied, or is irate, escalate the call to a Team Supervisor.

Utility Company Report

Whenever a customer initiates a dispute, we have 30 days to either satisfy the customer's concerns or send the customer a Utility Company Report. This report, (Correspondence letter), gives closure to the customer's issue and satisfies AW's requirements according to the Pennsylvania Regulations.

The Utility Company Report is generated by the ART Team; it is written on company letterhead that outlines the following:

- The customer's complaint
- AW's findings
- AW's position
- Information to the customer regarding the dispute

Since no two issues are identical, each Utility Company Report is unique in its composition.

Utility Company Reports are issued:

1. In situations where a customer does not verbally indicate satisfaction and satisfaction will not be reached per AW guidelines, policy, or procedures. The letter is sent within 30 days from the initial contact regarding the dispute.
2. In situations where a customer expresses verbal satisfaction with the resolution of the issue, but would like written documentation regarding the decision or results of the issue.

Please see an example of a Utility Company Report template on the next page.

Follow Up on a Utility Report

At the beginning of the call, if a Utility Company Report has already been sent to the customer regarding the issue, determine if any circumstances have changed, or if new circumstances have recently occurred. If this is the case, create a new BPEM to CS – Account Resolution Team Follow-Up with detailed notes about the change or new circumstances.

Customer Disputes the Utility Report Findings

If a customer has received a leak denial letter or a Utility Company Report and is not satisfied with the information in the report or has additional questions concerning the report:

- Send a BPEM to CS – Account Resolution Team Follow-Up and include notes on why the customer is not satisfied. Additionally, include a good call back phone number where the customer can be reached between the hours of 8:00am-5:00pm CST, Monday-Friday.

(Company Full Name)

(Company Address 1), (Company Address 2), (Company City) (Company State) (Company Zip)
(Company Phone)

(Mailing Address Name)
(Mailing Address 1)
(Mailing Address 2)
(Mailing City) (Mailing State) (Mailing Zip)

(Letter Date)

Account Number: (Cmp Id)-(Account Number)-(Check I
Premise Number: (Premise Number)
(Service Address 1)(Service Address 2)
(Service City) (Service State)

Utility Report

Transaction Date: (Variable Data)
Transaction Time: (Variable Data)
Caller Name: (Variable Data) CI Clerk: (Variable Data)

Complaint -

Findings -

Position -

Information To Customer -

* The amount currently outstanding on your account is $(Amount Owed). Your account will become delinquent on (Variable Data) unless you enter into a payment or settlement agreement, or you file an informal complaint with the (Public Utility Commission). No further action will be taken on your account until after this date.

Service will not be terminated pending completion of the dispute process including informal and formal complaints so long as there is compliance with all requirements of the commission. If the ratepayer does not agree with the contents of this report, he/she may file an informal complaint with the (Public Utility Commission) within 10 days from the date appearing above. The informal complaint may be filed by telephoning the commission at toll free (Variable Data) or writing to (Variable Data), (Variable Data).

* Company report issued on (Variable Data) and sent to (Mailing Address Name).

TMPNAME 000000001

Calls to the PUC and/or Lawyer

We want to make sure that we have done everything to resolve the customer's issue **before** the customer contacts the PUC. If you have a customer who informs you that they are going to call the PUC or requests the number to the PUC explain to the customer that we would like to attempt to resolve their issue before they contact the PUC.

If the customer is requesting the number to the PUC, escalate the call to a Supervisor. A Supervisor will attempt to resolve the customer's issue before they call the PUC. If the issue cannot be resolved, the Supervisor will provide the customer the number to the PUC.

In the Interaction Record comments, include the reason the customer wants to contact the PUC.

Determining Whether an Official PUC Complaint Exists

Whenever an official Commission complaint is made, the PA Compliance Team creates a BPEM Case Type CS-PUC Case to document the case.

BPEM Type	**CS – PUC Case**

The Interaction Record class and actions are used by both the PA Compliance Team and the CSC to document interactions with the customer regarding the PUC Case:

IR Class	IR Action
Complaints	Customer PUC Complaint
	Customer PUC Complaint – Mediation
	PUC Follow-Up / Invstgtn / Closure

Follow-Up

If a customer states they have a PUC Case or makes mention of the decision the PUC made on their behalf, be sure to review information in the BPEM case titled **CS – PUC Case** located in Account Overview > BPEMs, and the PUC Interaction Records. PA Compliance will have made notes in the BPEM. Read the notes carefully as there may be instructions on what to inform the customer if a call back is received. In all instances, **remain calm and professional if you see there is an open PUC complaint on the account.**

Making Updates to an Existing Open BPEM:

After viewing the BPEM and following the instructions, if a customer has a question or wants additional information on an existing complaint it is our job to forward the information to Compliance for follow up. **NEVER refer the customer back to the PUC regarding their complaint.**

At times, the customer contacts the CSC after filing a Commission complaint, and *asks for assistance on their issue*. Although the customer has filed a complaint, if you perform account research and determine that there is something we can do at the CSC to assist them, we should take appropriate actions to satisfy the customer. These situations do not occur often, but it is important to understand that once the customer contacts the Commission, we should not always take a "hands off" approach. If we should not offer assistance to the customer, Compliance will include this in the CS – PUC Case BPEM notes.

Suggested Scripting:
"I see you have contacted the Commission concerning your account. I will research your account to determine what we can do assist you."

Examples:

- If the customer's complaint is regarding an installment plan, and the customer is eligible for one, you can set the customer up on an installment plan based on their ATP category.
- If the customer's complaint is regarding a high bill, and we have not yet investigated via the High Bill Script, leak kit, and ILK order, complete the High Bill Complaint process with the customer.
- If the customer's complaint is regarding a restoration issue, and a Restoration Notification has not yet been created, create a notification.
- If there are situations that are not as clear-cut and involve extenuating circumstances, review with a Supervisor.
    - Ask the customer to hold while you perform account research. To enhance customer experience and to take ownership of the situation, do not advise that you are getting a Supervisor involved.
        - Discuss the situation with a Supervisor.
    - If you cannot locate a Supervisor, ask the customer if they would be willing to receive a call back after their account has been reviewed. Advise that they will be contacted within 24 hours. Send a Supervisor Follow-up BPEM case for your Supervisor to review the customer's issue.
        - Supervisors will call the customer back to discuss if any actions can be taken on their account to resolve their issue.

If we are able to assist the customer, we can advise the customer that they should contact the PUC back to withdraw their complaint.

Making Updates to an Existing Open PUC Case BPEM:

After viewing the BPEM and following the instructions, if a customer has a *question or wants additional information* on an existing complaint it is our job to forward the information to Compliance for follow up. **NEVER refer the customer back to the PUC regarding their complaint.**

Suggested Scripting:
"I see you have contacted the Commission concerning your account. At this time, I do not have any additional information to provide. What I can do to assist you is to forward your information to our AW internal contact."

If the customer’s situation is **urgent** (water is off; customer indicates the PUC has advised them of a decision and there are no notes in the CS – PUC Case BPEM):

1. Create a PUEC-PA-Compliance Follow Up BPEM with detailed notes regarding the customer’s question or request (this is for tracking purposes for the Compliance Team).
2. Ask your customer if they will hold while you perform further research on their account.
3. Contact a Team Supervisor, who will reach out to Compliance to determine what our next actions should be.
4. Complete any actions on the account as advised by Compliance.

Supervisors, you can reach out to: Nancy Smeltz, Todd Haslup, Laura Stolpe, Galen Shaner or Dawn Maynor

If the customer’s situation is **non-urgent** (water is on; customer following up on request for PUC Budget; customer has questions about change in their PUC Budget; etc.):

1. Create a PUEC-PA-Compliance Follow Up BPEM with detailed notes regarding the customer’s question or request. Include a contact telephone number for the customer to be reached.
2. A return call will be made within 3 business days. (They will try to get back to the customer on the same day if able).
3. Includes notes regarding the customer’s request in your Interaction Record comments.

PUC Complaints and Current Bill Terminations

If a customer calls the PUC with a complaint, the PA Compliance Team will place a lock on the account while the issue is being investigated. At that point, we will not be able to collect on the customer’s past due balance; however, the customer **is responsible** for charges from the date of the complaint.

When the customer logs their complaint with the PUC, they are made aware that they must pay their current charges. If the customer does not pay any new charges (since the date they filed the complaint), a termination notice will be sent. **The termination notice will only include charges incurred after the complaint was filed, and that amount is what should be quoted to the customer.**

If a customer calls asking what they need to pay to prevent termination or to restore service, offer to update ATP if it has been 30 days or more since the last update. The customer can decline ATP and if so create an RATP record. Advise the customer they must pay the amount on the notice. If the water is off, they must also pay the $30 reconnection fee. **DO NOT OFFER AN INSTALLMENT PLAN**. The customer is not eligible while they have an open PUC complaint.

Suggested scripting:

“Because you have an ongoing PUC case, we can only ask for the current charges due on your account as instructed to you by the PUC when you filed your complaint. Have there been any changes to your income and occupancy information since you called on --/--? (Review the information quickly with the customer. If the answer is no, proceed with the scripting. If the answer is yes, take the information and then proceed with the scripting). The amount required to prevent disruption of service is $_____. I can take that payment over the phone or I can provide you with a payment location, whichever you prefer."

AMERICAN WATER

PENNSYLVANIA –CUSTOMER ADVOCACY PROCESS

Introduction

When a customer or applicant contacts American Water with a question or concern, it is handled as an inquiry. In accordance with Pennsylvania Public Utility Commission regulations, Pennsylvania American Water has five days to resolve the inquiry and obtain customer satisfaction. If the company cannot obtain customer satisfaction, the inquiry becomes a dispute. If the time to obtain customer satisfaction exceeds five (calendar) days, the inquiry is considered a dispute.

The Pennsylvania Public Utility Commission has set specific regulations for PAW to resolve customer dispute within 30 days from the creation of the **original customer contact.** This would require verbal customer satisfaction or issuance of a Utility Company Report. Our goal is to process all customer dispute in less than 30 days of the original contact date of the customer.

The PA Customer Advocacy Team is involved with customer contact for Local Field Operations issues, Billing and Collection issues. Disputes pertaining to property restoration and high or low pressure are a few of the Local Field Operations issues handled by PA Customer Advocacy. Leak adjustment request are typically the leading customer dispute. PA Customer Advocacy is also involved in ensuring that commercial properties are receiving actual reads for billing purposes by contacting and scheduling orders to read or repair meter equipment.

Customer Communication Requirements

Once all activities related to the customer's inquiry/dispute have been completed, customer notification is **required.**

One or more attempts are made to reach the customer by phone to discuss the issue and obtain, as appropriate, customer satisfaction. If the Customer Advocacy is unsuccessful at reaching the customer, a message with the Customer Advocacy number is left for a return call.

If there is not a return call within 24 hours of the attempt, a Utility Company Report is created and mailed to the customer.

If contact is made with the customer, Customer Advocacy reviews the customer dispute and all pertinent details. The objective is to obtain verbal satisfaction from the customer on our findings and position or resolution on their dispute. An interaction record with the results of the conversation is required even if only a message is left for a call back.

Enhanced customer service skills are used to ensure a positive customer experience and outcome. The explanation of a policy may not be what the customer wants to hear, however, Customer Advocacy provide knowledgeable answers to customer questions and concerns and provide available options. Customer Advocacy explain first what the company can do for the customer and provide the background information on the reasons behind the decisions.

If the customer has a remaining balance after the dispute is resolved, an Installment Plan can be offered to pay off the remaining disputed balance.

AMERICAN WATER

PENNSYLVANIA –CUSTOMER ADVOCACY PROCESS

The key to successful resolution of a customer dispute is to listen to the customer and acknowledge that we understand their concerns. If Customer Advocacy is unable to satisfy the customer during the phone interaction and the customer continues to dispute the findings and position, Customer Advocacy would follow the escalated resolution process.

Escalated Resolution Process

If speaking with the customer, and they are still not satisfied with options/ adjustment/information we were able to provide, please follow the outline below:

- Review the account and determine if the correct information and actions were taken within the 30-day requirement.
- Was the average usage for this customer correct or is there other consideration that needs to be made regarding the average that was used.
- Offer a payment arrangement (Make a diligent attempt to negotiate a reasonable payment agreement-typical PAW arrangements are for current bill + $30, however, you should take into consideration: the size of the unpaid balance/high bill, the ability of the customer to pay, the payment history of the customer, the length of time over which the bill accumulated. No payment arrangement should go beyond 5 years.
- Review with the Customer Advocacy Supervisor if there is a question on if the complaint is justified.
- If customer is not satisfied with additional offers, complete the steps as outlined in 56.151 and advise that we will send written documentation (Utility Company Report). Attach the Utility Company Report to Contract Account
- Update all information regarding the conversation and company position in the BPEM case notes. Create an interaction record referencing the BPEM case number.

Utility Company Reports are issued:

1. In situations where a customer does not verbally indicate satisfaction and satisfaction will not be reached per American Water guidelines, policy, or procedures. The letter must be sent within 30 days from the **initial customer contact.**
2. In situations where a customer expresses verbal satisfaction with the resolution of the issue, but would like written documentation regarding the decision or results of the issue.

The 30-day timeline begins on the date of the **initial customer contact with customer service**. If the investigation is **not completed** within 30 days, the customer was not contacted, and verbal satisfaction was not obtained, it is considered out of compliance with the regulations for PA.

AMERICAN WATER

Pennsylvania –Customer Advocacy Process

Utility Company Report Process

This report gives closure to the customer's issue and satisfies American Water's requirements according to the Pennsylvania Regulations.

A Utility Company Report is either a letter that is generated by Customer Advocacy that outlines the following:

- The customer's complaint
- American Water's findings
- American Water's position
- Information to the customer regarding the dispute

Since no two issues are identical, each Utility Company Report (UR) is unique in its composition. In addition to the UCR, **a PUC regulation at 56 Pa Code 151.4 requires utility companies to provide a statement of their account that is in dispute.**

The most important part of the Utility Company Report is outlining the timeline that covers the customer's dispute. The start of the timeline is the date from the first contact (Example: call, correspondence, email, etc.) when the customer may have been only "inquiring" about the "issue." The Utility Report also needs to have an account statement included.

PUC Complaints - Informal 2019

	Cal. Month	Business Partner	BCS Case #	Premise Street	Premise City	Contract Account	District
1.1 Main Ext agreemnts							
1.2 Private srvc line							
	04/2019	[redacted]	3689568	[redacted]	South Park	210030648460	Pittsburgh
	07/2019	[redacted]	3718420	[redacted]	McDonald	BP #1202718836	McMurray
1.3 Damage due to const/rest							
	03/2019	[redacted]	3683951	[redacted]	Avoca	210031156339	Wilkes Barre/Scranton
	05/2019	[redacted]	3703892	[redacted]	Dickson City	210031221585	Wilkes Barre/Scranton
	07/2019	[redacted]	3715187	[redacted]	Homestead	210037054523	Pittsburgh
	07/2019	[redacted]	3717982	[redacted]	Yardley	210029713319	Yardley
	07/2019	[redacted]	3721286	[redacted]	Washington	220028577005	McMurray
	08/2019	[redacted]	3729839	[redacted]	Homestead	210034271824	Pittsburgh
	08/2019	[redacted]	3730159	[redacted]	Indiana	210036672577	Indiana
	09/2019	[redacted]	3736540	[redacted]	Yardley	210029221837	Yardley
	10/2019	[redacted]	3738553	[redacted]	New Cumberland	220026349365	Mechanicsburg
	10/2019	[redacted]	3744256	[redacted]	Moosic	210034829278	Wilkes Barre/Scranton
	10/2019	[redacted]	3741806	[redacted]	McKeesport	210033630215	Mon Valley
	10/2019	[redacted]	3743714	[redacted]	Pittsburgh	210030519746	Pittsburgh
	11/2019	[redacted]	3749548	[redacted]	Norristown	210029902270	Norristown
	12/2019	[redacted]	3753134	[redacted]	Pittsburgh	210035916045	Pittsburgh
1.4 Pressure							
	02/2019	[redacted]	3678508	[redacted]	Pittsburgh	210036771504	Pittsburgh
	04/2019	[redacted]	3688897	[redacted]	Washington	210030030144	McMurray
	04/2019	[redacted]	3691025	[redacted]	Wilkes Barre	210033605776	Wilkes Barre/Scranton
	06/2019	[redacted]	3707642	[redacted]	Connellsville	210034280033	Connellsville
	06/2019	[redacted]	3711465	[redacted]	Scranton	210028495816	Wilkes Barre/Scranton
	08/2019	[redacted]	3729708	[redacted]	Lawrence	220003975389	McMurray
	12/2019	[redacted]	3754413	[redacted]	Olyphant	220003836293	Wilkes Barre/Scranton
	12/2019	[redacted]	3754773	[redacted]	Scranton	210034299587	Wilkes Barre/Scranton
1.5 Water Qaulity							
	01/2019	[redacted]	3675092	[redacted]	Yardley	220009143661	Yardley Dist
	01/2019	[redacted]	3676051	[redacted]	Yardley	220012961247	Yardley Dist
	01/2019	[redacted]	3675500	[redacted]	West Mifflin	220011234140	Pittsburgh
	01/2019	[redacted]	3676359	[redacted]	Burgettstown	220026407889	McMurray
	03/2019	[redacted]	3682699	[redacted]	Yardley	210029217637	Yardley Dist
	04/2019	[redacted]	3691621	[redacted]	Carnegie	220001665907	Pittsburgh
	08/2019	[redacted]	3724892	[redacted]	Reading	210031867622	Glen Alsace
	12/2019	[redacted]	3754375	[redacted]	Tobyhanna	210032490063	Pocono

1.6 New service taps

05/2019	[redacted]	3701668	[redacted]	Dupont	220029036415	Wilkes Barre/Scranton
10/2019	[redacted]	3743606	[redacted]	Carbondale	210028378560	Wilkes Barre/Scranton

1.7 Leaking svc pipe -cust

01/2019	[redacted]	3674583	[redacted]	Norristown	210033489066	Norristown
01/2019	[redacted]	3675378	[redacted]	Uniontown	220012533918	Uniontown
01/2019	[redacted]	3675998	[redacted]	Yardley	210029116017	Yardley
01/2019	[redacted]	3676188	[redacted]	Limerick	220025061488	Royersford
01/2019	[redacted]	3676596	[redacted]	Canonsburg	210031839849	McMurray
02/2019	[redacted]	3679600	[redacted]	Plymouth	220016911725	Wilkes Barre/Scranton
03/2019	[redacted]	3680501	[redacted]	Uniontown	220010563722	Uniontown
03/2019	[redacted]	3682344	[redacted]	Pittsburgh	220014416521	Pittsburgh
03/2019	[redacted]	3684395	[redacted]	Washington	210034254416	McMurray
04/2019	[redacted]	3692128	[redacted]	Dingmans Ferry	220012444292	Hickory
05/2019	[redacted]	3697576	[redacted]	Scranton	210029458872	Wilkes Barre/Scranton
05/2019	[redacted]	3702123	[redacted]	Monongahela	210034256481	Mon Valley
05/2019	[redacted]	3704284	[redacted]	Coatesville	220022924351	Coatesville
06/2019	[redacted]	3708349	[redacted]	New Caslte	210032594064	New Castle
08/2019	[redacted]	3730371	[redacted]	Bushkill	210029363608	Lehman Pike
09/2019	[redacted]	3734039	[redacted]	Scranton	210034320276	Wilkes Barre/Scranton
10/2019	[redacted]	3741732	[redacted]	Pittsburgh	220014585816	Pittsburgh
10/2019	[redacted]	3744070	[redacted]	Scranton	210030739793	Wilkes Barre/Scranton
12/2019	[redacted]	3752188	[redacted]	Tobyhanna	210029008550	Pocono
12/2019	[redacted]	3754344	[redacted]	Bridgeville	220031307011	Pittsburgh
12/2019	[redacted]	3754512	[redacted]	Sandy Ridge	220031037282	Philipsburg
12/2019	[redacted]	3754784	[redacted]	Norristown	210033924613	Norristown
12/2019	[redacted]	3753765	[redacted]	Scranton	220015371126	Wilkes Barre/Scranton

1.8 Water main lks or brks

06/2019	[redacted]	3707062	[redacted]	Norristown	210034073174	Norristown
07/2019	[redacted]	3715440	[redacted]	Jefferson Hill	220009076884	Pittsburgh
07/2019	[redacted]	3716866	[redacted]	Washington	210033715178	McMurray
07/2019	[redacted]	3717771	[redacted]	Pittsburgh	210033114317	Pittsburgh
08/2019	[redacted]	3724490	[redacted]	New Castle	210036330620	New Castle
11/2019	[redacted]	3746288	[redacted]	Scranton	210036012397	Wilkes Barre/Scranton
12/2019	[redacted]	3752723	[redacted]	Dravosburg	220025002243	Mon Valley
12/2019	[redacted]	3754692	[redacted]	Pittsburgh	220009694633	Pittsburgh

1.9 Frozen svc line

1.10 Air in lines

1.11 No water calls

01/2019	[redacted]	3675760	[redacted]	Howard	210031780022	Nittany
09/2019	[redacted]	3732168	[redacted]	Camp Hill	220028616917	Mechanicsburg
10/2019	[redacted]	3743030	[redacted]	MRdhall	220006049876	Pittsburgh

1.12 Misc - Dist comp

01/2019	[redacted]	3674532	[redacted]	Coatesville	210030675875	Coatesville
02/2019	[redacted]	3677578	[redacted]	Nanticoke	210031285770	Wilkes Barre/Scranton
02/2019	[redacted]	3677911	[redacted]	Blue Bell	210030634164	Norristown
04/2019	[redacted]	3695695	[redacted]	West Mifflin	210036298443	Pittsburgh
05/2019	[redacted]	3705881	[redacted]	Norristown	220018659337	Norristown
08/2019	[redacted]	3729904	[redacted]	Pittsburgh	210036940799	Pittsburgh
09/2019	[redacted]	3735295	[redacted]	West Mifflin	210036546128	Pittsburgh
10/2019	[redacted]	3738233	[redacted]	Bethel Park	210036277767	Pittsburgh
12/2019	[redacted]	3753319	[redacted]	Old Forge	220026208815	Wilkes Barre/Scranton

2.1 1 svc line sprte mtrs

10/2019	[redacted]	3741751	[redacted]	Nazareth	220019497358	Blue Mountain

2.2 Discontinuance t/l

08/2019	[redacted]	3723612	[redacted]	Port Vue	210039595761	McKeesport

2.3 T/L terminations

2.4 Act 54

07/2019	[redacted]	3717351	[redacted]	Moutain Top	210036612032	Wilkes Barre/Scranton
10/2019	[redacted]	3738946	[redacted]	McKeesport	220023161535	McKeesport
12/2019	[redacted]	3753776	[redacted]	Scranton	210035062139	Wilkes Barre/Scranton

3.1 Can't get through

09/2019	[redacted]	3731231	[redacted]	Dunmore	220019740526	Wilkes Barre/Scranton

3.2 Put on hold + cut off

3.3 Did not call back

03/2019	[redacted]	3684089	[redacted]	Scranton	220017713658	Wilkes Barre/Scranton
06/2019	[redacted]	3712310	[redacted]	Lawrence	220029211544	McMurray
07/2019	[redacted]	3717957	[redacted]	Homestead	220011688402	Pittsburgh

3.4 Didn't show up for appt

06/2019	[redacted]	3708208	[redacted]	McDonald	210038740469	McMurray
10/2019	[redacted]	3743270	[redacted]	Dunmore	220031139607	Wilkes Barre/Scranton
11/2019	[redacted]	3750333	[redacted]	Dingmans Ferry	220031610571	Hickory

3.5 Failure to recv bill + ntc

01/2019	[redacted]	3675126	[redacted]	Washington	220004874090	McMurray
02/2019	[redacted]	3680089	[redacted]	Edwardsville	220026459170	Wilkes Barre/Scranton
03/2019	[redacted]	3681873	[redacted]	Inkerman	220024306621	Wilkes Barre/Scranton
05/2019	[redacted]	3699537	[redacted]	Palmyra	220025753954	Hershey/Palmyra
05/2019	[redacted]	3701583	[redacted]	Shippenville	220005333370	Clarion
09/2019	[redacted]	3737457	[redacted]	Wilkes Barre	220020786195	Wilkes Barre/Scranton

3.6 Term w/additional comp

01/2019	[redacted]	3676652	[redacted]	Hopwood	220023126990	Uniontown
02/2019	[redacted]	3678122	[redacted]	Bridgeville	220010901102	McMurray
04/2019	[redacted]	3686059	[redacted]	Wilkes Barre	220011669104	Wilkes Barre/Scranton
05/2019	[redacted]	3699918	[redacted]	Washington	220024051273	McMurray
06/2019	[redacted]	3711868	[redacted]	Tobyhanna	220028047979	Pocono
07/2019	[redacted]	3718617	[redacted]	Tobyhanna	210034924821	Pocono
07/2019	[redacted]	3715213	[redacted]	East Stroudsburg	220026281803	Lehman Pike
07/2019	[redacted]	3715984	[redacted]	Coatesville	210032081452	Coatesville
08/2019	[redacted]	3727856	[redacted]	New Castle	210035591453	New Castle
08/2019	[redacted]	3726411	[redacted]	West Elizabeth	210032512550	Mon Valley
08/2019	[redacted]	3730763	[redacted]	Pittsburgh	210035587218	Pittsburgh
09/2019	[redacted]	3733024	[redacted]	Butler	220005368208	Butler
10/2019	[redacted]	3741892	[redacted]	Bushkill	210030953384	Lehman Pike
10/2019	[redacted]	3745951	[redacted]	Tobyhanna	210029767484	Pocono

3.7 Co Personnel impolite

09/2019	[redacted]	3733366	[redacted]	Pittsburgh	210029521039	Pittsburgh
10/2019	[redacted]	3738819	[redacted]	Scranton	210034651086	Wilkes Barre/Scranton

3.8 Miscellaneous

02/2019	[redacted]	3677661	[redacted]	West Wyoming	210030779524	Wilkes Barre/Scranton
03/2019	[redacted]	3680487	[redacted]	Pittsburgh	210030633635	Pittsburgh
03/2019	[redacted]	3681872	[redacted]	Carbondale	220026285171	Wilkes Barre/Scranton
03/2019	[redacted]	3683094	[redacted]	Pittsburgh	220006280387	Pittsburgh
03/2019	[redacted]	3683526	[redacted]	Saxonburg	210033654129	Butler
03/2019	[redacted]	3684522	[redacted]	Archbald	210028935000	Wilkes Barre/Scranton
04/2019	[redacted]	3660672	[redacted]	Homestead	210031466579	Pittsburgh
04/2019	[redacted]	3688940	[redacted]	Koppel	210032794437	Ellwood
04/2019	[redacted]	3694201	[redacted]	Pittsburgh	220021341465	Pittsburgh
05/2019	[redacted]	3701577	[redacted]	Exeter	220024173197	Wilkes Barre/Scranton

05/2019	[redacted]	3704513	[redacted]	Scranton	210034794761	Wilkes Barre/Scranton
06/2019	[redacted]	3707942	[redacted]	Pittsburgh	210035689527	Pittsburgh
07/2019	[redacted]	3717258	[redacted]	Burgettstown	210032699082	McMurray
07/2019	[redacted]	3719606	[redacted]	McKeesport	210039678727	McKeesport
07/2019	[redacted]	3719742	[redacted]	Bridgeport	210029782179	Norristown
07/2019	[redacted]	3720039	[redacted]	Norristown	220026168429	Norristown
08/2019	[redacted]	3722393	[redacted]	Frackville	210036017170	Frackville
09/2019	[redacted]	3733840	[redacted]	Simpson	210035184848	Wilkes Barre/Scranton
09/2019	[redacted]	3734479	[redacted]	Camp Hill	210036434690	Mechanicsburg
09/2019	[redacted]	3735457	[redacted]	Munhall	210032310662	Pittsburgh
10/2019	[redacted]	3739540	[redacted]	Pittsburgh	210032396871	Pittsburgh
10/2019	[redacted]	3740572	[redacted]	Pittsburgh	210034880556	Pittsburgh
10/2019	[redacted]	3745474	[redacted]	Norristown	220002326427	Norristown
11/2019	[redacted]	3750592	[redacted]	Parkesburg	210030179445	Coatesville
12/2019	[redacted]	3754667	[redacted]	Washington	220026424730	McMurray

4.1 High Rates

01/2019	[redacted]	3675544	[redacted]	Clarion	210033388088	Clarion
08/2019	[redacted]	3728769	[redacted]	New Castle	BP #1202924396	New Castle

4.2 Final Bill errors

01/2019	[redacted]	3676199	[redacted]	Glen Lyon	210036042800	Wilkes Barre/Scranton
02/2019	[redacted]	3679434	[redacted]	Forty Fort	220015949420	Wilkes Barre/Scranton
02/2019	[redacted]	3677812	[redacted]	Ellwood City	220016967445	Ellwood
03/2019	[redacted]	3683778	[redacted]	Camp Hill	220018966943	Mechanicsburg
04/2019	[redacted]	3687901	[redacted]	Jessup	220005811047	Wilkes Barre/Scranton
04/2019	[redacted]	3695078	[redacted]	Old Forge	220015865706	Wilkes Barre/Scranton
05/2019	[redacted]	3706660	[redacted]	Pittsurgh	220021276189	Pittsburgh
08/2019	[redacted]	3726546	[redacted]	Monongahela	220029595006	Mon Valley
08/2019	[redacted]	3728277	[redacted]	Berwick	220020960986	Berwick
10/2019	[redacted]	3741810	[redacted]	Pittston	210031978348	Wilkes Barre/Scranton
10/2019	[redacted]	3744906	[redacted]	Scranton	220007344796	Wilkes Barre/Scranton

4.3 Crdtng pymnts incorrectly

01/2019	[redacted]	3675454	[redacted]	Susquehanna	210031280270	Susquehanna
01/2019	[redacted]	3676418	[redacted]	Norristown	220014103214	Norristown
01/2019	[redacted]	3676930	[redacted]	Pittston	220023328093	Wilkes Barre/Scranton
03/2019	[redacted]	3681423	[redacted]	West Mifflin	220008739632	Pittsburgh
05/2019	[redacted]	3697866	[redacted]	Carnegie	220007486409	Pittsburgh
08/2019	[redacted]	3723121	[redacted]	Bridgeville	210030447216	McMurray
08/2019	[redacted]	3727009	[redacted]	Butler	220027066083	Butler

4.4 High bills

01/2019	[redacted]	3674046	[redacted]	Lake Heritage	210030766320	Lake Heritage
01/2019	[redacted]	3674499	[redacted]	Berwick	220024622835	Berwick
01/2019	[redacted]	3674567	[redacted]	Dingmans Ferry	210032766197	Hickory
01/2019	[redacted]	3674616	[redacted]	Scranton	220025706293	Wilkes Barre/Scranton
01/2019	[redacted]	3675202	[redacted]	Yardley	210034922870	Yardley
01/2019	[redacted]	3675213	[redacted]	Hanover Twp	220013082536	Wilkes Barre/Scranton
01/2019	[redacted]	3676632	[redacted]	New Castle	220021714209	New Castle
01/2019	[redacted]	3676928	[redacted]	Norristown	210039197563	Norristown
01/2019	[redacted]	3675050	[redacted]	Exeter	210033112922	Wilkes Barre/Scranton
01/2019	[redacted]	3675289	[redacted]	Pittsburgh	210030881519	Pittsburgh
01/2019	[redacted]	3675356	[redacted]	Avoca	210033083765	Wilkes Barre/Scranton
01/2019	[redacted]	3675759	[redacted]	Mountain Top	220020164290	Wilkes Barre/Scranton
01/2019	[redacted]	3675839	[redacted]	Hanover Twp	220026891408	Wilkes Barre/Scranton
01/2019	[redacted]	3675859	[redacted]	Pen Argyl	220016892374	Blue Mountain
01/2019	[redacted]	3676207	[redacted]	Butler	210030205351	Butler
01/2019	[redacted]	3676232	[redacted]	Limerick	210029528610	Royersford
01/2019	[redacted]	3676547	[redacted]	Scranton	210035558920	Wilkes Barre/Scranton
01/2019	[redacted]	3676599	[redacted]	Scranton	210039006438	Wilkes Barre/Scranton
01/2019	[redacted]	3676880	[redacted]	Tobyhanna	210034182511	Pocono
02/2019	[redacted]	3677760	[redacted]	McDonald	220010907629	Pittsburgh
02/2019	[redacted]	3679469	[redacted]	Scranton	220023514962	Wilkes Barre/Scranton
02/2019	[redacted]	3679494	[redacted]	Scranton	220006180180	Wilkes Barre/Scranton
02/2019	[redacted]	3679511	[redacted]	Ashley	210036323516	Wilkes Barre/Scranton
02/2019	[redacted]	3678025	[redacted]	Bushkill	210029686981	Lehman Pike
02/2019	[redacted]	3680083	[redacted]	Yardley	220015837992	Yardley
03/2019	[redacted]	3680427	[redacted]	Wilkes Barre	220016927669	Wilkes Barre/Scranton
03/2019	[redacted]	3680832	[redacted]	Wilkes Barre	220008066303	Wilkes Barre/Scranton
03/2019	[redacted]	3680852	[redacted]	Wilkes Barre	220012996298	Wilkes Barre/Scranton
03/2019	[redacted]	3680984	[redacted]	Daisytown	220001739044	Brownsville
03/2019	[redacted]	3681643	[redacted]	Olyphant	220007981263	Wilkes Barre/Scranton
03/2019	[redacted]	3681961	[redacted]	Nanticoke	220025734304	Wilkes Barre/Scranton
03/2019	[redacted]	3681989	[redacted]	Wilkes Barre	210031553596	Wilkes Barre/Scranton
03/2019	[redacted]	3682018	[redacted]	Phoenixville	210029572273	Royersford
03/2019	[redacted]	3682539	[redacted]	Pittston	220011040482	Wilkes Barre/Scranton
03/2019	[redacted]	3682557	[redacted]	Osceola Mills	210037183797	Philipsburg
03/2019	[redacted]	3683274	[redacted]	Pittsburgh	210034940342	Pittsburgh
03/2019	[redacted]	3684233	[redacted]	Tobyhanna	220025833157	Pocono
03/2019	[redacted]	3685453	[redacted]	Nanticoke	210030310949	Wilkes Barre/Scranton
03/2019	[redacted]	3680598	[redacted]	Wilkes Barre	210031272200	Wilkes Barre/Scranton

03/2019	[redacted]	3681644	[redacted]	Reading	220024699378	Glen Alsace
03/2019	[redacted]	3682216	[redacted]	Blue Bell	210033705577	Norristown
03/2019	[redacted]	3682878	[redacted]	Yardley	210030907824	Yardley
03/2019	[redacted]	3684459	[redacted]	Uniontown	220021209400	Uniontown
03/2019	[redacted]	3685197	[redacted]	Scranton	220025706187	Wilkes Barre/Scranton
04/2019	[redacted]	3687260	[redacted]	Whitaker	220016408373	Pittsburgh
04/2019	[redacted]	3688631	[redacted]	Tobyhanna	220025220348	Pocono
04/2019	[redacted]	3689492	[redacted]	Scranton	210032999423	Wilkes Barre/Scranton
04/2019	[redacted]	3690000	[redacted]	Plains	210033002445	Wilkes Barre/Scranton
04/2019	[redacted]	3690547	[redacted]	Douglassville	220020743549	Glen Alsace
04/2019	[redacted]	3690577	[redacted]	Scranton	210028188279	Wilkes Barre/Scranton
04/2019	[redacted]	3691561	[redacted]	Brownsville	220027368277	Brownsville
04/2019	[redacted]	3691660	[redacted]	Grindstone	220024397344	Brownsville
04/2019	[redacted]	3697070	[redacted]	Allison	220021364031	Brownsville
04/2019	[redacted]	3697491	[redacted]	Monongahela	220013211907	Mon Valley
04/2019	[redacted]	3694669	[redacted]	Pittsburgh	210032665297	Pittsburgh
05/2019	[redacted]	3698298	[redacted]	Coatesville	210032372554	Coatesville
05/2019	[redacted]	3698771	[redacted]	Wilkes Barre	220027262485	Wilkes Barre/Scranton
05/2019	[redacted]	3699433	[redacted]	Moosic	210034368094	Wilkes Barre/Scranton
05/2019	[redacted]	3700156	[redacted]	Coatesville	220018603778	Coatesville
05/2019	[redacted]	3701122	[redacted]	Carbondale	220028067423	Wilkes Barre/Scranton
05/2019	[redacted]	3701424	[redacted]	Scranton	210034279521	Wilkes Barre/Scranton
05/2019	[redacted]	3702873	[redacted]	Monongahela	220009679900	Mon Valley
05/2019	[redacted]	3704953	[redacted]	Coatesville	220006765055	Coatesville
05/2019	[redacted]	3702012	[redacted]	Camp Hill	210036062606	Mechanicsburg
05/2019	[redacted]	3704467	[redacted]	Pittsburgh	210031794946	Pittsburgh
05/2019	[redacted]	3705842	[redacted]	Cannonsburg	220024838869	McMurray
06/2019	[redacted]	3706926	[redacted]	Wilkes Barre	210033892006	Wilkes Barre/Scranton
06/2019	[redacted]	3707580	[redacted]	Zelienople	220028395333	Ellwood
06/2019	[redacted]	3707943	[redacted]	Bridgeport	210033626087	Norristown
06/2019	[redacted]	3712238	[redacted]	Cannonsburg	210031087112	McMurray
06/2019	[redacted]	3712527	[redacted]	Pittsburgh	210038664886	Pittsburgh
06/2019	[redacted]	3713275	[redacted]	Wilkes Barre	220012872484	Wilkes Barre/Scranton
06/2019	[redacted]	3713310	[redacted]	Shickshinny	210031252015	Wilkes Barre/Scranton
06/2019	[redacted]	3713326	[redacted]	Dingmans Ferry	220019830665	Silver
06/2019	[redacted]	3713665	[redacted]	Scranton	210032238852	Wilkes Barre/Scranton
06/2019	[redacted]	3714354	[redacted]	Norristown	220029051728	Norristown
07/2019	[redacted]	3715065	[redacted]	Bushkill	210029152303	Lehman Pike
07/2019	[redacted]	3716636	[redacted]	Jermyn	210031723876	Wilkes Barre/Scranton
07/2019	[redacted]	3717081	[redacted]	Scranton	220026485537	Wilkes Barre/Scranton
07/2019	[redacted]	3717676	[redacted]	Plains	220017576491	Wilkes Barre/Scranton
07/2019	[redacted]	3717777	[redacted]	Pittsburgh	210032370787	Pittsburgh
07/2019	[redacted]	3719545	[redacted]	Nanticoke	220018202885	Wilkes Barre/Scranton
07/2019	[redacted]	3720676	[redacted]	Mechanicsburg	220014909931	Mechanicsburg
07/2019	[redacted]	3721697	[redacted]	Royersford	220028916716	Royersford
07/2019	[redacted]	3721950	[redacted]	Pittsburgh	210036639150	Pittsburgh
07/2019	[redacted]	3719947	[redacted]	Scranton	210032703509	Wilkes Barre/Scranton
07/2019	[redacted]	3720542	[redacted]	Washington	210029208299	McMurray
07/2019	[redacted]	3720691	[redacted]	New Cumberland	210032272487	Mechanicsburg
08/2019	[redacted]	3722977	[redacted]	Finleyville	210031771059	Mon Valley
08/2019	[redacted]	3723325	[redacted]	Eagleville	210035362433	Norristown
08/2019	[redacted]	3724822	[redacted]	Coatesville	220023893634	Coatesville
08/2019	[redacted]	3725788	[redacted]	Lewisburg	220027245107	Milton
08/2019	[redacted]	3725861	[redacted]	Washington	220018791170	McMurray
08/2019	[redacted]	3725829	[redacted]	Pocono Summit	210030260198	Pocono
08/2019	[redacted]	3725838	[redacted]	Scranton	210030997933	Wilkes Barre/Scranton
08/2019	[redacted]	3727849	[redacted]	West Mifflin	220011265038	Pittsburgh
08/2019	[redacted]	3728572	[redacted]	Scranton	220027905829	Wilkes Barre/Scranton
08/2019	[redacted]	3728745	[redacted]	Scranton	210031710092	Wilkes Barre/Scranton
08/2019	[redacted]	3729696	[redacted]	Houston	220022604091	McMurray
08/2019	[redacted]	3730315	[redacted]	Old Forge	210031469561	Wilkes Barre/Scranton
08/2019	[redacted]	3730747	[redacted]	Warren	210030639305	Warren
09/2019	[redacted]	3731427	[redacted]	Wilkes Barre	220024366364	Wilkes Barre/Scranton
09/2019	[redacted]	3731686	[redacted]	Finleyville	220011002886	Mon Valley
09/2019	[redacted]	3732158	[redacted]	Pittsburgh	220029344215	Pittsburgh
09/2019	[redacted]	3732840	[redacted]	Clarion	220010704233	Clarion
09/2019	[redacted]	3733182	[redacted]	Eagleville	210034717429	Norristown
09/2019	[redacted]	3733881	[redacted]	Clairton	220003558913	Mon Valley
09/2019	[redacted]	3733857	[redacted]	Plymouth	220002670261	Wilkes Barre/Scranton
09/2019	[redacted]	3735800	[redacted]	Jessup	220008667881	Wilkes Barre/Scranton

09/2019	[redacted]	3736863	[redacted]	Dingmans Ferry	220023324015	Hickory
09/2019	[redacted]	3737558	[redacted]	Duquesne	220023073287	McKeesport
09/2019	[redacted]	3733880	[redacted]	Pittsburgh	220002633149	Pittsburgh
09/2019	[redacted]	3734477	[redacted]	Frackville	210036158019	Frackville
09/2019	[redacted]	3735337	[redacted]	Coatesville	220026498410	Coatesville
09/2019	[redacted]	3737458	[redacted]	Bushkill	220023336568	Lehman Pike
10/2019	[redacted]	3738083	[redacted]	Kingston	210035772597	Wilkes Barre/Scranton
10/2019	[redacted]	3739059	[redacted]	Washington	210031862115	McMurray
10/2019	[redacted]	3740155	[redacted]	Pittsburgh	210030106003	Pittsburgh
10/2019	[redacted]	3741809	[redacted]	Pittston	220019105420	Wilkes Barre/Scranton
10/2019	[redacted]	3741856	[redacted]	Punxsutawney	220023673137	Punxsutawney
10/2019	[redacted]	3743268	[redacted]	Hershey	220021397772	Hershey/Palmyra
10/2019	[redacted]	3744378	[redacted]	Wilkes Barre	210034462743	Wilkes Barre/Scranton
10/2019	[redacted]	3744111	[redacted]	Dunmore	210036388995	Wilkes Barre/Scranton
10/2019	[redacted]	3745822	[redacted]	Norristown	220018668294	Norristown
11/2019	[redacted]	3746320	[redacted]	Reading	220027619180	Glen Alsace
11/2019	[redacted]	3746504	[redacted]	Canonsburg	220019401708	McMurray
11/2019	[redacted]	3746894	[redacted]	Plains	220013355333	Wilkes Barre/Scranton
11/2019	[redacted]	3747106	[redacted]	Pittsburgh	210037000779	Pittsburgh
11/2019	[redacted]	3747969	[redacted]	Avoca	210034396044	Wilkes Barre/Scranton
11/2019	[redacted]	3748662	[redacted]	Mountain Top	220006125206	Wilkes Barre/Scranton
11/2019	[redacted]	3749010	[redacted]	Nanticoke	210031043983	Wilkes Barre/Scranton
11/2019	[redacted]	3749198	[redacted]	Coatesville	210030675875	Coatesville
11/2019	[redacted]	3749790	[redacted]	Dunmore	210034829179	Wilkes Barre/Scranton
11/2019	[redacted]	3749814	[redacted]	Pittsburgh	210032194655	Pittsburgh
11/2019	[redacted]	3750185	[redacted]	Nanticoke	220010596326	Wilkes Barre/Scranton
11/2019	[redacted]	3750251	[redacted]	Wilkes Barre	210034837163	Wilkes Barre/Scranton
11/2019	[redacted]	3750826	[redacted]	Reading	220020993153	Glen Alsace
11/2019	[redacted]	3751263	[redacted]	Pittsburgh	220027556616	Pittsburgh
11/2019	[redacted]	3751788	[redacted]	Norristown	220019501561	Norristown
11/2019	[redacted]	3752044	[redacted]	Scranton	220028059316	Wilkes Barre/Scranton
11/2019	[redacted]	3752064	[redacted]	Bethel Park	210036864307	Pittsburgh
11/2019	[redacted]	3748633	[redacted]	Nazareth	210030020987	Blue Mountain
11/2019	[redacted]	3723488	[redacted]	Pittsburgh	210035947315	Pittsburgh
12/2019	[redacted]	3752282	[redacted]	Nazareth	220031041717	Blue Mountain
12/2019	[redacted]	3752914	[redacted]	Spring City	210028947850	Royersford
12/2019	[redacted]	3753195	[redacted]	Pittsburgh	220017368232	Pittsburgh
12/2019	[redacted]	3753425	[redacted]	Pittsburgh	220007815977	Pittsburgh
12/2019	[redacted]	3754367	[redacted]	Wilkes Barre	220020329967	Wilkes Barre/Scranton
12/2019	[redacted]	3754380	[redacted]	Coatesville	210036402402	Coatesville
12/2019	[redacted]	3754571	[redacted]	Scranton	220028243845	Wilkes Barre/Scranton
12/2019	[redacted]	3754554	[redacted]	Washington	210032041447	McMurray
12/2019	[redacted]	3753878	[redacted]	Bushkill	210031729447	Lehman Pike
12/2019	[redacted]	3754497	[redacted]	New Cumberland	220012771970	Mechanicsburg
12/2019	[redacted]	3754312	[redacted]	Wilkes Barre	210038413811	Wilkes Barre/Scranton

4.5 Meter access

03/2019	[redacted]	3682068	[redacted]	South Abington	220026298832	Abington
03/2019	[redacted]	3683926	[redacted]	Wilkes Barre	210034386856	Wilkes Barre/Scranton
03/2019	[redacted]	3685331	[redacted]	Parkesburg	220023561111	Coatesville
04/2019	[redacted]	3696544	[redacted]	Clarks Summit	210029150062	Abington
06/2019	[redacted]	3707939	[redacted]	Warren	220005688544	Warren
12/2019	[redacted]	3752728	[redacted]	Nanticoke	210035033421	Wilkes Barre/Scranton

4.6 Damage claims

01/2019	[redacted]	3674191	[redacted]	Wilkes Barre	210033778063	Wilkes Barre/Scranton
05/2019	[redacted]	3700293	[redacted]	Canonsburg	220011055583	McMurray
07/2019	[redacted]	3718609	[redacted]	Homestead	220028511326	Pittsurgh
08/2019	[redacted]	3726889	[redacted]	Berwick	220019494069	Berwick
09/2019	[redacted]	3737709	[redacted]	Wilkes Barre	21003061738	Wilkes Barre/Scranton

4.7 Billing errors

01/2019	[redacted]	3674761	[redacted]	McKeesport	210039677830	McKeesport
01/2019	[redacted]	3674887	[redacted]	Carbondale	220025497575	Wilkes Barre/Scranton
01/2019	[redacted]	3675754	[redacted]	Dingmans Ferry	210029075659	Hickory
01/2019	[redacted]	3675834	[redacted]	Washington	220009056187	McMurray
01/2019	[redacted]	3675995	[redacted]	Shickshinny	210028316395	Wilkes Barre/Scranton
02/2019	[redacted]	3678188	[redacted]	Tobyhanna	220018650354	Pocono

02/2019	[redacted]	3679758	[redacted]	Enola	220012462962	Mechanicsburg
03/2019	[redacted]	3681898	[redacted]	Pittsburgh	220016672785	Pittsburgh
03/2019	[redacted]	360558	[redacted]	Carbondale	220019901147	Wilkes Barre/Scranton
05/2019	[redacted]	3698667	[redacted]	East Followfield	210032747516	Coatesville
05/2019	[redacted]	3704404	[redacted]	Scranton	210029272351	Wilkes Barre/Scranton
06/2019	[redacted]	3709540	[redacted]	Meadow lands	220004234753	McMurray
06/2019	[redacted]	3710368	[redacted]	Peckville	210031001965	Wilkes Barre/Scranton
07/2019	[redacted]	3719619	[redacted]	Tobyhanna	210032277604	Pocono
08/2019	[redacted]	3725138	[redacted]	Mount Pocono	210030807481	Pocono
08/2019	[redacted]	3730821	[redacted]	Wilkes Barre	210035866997	Wilkes Barre/Scranton
09/2019	[redacted]	3737241	[redacted]	Plymouth	210036541840	Wilkes Barre/Scranton
10/2019	[redacted]	3744921	[redacted]	Turbotville	210040770456	Turbotville
10/2019	[redacted]	3745111	[redacted]	Scranton	210032350271	Wilkes Barre/Scranton
12/2019	[redacted]	3753660	[redacted]	Scranton	220017201483	Wilkes Barre/Scranton
12/2019	[redacted]	3754532	[redacted]	Plymouth	210033820889	Wilkes Barre/Scranton

4.8 Comp Agnst prpsd rts

4.9 Svc chrg bill complaint

03/2019	[redacted]	3680933	[redacted]	Munhall	210032844523	Pittsburgh
05/2019	[redacted]	3698802	[redacted]	Norristown	210030517092	Norristown
07/2019	[redacted]	3721163	[redacted]	Mt Pocono	210033510014	Pocono

4.10 Activation fee

01/2019	[redacted]	3674242	[redacted]	Camp Hill	220020254315	Mechanicsburg
01/2019	[redacted]	3676438	[redacted]	Monongahela	210040304392	Mon Valley
01/2019	[redacted]	3676749	[redacted]	Washington	210033804788	McMurray
01/2019	[redacted]	3674917	[redacted]	Presto	210030378365	Pittsburgh

4.11 Tariff Provisions

02/2019	[redacted]	3679388	[redacted]	McKeesport	210030255363	Mon Valley
03/2019	[redacted]	3680655	[redacted]	Pittsburgh	210030418706	Pittsburgh
06/2019	[redacted]	3710443	[redacted]	Pittsburgh	210032985097	Pittsburgh
06/2019	[redacted]	3710449	[redacted]	Pittsburgh	210033246603	Pittsburgh
06/2019	[redacted]	3710451	[redacted]	Pittsburgh	210033246528	Pittsburgh
07/2019	[redacted]	3714975	[redacted]	Pittsburgh	210035428425	Pittsburgh
09/2019	[redacted]	3736907	[redacted]	Grindstone	210033076521	Brownsville
10/2019	[redacted]	3743191	[redacted]	Port Vue	210039622151	McKeesport

4.12 Frzn/brkn meter chg

02/2019	[redacted]	3677406	[redacted]	Mountain Top	210028428243	Wilkes Barre/Scranton
04/2019	[redacted]	3687125	[redacted]	Old Forge	220026208815	Wilkes Barre/Scranton
04/2019	[redacted]	3687127	[redacted]	Old Forge	220021472031	Wilkes Barre/Scranton
05/2019	[redacted]	3702569	[redacted]	Kingston	220026555160	Wilkes Barre/Scranton
08/2019	[redacted]	3728004	[redacted]	Washington	220004000097	McMurray
12/2019	[redacted]	3753927	[redacted]	West Wyoming	210040188200	Wilkes Barre/Scranton

4.13 charged off acct

4.14 Act svc w/out approval

07/2019	[redacted]	3720203	[redacted]	Berwick	220011586674	Berwick

4.15 Estimated bills

01/2019	[redacted]	3676549	[redacted]	Pittsburgh	210036633077	Pittsburgh
02/2019	[redacted]	3679453	[redacted]	Washington	220010843909	McMurray
02/2019	[redacted]	3677731	[redacted]	Coatesville	220018436848	Coatesville
03/2019	[redacted]	3683045	[redacted]	Norristown	220023094031	Norristown
04/2019	[redacted]	3693722	[redacted]	Yardley	210035008111	Yardley
06/2019	[redacted]	3709282	[redacted]	McDonald	220026710455	McMurray
06/2019	[redacted]	3714153	[redacted]	West Mifflin	210031165241	Pittsburgh
07/2019	[redacted]	3716231	[redacted]	Carnegie	210030560171	Pittsburgh

08/2019	[redacted]	3725146	[redacted]	King of Prussia	210035769423	Norristown
08/2019	[redacted]	3727332	[redacted]	Norristown	220006670201	Norristown
09/2019	[redacted]	3735209	[redacted]	Norristown	220025957107	Norristown
09/2019	[redacted]	3736357	[redacted]	Bushkill	210029913973	Lehman Pike
10/2019	[redacted]	3739378	[redacted]	Carbondale	220008510749	Wilkes Barre/Scranton
12/2019	[redacted]	3752891	[redacted]	Scranton	220026723963	Wilkes Barre/Scranton
12/2019	[redacted]	3753455	[redacted]	Munhall	210035082485	Pittsburgh
12/2019	[redacted]	3754498	[redacted]	Coatesville	220018966370	Coatesville
12/2019	[redacted]	3754768	[redacted]	Osceola Mills	210030185938	Philipsburg

4.16 Additional bills

01/2019	[redacted]	3674189	[redacted]	Bridgeville	220021248078	Pittsburgh
01/2019	[redacted]	3674225	[redacted]	Elizabeth	210029372404	Mon Valley
01/2019	[redacted]	3675794	[redacted]	Norristown	220019667553	Norristown
02/2019	[redacted]	3678320	[redacted]	Bridgeville	220013341242	Mon Valley
02/2019	[redacted]	3656659	[redacted]	Pittsburgh	210030538105	Pittsburgh
03/2019	[redacted]	3680517	[redacted]	Connellsville	220019144302	Connellsville
03/2019	[redacted]	3682014	[redacted]	Glassport	220023043613	Mon Valley
04/2019	[redacted]	3687696	[redacted]	Brownsville	210029322942	Brownsville
04/2019	[redacted]	3697321	[redacted]	Elizabeth	210029323532	Mon Valley
05/2019	[redacted]	3701347	[redacted]	New Cumberland	220027466751	Mechanicsburg
05/2019	[redacted]	3706065	[redacted]	Dunmore	210038963484	Wilkes Barre/Scranton
05/2019	[redacted]	3702311	[redacted]	West Mifflin	220021864593	Pittsburgh
06/2019	[redacted]	3709923	[redacted]	West Mifflin	210030670856	Pittsburgh
06/2019	[redacted]	3714125	[redacted]	Palmyra	210029537904	Hershey/Palmyra
07/2019	[redacted]	3715943	[redacted]	Old Forge	220026631149	Wilkes Barre/Scranton
08/2019	[redacted]	3729594	[redacted]	Scranton	210031984787	Wilkes Barre/Scranton
09/2019	[redacted]	3735973	[redacted]	Elizabeth	210032706607	Mon Valley
10/2019	[redacted]	3740611	[redacted]	New Cumberland	210036496971	Mechanicsburg
10/2019	[redacted]	3741090	[redacted]	Pittsburgh	220025772511	Pittsburgh
10/2019	[redacted]	3744678	[redacted]	Pittsburgh	220022197241	Pittsburgh
11/2019	[redacted]	3749505	[redacted]	Coatesville	220016055786	Coatesville
12/2019	[redacted]	3754786	[redacted]	Wilkes Barre	220023862814	Wilkes Barre/Scranton

4.17 App of svc comp

04/2019	[redacted]	3688017	[redacted]	Palmyra	210033391947	Hershey/Palmyra
04/2019	[redacted]	3688303	[redacted]	Peckville	220020295187	Wilkes Barre/Scranton
05/2019	[redacted]	3702924	[redacted]	Washington	220013841575	McMurray
08/2019	[redacted]	3724484	[redacted]	Scranton	220019798808	Wilkes Barre/Scranton
11/2019	[redacted]	3748003	[redacted]	Coatesville	220018265725	Coatesville
11/2019	[redacted]	3749560	[redacted]	New Castle	210033525214	New Castle
11/2019	[redacted]	3751899	[redacted]	Edwardsville	220011943758	Wilkes Barre/Scranton
11/2019	[redacted]	3751952	[redacted]	Scranton	220006721871	Wilkes Barre/Scranton

4.18 User w/out cntrct

12/2019	[redacted]	3753932	[redacted]	Duquesne	220023087736	McKeesport

4.19 Temporary shut off

02/2019	[redacted]	3679562	[redacted]	Bridgeville	220006223124	McMurray
04/2019	[redacted]	3687405	[redacted]	West Pittston	210028869820	Wilkes Barre/Scranton
06/2019	[redacted]	3708315	[redacted]	Norristown	210029836298	Norristown

4.20 Comp abt due dates

4.21 Theft of service

11/2019	[redacted]	3748434	[redacted]	Berwick	220031518231	Berwick

4.22 Availability charge

4.23 Lost payment

02/2019	[redacted]	3679601	[redacted]	Coatesville	220014819700	Coatesville
04/2019	[redacted]	3689393	[redacted]	New Castle	220020545967	New Castle
05/2019	[redacted]	3706483	[redacted]	Finleyville	220012305861	McMurray

4.24 Pymt arrangemnet disp

02/2019	[redacted]	3677111	[redacted]	Archbald	210034316222	Wilkes Barre/Scranton
03/2019	[redacted]	3681686	[redacted]	Scranton	210036377117	Wilkes Barre/Scranton
03/2019	[redacted]	3684686	[redacted]	Tobyhanna	220011086198	Pocono
03/2019	[redacted]	3685139	[redacted]	Taylor	220015160012	Wilkes Barre/Scranton
05/2019	[redacted]	3698559	[redacted]	New Castle	210039716193	New Castle

05/2019	[redacted]	3704507	[redacted]	Pittsburgh	220011250463	Pittsburgh
05/2019	[redacted]	3704833	[redacted]	Wilkes Barre	220026531805	Wilkes Barre/Scranton
06/2019	[redacted]	3710005	[redacted]	Pittston	210029762083	Wilkes Barre/Scranton

4.25 Non access

06/2019	[redacted]	3706905	[redacted]	Norristown	210033631270	Norristown
06/2019	[redacted]	3711202	[redacted]	Courtdale	210036252706	Wilkes Barre/Scranton
09/2019	[redacted]	3736285	[redacted]	Camp Hill	220010940350	Mechanicsburg
09/2019	[redacted]	3737409	[redacted]	New Cumberland	210036559865	Mechanicsburg
10/2019	[redacted]	3740441	[redacted]	South Park	210032851644	Pittsburgh
10/2019	[redacted]	3743529	[redacted]	Scranton	210038987336	Wilkes Barre/Scranton
10/2019	[redacted]	3744473	[redacted]	Camp Hill	220015694751	Mechanicsburg
11/2019	[redacted]	3750390	[redacted]	Moosic	210031986875	Wilkes Barre/Scranton

4.26 Cross Connect

04/2019	[redacted]	3687401	[redacted]	Pittsburgh	220005437883	Pittsburgh
05/2019	[redacted]	3703906	[redacted]	Berwick	220020442495	Berwick
06/2019	[redacted]	3711811	[redacted]	Eagleville	220022386614	Norristown

4.27 Denial of svc complaint

4.28 Misc. Billing cmplaint

01/2019	[redacted]	3676058	[redacted]	Coatesville	220022653307	Coatesville
01/2019	[redacted]	3674223	[redacted]	Pittsburgh	210035824047	Pittsburgh
01/2019	[redacted]	3676607	[redacted]	South Park	210031066405	Pittsburgh
03/2019	[redacted]	3682426	[redacted]	Butler	220006618920	Butler
03/2019	[redacted]	3680926	[redacted]	Coatesville	220022653307	Coatesville
03/2019	[redacted]	3681325	[redacted]	Glen Lyon	210032624125	Wilkes Barre/Scranton
04/2019	[redacted]	3688539	[redacted]	Pittsburgh	220025190645	Pittsburgh
04/2019	[redacted]	3691095	[redacted]	Ellwood City	220025204117	Ellwood
04/2019	[redacted]	3691795	[redacted]	Nanticoke	220016370676	Wilkes Barre/Scranton
04/2019	[redacted]	3692592	[redacted]	Butler	220019648118	Butler
04/2019	[redacted]	3696846	[redacted]	Tobyhanna	210030738936	Pocono
05/2019	[redacted]	3701282	[redacted]	Hopwood	210033133783	Uniontown
05/2019	[redacted]	3701799	[redacted]	Scranton	220023167151	Wilkes Barre/Scranton
05/2019	[redacted]	3702673	[redacted]	Washington	220028123309	McMurray
05/2019	[redacted]	3706111	[redacted]	Scranton	220017983815	Wilkes Barre/Scranton
06/2019	[redacted]	3707492	[redacted]	Eighty Four	210030119115	McMurray
06/2019	[redacted]	3709951	[redacted]	Nazareth	220010178650	Blue Mountain
06/2019	[redacted]	3710610	[redacted]	Plymouth	210032705079	Wilkes Barre/Scranton
06/2019	[redacted]	3710755	[redacted]	Tobyhanna	220009289130	Pocono
06/2019	[redacted]	3711550	[redacted]	Forty Fort	210030755429	Wilkes Barre/Scranton
06/2019	[redacted]	3712969	[redacted]	Plymouth	210030863979	Wilkes Barre/Scranton
06/2019	[redacted]	3710399	[redacted]	Elizabeth	210032639486	Mon Valley
07/2019	[redacted]	3718833	[redacted]	New Cumberland	220029805437	Mechanicsburg
07/2019	[redacted]	3720059	[redacted]	New Cumberland	220025739538	Mechanicsburg
07/2019	[redacted]	3720858	[redacted]	Tobyhanna	220019864545	Pocono
07/2019	[redacted]	3722328	[redacted]	Mount Pocono	220017884000	Pocono
07/2019	[redacted]	3717083	[redacted]	McDonald	210036103279	Pittsburgh
08/2019	[redacted]	3725029	[redacted]	Wilkes Barre	210037492163	Wilkes Barre/Scranton
08/2019	[redacted]	3725025	[redacted]	Morgan	210030023917	Pittsburgh
08/2019	[redacted]	3725022	[redacted]	Pittsburgh	220029638064	Pittsburgh
08/2019	[redacted]	3727049	[redacted]	Carnegie	220019723101	Pittsburgh
08/2019	[redacted]	3727615	[redacted]	Old Forge	220016015153	Wilkes Barre/Scranton
08/2019	[redacted]	3728543	[redacted]	Munhall	220029978700	Pittsburgh
08/2019	[redacted]	3730192	[redacted]	Clairton	220023982251	Mon Valley
10/2019	[redacted]	3739503	[redacted]	Lewisburg	210032767442	Milton
10/2019	[redacted]	3742122	[redacted]	Simpson	220029032468	Wilkes Barre/Scranton
10/2019	[redacted]	3745768	[redacted]	Courtdale	220019280062	Wilkes Barre/Scranton
10/2019	[redacted]	3745965	[redacted]	Coatesville	220024915834	Coatesville
11/2019	[redacted]	3750550	[redacted]	Clairton	210033299355	Mon Valley
11/2019	[redacted]	3750690	[redacted]	Kittanning	220023126556	Kittanning
12/2019	[redacted]	3753375	[redacted]	Dingmans Ferry	220020126533	Hickory

6.1 Comm Terminations

02/2019	[redacted]	3679388	[redacted]	Mckeesport	210030255363	Mon Valley
05/2019	[redacted]	3702038	[redacted]	Wilkes Barre	210032506548	Wilkes Barre/Scranton

6.2 Comm Pymt Agmnt

6.3 Comm final bill

6.4 Comm High bills

01/2019	[redacted]	3676419	[redacted]	Camp Hill	210031024401	Mechanicsburg
02/2019	[redacted]	3678180	[redacted]	Monongahela	210032689658	Mon Valley
05/2019	[redacted]	3697678	[redacted]	Bridgeport	220011280334	Norristown
06/2019	[redacted]	3713598	[redacted]	Eagleville	210036551984	Norristown
06/2019	[redacted]	3712362	[redacted]	Mayfield	210035275546	Wilkes Barre/Scranton
07/2019	[redacted]	3716266	[redacted]	Mountain Top	220020164290	Wilkes Barre/Scranton

6.5 Comm Restorations

06/2019	[redacted]	3711551	[redacted]	Downingtown	BP #1202851004	Coatesville

6.6 Comm Main Line Ext

6.7 Comm Svc Pipe leak

10/2019	[redacted]	3742059	[redacted]	Taylor	210029611673	Wilkes Barre/Scranton

6.8 Comm Main Line Lk/brk

6.9 Comm/Minc rate comp

6.10 Comm Frzn/brkn mtr chrg

6.11 Comp Frzn/Brkn meter

6.12 Mun Cmplnt not rate related

6.13 Fire service complaint not rate

04/2019	[redacted]	3694697	[redacted]	Pittsburgh	210037140998	Pittsburgh

6.14 Comm Case Closed by PUC

PUC 2019
Sewer

	Cal. year / r	Business Partner		Premise Street	Premise City	Contract Account	District
1.4 Pressure							
1.5 Water Quality							
	02/2019	[redacted]	3679947	[redacted]	Dunmore	210033222485	Wilkes Barre/Scranton
1.12 Misc - Dist							
	02/2019	[redacted]	3677183	[redacted]	Pittsburgh	210031547287	Pittsburgh
	07/2019	[redacted]	3715346	[redacted]	Port Vue	210039652978	McKeesport
.6 Term W/Addtnl Cmplnt							
	05/2019	[redacted]	3698772	[redacted]	Nanticoke	210033226074	Wilkes Barre/Scranton

4.2 Final Bill Errors

04/2019	[redacted]	3692713	[redacted]	Duquesne	210039642001	Mckeesport

4.4 High bills

4.6 Damage Claims

01/2019	[redacted]	3674072	[redacted]	Burgettstown	210030578035	McMurray

4.7 Billing errors

01/2019	[redacted]	3674654	[redacted]	Pittsburgh	21002233827	Pittsburgh
03/2019	[redacted]	3680390	[redacted]	Port Vue	210039646645	McKeesport
12/2019	[redacted]	3753289	[redacted]	McKeesport	220025273311	McKeesport

4.11 Tariff Provisions

01/2019	[redacted]	3674298	[redacted]	Parksburg	210030329912	Coatesville

4.24 payment arrangement disp

4.25 Non Access

4.27 Denial of svc Comp

AMERICAN WATER

PENNSYLVANIA –CUSTOMER ADVOCACY PROCESS

Introduction

When a customer or applicant contacts American Water with a question or concern, it is handled as an inquiry. In accordance with Pennsylvania Public Utility Commission regulations, Pennsylvania American Water has five days to resolve the inquiry and obtain customer satisfaction. If the company cannot obtain customer satisfaction, the inquiry becomes a dispute. If the time to obtain customer satisfaction exceeds five (calendar) days, the inquiry is considered a dispute.

The Pennsylvania Public Utility Commission has set specific regulations for PAW to resolve customer dispute within 30 days from the creation of the **original customer contact.** This would require verbal customer satisfaction or issuance of a Utility Company Report. Our goal is to process all customer dispute in less than 30 days of the original contact date of the customer.

The PA Customer Advocacy Team is involved with customer contact for Local Field Operations issues, Billing and Collection issues. Disputes pertaining to property restoration and high or low pressure are a few of the Local Field Operations issues handled by PA Customer Advocacy. Leak adjustment request are typically the leading customer dispute. PA Customer Advocacy is also involved in ensuring that commercial properties are receiving actual reads for billing purposes by contacting and scheduling orders to read or repair meter equipment.

Customer Communication Requirements

Once all activities related to the customer's inquiry/dispute have been completed, customer notification is **required.**

One or more attempts are made to reach the customer by phone to discuss the issue and obtain, as appropriate, customer satisfaction. If the Customer Advocacy is unsuccessful at reaching the customer, a message with the Customer Advocacy number is left for a return call.

If there is not a return call within 24 hours of the attempt, a Utility Company Report is created and mailed to the customer.

If contact is made with the customer, Customer Advocacy reviews the customer dispute and all pertinent details. The objective is to obtain verbal satisfaction from the customer on our findings and position or resolution on their dispute. An interaction record with the results of the conversation is required even if only a message is left for a call back.

Enhanced customer service skills are used to ensure a positive customer experience and outcome. The explanation of a policy may not be what the customer wants to hear, however, Customer Advocacy provide knowledgeable answers to customer questions and concerns and provide available options. Customer Advocacy explain first what the company can do for the customer and provide the background information on the reasons behind the decisions.

If the customer has a remaining balance after the dispute is resolved, an Installment Plan can be offered to pay off the remaining disputed balance.

AMERICAN WATER

PENNSYLVANIA –CUSTOMER ADVOCACY PROCESS

The key to successful resolution of a customer dispute is to listen to the customer and acknowledge that we understand their concerns. If Customer Advocacy is unable to satisfy the customer during the phone interaction and the customer continues to dispute the findings and position, Customer Advocacy would follow the escalated resolution process.

Escalated Resolution Process

If speaking with the customer, and they are still not satisfied with options/ adjustment/information we were able to provide, please follow the outline below:

- Review the account and determine if the correct information and actions were taken within the 30-day requirement.
- Was the average usage for this customer correct or is there other consideration that needs to be made regarding the average that was used.
- Offer a payment arrangement (Make a diligent attempt to negotiate a reasonable payment agreement-typical PAW arrangements are for current bill + $30, however, you should take into consideration: the size of the unpaid balance/high bill, the ability of the customer to pay, the payment history of the customer, the length of time over which the bill accumulated. No payment arrangement should go beyond 5 years.
- Review with the Customer Advocacy Supervisor if there is a question on if the complaint is justified.
- If customer is not satisfied with additional offers, complete the steps as outlined in 56.151 and advise that we will send written documentation (Utility Company Report). Attach the Utility Company Report to Contract Account
- Update all information regarding the conversation and company position in the BPEM case notes. Create an interaction record referencing the BPEM case number.

Utility Company Reports are issued:

1. In situations where a customer does not verbally indicate satisfaction and satisfaction will not be reached per American Water guidelines, policy, or procedures. The letter must be sent within 30 days from the **initial customer contact.**
2. In situations where a customer expresses verbal satisfaction with the resolution of the issue, but would like written documentation regarding the decision or results of the issue.

The 30-day timeline begins on the date of the **initial customer contact with customer service**. If the investigation is **not completed** within 30 days, the customer was not contacted, and verbal satisfaction was not obtained, it is considered out of compliance with the regulations for PA.

AMERICAN WATER

PENNSYLVANIA –CUSTOMER ADVOCACY PROCESS

Utility Company Report Process

This report gives closure to the customer's issue and satisfies American Water's requirements according to the Pennsylvania Regulations.

A Utility Company Report is either a letter that is generated by Customer Advocacy that outlines the following:

- The customer's complaint
- American Water's findings
- American Water's position
- Information to the customer regarding the dispute

Since no two issues are identical, each Utility Company Report (UR) is unique in its composition. In addition to the UCR, **a PUC regulation at 56 Pa Code 151.4 requires utility companies to provide a statement of their account that is in dispute.**

The most important part of the Utility Company Report is outlining the timeline that covers the customer's dispute. The start of the timeline is the date from the first contact (Example: call, correspondence, email, etc.) when the customer may have been only "inquiring" about the "issue." The Utility Report also needs to have an account statement included.

FR IX.5

Pennsylvania-American Water Company
IX. Quality of Service

5. Indicate whether the Company is in compliance with 52 Pa. Code, § 65.4 (b) regarding complete and current mapping of the entire distribution or collection system.

Answer:

Pennsylvania-American Water Company maintains complete and current mapping of all water distribution and wastewater collection systems for each of its operating areas in a Geographic Information System (GIS). Utilizing GIS and a Global Navigation Satellite System (GNSS), asset information is updated regularly and is accessible via a secure mobile application on smartphones and tablets.

FR IX.6

Pennsylvania-American Water Company
<u>IX. Quality of Service</u>

6. Provide a summary report demonstrating the Company's efforts in water conservation, since the last rate proceeding to 52 Pa. Code § 65.20.

Answer:

Reference is made to PA PUC approved Tariff Water-PA P.U.C. No. 4 page 66, Rule 24, Water Conservation Contingency Plan.

In addition, as part of the approved tariff for Low- Income Customers, the Company contracts with Dollar Energy Fund of Pittsburgh in providing water-saving devices, including a low-flow showerhead, sink aerators and a toilet bladder, as well as an educational booklet outlining ways to use water wisely.

Since the last rate proceeding, conservation has been addressed in various ways through communications with customers. The Company sends out a bill insert annually to all customers providing tips on how to use water more wisely inside and outside the home. In the pre-winter months, the Company also sends out a bill insert on how to prevent pipes from freezing (Cold Weather Tips). In addition, a flyer (Save Money and Water) discussing conservation tips was distributed at presentations to civic organizations, schools, environmental groups and community activities and festivals. The bill inserts and/or flyers are provided at these speaking engagements and community events as handouts.

In advance of extended periods of sub-freezing weather, the Company has issued press releases and launched emergency customer notifications through its mass customer notification system, CodeRED, to remind customers of the precautions they should take to protect their plumbing and prevent pipes from freezing and bursting *(see attached CodeRED script and report).* In addition, the Company has produced customer education videos on these topics, which are posted on its YouTube channel (<u>www.youtube.com/paamwater</u>). Finally, the Company regularly uses social media (Facebook, Twitter, Instagram and YouTube) to promote conservation and educational messages, infographics, photos and videos.

The Company also disseminates a water leak detection kit with a booklet and leak detection tablets as a give-away item for participants at speaking engagements as appropriate and at community events.

Examples are attached.

WELCOME

As you know, you are currently enrolled in Pennsylvania American Water's monthly Service Charge Discount Program based on your financial qualifications. The discount is part of the company's **H2O Help to Others Program®** , designed to lend a hand of support to customers in need during difficult times.

We are pleased to introduce you to another benefit of Pennsylvania American Water's program provided to eligible customers—a wise water use kit.

This kit helps you to control the cost of your water bill through conservation. Your kit has valuable products to save hot and cold water in showers and sinks, to conserve water with every flush and to find silent and costly toilet leaks. These products, along with wise water use tips, can help you save gallons of water every month.

If you are a renter and have plumbing leaks, contact your landlord immediately.

Your monthly water bills can be affordable when you know how to use water wisely, because the more water you save, the lower your bills will be.

Steps to saving water and money

- **Read this booklet and find out how the H2O Help to Others Program® can help you save money on your water bills.**
- **Install the water-saving products supplied in this kit.** Complete instructions are printed in this pamphlet.
- **Kit installation assistance:** If you are having difficulty with installing any of the products in the conservation kit, a local Pennsylvania American Water team member can provide assistance by phone. Please call 717-531-3263 between the hours of 9 a.m. and 5 p.m., Monday through Friday. If unavailable, please leave a message.
- **Include the whole family in changing water-wasting habits into daily water-saving habits** by using the tips provided in this booklet.
- **Pay your Pennsylvania American Water bill every month.**

In the Kitchen

- Run only full loads in the dishwasher.
- Before washing dishes by hand or in the dishwasher, scrape them; don't rinse first.
- If you wash dishes by hand, use two basins: one for washing and one for rinsing. Don't let the water run.
- Keep a bottle of drinking water in the refrigerator instead of running the tap for a cold glass.
- Rinse vegetables and fruit in a basin rather than under running water.
- Defrost frozen foods without running water over the packages. Plan ahead and place frozen items in the refrigerator overnight or defrost them in the microwave.

In the Laundry

- Washing machines use 15-40 gallons of water per load. If you have a machine with adjustable load controls, always adjust the water level to match the size of each load. If your machine doesn't adjust to different size loads, always wash full loads.
- The major cost in washing clothes is the hot water used. The more you wash and rinse with cold water, the more energy you will save.

Outside the Home

- Wash your car at a car wash that recycles its water. If washing at home, don't let the hose run continuously. Use a sprayer attachment on the hose that can easily be shut off.
- Drive your car onto the lawn before washing so that the rinse water can help water the lawn.
- Water the lawn only when it needs it, in the early morning or evening when there is less evaporation. Don't water on windy days. If the grass springs up when you walk on it, it doesn't need watering.
- Sweep driveways, patios and sidewalks with a broom instead of using the hose.

LEARN MORE

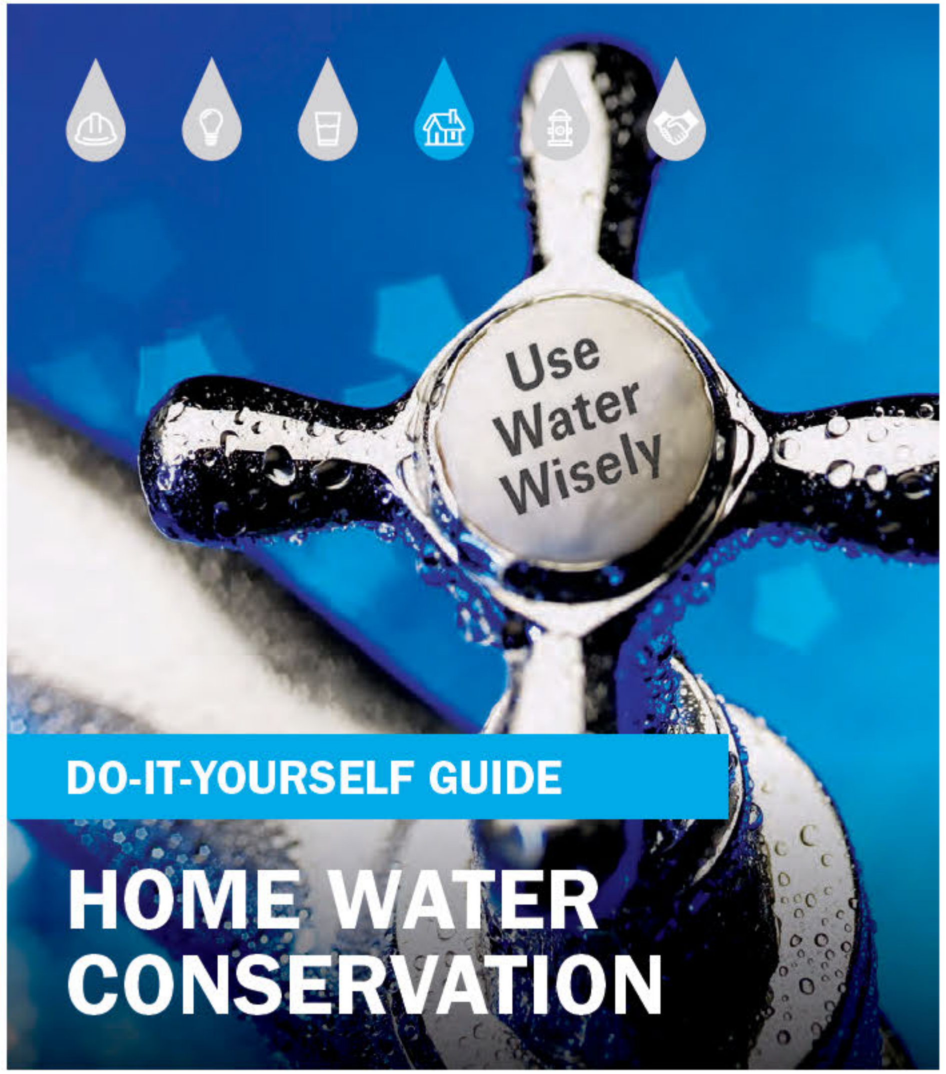
For more water-saving tips, check these sites out online:

- **WaterSense:** www.epa.gov/watersense
- **Alliance for Water Efficiency Home Water Works:** www.home-water-works.org
- **Pennsylvania American Water:** www.pennsylvaniaamwater.com

09-2018

Pennsylvania American Water is a proud member of the US EPA's WaterSense Program. We are committed to conserving our most precious natural resource – water, so it is available to meet the needs of future generations.

EPA WaterSense PARTNER



DO-IT-YOURSELF GUIDE

HOME WATER CONSERVATION

PENNSYLVANIA AMERICAN WATER

WE KEEP LIFE FLOWING™

STEP 1: INSTALL THE WATER-SAVER KIT

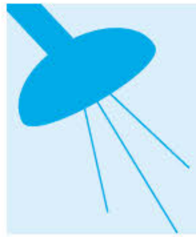
WHAT YOUR WATER-SAVER KIT INCLUDES

- WaterSense showerhead and Teflon thread sealing tape
- Two water-saving faucet aerators (one kitchen; one bath)
- Fill cycle diverter
- Leak-detecting, non-toxic dye tablets for the toilet

HOW TO INSTALL YOUR WATER-SAVING DEVICES

WaterSense Showerhead

1. Unscrew old showerhead (turn counter-clockwise).
2. Clean shower arm threads.
3. Apply Teflon thread-sealing tape, wrapping clockwise.
4. Screw on showerhead. Do not overtighten.
5. Run water to test for leaks. If needed, gently tighten with wrench.
6. Turn face of showerhead to select preferred spray option.



According to the EPA, replacing one showerhead with a WaterSense model can save the average family as much as **2,900 gallons** of water a year — or **more than $70 in energy and water costs every year.**

Water-Saving Faucet Aerators

This kit features two aerators: a 2.2 size for the kitchen and a 1.5 size for the bath. Read the numbers on the side before installing.

1. Unscrew old faucet attachment. For an inside-threaded faucet, install aerator as is. For an outside-threaded faucet, first remove the top washer to expose inside threads and then install.
2. Hand tighten, but do not over-tighten. If a wrench is used, protect finish with a cloth.

Fill Cycle Diverter

The Fill Master Fill Cycle Diverter saves 0.5 to 1.5 gallons of water per flush, by diverting the majority of water that would normally flow down the toilet overflow tube back into your toilet tank during the toilet's filling cycle.

1. Pull hose loose from overflow tube.
2. Remove clip or holder from hose.
3. Insert Fill Master into end of hose.
4. Push Fill Master onto overflow tube with nozzle #1 inside the tube and nozzle #2 and #3 outside the tube. NOTE: Hose may need to be cut shorter for proper fit.
5. Position nozzle #2 or #3 into the tube as needed if the bowl does not fill to its normal level when flushed.

Leak Detecting Non-Toxic Dye Tablets for the Toilet

1. Remove lid from toilet tank.
2. Drop one dye tablet into water in tank.
3. Wait 15 minutes. If blue color appears in the bowl, your toilet has a silent leak and repairs need to be made.

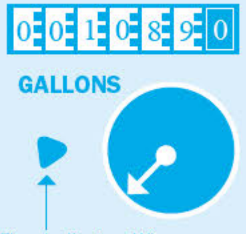
STEP 2: FINDING WATER LEAKS

Your meter can be a great tool to check for household leaks

Not fixing a leaky toilet or faucet is like throwing money down the drain. If your water meter is in your home, you can use it to check for leaks. Start by making sure that no one is using water and that all water-using appliances are turned off, including automatic ice makers. Then, check to see what type of water meter you have (dial or digital), and follow these simple steps.

Dial Meter: Check the flow indicator on your meter. If it is moving, it means that water is passing through the meter and there is a leak(s). If your meter does not have a low flow indicator, write down the meter reading shown on the dial and take note of the sweep hand's position. Check the meter in an hour. If the reading or the position of the sweep hand has changed, it may indicate that you have a leak(s).

DIAL METER



Flow Indicator: When moving, indicates water is flowing through the meter and in which direction.

Digital Meter: First, activate the screen on the digital meter by shining a light on the face of the meter. If the flow arrow appears on the screen or if the meter reading calculates, and the number is increases, that means water is moving through the meter. NOTE: The direction of the flow arrow should match the direction of the arrow that appears on the base of the meter itself. If it does not, this means water is flowing in the opposite direction. This should be addressed immediately by installing a dual check valve on your service line or having your current dual check valve serviced.

10% of homes have leaks that waste 90 gallons or more per day. Check and fix all household plumbing leaks or you could be throwing money down the drain (literally).

Check for faucet leaks

Faucet leaks are easy to detect. If your faucet drips, or worse, continues to keep running after you shut it off, it needs to be fixed. If the dripping water is hot, it is also costing you money to heat the water. Water dripping from the showerhead when the shower is off, or running out of the spout when the shower is on, is usually caused by bad washers or seats which need to be replaced.

Check for toilet leaks

Toilet leaks, which can often go unnoticed, are often caused by worn or damaged parts in the toilet flush tank, such as a bad flapper valve, flapper valve seat, ballcock valve, float arm or overflow tube. Use the dye tablets included with this kit to check for toilet leaks. Once you have used the tablets in the kit, you can continue to regularly check for leaks by pouring a cup of weak tea or coffee into your toilet tank. Using food coloring may permanently discolor your toilet bowl, if it has scratches or cracks.

STEP 3: PRACTICE WISE WATER USE

In the Bathroom

- The toilet is the biggest water waster in your house. By inserting the enclosed Fill Master Fill Cycle Diverter, you can prevent excess water from needlessly flowing down the drain. The fill cycle diverter saves water and money by making your toilet more efficient.
- Install water-saving showerheads and faucet aerators in your sinks.
- Shorten your shower to 7-10 minutes. Even shortening your shower by one or two minutes can save up to 150 gallons a month.
- Turn off the water when brushing your teeth. Saves one to two gallons each day.
- Rinse your razor with short blasts of water or by swishing it in a partially filled sink instead of running the water while you shave.
- Put bathroom trash and feminine hygiene products in the waste basket instead of flushing them down the toilet.

(More tips on the back panel)

PA.06.2019

OUTSIDE YOUR HOME

- No need to water every day. Instead, only water as needed. Depending on the weather or type of plants/turf, you may find that you only need to water once or twice per week.
- Water late in the day or early in the morning when the sun is low to minimize evaporation.
- Collect and store rainwater in a rain barrel and use it to water your outdoor plants.
- Use a broom instead of a hose to clean patios and sidewalks.
- Choose drought-resistant plants or native plants. Plants native to the local conditions have the benefit of being able to thrive within them. And, they often require less maintenance and water.
- Use a hose nozzle on your hose to better control the flow you are using. Place hoses carefully to avoid watering unnecessary areas like sidewalks.
- If you use a sprinkler, check sprinkler heads to make sure they're not watering paved or unwanted areas. Be sure to turn them off when it rains.
- Mulch plant beds to reduce weeds and preserve moisture. NOTE: over mulching can stress plants. Only two to three inches are needed.
- Use a bucket of soapy water rather than leaving the hose running when washing your car or take your car to a car wash that recycles the water.
- Bathe pets outdoors in areas that need water.

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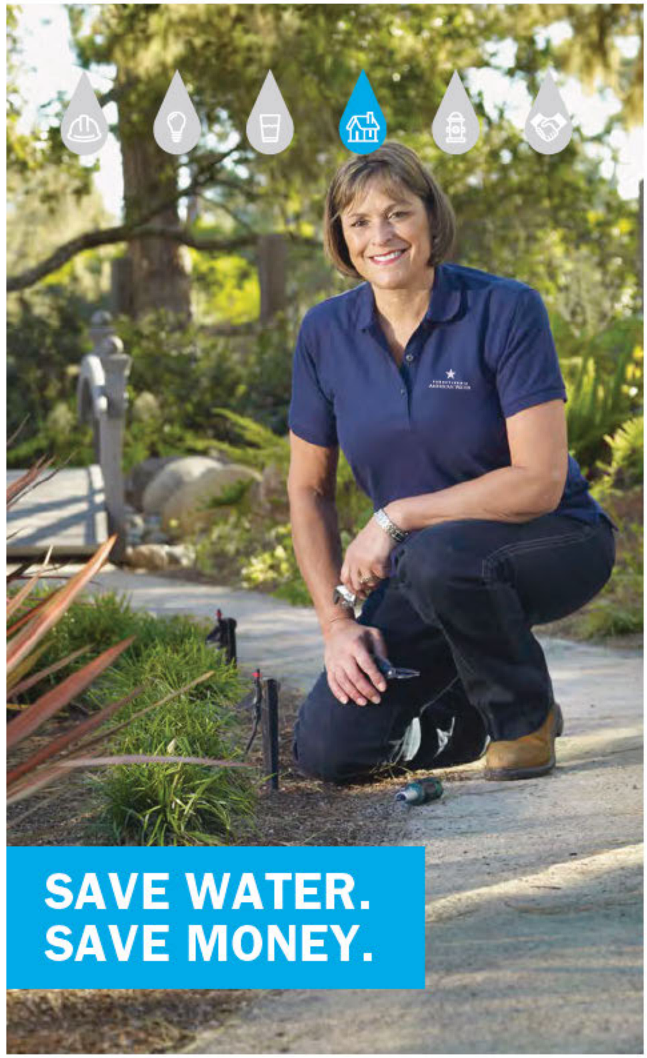


Using water wisely and saving money are always in season. See inside for tips on how you can use water wisely this summer!

PENNSYLVANIA AMERICAN WATER

WE KEEP LIFE FLOWING™

CHECK FOR FAUCET LEAKS

Faucet leaks are easy to detect. If your faucet drips, or worse, continues to keep running after you shut it off, it needs to be fixed. If the dripping water is hot, it is also costing you money to heat the water. Water dripping from the showerhead when the shower is off, or running out of the spout when the shower is on, is usually caused by bad washers or seats which need to be replaced.

CHECK FOR TOILET LEAKS

Toilet leaks, which can go unnoticed, are often caused by worn or damaged parts in the toilet flush tank. Here's how to check for toilet leaks:

- Remove the lid from your toilet tank and drop a small amount of food coloring or weak tea into the tank.
- Wait 10-20 minutes. If the food coloring appears in the bowl, repairs may need to be made or the flapper valve adjusted.
- If you can hear water running, it may mean that water is running over the overflow tube in the tank. This too should be fixed.

INSIDE YOUR HOME

- Install water-saving showerheads and shorten your shower time to five minutes.
- Run only full loads in your dishwasher and washing machine.
- If you wash dishes by hand, use two basins: one for washing and one for rinsing. Don't let the water run.
- Before washing dishes by hand or in the dishwasher, scrape them; don't rinse first.
- Turn off the water while you are brushing your teeth.
- Keep a pitcher of drinking water in the refrigerator instead of running the tap for a cold glass.
- Rinse vegetables and fruit in a basin rather than under running water.
- Defrost frozen foods without running water over the packages. Plan ahead and place frozen items in the refrigerator overnight or defrost them in the microwave.
- Look for appliances with cycle and load size adjustments. They are more water and energy efficient than older appliances. EnergyStar™ rated washers use less water and less energy per load. This saves you money on both your water and energy bills.

10% of homes have leaks that waste 90 gallons or more per day.

Check and fix all household plumbing leaks or you could be throwing money down the drain (literally).

PA.11.2019

HANG THIS TAG ON YOUR MAIN

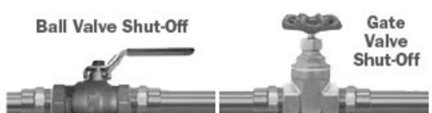
WATER SHUT-OFF VALVE

In the event of an emergency, it may be necessary to turn off the main water valve in your home. It's important that everyone knows where to locate the main water shut-off valve. In many homes, it is located near the water meter. If the water meter is not inside, the shut-off valve is typically located close to where the water pipe enters your home or business; possibly in the basement, in a utility closet or crawl space.

PLEASE NOTE: You may want to test the valve to ensure that it is working properly. To test it, find your main shut-off valve and close it.

- **Ball valve:** Generally, closing a ball valve only requires a quarter turn, so that the handle is perpendicular to the water line. In the image below, the valve is open.
- **Gate valve:** Gate valves are generally closed by turning the handle clockwise. If the valve does not turn easily, do not force it and consider having the valve repaired so that it does turn easily.

Once the main shut-off valve is completely closed, check sinks and other fixtures to be sure you have found the main valve and that it is working properly. To turn water back on, slowly turn the valve until fully reopened.



CUT HERE

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PENNSYLVANIA AMERICAN WATER

WE KEEP LIFE FLOWING™

BEFORE THE COLD SETS IN:

CHECK SPRINKLER OR IRRIGATION SYSTEMS
Make sure you've turned everything off and fully drained the system.

IDENTIFY YOUR HOME'S FREEZING POINTS
Check your home for pipes in areas that might be prone to freezing, such as crawl spaces, unheated rooms, basements, garages, and exterior walls.

KNOW HOW TO SHUT OFF YOUR WATER
Locate your main water shut-off valve. Hang the I.D. tag located on the back of this insert on the valve, so you can find it quickly in an emergency.

STRENGTHEN YOUR DEFENSES
Eliminate sources of cold air near water lines by closing off crawl spaces, fixing drafty windows, insulating walls and attics, and plugging drafts around doors.

PROTECT YOUR PIPES
Where pipes are exposed to cold, wrap them with insulation or heat tape (even fabric or newspaper can help).

AVOID COSTLY REPAIRS
If the meter freezes, the homeowner/business is responsible for the cost to replace or repair the meter. With a little attention, you can help prevent pipes and meters from freezing in your home.

WHEN TEMPERATURES STAY BELOW FREEZING:

GIVE PIPES A HELPING HAND
If pipes run through cabinets or vanities, open the doors to let warmer room temperatures flow in.

KEEP WATER WORKING
Keep water moving through the pipes by allowing a small trickle of water to run. The cost of the extra water is typically lower than the cost of repairing a broken pipe.

IF YOUR PIPES DO FREEZE:

SHUT OFF THE WATER IMMEDIATELY
Don't attempt to thaw pipes without turning off the main shut-off valve.

THAW PIPES WITH WARM AIR
Melt the frozen water in the pipe by warming the air around it. Be sure not to leave space heaters unattended and avoid the use of kerosene heaters or open flames.

BE CAREFUL TURNING THE WATER BACK ON
Once pipes are thawed, slowly turn the water back on and check pipes and joints for any cracks or leaks that might have been caused by freezing.

PLACE THIS TAG ON YOUR MAIN WATER SHUT-OFF VALVE

AMERICAN WATER

EPA WaterSense PARTNER

WATER LEAKS: WHAT YOU SHOULD KNOW

AMERICAN WATER

Imagine that the dot inside these brackets [•] is the only hole in your home's water system. By its size alone, that hole may not seem worth tracking down. But that hole can waste more than 4,000 gallons of fresh water each month — enough water to take a shower every day for more than half a year!

Consider how important water is for our families, pets and environment, and you see that even tiny holes deserve immediate attention. That's why we developed this simple water leak detection kit. It's designed to help you find and repair water leaks — even the tiny ones.

GETTING READY

Use the checklists on the following pages to help direct your search for some fairly common — and a few not-so-common — water leaks.

How can you be sure your inspection will be as thorough as possible? The checklists cover three areas: common indoor leaks, not-so-common indoor leaks, and outdoor leaks. If you investigate the leak possibilities in the order shown, you'll uncover the greatest potential for savings in the first few places you look. It's a good idea to have the following items with you as you begin your work:

- Flashlight
- Leak Detection Tablets (included with this kit) or Food Coloring
- Shut-Off Valve Tag (located to the left)

SPOT YOUR SHUT-OFF VALVE NOW

Your main shut-off valve controls all of the water coming into your house. Everyone in your home should know the location of this valve, and how to turn it off. In case of an emergency such as a burst pipe, fast action could prevent costly damage from flooding.

If you don't know where this valve is located, it's important that you find out. Normally, it's near the water meter. If your meter is outside the house, find the place where the water service line enters the building. The shut-off valve is likely to be close by. Common locations are in the basement, under the kitchen sink, near the meter box or at the pressure regulator (if required). We have included an identification tag to cut out and place on your main shut-off valve. (See flap on left).

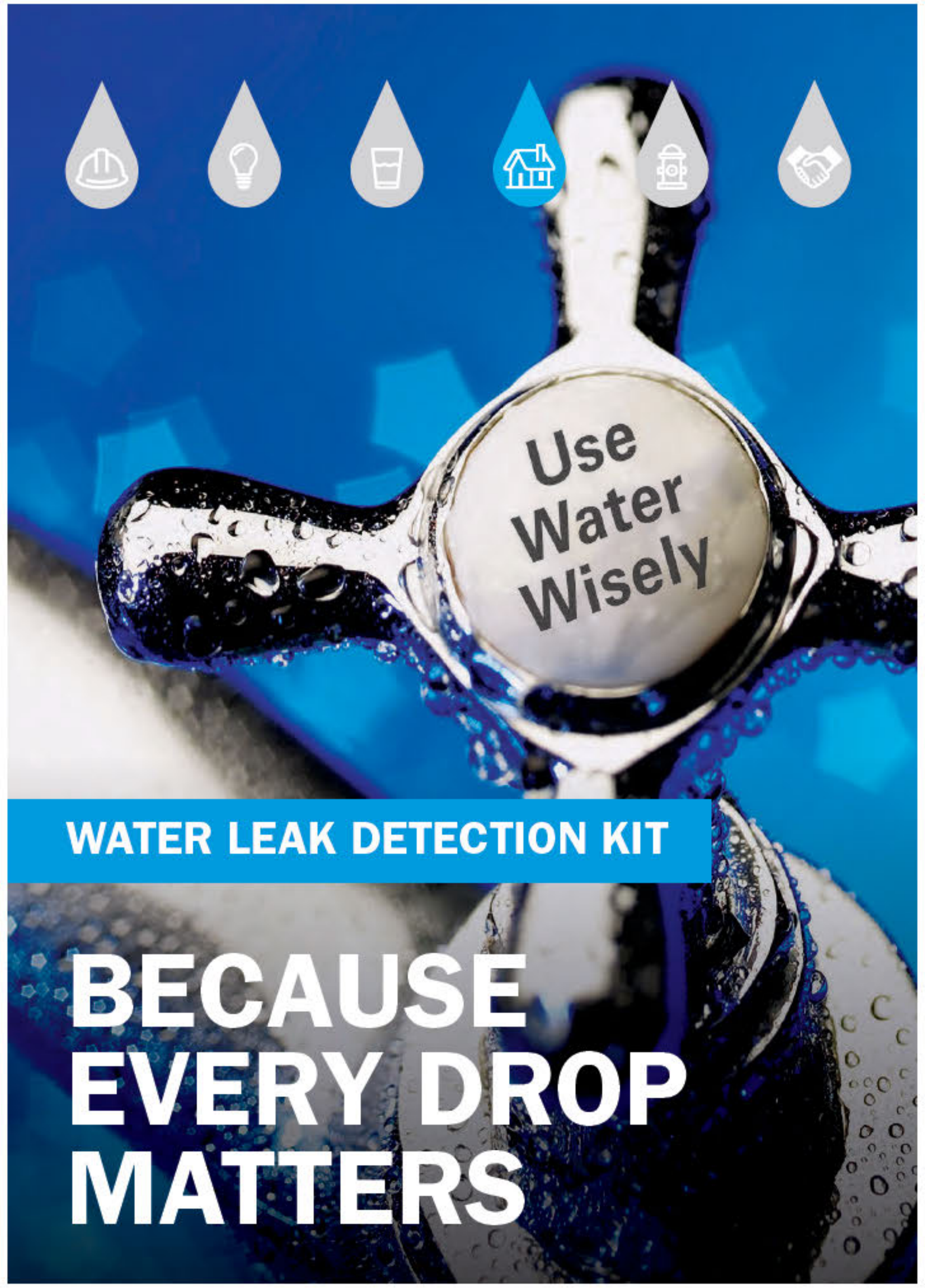
After finding the valve, turn it to make sure it isn't stuck. Water valves are generally closed by turning the handle clockwise. If a valve does not turn easily, do not force it or it might break. Rather, you may want to have the valve repaired so that it will work when you need it.

NOW YOU'RE READY TO BEGIN!

When opening the valve to turn the water back on, open it fully, then close it just a quarter of a turn to make closing the valve easier the next time. You should also check every water fixture shut-off valve periodically, and consider operating the main and individual valves annually.

EPA WaterSense PARTNER

AMERICAN WATER



WATER LEAK DETECTION KIT

BECAUSE EVERY DROP MATTERS

AMERICAN WATER

WE KEEP LIFE FLOWING ™

At American Water, we are committed to environmental stewardship and the responsible management of our precious natural resources. By using this leak detection kit to identify and repair water leaks, you can help make a difference in your monthly bill while conserving water.

COMMON INDOOR LEAKS

THE LEAKY TOILET

Toilet flushes make up about 25 percent of the average household use. Accounting for the majority of indoor water waste, toilet leaks are often caused by worn or damaged parts in the toilet flush tank.

Some of these leaks will empty directly into the sewer line wi hout leaving any clues Even so, you can check for these leaks. Common causes include:

Float arm problems

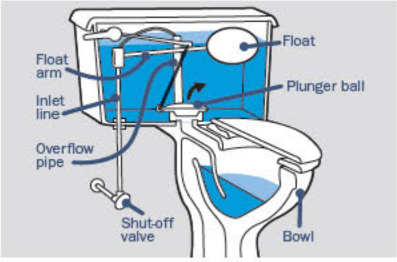
Remove the lid from the top of the flush tank. See if the overflow pipe and the plunger ball are working properly Do this by flushing the to let, watching the tank mechanism and listening You should hear the water flow shut off

If the water does not shut off, check the water level. If it has risen above the overflow pipe, gently bend the float arm down and flush again.

You may need to replace the plunger ball if the water level is about one inch below the top of the overflow pipe and you still hear water flowing.

A tiny pinhole

A pinhole opening below the overflow pipe's water line could produce an invisible leak Check for this by shining a flashlight down into the overflow

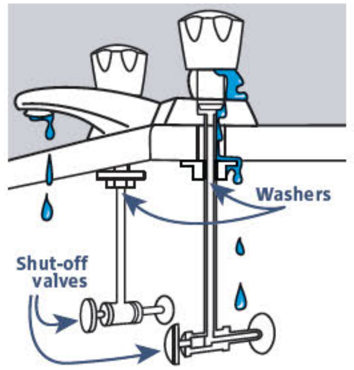


Water in the overflow pipe could also be caused by a pinhole in the float or a worn washer on the inlet line.

pipe. If you see running water, you have a leak that should be repaired.

Defective plunger ball (flapper valve)

This is often a silent leak which causes the tank to continually drain and refill. Check for a worn or improperly seated plunger ball (flapper valve) by dropping one of the dye-tracing tablets (included with this kit), or a few drops of food coloring, into the toilet tank. Do not flush. If a leak exists, the dye-colored water will seep into the bowl in about five minutes If it does, the plunger ball (flapper valve) may need to be replaced or realigned.



A slow drip can waste as much as 20 gallons of water each day.

THE LEAKY FAUCET

A dripping faucet

A slow drip can waste as much as 20 gallons of water each day. A mere 1/16-inch leak wastes 100 gallons of water each day. With that much water — and money — going down the drain, it's important to get leaky faucets fixed as soon as possible.

If you notice that a faucet is dripping, first try closing it tightly. If it continues to drip, the most likely cause is a worn or wrong-size seat washer (also called a stem washer). With just a little effort, you may be able

COMMON INDOOR LEAKS CONTINUED

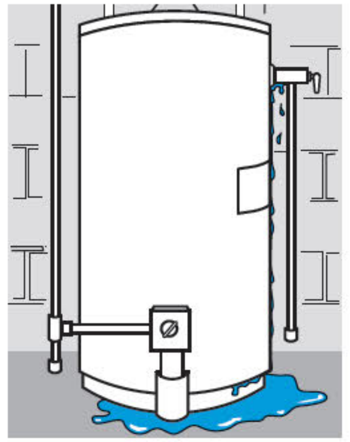
to replace the washer yourself. You may need an adjustable wrench, a standard-blade screwdriver, and a Phil ips screwdriver for older plumbing fixtures. It may be more economical to rebuild or replace the faucet if it is washerless.

Changing a washer

Before you start, turn off the water supply to the faucet by closing the fixture s shut-off valve. Most kitchen and bathroom faucets have shut-off valves under the sink. Turn the valve clockwise until it's tight. This shuts off the water to the sink only, and does not affect the water service for any other part of the house.

Be certain that the replacement washer is the same size as the worn one (if the worn washer was the correct size). If you need help, bring the worn washer to your plumbing supply or hardware store, and the store representative can help you match it with a new one.

NOT-SO-COMMON INDOOR LEAKS



Water dripping down the side of the tank could mean the pressure release valve is stuck.

Water heater tank

The pressure valve release could be stuck. This valve is most often found near the top of the tank, and is usually a large brass fitting threaded into the tank. If it's not working properly, water will be leaking from it, dripping down the side of the tank and accumulating on the floor.

Boiler

Listen for the sound of running water. If it is continuous and does not stop and start periodically, your boiler system may have a leak

Water softener

If you have a water softener, it could be wasting water if it is not recycling properly. The cycling process, regulated by a timer, often occurs between 2 a.m. and 4 a.m. You re likely to have a problem in this unit if you constantly hear the sound of running water

Washing machine

I you see water on the floor near the machine, it could mean a leak. You may want to call your washing machine repair service.

Humidifier

Water accumulated beneath the unit could be a sign of a leak. If the overflow discharge is piped into a sewer or drainage line, you may not find any visual signs of a leak. Listen for running water. If it's continuous, the float valve could be stuck.

Fire suppression systems

Many newer homes and businesses have fire suppression systems. If so, check to make su e that the sprinkler heads are tight and not leaking.

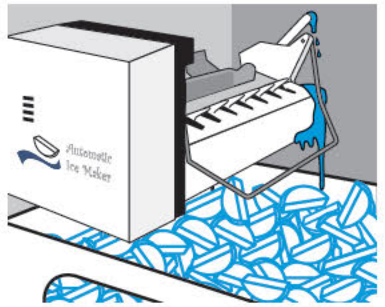
Dishwasher

Water accumulated on the floor near the unit could be a sign of a leak. You may want to call your dishwasher repair service.

NOT-SO-COMMON INDOOR LEAKS CONTINUED

Refrigerator ice-making unit

A leak in the ice-making unit will cause excessive ice accumulation in the freezer and may also produce small puddles of water under the refrigerator. You may want to call your refrigerator repair service.



Bathtubs & showers

Check the spout and shower head for dripping water. New washers may be needed on the faucet handles. You may be able to do this repair yourself by unscrewing the faucet and replacing the washer with one of the same size. Before doing this repair, close your home's main shut-off valve.

OUTDOOR LEAKS

When checking for water leaks, many people forget that water faucets and equipment exist outside as well as inside the home. Here are four areas you shouldn't overlook.

Water faucets

Each faucet should be checked for leaks. Make sure faucets are closed when not in use. If you find a leaky faucet, change the washer (after closing the shut-off valve).

In colder climates, during the winter, these inside shut-off valves should be closed to prevent freeze-ups. Be sure to open the outside faucet after you have shut the inside valve so that any water still in the pipes will drain out. These shut-off valves are usually in your basement. One shut-off valve may control all the outdoor faucets.

Automatic lawn-sprinkling system

Soft spots on your lawn may indicate a leak that is being absorbed into the ground.

Swimming pool

The pool system's automatic shut-off valve could be malfunctioning, causing a continuous cycle of water to be pumped in and then drained out. If the water level stays higher than normal, or the pool overflows when people are using it, your automatic shut-off valve may need some attention.

Service connecting line

If you find a soft, wet spot on your lawn or hear running water outside your house, you may have a leak in the service line to your house. Water soaks into the ground, causing the soft spots. Close the main shut-off valve. If the sound of running water continues, the outside service could be leaking.

YOU'VE CHECKED EVERYTHING... NOW WHAT?

If you haven't found a leak after checking all of the water outlets mentioned, and you still suspect a problem, you may want to call in a licensed plumber. You're also welcome to contact an American Water customer service representative for assistance. We'll work as hard as possible to help you.

11-2019

YOUR MAIN WATER SHUT-OFF VALVE

WHEN YOU LOCATE THE VALVE, PLACE THIS I.D. TAG ON IT.

You may want to turn the valve to make sure it isn't stuck. Water valves are generally closed by turning the handle clockwise. **PLEASE NOTE: If a valve does not turn easily, do not force it, or it might break.** Rather, you may want to have the valve repaired so that it does turn easily. Then, check sinks and other fixtures to be sure you have found the main valve and that it is working properly. When opening the valve to turn the water on, open it fully, then close it just a quarter turn to make it easier to close the next time. You should also find, turn, and tag individual shut-off valves on fixtures such as sinks and toilets, and consider operating the main and individual valves annually.

LEAK DETECTION TABLETS

FOR DETECTING TOILET LEAKS

PRESS RELEASE

PENNSYLVANIA AMERICAN WATER

FOR IMMEDIATE RELEASE

Western Pennsylvania
Gary Lobaugh
724.873.3674
gary.lobaugh@amwater.com

Eastern/Central Pennsylvania
Susan Turcmanovich
570.351.0120
susan.turcmanovich@amwater.com

PENNSYLVANIA AMERICAN WATER REMINDS CUSTOMERS THAT ARCTIC TEMPERATURES CAN FREEZE HOME PLUMBING

HERSHEY, Pa., (January 28, 2019) – With polar-like conditions predicted to bring frigid air to the Commonwealth for the rest of this week, Pennsylvania American Water today advised homeowners that freezing temperatures can damage your plumbing inside and outside of the home and result in a loss of pressure or service.

"Sub-freezing temperatures for an extended period can cause pipes in vulnerable areas to freeze, burst and result in costly damage," said Pennsylvania American Water Vice President of Operations Jimmy Sheridan**.** "Making the necessary preparations for these conditions and learning how to respond to frozen pipes can alleviate the expenses associated making major repairs."

Property owners are responsible for maintenance of the water service line from the curb to the house, as well as any in-home piping. During extending periods of sub-freezing temperatures, if you turn on a faucet and only a trickle comes out, suspect a frozen pipe.

The company advised customers to check with a neighbor on the status of their service if they suspect they may have frozen pipes. If the neighbors have water, then pipes may be frozen or there may a leak on the resident's service line.

Pennsylvania American Water encourages residents to take the following steps:

If your pipes freeze:
- Shut off the water immediately. Don't attempt to thaw frozen pipes unless the water is shut off. Freezing can often cause unseen cracks in pipes or joints.
- Apply heat to the frozen pipe by warming the air around it, or by applying heat directly to a pipe. You can use a hair dryer, space heater or hot water. Be sure not to leave space heaters unattended, and avoid the use of kerosene heaters or open flames.
- Once the pipes have thawed, turn the water back on slowly and check for cracks and leaks.

During at or below freezing temperatures:
- If you have pipes that are vulnerable to freezing, allow a small trickle of water to run overnight to keep pipes from freezing. The cost of the extra water is low compared to the cost to repair a broken pipe.
- Open cabinet doors to expose pipes to warmer room temperatures to help keep them from freezing.

-more-

When you are away:

- Have a friend, relative or neighbor regularly check your property to ensure that the heat is working and the pipes have not frozen.
- Also, a freeze alarm can be purchased for less than $100 and will call a user-selected phone number if the inside temperature drops below 45 degrees.

Being aware of your internal plumbing also can prevent damage to your plumbing system, and Pennsylvania American Water encourages customers to:

- Know what areas of your home, such as basements, crawl spaces, unheated rooms and outside walls, are most vulnerable to freezing.
- Eliminate sources of cold air near water lines by repairing broken windows, insulating walls, closing off crawl spaces and eliminating drafts near doors.
- Know the location of your main water shut-off valve. If a pipe freezes or bursts, shut the water off immediately.
- Protect your pipes and water meter. Wrap exposed pipes with insulation or use electrical heat tracing wire; newspaper or fabric might also work. For outside meters, keep the lid to the meter pit closed tightly and let any snow that falls cover it. Snow acts as insulation, so don't disturb it.

More cold weather tips can be found at www.pennsylvaniaamwater.com, or by visiting the company's YouTube channel (youtube.com/paamwater) or its Facebook page (facebook.com/pennsylvaniaamwater.com).

Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 2.4 million people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 14 million people in 45 states and Ontario, Canada. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

###

Statewide CodeRED call – Protect Pipes Against Freezing

Launch #23690 – Jan. 27, 2019

Voice Message/Email Message

With extremely cold weather in the forecast, Pennsylvania American Water reminds customers to take necessary measures to prevent frozen household pipes. Protect your home by wrapping exposed pipes with insulation and eliminate sources of cold air near any waterlines. We also recommend allowing a small trickle of water to run overnight to keep pipes from freezing. The cost of the water is minimal compared to repairing the damage from bursting pipes. Know the location of your main water shut-off valve. If a pipe freezes or bursts, shut the water off immediately. Do not attempt to thaw frozen pipes unless the water is shut off. To thaw pipes, apply heat from a hair dryer, space heater, or hot water. DO NOT USE a torch or open flame. For more tips on preventing frozen pipes, visit pennsylvaniaamwater.com, Click on Water Information, and Wise Water Use.

Text Message

Pennsylvania American Water has an important message in your area. For info visit our website Pennsylvaniaamwater.com and click Alert Notifications

ID	Launch Name	Launched By	Launch Date	Launch Type	Phone Calls	Connection Rate
23690	01.25.19: Pennsylvania State wide Call	Rogers, Terry	1/27/2019 4:00:09 PM	General	569996	90%

FR IX.7

Pennsylvania-American Water Company
<u>IX. Quality of Service</u>

7. Provide a discussion of the Company's policy regarding meter requirements, replacements and testing. State if the Company procedures are in compliance with 52 Pa. Code, § 65.8 (b).

a. Provide meter test records as required in 52 Pa. Code, § 65.8(c) for 50 meters most recently removed from service.

b. Provide a discussion of the Company's policy and history of compliance with 52 Pa. Code § 65.9 regarding adjustments of bills for meter error within the last year.

Answer: Pennsylvania-American Water Company adheres to 52 Pa Code § 65.8(b) concerning meter requirements, replacements and testing.

a. Please see attachment.

b. When a customer requests a special test of a meter pursuant to Tariff Rule 6.2, and the meter is found to have an error, the Company adjusts the customer's bill in accordance with 52 Pa. Code § 65.9. Within the last year, the Company discovered inconsistencies in bill adjustments for meters found to have an error in other circumstances, such as when meters are tested without a customer request. Effective January 1, 2020, the Company has modified its procedures to comply with bill adjustments for meter errors required by 52 Pa. Code § 65.9.

Inspection Lot	Serial Number	Material	Plant	Manufacturer	Meter Size	Inspector	Inspection Date	Start Read	End Read	Low Volume	Intermediate Volume	High Volume
80001979725	N040698487	1101509	D132	Neptune	5/8-METER	GRUBERRJ	2/18/2020	1528.15	1528.249	96	100	99
80001979727	N083590874	1101509	D132	Neptune	5/8-METER	GRUBERRJ	2/18/2020	1333.2748	1333.3746	0	99	99.8
80001978389	N70120634	1101346	D112	Neptune	1-METER	RYMANBS	2/14/2020	3868.3543	3868.4546	100	100.3	100.3
80001978388	N000900594	1101610	D109	Neptune	1.5-METER	RYMANBS	2/14/2020	2983.024	2983.125	100	101	101
80001978386	N060419699	1101413	D109	Neptune	2-METER	RYMANBS	2/14/2020	1827.512	1827.612	100	100	100
80001950172	N040698487	1101509	D132	Neptune	5/8-METER	GRUBERRJ	1/24/2020	1528.15	1528.249	96	100	99
80001948866	36165011	1101509	D132	Neptune	5/8-METER	BISHOPDG	1/22/2020	1853.96805	1853.97805	0	100	100.1
80001939786	36165009	1101509	D132	Neptune	5/8-METER	BISHOPDG	1/15/2020	2382.925	2382.935	0	100	99.5
80001904648	36165005	1101509	D132	Neptune	5/8-METER	BISHOPDG	12/2/2019	1664.41805	1664.42795	0	99	99
80001904649	36164997	1101509	D132	Neptune	5/8-METER	BISHOPDG	12/2/2019	1595.2703	1595.28035	0	100.5	99.9
80001900116	N043868322	1101509	D140	Neptune	5/8-METER	LIVAA	11/25/2019	2050.0853	2050.1837	95	100	98.4
80001900121	N044789362	1101509	D140	Neptune	5/8-METER	LIVAA	11/25/2019	1476.8025	1476.9036	104	103	101.1
80001900123	N45241320	1101509	D140	Neptune	5/8-METER	LIVAA	11/25/2019	1153.4293	1153.53	100	101	100.7
80001897923	N045792273	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	3524.4084	3524.5089	95	101	100.5
80001897909	N044675351	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	2741.1086	2741.2091	100	102	100.5
80001897914	N45241727	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1968.8443	1968.944	97	101	99.7
80001897916	N45162717	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1779.6202	1779.7212	100	102	101
80001897924	N044285680	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1720.6517	1720.7518	98	102	100.1
80001897912	N044675834	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1631.4634	1631.5622	90	99	98.8
80001897908	N043759587	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1561.5831	1561.682	97	100	98.9
80001897902	N45241728	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1520.6435	1520.7437	97	101	100.2
80001897906	N45245624	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1495.1116	1495.2126	101	102	101
80001897926	N041586383	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1385.328	1385.4276	107	102	99.6
80001897915	N45298966	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1324.9416	1325.0426	102	101	101
80001897922	N45172342	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1243.1704	1243.2709	101	101	100.5
80001897919	N044789401	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1196.6193	1196.7193	97	102	100
80001897910	N043758225	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1148.0391	1148.1388	100	101	99.7
80001897925	N043523525	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1147.1864	1147.2852	97	99	98.8
80001897913	N45241321	1101509	D140	Neptune	5/8-METER	LIVAA	11/22/2019	1078.0722	1078.1725	100	101	100.3
80001886638	N043602412	1101509	D140	Neptune	5/8-METER	LIVAA	11/21/2019	1916.9056	1917.0056	98	101	100
80001886636	N45172435	1101509	D140	Neptune	5/8-METER	LIVAA	11/21/2019	1810.6416	1810.7419	103	102	100.3
80001886626	N044789304	1101509	D140	Neptune	5/8-METER	LIVAA	11/21/2019	1660.1403	1660.2404	98	101	100.1
80001886625	N041930065	1101509	D140	Neptune	5/8-METER	LIVAA	11/21/2019	1537.959	1538.0585	99	100	99.5
80001886639	N042951811	1101509	D140	Neptune	5/8-METER	LIVAA	11/21/2019	1404.009	1404.1087	97	101	99.7
80001886627	N044789183	1101509	D140	Neptune	5/8-METER	LIVAA	11/21/2019	1260.4046	1260.5042	101	101	99.6
80001886630	N043299345	1101509	D140	Neptune	5/8-METER	LIVAA	11/21/2019	1162.1591	1162.2589	101	101	99.8
80001886629	N45244937	1101509	D140	Neptune	5/8-METER	LIVAA	11/21/2019	1017.8244	1017.9244	100	101	100
80001876471	N044285346	1101509	D140	Neptune	5/8-METER	LIVAA	11/11/2019	1397.5262	1397.6262	100	100	100
80001876472	N044042900	1101509	D140	Neptune	5/8-METER	LIVAA	11/11/2019	1262.6778	1262.7772	98	101	99.4
80001872569	36165004	1101509	D132	Neptune	5/8-METER	BISHOPDG	11/7/2019	2648.42035	2648.4303	0	99.5	98.1
80001869789	N043868160	1101509	D140	Neptune	5/8-METER	LIVAA	11/1/2019	1691.2082	1691.3087	101	101	100.5
80001869792	N043757101	1101509	D140	Neptune	5/8-METER	LIVAA	11/1/2019	1025.7439	1025.8437	98	101	99.8
80001863137	N45306222	1101509	D140	Neptune	5/8-METER	LIVAA	10/29/2019	1679.5047	1679.6042	97	101	99.5
80001863135	N043442694	1101509	D140	Neptune	5/8-METER	LIVAA	10/29/2019	1375.6569	1375.7567	96	89	99.8
80001863130	N042647773	1101509	D140	Neptune	5/8-METER	LIVAA	10/29/2019	1247.0843	1247.1837	97	102	99.4
80001863136	N042304835	1101509	D140	Neptune	5/8-METER	LIVAA	10/29/2019	1143.7081	1143.808	98	100	99.9
80001860392	N45241384	1101509	D140	Neptune	5/8-METER	LIVAA	10/28/2019	1460.4282	1460.5283	101	102	100.1
80001860387	N041665566	1101509	D140	Neptune	5/8-METER	LIVAA	10/28/2019	1454.6089	1454.7	101	102	91.1
80001860388	N044888730	1101509	D140	Neptune	5/8-METER	LIVAA	10/28/2019	1309.2703	1309.3701	97	101	99.8
80001860394	N044044537	1101509	D140	Neptune	5/8-METER	LIVAA	10/28/2019	1283.0383	1283.1375	99	102	99.2

MFR Description

FR X. BALANCE SHEET

1	Comparative balance sheet
2	Physical property, investments in affiliated companies, and other investments
3	Special cash accounts
4	Notes receivable and accounts receivable from associated companies
5	Accumulated reserve for uncollectible accounts
6	Prepayments
7	Significant items in current assets
8	Deferred asset account
9	Accounts payable to associated companies
10	Deferred credits
11	Method of funding of any reserves
12	Unappropriated retained earnings
13	Advances made by company to parent

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission

FR X.1

Pennsylvania-American Water Company
X. Balance Sheet

1. Provide a comparative balance sheet for the historic test year-end and the preceding year-end.

Answer: Please see attached.

Pennsylvania American Water Company - Total Company
Comparative Balance Sheet
FRX.1

	12/31/2019	12/31/2018
Assets		
Utility Plant In Service	$6,402,667,182	$5,939,490,080
Construction Work In Progress	87,251,946	54,514,920
Utility Plant Accumulated Depreciation/Amortization	(1,549,534,230)	(1,430,954,354)
Total Utility Plant Adjustment	11,839,099	12,583,821
Utility property, net of accumulated depreciation	$4,952,223,998	$4,575,634,467
Nonutility property, net of accumulated depreciation	$587,663	$248,041
Total Property, Plant and Equipment	$4,952,811,661	$4,575,882,508
Cash and Cash Equivalents	($812,974)	($338,174)
Accounts Receivable, net	75,106,595	57,949,648
Unbilled Revenues	36,826,469	34,993,603
Materials and Supplies	10,186,863	9,333,659
Other current assets	10,118,969	3,809,424
Total Current Assets	$131,425,922	$105,748,159
Regulatory Assets	$124,879,925	$111,051,162
Goodwill	78,006,179	76,123,525
Operating lease right-of-use assets	401,228	0
Other Long Term Assets	1,358,387	1,250,922
Total Regulatory and Other L/T Assets	$204,645,719	$188,425,609
Total Assets	$5,288,883,301	$4,870,056,275
Capital & Liabilities		
Common stock	$21,506,887	$21,506,887
Paid in Capital	1,322,040,170	1,191,960,369
Retained Earnings	692,749,126	638,726,957
Total Stockholder(s) Equity	$2,036,296,182	$1,852,194,213
Total Equity	$2,036,296,182	$1,852,194,213
Long Term Debt	$1,661,925,903	$1,556,794,755
Redeemable Preferred Stock at redemption value	2,851,500	3,873,500
Total Long-term debt	$1,664,777,403	$1,560,668,255
Total Capitalization	$3,701,073,585	$3,412,862,467
Short-Term Debt	$114,723,817	$76,419,576
Current Portion Long-term Debt	5,143,308	5,360,223
Current portion redeemable preferred stock	1,200,000	1,378,000
Accounts Payable	150,967,471	102,602,677
Taxes Accrued	(12,759,804)	(3,821,094)
Interest Accrued	18,945,036	20,029,284
Other current liabilities	26,034,176	28,676,516
Total Current Liabilities	$304,254,004	$230,645,183
Customer Advances for Construction	$62,850,378	$62,813,781
Deferred Income Taxes	631,445,374	571,215,972
Deferred Investment tax credits	4,438,204	4,671,796
Regulatory liability	349,285,034	356,090,553
Accrued Pension	(6,390,798)	(10,459,754)
Accrued postretirement benefit expense	(2,626,875)	3,356,702
Operating lease long-term liabilities	231,218	0
Other Deferred Credits	44,357,440	39,479,361
Regulatory & Other Long Term Liabilities	$1,083,589,976	$1,027,168,412
Contributions in aid of Construction	$199,965,736	$199,380,213
Total Capital and Liabilities	$5,288,883,301	$4,870,056,275

Pennsylvania-American Water Company - Water Operations Excl. Steelton
Comparative Balance Sheet
FRX.1

	12/31/2019	12/31/2018
Assets		
Utility Plant In Service	$5,239,057,055	$5,088,678,667
Construction Work In Progress	64,399,273	37,641,085
Utility Plant Accumulated Depreciation/Amortization	(1,097,128,612)	(1,117,531,057)
Total Utility Plant Adjustment	12,338,637	13,333,128
Utility property, net of accumulated depreciation	$4,218,666,354	$4,022,121,822
Nonutility property, net of accumulated depreciation	$587,663	$248,041
Total Property, Plant and Equipment	$4,219,254,017	$4,022,369,863
Cash and Cash Equivalents	($1,645,981)	($1,214,936)
Accounts Receivable, net	70,879,860	54,279,818
Unbilled Revenues	36,573,662	34,993,603
Materials and Supplies	10,010,895	9,235,210
Other current assets	17,404,509	10,809,424
Total Current Assets	$133,222,945	$108,103,119
Regulatory Assets	$116,609,637	$106,292,039
Goodwill	41,461,103	39,578,449
Operating lease right-of-use assets	401,228	0
Other Long Term Assets	1,358,387	1,250,922
Total Regulatory and Other L/T Assets	$159,830,355	$147,121,410
Total Assets	$4,512,307,316	$4,277,594,392
Capital & Liabilities		
Common stock	$21,506,887	$21,506,887
Paid in Capital	1,322,040,170	1,191,960,369
Retained Earnings	(32,136,904)	96,587,043
Total Stockholder(s) Equity	$1,311,410,153	$1,310,054,298
Total Equity	$1,311,410,153	$1,310,054,298
Long Term Debt	$1,655,639,927	$1,550,508,779
Redeemable Preferred Stock at redemption value	2,851,500	3,873,500
Total Long-term debt	$1,658,491,427	$1,554,382,279
Total Capitalization	$2,969,901,580	$2,864,436,577
Short-Term Debt	$114,723,817	$76,419,576
Current Portion Long-term Debt	5,143,308	5,360,223
Current portion redeemable preferred stock	1,200,000	1,378,000
Accounts Payable	143,930,201	97,035,353
Taxes Accrued	(12,759,804)	(3,821,094)
Interest Accrued	18,945,036	20,029,284
Other current liabilities	25,480,367	28,197,775
Total Current Liabilities	$296,662,926	$224,599,119
Customer Advances for Construction	$62,415,114	$62,436,407
Deferred Income Taxes	631,445,374	571,215,972
Deferred Investment tax credits	4,438,204	4,671,796
Regulatory liability	344,999,247	352,085,366
Accrued Pension	(6,390,798)	(10,459,754)
Accrued postretirement benefit expense	(2,626,875)	3,356,702
Operating lease long-term liabilities	231,218	0
Other Deferred Credits	44,357,440	39,479,361
Regulatory & Other Long Term Liabilities	$1,078,868,924	$1,022,785,851
Contributions in aid of Construction	$166,873,886	$165,772,846
Total Capital and Liabilities	$4,512,307,316	$4,277,594,392

Pennsylvania-American Water Company - Steelton Water Operations
Comparative Balance Sheet
FRX.1

	12/31/2019	**12/31/2018**
Assets		
Utility Plant In Service	$44,376,356	$0
Construction Work In Progress	24,128	0
Utility Plant Accumulated Depreciation/Amortization	(23,871,161)	0
Utility property, net of accumulated depreciation	$20,529,322	$0
Accounts Receivable, net	$379,489	$0
Materials and Supplies	14,884	0
Total Current Assets	$394,373	$0
Regulatory Assets	$10,548	$0
Total Regulatory and Other L/T Assets	$10,548	$0
Total Assets	$20,934,242	$0
Capital & Liabilities		
Retained Earnings	$20,928,673	$0
Total Stockholder(s) Equity	$20,928,673	$0
Total Equity	$20,928,673	$0
Total Capitalization	$20,928,673	$0
Other current liabilities	$5,569	$0
Total Current Liabilities	$5,569	$0
Total Capital and Liabilities	$20,934,242	$0

Pennsylvania-American Water Company - WW SSS Excl. Sadsbury and Exeter Operations
Comparative Balance Sheet
FRX.1

	12/31/2019	12/31/2018
Assets		
Utility Plant In Service	$336,386,567	$316,502,222
Construction Work In Progress	3,170,724	(494,158)
Utility Plant Accumulated Depreciation/Amortization	(71,607,111)	(66,825,400)
Total Utility Plant Adjustment	(499,538)	(749,307)
Utility property, net of accumulated depreciation	$267,450,642	$248,433,357
Accounts Receivable, net	($484,141)	($739,458)
Materials and Supplies	48,200	26,643
Total Current Assets	($435,941)	($712,815)
Regulatory Assets	$4,667,080	$3,202,286
Goodwill	1,955,849	1,955,849
Total Regulatory and Other L/T Assets	$6,622,928	$5,158,134
Total Assets	$273,637,630	$252,878,676
Capital & Liabilities		
Retained Earnings	$237,409,218	$217,777,527
Total Stockholder(s) Equity	$237,409,218	$217,777,527
Total Equity	$237,409,218	$217,777,527
Total Capitalization	$237,409,218	$217,777,527
Accounts Payable	$6,194,932	$5,161,048
Other current liabilities	214,931	68,649
Total Current Liabilities	$6,409,863	$5,229,698
Customer Advances for Construction	$435,264	$377,374
Regulatory liability	3,624,701	3,374,487
Regulatory & Other Long Term Liabilities	$4,059,965	$3,751,861
Contributions in aid of Construction	$25,758,583	$26,119,591
Total Capital and Liabilities	$273,637,630	$252,878,676

Pennsylvania-American Water Company - WW SSS Sadsbury Operations
Comparative Balance Sheet
FRX.1

	12/31/2019	**12/31/2018**
Assets		
Utility Plant In Service	$193,696,510	$0
Construction Work In Progress	350,309	0
Utility Plant Accumulated Depreciation/Amortization	(101,979,427)	0
Utility property, net of accumulated depreciation	$92,067,391	$0
Total Property, Plant and Equipment	$92,067,391	$0
Accounts Receivable, net	$320,872	$0
Unbilled Revenues	252,807	0
Materials and Supplies	7,252	0
Total Current Assets	$580,931	$0
Regulatory Assets	$11,791	$0
Total Regulatory and Other L/T Assets	$11,791	$0
Total Assets	$92,660,114	$0
Capital & Liabilities		
Retained Earnings	$92,631,125	$0
Total Stockholder(s) Equity	$92,631,125	$0
Total Equity	$92,631,125	$0
Total Capitalization	$92,631,125	$0
Accounts Payable	$2,518	$0
Other current liabilities	26,470	0
Total Current Liabilities	$28,988	$0
Total Capital and Liabilities	$92,660,114	$0

Pennsylvania-American Water Company - WW SSS Exeter Operations
Comparative Balance Sheet
FRX.1

	12/31/2019	**12/31/2018**
Assets		
Utility Plant In Service	$11,254,814	$0
Utility Plant Accumulated Depreciation/Amortization	(3,068,004)	0
Utility property, net of accumulated depreciation	$8,186,810	$0
Total Property, Plant and Equipment	$8,186,810	$0
Total Assets	$8,186,810	$0
Capital & Liabilities		
Retained Earnings	$8,186,810	$0
Total Stockholder(s) Equity	$8,186,810	$0
Total Equity	$8,186,810	$0
Total Capitalization	$8,186,810	$0
Total Capital and Liabilities	$8,186,810	$0

Pennsylvania-American Water Company - WW CSS Scranton Operations
Comparative Balance Sheet
FRX.1

	12/31/2019	12/31/2018
Assets		
Utility Plant In Service	$227,804,991	$199,385,267
Construction Work In Progress	12,698,857	15,477,766
Utility Plant Accumulated Depreciation/Amortization	(64,033,435)	(64,162,262)
Utility property, net of accumulated depreciation	$176,470,413	$150,700,770
Total Property, Plant and Equipment	$176,470,413	$150,700,770
Cash and Cash Equivalents	$836,456	$876,068
Accounts Receivable, net	1,926,515	2,140,916
Materials and Supplies	104,780	70,497
Other current assets	(285,541)	0
Total Current Assets	$2,582,210	$3,087,481
Regulatory Assets	$2,135,796	$1,349,699
Goodwill	33,734,400	33,734,400
Total Regulatory and Other L/T Assets	$35,870,196	$35,084,099
Total Assets	$214,922,820	$188,872,350
Capital & Liabilities		
Retained Earnings	$199,745,487	$173,875,929
Total Stockholder(s) Equity	$199,745,487	$173,875,929
Total Equity	$199,745,487	$173,875,929
Long Term Debt	$6,285,976	$6,285,976
Total Long-term debt	$6,285,976	$6,285,976
Total Capitalization	$206,031,462	$180,161,904
Accounts Payable	$694,692	$383,728
Other current liabilities	202,312	208,242
Total Current Liabilities	$897,004	$591,970
Regulatory liability	$661,087	$630,701
Regulatory & Other Long Term Liabilities	$661,087	$630,701
Contributions in aid of Construction	$7,333,267	$7,487,776
Total Capital and Liabilities	$214,922,820	$188,872,350

Pennsylvania-American Water Company - WW CSS McKeesport Operations
Comparative Balance Sheet
FRX.1

	12/31/2019	**12/31/2018**
Assets		
Utility Plant In Service	$350,090,890	$334,923,925
Construction Work In Progress	6,608,655	1,890,227
Utility Plant Accumulated Depreciation/Amortization	(187,846,479)	(182,435,635)
Utility property, net of accumulated depreciation	$168,853,066	$154,378,517
Total Property, Plant and Equipment	$168,853,066	$154,378,517
Cash and Cash Equivalents	($3,448)	$694
Accounts Receivable, net	2,084,000	2,268,372
Materials and Supplies	852	1,308
Other current assets	(7,000,000)	(7,000,000)
Total Current Assets	($4,918,597)	($4,729,626)
Regulatory Assets	$1,445,074	$207,138
Goodwill	854,827	854,827
Total Regulatory and Other L/T Assets	$2,299,901	$1,061,965
Total Assets	$166,234,370	$150,710,856
Capital & Liabilities		
Retained Earnings	$165,984,717	$150,486,459
Total Stockholder(s) Equity	$165,984,717	$150,486,459
Total Equity	$165,984,717	$150,486,459
Total Capitalization	$165,984,717	$150,486,459
Accounts Payable	$145,128	$22,548
Other current liabilities	104,525	201,849
Total Current Liabilities	$249,653	$224,397
Total Capital and Liabilities	$166,234,370	$150,710,856

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Other Investment as of December 31, 2019

FR X.2

Pennsylvania-American Water Company
X. Balance Sheet

2. Provide a detail of other Physical Property, Investment in Affiliated Companies and Other Investments.

Answer:

Area	Description	Amount	Depreciation	Amount	Asset
Account 103 - Property Held for Future Use					
	Well #4 - 1,845.50 sq ft	9,264	0	9,264	78203826
	Well #5 - 2,500 sq ft	12,550	0	12,550	78203827
	1 Million Gallon Tank Land	45,115	0	45,115	78203828
	Land - Pittsburgh	26,975	0	26,975	78203829
	Pennhurst Property - 4.4 acres	46,716	0	46,716	30018238
	Parcel	13,667	0	13,667	78324368
	Interest Privilege Right	1,278	0	1,278	78324369
	Parcel	174	0	174	78324370
	Parcel	13,391	13,391	0	78324371
	Interest Privilege Right	390	0	390	78324372
	Well	925	0	925	78324373
	Well	557	0	557	78324374
	Well House	1,331	1,331	0	78324375
	Test Pumping	10,145	10,145	0	78324376
	Well	20,432	20,432	0	78324377
	Well	20,000	0	20,000	78324380
	Unit Heater	807	807	0	78324382
	Well	18,599	18,599	0	78324383
	Well	33,315	33,315	0	78324384
	Pump & Meters 50 HP	26,098	26,098	0	78324385
	Birch Acres Well - Parcel #2	4,919	0	4,919	19772334
	Birch Acres Well - Parcel #3 Land Right	1	0	1	19772336
	Birch Acres Well - Parcel #4	5,549	0	5,549	19772335
		312,199	124,117	188,082	

*Assets fully depreciated in 2004 are no longer included in account 103.

Area	Description	Amount	Depreciation	Amount
Account 121 - Non Utility Plant				
	Non Utility Plant - Land	677,183	119,772	557,411
	Non Utility Plant - Other	740,277	710,026	30,252
		1,417,461	829,798	587,663

FR X.3

Pennsylvania-American Water Company
X. Balance Sheet

3. Provide the amounts and purpose of Special Cash Accounts as of the historic test-year end.

Answer: The Petty Cash Account 134 had a balance of $694 at the end of the historic test year.

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Notes Receivable, Accounts Receivable from Associated Companies and Other Receivables as of December 31, 2019

FR X.4

Pennsylvania-American Water Company
X. Balance Sheet

4. Describe the nature and amounts of notes receivable, accounts receivable from associated companies, and any other receivables, other than customers' accounts, greater than 15% of the total. Limit the explanation to variances greater than $10,000.

Answer:

Please refer to the summary below. Additional detail attached.

Miscellaneous Receivables (Total Company)

Account/Description	Amount	% of Total
14510000 A/R Assoc Cos - Miscellaneous	$6,682,547	24.0%
14510100 A/R Assoc Cos - Reconciliation Account	19,977,016	71.8%
14511001 A/R Assoc Cos - Service Company Bill	412,239	1.5%
14573000 A/R Assoc Cos - Dividend Equivalents	35,458	0.1%
14574000 N/R Assoc Co's	0	0.0%
Sub-Total A/R Assoc Cos	**$27,107,260**	**97.5%**
14610000 Misc A/R - Reconciliation Account	($13,686)	(0.0%)
14611000 Misc A/R - Manual	48,012	0.2%
14611300 Misc A/R - Liability Insurance	0	0.0%
14611500 Misc A/R - Medicare Subsidy	662,344	2.4%
14613000 Misc A/R - Employees	275	0.0%
14613100 Misc A/R - Employees Payroll	2,781	0.0%
Sub-Total Misc A/R	**$699,726**	**2.5%**
14620000 Misc Rec - Allow for Uncollectible Accts	$0	0.0%
Total Miscellaneous Receivables	**$27,806,986**	**100.0%**

Pennsylvania-American Water Company - A/R Associated Companies
Miscellaneous
Balance Summary as of December 31, 2019

Description	Amount
Fed Tax Sharing	$6,607,680
Credit Line Fees	2,013
Intercompany AWR	72,854
Total	**$6,682,547**

Pennsylvania-American Water Company - A/R Associated Companies Reconciliation Account
Balance Summary as of December 31, 2019

Description	Amount
AFUDC - Equity	$12,642
Credit Line Fees	1,379
Alan Sechman	326
Borough of Castle Shannon	1,071
Borough of Clarks Summit	150
CCATT Holdings LLC	5,484
Clearwire Legacy LLC	4,000
Connellsville Twp Municipal Jnt Authority	42
Contract Services - Legal	2,461
Contract Svc-Other - Natural Account	171,420
Cumru Township	15
Defined Compensation Plan Expense	64,835
Ellport Borough Sewer Authority	31
Forms - Natural Account	174
IHC Clearing - Incoming Payment	(4,845)
IHC Clearing - Outgoing Payment	242,188
Intercompany System Clearing -CIS Only	1,500,106
Labor Natural Account	564,270
LT Asset - OPEB	17,024,662
Misc Exp (O&M) - Natural Acct	519
Municipality of Bethel Park	675
North Londonderry Township	137
Perry Township Mun Authority	17
PNC AWCC-Accounts Payable - Outbound Check	359,516
Silver Springs Township Auth	15
South Uniontown Township	16
Sprint (United Management Company)	2,000
Strattanville Water Authority	22
SUTA	21,916
Township of Upper St Clair	388
Weaver & Sturgill Sanitation	1,275
West Butler County Authority	54
West Elizabeth Sanitary	55
Total	**$19,977,016**

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Uncollectibles as of December 31, 2012

FR X.5

Pennsylvania-American Water Company
X. Balance Sheet

5. Provide the amount of accumulated reserve for uncollectible accounts, method and rate of accrual, amounts accrued and amounts written-off in each of the last three years.

Answer:

Accumulated Reserve – Uncollectible Accounts (Total Company) $15,663,169

The allowance for doubtful accounts is calculated based upon an uncollectible percentage of sales method coupled with an allowance for customer account balances, which have aged over 150 days. Accounts are typically written off once they age to 150 days. The percentage used for the sales method is determined annually by the Accounting Manager and approved by an Assistant Controller of Accounting. The percentage factor is reviewed annually but may be updated more frequently if an adjustment is needed (i.e. change in economic conditions). Discretionary adjustments are manual changes to remove or add specific customer accounts to/from the doubtful accounts report. Discretionary adjustments should only be made if there is a reasonable expectation that payments will be received or not received.

Calculation of the total reserve for the current month.

A. Obtain total customer revenue (billed and unbilled) for the past 5 months by individual entity
B. Multiply A by the % factor approved
C. Obtain the Account balances > 150 days by state. (Aging reports generated at month end)
D. Obtain any Approved discretionary adjustments.
E. Total reserve = B + C + D

	Total Company		
	Year-end 2017	Year-end 2018	Year-end 2019
Accrued Expense	$6,350,781	$10,221,156	$10,677,158
Net Charge Offs	$7,630,917	$8,770,225	$8,423,765

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Prepayments

FR X.6

Pennsylvania-American Water Company
X. Balance Sheet

6. Provide a list of prepayments and give an explanation of special prepayments.

Answer:

(Total Company)	
Prepayments	**12/31/2019**
Account/Description	**Balance**
16410000 Other Deposits	10,253
16510000 Prepaid Taxes	4,125,704
16520000 Prepaid Insurance	172,908
16530000 Prepaid PUC/PSC Assessment	2,356,587
16550000 Prepaid Other	392,854
16550010 Prepaid Other - Global	2,315,167
16612000 Reg Asset-OCA non tax	745,495
Total	10,118,969

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Significant Items in Current Assets

FR X.7

Pennsylvania-American Water Company
X. Balance Sheet

7. Break down and explain in detail any significant items, greater than 15% of the total, in the current assets account listed on the balance sheet. Limit the explanation to variances greater than $10,000.

Answer:

(Total Company)	**12/31/2019**		
Current Assets	**Balance**	**% of Total**	
Cash and Cash Equivalents	($812,974)	-1%	
Accounts Receivable, net	75,106,595	57%	See Detail Below
Unbilled Revenues	36,826,469	28%	
Materials and Supplies	10,186,863	8%	See Detail Below
Other current assets	10,118,969	8%	See Detail Below
Total Current Assets	$131,425,922	100%	
Accounts Receivable, net			
Customer accounts receivable	62,962,777		
Accounts Receivable Assoc Co's	27,107,260		
Miscellaneous Receivables	699,726		
Allowance for Uncollectible Accounts	(15,663,169)		
Sub-Total	75,106,595		
Materials and Supplies			
Plant Material	8,093,472		
Fuel	13,965		
Chemicals	1,786,892		
Other Materials & Supplies	292,534		
Sub-Total	10,186,863		
Other current assets			
Other Specials Deposits	10,253		
Prepaid Taxes	4,125,704		
Prepaid Insurance	172,908		
Prepaid PUC/PSC Assessments	2,356,587		
Prepaid Other	392,854		
Prepaid Other - Global	2,315,167		
Reg Asset - Other Current Asset Non Tax	745,495		
Sub-Total	10,118,969		

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Deferred Assets as of December 31, 2019

FR X.8

Pennsylvania-American Water Company
X. Balance Sheet

8. Explain in detail, including the amount and purpose, the deferred asset accounts that currently operate to effect or will at a later date effect the operating account supplying:

a. Origin of these accounts.
b. Probable changes to this account in the near future.
c. Amortization of these accounts currently charged to operations or to be charged in the near future.

Answer:

Deferred Assets (Total Company)

Account/Description	12/31/2019 Balance	2019 New Charges	2019 Expense Amortization	Account Charged
Deferred Rate Proceedings	821,927	85,919	(735,986)	18620000
Deferred Purchase Prem Rec Thru Rat	415,961		(174,511)	18650000
Cost of Removal	77,361,756			18680000
Cost of Removal-RWIP	6,132,285			18680100
Post In-Service AFUDC	106,290	102,290		18680134
Post In-Service Depreciation	95,482	86,750		18680135
Cost of Service Study	213,669		(26,709)	18680132
Deferred Acquisition Costs	6,426,860	1,601,490	(89,386)	18680162
Debt Call Premium	13,901,622		(1,719,605)	18680218
Lead Service Line Costs	268,526	35,918		18689900
Safe Drinking Water Annual Fee	837,500	837,500		18689900
Total	$106,581,877			

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Accounts Payable to Associated Companies as of December 31, 2019

FR X.9

Pennsylvania-American Water Company
X. Balance Sheet

9. Explain the nature of accounts payable to associated companies. Provide a breakdown by category.

Answer: The Company has four accounts payable to associated companies accounts. The first account, 23410100, is a clearing account associated with receivables and disbursements of Pennsylvania American that are handled by American Water Capital Corporation. The second account, 23510000, would include accounts payable to internal trading partners such as American Water Capital Corporation for short term debt, or American Water Works company for accrued federal income taxes. The third and fourth accounts, 23520000 & 23520001 (A/P Service Co Bill), net, represents the balance Pennsylvania American owes AWWSC for support services.

Accounts Payable to Associated Companies
(Total Company)

Account/Description	Amount
23410100 A/P Intercompany - Reconciliation Account	$22,868,527
23510000 A/P Associated Companies	0
23520000 A/P Associated Companies - Service Co Bill	(6,431,263)
23520001 A/P Associated Companies - Service Co Bill	9,837,228

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Deferred Credits as of December 31, 2019

FR X.10

Pennsylvania-American Water Company
X. Balance Sheet

10. Provide a breakdown and explanation of other deferred credits as to their origin and disposition policy, for example, amortization.

Answer:

Deferred Credits (Total Company)

Account/Description	**12/31/2019 Balance**	**2019 New Charges**	**2019 Expense Amortization**	**Account Charged**
Tax Cuts Job Act	(23,441,065)	(1,077,686)		25632300
Pension Tracker	(11,832,712)		1,479,089	25633000
Service Company Pension	(3,834,630)		479,329	25633200
Gain on Acquisition	(1,410,307)	(1,020,074)	127,207	25633700
Total	($40,518,714)			

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Funding of Reserves

FR X.11

Pennsylvania-American Water Company
<u>X. Balance Sheet</u>

11. Provide an explanation and method of funding of any reserves, other than depreciation and bad debt appearing on historic balance sheet.

Answer: The Company maintains no reserves, other than depreciation and bad debt, appearing on historic balance sheet.

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Unapppropriated Retained Earnings as of December 31, 2010

FR X.12

Pennsylvania-American Water Company
X. Balance Sheet

12. Provide an analysis of unappropriated retained earnings for the historic test year and two preceding years.

Answer: Total Company

Unappropriated Retained Earnings
Water and Wastewater

	12/31/2019	12/31/2018	12/31/2017
Balance at Beginning of Period	$638,726,957	$587,534,546	$542,942,074
Add:			
Net Income for Period	186,741,762	189,071,429	160,704,637
Cumulative Effect of Change in Accounting Principle	(127,994)	0	376,954
Deduct:			
Preferred Stock Dividends	0	0	0
Declaration of Common Stock Dividends	132,599,731	137,878,694	116,489,118
Adjustment	8,131	(324)	0
Balance at the end of Period	$692,749,126	$638,726,957	$587,534,546

FR X.13

Pennsylvania-American Water Company
X. Balance Sheet

13. Describe the purpose of any advances made by the Company to its parent corporation and describe all terms and conditions associated with such advances, including an estimate of future advances or repayments that are expected to occur.

Answer: The Company made no advances to its parent corporation.

MFR Description

FR XI. OTHER DATA

1 Monthly balance sheets and income statements

2 Internal and external audit copies

3 Monthly budget variances reports to management – Refer to XI.1

4 Operating and capital budgets

5 Unaccounted for water schedule, I & I for Wastewater

6 Corporate history

FR XI.1

Pennsylvania-American Water Company
XI. Other Data

1. Provide the Company's monthly balance sheets and income statements for each month of the historic and future test year.

Answer: Please see attached.

Pennsylvania-American Water Company
FR XI.01 Balance Sheet
Total Company

	1/31/2019	2/28/2019	3/31/2019	4/30/2019
Assets				
Utility Plant In Service	$5,950,455,083	$5,961,758,040	$5,932,497,032	$5,932,654,699
Construction Work In Progress	59,029,984	60,417,706	63,362,806	69,238,946
Utility Plant Accumulated Depreciation/Amortization	(1,440,106,620)	(1,450,181,550)	(1,411,952,392)	(1,408,351,761)
Total Utility Plant Adjustment	12,552,855	12,521,890	12,490,924	12,459,958
Utility property, net of accumulated depreciation	$4,581,931,303	$4,584,516,086	$4,596,398,370	$4,606,001,842
Nonutility property, net of accumulated depreciation	$247,424	$246,806	$246,189	$245,571
Total Property, Plant and Equipment	$4,582,178,727	$4,584,762,892	$4,596,644,559	$4,606,247,413
Cash and Cash Equivalents	($1,631,298)	($115,458)	($883,498)	$744,125
Accounts Receivable, net	51,564,326	57,205,902	57,400,799	50,638,739
Unbilled Revenues	34,646,314	31,361,575	33,646,915	34,542,647
Materials and Supplies	9,336,034	9,511,540	9,907,384	10,491,850
Other current assets	3,970,236	4,463,024	5,726,005	8,930,392
Total Current Assets	$97,885,612	$102,426,582	$105,797,604	$105,347,754
Regulatory Assets	$256,435,538	$256,578,999	$109,880,673	$256,751,891
Goodwill	76,123,525	76,123,525	76,123,525	76,123,525
Operating lease right-of-use assets	0	664,518	588,782	551,879
Other Long Term Assets	1,223,947	1,195,752	1,167,487	1,434,950
Total Regulatory and Other L/T Assets	$333,783,010	$334,562,794	$187,760,467	$334,862,244
Total Assets	$5,013,847,349	$5,021,752,268	$4,890,202,630	$5,046,457,412
Capital & Liabilities				
Common stock	$21,506,887	$21,506,887	$21,506,887	$21,506,887
Paid in Capital	1,191,960,369	1,191,982,179	1,192,058,056	1,192,058,056
Retained Earnings	651,470,968	661,419,849	647,360,157	661,775,153
Total Stockholder(s) Equity	$1,864,938,223	$1,874,908,914	$1,860,925,099	$1,875,340,096
Total Equity	$1,864,938,223	$1,874,908,914	$1,860,925,099	$1,875,340,096
Long Term Debt	$1,556,363,626	$1,555,931,714	$1,555,517,278	$1,555,101,479
Redeemable Preferred Stock at redemption value	2,851,500	2,851,500	2,851,500	2,851,500
Total Long-term debt	$1,559,215,126	$1,558,783,214	$1,558,368,778	$1,557,952,979
Total Capitalization	$3,424,153,349	$3,433,692,128	$3,419,293,877	$3,433,293,075
Short-Term Debt	$77,148,346	$78,513,158	$118,045,485	$117,950,368
Current Portion Long-term Debt	5,343,535	5,326,804	5,307,563	5,288,262
Current portion redeemable preferred stock	1,200,000	1,200,000	1,200,000	1,200,000
Accounts Payable	84,518,574	70,275,604	71,775,929	70,621,102
Taxes Accrued	(4,199,018)	(3,527,367)	3,510,095	(208,848)
Interest Accrued	24,961,481	30,555,244	13,669,437	15,833,479
Other current liabilities	26,058,673	27,491,781	24,264,621	21,808,396
Total Current Liabilities	$215,031,589	$209,835,225	$237,773,131	$232,492,759
Customer Advances for Construction	$62,903,451	$63,794,797	$63,885,215	$63,689,928
Deferred Income Taxes	574,565,554	577,957,899	580,747,902	583,317,590
Deferred Investment tax credits	4,652,330	4,632,864	4,613,398	4,593,932
Regulatory liability	500,600,111	500,505,635	355,327,515	500,307,755
Accrued Pension	(9,583,101)	(10,062,498)	(9,281,145)	(8,499,792)
Accrued postretirement benefit expense	2,893,957	2,376,164	1,885,895	1,395,626
Operating lease long-term liabilities	0	429,492	378,721	357,058
Other Deferred Credits	39,610,056	39,600,161	36,894,355	36,900,432
Regulatory & Other Long Term Liabilities	$1,175,642,359	$1,179,234,514	$1,034,451,856	$1,182,062,530
Contributions in aid of Construction	$199,020,052	$198,990,400	$198,683,766	$198,609,049
Total Capital and Liabilities	$5,013,847,349	$5,021,752,268	$4,890,202,630	$5,046,457,412

Pennsylvania-American Water Company
FR XI.01 Balance Sheet
Total Company

	5/31/2019	6/30/2019	7/31/2019	8/31/2019
Assets				
Utility Plant In Service	$5,934,959,188	$5,911,193,176	$5,932,376,071	$5,979,963,717
Construction Work In Progress	78,311,603	97,296,364	112,166,162	112,402,301
Utility Plant Accumulated Depreciation/Amortization	(1,397,328,061)	(1,369,794,647)	(1,379,841,800)	(1,388,496,724)
Total Utility Plant Adjustment	12,428,993	12,024,893	11,993,927	11,962,962
Utility property, net of accumulated depreciation	$4,628,371,723	$4,650,719,786	$4,676,694,360	$4,715,832,256
Nonutility property, net of accumulated depreciation	$244,954	$200,405	$199,788	$199,170
Total Property, Plant and Equipment	$4,628,616,677	$4,650,920,191	$4,676,894,148	$4,716,031,427
Cash and Cash Equivalents	$117,459	($199,952)	$263,102	($2,747,118)
Accounts Receivable, net	56,543,762	60,762,416	53,951,462	172,510,439
Unbilled Revenues	37,891,875	36,113,940	37,556,148	37,674,323
Materials and Supplies	10,878,073	11,784,154	11,832,274	11,241,224
Other current assets	7,307,687	5,359,445	9,197,043	9,438,285
Total Current Assets	$112,738,855	$113,820,004	$112,800,029	$228,117,154
Regulatory Assets	$257,994,201	$115,491,483	$261,750,161	$264,291,763
Goodwill	76,123,525	75,971,258	75,971,258	75,971,258
Operating lease right-of-use assets	532,555	514,491	494,967	475,384
Other Long Term Assets	1,417,649	1,394,537	1,867,080	1,388,929
Total Regulatory and Other L/T Assets	$336,067,931	$193,371,768	$340,083,465	$342,127,333
Total Assets	$5,077,423,463	$4,958,111,963	$5,129,777,642	$5,286,275,913
Capital & Liabilities				
Common stock	$21,506,887	$21,506,887	$21,506,887	$21,506,887
Paid in Capital	1,192,102,770	1,192,148,865	1,192,148,865	1,322,195,874
Retained Earnings	676,331,767	666,338,050	682,723,172	701,299,545
Total Stockholder(s) Equity	$1,889,941,423	$1,879,993,802	$1,896,378,924	$2,045,002,305
Total Equity	$1,889,941,423	$1,879,993,802	$1,896,378,924	$2,045,002,305
Long Term Debt	$1,664,442,938	$1,664,027,618	$1,664,011,819	$1,663,595,962
Redeemable Preferred Stock at redemption value	2,851,500	2,851,500	2,851,500	2,851,500
Total Long-term debt	$1,667,294,438	$1,666,879,118	$1,666,863,319	$1,666,447,462
Total Capitalization	$3,557,235,861	$3,546,872,920	$3,563,242,243	$3,711,449,767
Short-Term Debt	$1,685,547	$23,865,693	$19,747,974	($10,451)
Current Portion Long-term Debt	5,268,974	5,249,626	5,218,246	5,198,837
Current portion redeemable preferred stock	1,200,000	1,200,000	1,200,000	1,200,000
Accounts Payable	82,128,702	93,762,346	96,243,678	114,521,480
Taxes Accrued	3,656,665	1,986,346	6,045,859	10,341,142
Interest Accrued	20,184,380	18,601,658	23,571,087	29,356,909
Other current liabilities	23,589,020	27,179,414	26,195,785	24,026,683
Total Current Liabilities	$137,713,287	$171,845,083	$178,222,630	$184,634,600
Customer Advances for Construction	$64,278,987	$64,442,895	$64,470,820	$64,437,802
Deferred Income Taxes	585,791,570	586,377,769	589,167,827	592,638,426
Deferred Investment tax credits	4,574,466	4,555,000	4,535,534	4,516,068
Regulatory liability	500,208,815	354,612,822	500,006,470	499,898,579
Accrued Pension	(8,883,889)	(8,102,536)	(7,321,183)	(8,028,020)
Accrued postretirement benefit expense	905,357	314,739	(175,530)	(665,799)
Operating lease long-term liabilities	340,904	325,300	309,123	292,891
Other Deferred Credits	36,884,537	38,560,916	38,622,301	38,631,489
Regulatory & Other Long Term Liabilities	$1,184,100,747	$1,041,086,906	$1,189,615,362	$1,191,721,436
Contributions in aid of Construction	$198,373,567	$198,307,054	$198,697,407	$198,470,110
Total Capital and Liabilities	$5,077,423,463	$4,958,111,963	$5,129,777,642	$5,286,275,913

Pennsylvania-American Water Company
FR XI.01 Balance Sheet
Total Company

	9/30/2019	10/31/2019	11/30/2019	12/31/2019
Assets				
Utility Plant In Service	$5,995,473,119	$6,132,141,802	$6,234,875,551	$6,402,667,182
Construction Work In Progress	142,608,841	153,671,597	95,868,628	87,251,946
Utility Plant Accumulated Depreciation/Amortization	(1,399,890,057)	(1,409,949,300)	(1,419,364,747)	(1,549,534,230)
Total Utility Plant Adjustment	11,931,996	11,901,030	11,870,065	11,839,099
Utility property, net of accumulated depreciation	$4,750,123,899	$4,887,765,129	$4,923,249,496	$4,952,223,998
Nonutility property, net of accumulated depreciation	$228,043	$227,426	$226,808	$587,663
Total Property, Plant and Equipment	$4,750,351,942	$4,887,992,554	$4,923,476,304	$4,952,811,661
Cash and Cash Equivalents	($2,941,661)	($3,566,817)	($3,831,747)	($812,974)
Accounts Receivable, net	114,966,803	48,021,957	75,284,960	75,106,595
Unbilled Revenues	34,280,714	37,147,967	35,214,655	36,826,469
Materials and Supplies	11,079,843	10,735,825	10,265,045	10,186,863
Other current assets	11,834,182	12,215,514	10,161,376	10,118,969
Total Current Assets	$169,219,881	$104,554,446	$127,094,288	$131,425,922
Regulatory Assets	$118,585,985	$271,486,276	$272,640,698	$124,879,925
Goodwill	75,971,258	78,721,258	78,721,258	78,006,179
Operating lease right-of-use assets	460,827	441,022	421,164	401,228
Other Long Term Assets	1,325,652	1,305,329	1,279,992	1,358,387
Total Regulatory and Other L/T Assets	$196,343,721	$351,953,885	$353,063,112	$204,645,719
Total Assets	$5,115,915,544	$5,344,500,885	$5,403,633,705	$5,288,883,301
Capital & Liabilities				
Common stock	$21,506,887	$21,506,887	$21,506,887	$21,506,887
Paid in Capital	1,322,225,477	1,322,225,477	1,322,267,635	1,322,040,170
Retained Earnings	684,107,324	700,975,597	714,183,209	692,749,126
Total Stockholder(s) Equity	$2,027,839,687	$2,044,707,961	$2,057,957,730	$2,036,296,182
Total Equity	$2,027,839,687	$2,044,707,961	$2,057,957,730	$2,036,296,182
Long Term Debt	$1,663,179,330	$1,662,762,493	$1,662,344,305	$1,661,925,903
Redeemable Preferred Stock at redemption value	2,851,500	2,851,500	2,851,500	2,851,500
Total Long-term debt	$1,666,030,830	$1,665,613,993	$1,665,195,805	$1,664,777,403
Total Capitalization	$3,693,870,517	$3,710,321,954	$3,723,153,535	$3,701,073,585
Short-Term Debt	$552,722	$54,144,591	$63,469,057	$114,723,817
Current Portion Long-term Debt	5,179,403	5,159,984	5,151,626	5,143,308
Current portion redeemable preferred stock	1,200,000	1,200,000	1,200,000	1,200,000
Accounts Payable	125,226,863	129,500,772	155,718,392	150,967,471
Taxes Accrued	(12,351,622)	(8,747,949)	(7,481,330)	(12,759,804)
Interest Accrued	13,197,812	17,278,097	21,658,137	18,945,036
Other current liabilities	28,429,653	25,041,855	26,727,343	26,034,176
Total Current Liabilities	$161,434,830	$223,577,349	$266,443,224	$304,254,004
Customer Advances for Construction	$64,578,547	$63,817,000	$62,976,033	$62,850,378
Deferred Income Taxes	605,777,563	609,417,406	614,251,630	631,445,374
Deferred Investment tax credits	4,496,602	4,477,136	4,457,670	4,438,204
Regulatory liability	353,946,253	500,698,407	500,586,051	349,285,034
Accrued Pension	(7,246,667)	(6,465,314)	(7,172,151)	(6,390,798)
Accrued postretirement benefit expense	(1,156,068)	(1,646,337)	(2,136,606)	(2,626,875)
Operating lease long-term liabilities	280,666	264,239	247,756	231,218
Other Deferred Credits	40,682,671	40,690,762	40,708,651	44,357,440
Regulatory & Other Long Term Liabilities	$1,061,359,568	$1,211,253,299	$1,213,919,035	$1,083,589,976
Contributions in aid of Construction	$199,250,629	$199,348,282	$200,117,910	$199,965,736
Total Capital and Liabilities	$5,115,915,544	$5,344,500,885	$5,403,633,705	$5,288,883,301

Pennsylvania-American Water Company
FR XI.01 Balance Sheet
Total Company

	1/31/2020	2/28/2020	3/31/2020
Assets			
Utility Plant In Service	$6,422,076,562	$6,451,740,390	$6,462,114,221
Construction Work In Progress	91,319,606	84,993,423	90,565,760
Utility Plant Accumulated Depreciation/Amortization	(1,561,054,265)	(1,572,564,218)	(1,574,515,126)
Total Utility Plant Adjustment	11,808,134	11,777,168	11,746,202
Utility property, net of accumulated depreciation	$4,964,150,036	$4,975,946,762	$4,989,911,057
Nonutility property, net of accumulated depreciation	$225,573	$586,428	$585,811
Total Property, Plant and Equipment	$4,964,375,609	$4,976,533,190	$4,990,496,867
Cash and Cash Equivalents	($1,723,024)	($876,526)	($268,016)
Accounts Receivable, net	45,646,943	50,647,991	47,544,297
Unbilled Revenues	37,735,467	33,458,342	37,260,200
Materials and Supplies	10,678,857	11,261,128	11,725,803
Other current assets	13,690,982	12,419,873	10,605,032
Total Current Assets	$106,029,225	$106,910,807	$106,867,317
Regulatory Assets	$278,257,025	$278,188,803	$279,744,792
Goodwill	78,006,179	78,006,179	75,640,177
Operating lease right-of-use assets	386,042	526,672	510,447
Other Long Term Assets	1,236,209	1,216,633	1,193,499
Total Regulatory and Other L/T Assets	$357,885,455	$357,938,286	$357,088,915
Total Assets	$5,428,290,289	$5,441,382,283	$5,454,453,099
Capital & Liabilities			
Common stock	$21,506,887	$21,506,887	$21,506,887
Paid in Capital	1,322,040,170	1,322,077,518	1,322,112,668
Retained Earnings	706,542,361	718,285,049	698,826,238
Total Stockholder(s) Equity	$2,050,089,417	$2,061,869,453	$2,042,445,792
Total Equity	$2,050,089,417	$2,061,869,453	$2,042,445,792
Long Term Debt	$1,641,506,152	$1,641,085,616	$1,640,664,853
Redeemable Preferred Stock at redemption value	1,651,500	1,651,500	1,651,500
Total Long-term debt	$1,643,157,652	$1,642,737,116	$1,642,316,353
Total Capitalization	$3,693,247,069	$3,704,606,570	$3,684,762,146
Short-Term Debt	$123,055,521	$124,931,028	$164,378,607
Current Portion Long-term Debt	25,134,955	25,126,603	25,135,958
Current portion redeemable preferred stock	1,200,000	1,200,000	1,200,000
Accounts Payable	111,768,878	103,704,448	105,562,105
Taxes Accrued	(12,573,630)	(9,511,612)	(8,715,715)
Interest Accrued	23,756,786	29,213,126	12,809,435
Other current liabilities	22,340,547	18,728,613	20,867,088
Total Current Liabilities	$294,683,056	$293,392,205	$321,237,478
Customer Advances for Construction	$63,641,618	$63,516,195	$63,543,274
Deferred Income Taxes	636,625,318	641,651,221	648,748,649
Deferred Investment tax credits	4,418,738	4,399,272	4,379,806
Regulatory liability	500,361,341	500,285,605	500,184,445
Accrued Pension	(6,123,421)	(7,583,614)	(7,350,729)
Accrued postretirement benefit expense	(3,210,217)	(3,793,559)	(4,376,901)
Operating lease long-term liabilities	216,333	303,708	287,432
Other Deferred Credits	44,363,250	44,143,551	42,655,810
Regulatory & Other Long Term Liabilities	$1,240,292,960	$1,242,922,380	$1,248,071,785
Contributions in aid of Construction	$200,067,204	$200,461,128	$200,381,691
Total Capital and Liabilities	$5,428,290,289	$5,441,382,283	$5,454,453,099

Pennsylvania American Water Company
FR XI.01 Income Statement
Total Company

	Jan 2019	Feb 2019	Mar 2019	Apr 2019
OPERATING REVENUE				
Water revenues	$50,049,708	$46,327,608	$50,618,320	$48,961,244
Sewer revenues	4,952,106	4,509,768	5,245,996	4,733,724
Other operating revenues	917,566	922,765	935,361	1,017,124
Operating revenues	$55,919,379	$51,760,141	$56,799,678	$54,712,093
OPERATIONS & MAINTENANCE EXPENSE				
Purchased water	$244,287	$145,819	$194,150	$197,668
Fuel and power	1,343,519	1,350,107	1,483,710	1,277,610
Chemicals	883,089	876,871	814,169	826,373
Waste Disposal	164,043	398,966	324,196	422,370
Total Production Costs	$2,634,939	$2,771,763	$2,816,224	$2,724,021
Salaries and Wages	$5,181,204	$4,670,551	$5,070,614	$4,835,898
Pensions	112,238	113,191	112,237	105,813
Group insurances	1,046,044	744,515	828,246	826,753
Other benefits	332,207	374,460	360,996	323,637
Total employee related	$6,671,693	$5,902,718	$6,372,093	$6,092,101
Service Company costs	$3,899,560	$3,300,675	$4,110,913	$3,539,524
Contracted Services	$737,580	$650,090	$852,800	$485,031
Building maintenance and services	473,380	484,007	429,769	365,124
Telecommunication expenses	370,880	360,500	345,816	349,018
Postage, printing and stationery	24,872	33,776	22,634	19,712
Office supplies and services	220,421	196,027	211,574	244,599
Advertising & marketing expenses	3,208	459	14	2,219
Employee related expense travel & entertainment	39,848	83,647	71,718	139,834
Miscellaneous expenses	466,376	775,578	193,178	409,612
Rents	35,394	131,452	(14,501)	33,688
Transportation	225,012	314,232	232,052	192,379
Operating supplies and services	$2,596,971	$3,029,768	$2,345,054	$2,241,216
Uncollectible Accounts Exp	$837,344	$623,874	$13,426	($475,907)
Customer accounting other	633,885	651,990	749,319	808,500
Regulatory Expense	70,496	74,563	70,982	70,982
Insurance other than group	1,013,644	1,024,164	1,493,557	1,167,639
Maintenance service & supplies	959,704	789,025	850,949	739,682
Total operations and maintenance	$19,318,235	$18,168,539	$18,822,516	$16,907,758
Depreciation	$10,032,972	$10,060,430	$10,058,195	$10,030,702
Amortization	79,567	79,567	79,567	79,567
Removal Costs	1,070,324	1,070,324	1,070,324	1,070,324
Depreciation and Amortization	$11,182,863	$11,210,320	$11,208,085	$11,180,592
General Taxes	$1,442,985	$1,620,447	($2,334,579)	$1,123,463
Loss (gain) on sale of assets	(10,601)	(10,601)	(2,479,270)	(10,601)
Total operating expenses, net	$31,933,483	$30,988,706	$25,216,752	$29,201,212
Operating income (loss)	$23,985,897	$20,771,435	$31,582,926	$25,510,881
OTHER INCOME (EXPENSES)				
Interest Income	($1,241)	$0	($5)	($426)
Interest on Long Term Debt	6,265,115	6,251,746	6,258,045	6,255,172
Interest on Short Term Debt	191,633	173,967	236,604	254,340
Other Interest Expense	102,858	98,372	93,907	93,907
Interest net (Income)/Expense	$6,558,365	$6,524,084	$6,588,551	$6,602,992
Nonoperating benefit costs, net	($132,408)	($378,056)	($255,232)	($255,232)
AFUDC Equity Income/(Expense)	(259,943)	0	0	0
AFUDC Debt Income/(Expense)	(90,818)	(114,383)	(123,550)	(123,215)
Amortization of Debt Expense (Income)/Expense	137,681	137,546	135,795	111,266
Other Net Income/(Expense)	(59,345)	167,503	393,749	72,280
Total other Income/(Expense)	($6,153,531)	($6,336,694)	($6,739,313)	($6,408,091)
Income (loss) before income taxes	$17,832,366	$14,434,741	$24,843,613	$19,102,789
Provision for Income Taxes	$5,096,545	$4,169,819	$7,136,036	$5,519,191
Income (loss) from continuing operations	12,735,822	10,264,922	17,707,577	13,583,599
Income (loss) from discontinued operations net of tax				
Net Income (loss)	12,735,822	10,264,922	17,707,577	13,583,599
Preferred dividend declared				
Net income attributable to non-controlling interest				
Net income available to common stockholders	12,735,822	10,264,922	17,707,577	13,583,599
Common dividends	0	0	31,947,502	0
Current Year Retained Earnings	$12,735,822	$10,264,922	($14,239,925)	$13,583,599

Pennsylvania American Water Company
FR XI.01 Income Statement
Total Company

	May 2019	Jun 2019	Jul 2019	Aug 2019
OPERATING REVENUE				
Water revenues	$52,883,514	$51,365,156	$54,584,442	$55,209,836
Sewer revenues	5,345,332	5,419,972	4,896,179	5,193,239
Other operating revenues	956,432	882,155	915,946	1,009,363
Operating revenues	$59,185,277	$57,667,282	$60,396,567	$61,412,438
OPERATIONS & MAINTENANCE EXPENSE				
Purchased water	$210,658	$257,132	$297,129	$104,556
Fuel and power	1,230,662	1,230,721	1,295,459	1,348,028
Chemicals	1,052,664	537,341	1,230,761	1,150,730
Waste Disposal	240,038	451,395	330,895	332,435
Total Production Costs	$2,734,022	$2,476,588	$3,154,245	$2,935,749
Salaries and Wages	$5,113,419	$4,236,550	$4,970,082	$4,788,302
Pensions	98,779	105,516	89,900	76,931
Group insurances	872,193	735,092	907,607	893,595
Other benefits	404,749	319,015	357,813	366,460
Total employee related	$6,489,140	$5,396,173	$6,325,401	$6,125,288
Service Company costs	$3,758,988	$4,230,043	$3,802,927	$3,563,654
Contracted Services	$859,986	$365,303	$691,430	$600,428
Building maintenance and services	334,579	362,238	353,542	395,636
Telecommunication expenses	360,053	275,013	344,121	239,064
Postage, printing and stationery	21,922	25,835	19,767	32,559
Office supplies and services	216,385	218,866	276,436	239,845
Advertising & marketing expenses	(83)	888	194	504
Employee related expense travel & entertainment	174,096	135,198	126,051	76,631
Miscellaneous expenses	430,264	453,426	538,148	689,283
Rents	28,594	26,297	39,423	(9,191)
Transportation	287,009	219,746	298,895	217,747
Operating supplies and services	$2,712,806	$2,082,810	$2,688,006	$2,482,506
Uncollectible Accounts Exp	$810,038	$1,084,975	$719,399	$832,504
Customer accounting other	613,916	630,779	619,936	765,405
Regulatory Expense	71,085	70,982	82,587	77,732
Insurance other than group	1,158,764	1,154,773	1,150,413	1,137,736
Maintenance service & supplies	802,895	750,688	525,931	652,981
Total operations and maintenance	$19,151,654	$17,877,811	$19,068,845	$18,573,556
Depreciation	$10,108,410	$10,190,286	$10,012,052	$10,045,397
Amortization	79,567	79,567	79,567	79,567
Removal Costs	1,070,324	1,070,324	1,070,324	1,070,324
Depreciation and Amortization	$11,258,300	$11,340,176	$11,161,942	$11,195,288
General Taxes	$729,174	$1,032,181	$1,085,170	($555,325)
Loss (gain) on sale of assets	(10,601)	(5,912,040)	(10,601)	(10,601)
Total operating expenses, net	$31,128,528	$24,338,128	$31,305,357	$29,202,918
Operating income (loss)	$28,056,749	$33,329,155	$29,091,209	$32,209,521
OTHER INCOME (EXPENSES)				
Interest Income	$0	($6,841)	($448)	$0
Interest on Long Term Debt	6,329,336	6,631,851	6,274,690	6,523,168
Interest on Short Term Debt	212,279	0	38,825	11,834
Other Interest Expense	93,907	93,907	89,442	84,956
Interest net (Income)/Expense	$6,635,522	$6,718,917	$6,402,509	$6,619,958
Nonoperating benefit costs, net	($255,232)	($255,232)	($255,232)	($255,232)
AFUDC Equity Income/(Expense)	0	(51,644)	(321,694)	(294,229)
AFUDC Debt Income/(Expense)	(130,914)	(144,860)	(144,151)	(159,592)
Amortization of Debt Expense (Income)/Expense	102,378	111,125	113,639	117,167
Other Net Income/(Expense)	103,893	(68,631)	248,855	56,485
Total other Income/(Expense)	($6,455,647)	($6,309,675)	($6,043,926)	($6,084,557)
Income (loss) before income taxes	$21,601,102	$27,019,480	$23,047,284	$26,124,963
Provision for Income Taxes	$6,213,217	$7,646,657	$6,662,131	$7,548,624
Income (loss) from continuing operations	15,387,886	19,372,823	16,385,153	18,576,340
Income (loss) from discontinued operations net of tax				
Net Income (loss)	15,387,886	19,372,823	16,385,153	18,576,340
Preferred dividend declared				
Net income attributable to non-controlling interest				
Net income available to common stockholders	15,387,886	19,372,823	16,385,153	18,576,340
Common dividends	0	29,366,676	0	0
Current Year Retained Earnings	$15,387,886	($9,993,853)	$16,385,153	$18,576,340

Pennsylvania American Water Company
FR XI.01 Income Statement
Total Company

	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Total 2019
OPERATING REVENUE					
Water revenues	$51,132,574	$53,686,332	$49,205,163	$51,716,756	$615,740,653
Sewer revenues	5,081,786	5,439,999	5,217,102	5,830,221	61,865,425
Other operating revenues	915,919	952,694	1,181,310	916,290	11,522,923
Operating revenues	$57,130,279	$60,079,025	$55,603,576	$58,463,267	$689,129,001
OPERATIONS & MAINTENANCE EXPENSE					
Purchased water	$248,648	$284,913	$228,389	$165,004	$2,578,352
Fuel and power	1,348,673	1,338,041	1,250,485	1,489,461	15,986,477
Chemicals	1,127,995	1,100,251	885,165	977,834	11,463,241
Waste Disposal	464,724	394,994	322,753	434,071	4,280,880
Total Production Costs	$3,190,039	$3,118,197	$2,686,792	$3,066,369	$34,308,949
Salaries and Wages	$4,566,685	$4,827,898	$4,630,561	$3,654,786	$56,546,549
Pensions	92,562	79,330	88,880	90,457	1,165,833
Group insurances	896,362	902,296	848,854	833,866	10,335,423
Other benefits	270,997	322,703	378,992	269,569	4,081,597
Total employee related	$5,826,606	$6,132,228	$5,947,286	$4,848,677	$72,129,403
Service Company costs	$3,910,662	$3,498,606	$4,144,734	$4,805,759	$46,566,045
Contracted Services	$407,919	$753,549	$699,285	$545,720	$7,649,121
Building maintenance and services	319,657	421,071	339,157	367,741	4,645,902
Telecommunication expenses	348,183	375,457	294,313	427,784	4,090,201
Postage, printing and stationery	19,428	13,393	13,653	12,590	260,141
Office supplies and services	253,011	237,693	294,176	215,497	2,824,527
Advertising & marketing expenses	(354)	219	(15)	(7,255)	0
Employee related expense travel & entertainment	103,685	27,007	29,870	132,871	1,140,456
Miscellaneous expenses	329,966	547,406	679,879	414,458	5,927,573
Rents	29,351	30,750	24,345	74,435	430,039
Transportation	194,748	362,538	380,205	263,838	3,188,399
Operating supplies and services	$2,005,593	$2,769,084	$2,754,867	$2,447,679	$30,156,360
Uncollectible Accounts Exp	$857,371	$304,432	$855,390	$4,214,322	$10,677,168
Customer accounting other	692,953	776,714	701,827	627,919	8,273,141
Regulatory Expense	70,982	70,982	71,050	70,982	873,407
Insurance other than group	1,150,425	1,137,158	1,147,612	(617,249)	12,118,633
Maintenance service & supplies	499,785	604,593	509,482	490,553	8,176,268
Total operations and maintenance	$18,204,416	$18,411,994	$18,819,039	$19,955,011	$223,279,375
Depreciation	$10,136,241	$10,139,680	$10,208,595	$11,134,917	$122,157,876
Amortization	79,567	79,567	79,567	79,567	954,803
Removal Costs	1,070,324	1,070,324	1,070,324	1,070,324	12,843,884
Depreciation and Amortization	$11,286,132	$11,289,571	$11,358,486	$12,284,808	$135,956,563
General Taxes	$925,009	$950,150	$934,851	$727,412	$7,680,937
Loss (gain) on sale of assets	(40,091)	(10,601)	(10,601)	(221,730)	(8,737,935)
Total operating expenses, net	$30,375,467	$30,641,114	$31,101,775	$32,745,500	$358,178,939
Operating income (loss)	$26,754,812	$29,437,910	$24,501,800	$25,717,767	$330,950,062
OTHER INCOME (EXPENSES)					
Interest Income	($165,561)	($33,458)	$0	($12)	($207,993)
Interest on Long Term Debt	6,356,584	6,356,394	6,355,003	6,409,945	76,267,048
Interest on Short Term Debt	0	0	87,881	125,400	1,332,764
Other Interest Expense	84,956	80,492	80,492	80,492	1,077,686
Interest net (Income)/Expense	$6,275,979	$6,403,428	$6,523,375	$6,615,825	$78,469,505
Nonoperating benefit costs, net	($255,232)	($255,232)	($255,232)	($255,232)	($3,062,784)
AFUDC Equity Income/(Expense)	(749,155)	(439,645)	(384,736)	(615,418)	(3,116,465)
AFUDC Debt Income/(Expense)	(164,406)	(198,995)	(211,935)	(144,205)	(1,751,022)
Amortization of Debt Expense (Income)/Expense	119,175	119,136	119,136	123,254	1,447,298
Other Net Income/(Expense)	6,771	90,129	130,937	137,473	1,280,099
Total other Income/(Expense)	($5,233,131)	($5,718,821)	($5,921,546)	($5,861,698)	($73,266,630)
Income (loss) before income taxes	$21,521,681	$23,719,090	$18,580,254	$19,856,069	$257,683,431
Provision for Income Taxes	$5,632,524	$6,850,849	$5,372,703	$3,093,378	$70,941,669
Income (loss) from continuing operations	15,889,157	16,868,241	13,207,551	16,762,691	186,741,762
Income (loss) from discontinued operations net of tax					
Net Income (loss)	15,889,157	16,868,241	13,207,551	16,762,691	186,741,762
Preferred dividend declared					
Net income attributable to non-controlling interest					
Net income available to common stockholders	15,889,157	16,868,241	13,207,551	16,762,691	186,741,762
Common dividends	33,081,502	0	0	38,204,051	132,599,731
Current Year Retained Earnings	($17,192,344)	$16,868,241	$13,207,551	($21,441,360)	$54,142,031

Pennsylvania American Water Company
FR XI.01 Income Statement
Total Company

	Jan 2020	Feb 2020	Mar 2020	Total 2020
OPERATING REVENUE				
Water revenues	$52,263,582	$47,727,477	$52,201,722	$152,192,782
Sewer revenues	5,285,671	4,978,683	5,792,528	16,056,882
Other operating revenues	855,426	907,494	811,058	2,573,978
Operating revenues	$58,404,679	$53,613,654	$58,805,308	$170,823,642
OPERATIONS & MAINTENANCE EXPENSE				
Purchased water	$267,938	$305,143	$214,402	$787,483
Fuel and power	1,244,393	1,306,932	1,175,475	3,726,799
Chemicals	857,134	810,898	1,009,622	2,677,655
Waste Disposal	463,524	418,192	403,420	1,285,136
Total Production Costs	$2,832,989	$2,841,165	$2,802,919	$8,477,073
Salaries and Wages	$5,437,514	$4,494,190	$4,762,547	$14,694,251
Pensions	197,904	149,434	120,683	468,020
Group insurances	1,090,599	856,850	905,497	2,852,946
Other benefits	353,504	362,909	357,631	1,074,044
Total employee related	$7,079,521	$5,863,383	$6,146,358	$19,089,262
Service Company costs	$4,554,579	$4,522,620	$4,989,691	$14,066,889
Contracted Services	$623,806	$435,084	$353,566	$1,412,456
Building maintenance and services	439,029	368,330	391,004	1,198,364
Telecommunication expenses	353,363	331,810	356,524	1,041,697
Postage, printing and stationery	20,520	35,204	16,691	72,416
Office supplies and services	300,103	372,301	358,204	1,030,608
Advertising & marketing expenses	(56)	56	0	0
Employee related expense travel & entertainment	63,598	68,853	102,576	235,026
Miscellaneous expenses	516,670	228,540	530,865	1,276,075
Rents	(19,529)	40,296	4,581	25,349
Transportation	285,089	273,610	209,211	767,911
Operating supplies and services	$2,582,594	$2,154,084	$2,323,223	$7,059,901
Uncollectible Accounts Exp	$697,469	$591,882	$1,016,737	$2,306,089
Customer accounting other	92,846	79,580	40,497	212,923
Regulatory Expense	70,982	70,982	70,982	212,947
Insurance other than group	1,405,963	1,245,561	1,258,610	3,910,133
Maintenance service & supplies	749,717	720,766	625,563	2,096,046
Total operations and maintenance	$20,066,661	$18,090,023	$19,274,579	$57,431,262
Depreciation	$10,715,608	$10,888,390	$10,484,044	$32,088,041
Amortization	79,567	79,567	83,204	242,338
Removal Costs	1,641,433	1,641,433	1,641,433	4,924,299
Depreciation and Amortization	$12,436,607	$12,609,390	$12,208,681	$37,254,678
General Taxes	$1,203,653	$927,954	$968,771	$3,100,379
Loss (gain) on sale of assets	(10,601)	(10,601)	(10,601)	(31,802)
Total operating expenses, net	$33,696,321	$31,616,766	$32,441,430	$97,754,517
Operating income (loss)	$24,708,358	$21,996,888	$26,363,878	$73,069,124
OTHER INCOME (EXPENSES)				
Interest Income	($413)	($25)	$0	($438)
Interest on Long Term Debt	6,112,096	6,107,262	6,107,859	18,327,218
Interest on Short Term Debt	164,134	167,035	260,747	591,916
Other Interest Expense	80,492	80,492	80,492	241,475
Interest net (Income)/Expense	$6,356,308	$6,354,764	$6,449,099	$19,160,170
Nonoperating benefit costs, net	($922,578)	($922,578)	($922,578)	($2,767,734)
AFUDC Equity Income/(Expense)	(92,977)	0	(21,814)	(114,791)
AFUDC Debt Income/(Expense)	(142,351)	(133,020)	(132,917)	($408,288)
Amortization of Debt Expense (Income)/Expense	128,357	134,143	135,207	$397,707
Other Net Income/(Expense)	125,305	67,445	(123,735)	69,016
Total other Income/(Expense)	($5,452,065)	($5,500,754)	($5,383,262)	($16,336,080)
Income (loss) before income taxes	$19,256,294	$16,496,134	$20,980,616	$56,733,044
Provision for Income Taxes	$5,463,059	$4,753,446	$5,363,651	$15,580,155
Income (loss) from continuing operations	13,793,235	11,742,688	15,616,966	41,152,889
Income (loss) from discontinued operations net of tax				
Net Income (loss)	13,793,235	11,742,688	15,616,966	41,152,889
Preferred dividend declared				
Net income attributable to non-controlling interest				
Net income available to common stockholders	13,793,235	11,742,688	15,616,966	41,152,889
Common dividends	0	0	35,075,777	35,075,777
Current Year Retained Earnings	$13,793,235	$11,742,688	($19,458,811)	$6,077,112

Pennsylvania American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Other Data Internal and Independent Audit Reports

FR XI.2

Pennsylvania American Water Company
XI. Other Data

2. Supply a copy of internal and independent audit reports of the historic test year and prior calendar year, noting any exceptions and recommendations and disposition thereof.

Answer: Please refer to FR VII.15 for the 2017 and 2018 audited Financial Statements.

FR XI.3

Pennsylvania-American Water Company
<u>XI. Other Data</u>

3. Provide all monthly or quarterly, or both, budget variance reports to management or the Board of Directors, or both, submitted during the past year. Please provide the most recent detailed budget variance report which the Company compiled, and update as additional reports are issued.

Answer: Please refer to FR XI.1.

FR XI.4

Pennsylvania-American Water Company
<u>XI. Other Data</u>

4. Provide a copy of the Company's most recent operating and capital budgets.

Answer: Please see FR VII.8.

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Other Data Unaccounted For Water

FR XI.5

Pennsylvania-American Water Company
XI. Other Data

5. Provide a schedule that shows the percentage of unaccounted for water for the test year and two prior years. Describe how this amount was determined and explain any steps taken to reduce unaccounted for water. Provide a similar analysis of infiltration for wastewater utilities.

Pennsylvania-American Water Company - Water Operations

Answer:

Pennsylvania American Water (1,000 gallons)						
Water	2017		2018		2019	
System Delivery	67,469,067	100.0%	70,145,478	100.0%	70,704,310	100.0%
Sales	45,686,703	67.7%	45,662,776	65.1%	44,607,787	63.1%
Non-Revenue Use	11,624,046	17.2%	12,611,089	18.0%	12,194,493	17.2%
Unaccounted - for Water	10,158,318	15.1%	11,871,613	16.9%	13,902,030	19.7%

System delivery is the amount of water delivered to the distribution system from water treatment plants and/or wells. Each source of supply has a system delivery meter which measures water delivered to the distribution system. The sales number is the water delivered to customers measured by meters at each premises. The non-revenue use volume is a combination of water used by the company or public entities which are not billed for revenue, estimated identified leakage lost on repaired leaks, and the unavoidable leakage as calculated by standard International Water Association and American Water Works Association methods.

Pennsylvania American Water management team employs an NRW action plan, which includes industry best practices to reduce lost water. The following best practices are implemented and tracked:

Leak Survey – Manual and Logger
Leak Correlations
Un-Metered Fire Services Checked for Leakage
Right of Ways Checked for Leakage
River/Stream Crossings Checked for Leakage
Retirement of Parallel Mains and Service Changeover
Replacement of Small Diameter Mains (DSIC program)
Replacement of Leaking Services
Replacement of Regulatory Periodic Meter Changes
Customer Large Meter Testing
System Delivery Meter Testing/Monitoring

Training in NRW and Water Loss Practices
Large Meter Usage Variance Report
Large Meter Replacement Program
Average Bill Days Report
Leak on Owners Side (Service Line) Program
Non Revenue Water Productivity Report (Rolling 12)
Hydrant Program
Sales to System Delivery Report w/ District graphs
SCADA Programming of Night Flow Averages
Theft of Service Policy
AWWA /IWA District Water Audits

Pennsylvania-American Water Company - Wastewater Operations

Answer

Pennsylvania American Water			
(1,000 gallons)			
Wastewater - Sanitary Sewer Systems	2017	2018	2019
Customer Flows	2,034,790	2,390,631	1,967,834
I & I	590,496	967,982	827,103
Total Plant Flow	2,625,286	3,358,613	2,794,937
Number of Customers	24,823	25,113	34,544
Note: Data does not include Turbotville SSS, Sadsbury SSS, Exeter SSS which were acquired during 2019			

Pennsylvania American Water			
(1,000 gallons)			
Wastewater - Combined Sewer Systems	2017	2018	2019
Customer Flows	2,239,911	2,149,845	3,201,941
I & I	2,140,089	3,255,805	6,072,494
Total Plant Flow	4,380,000	5,405,650	9,274,435
Number of Customers	29,587	29,445	39,810
Note: 2017 & 2018 data includes Scranton and 2019 data includes Scranton and McKeesport			

Infiltration and Inflow (I&I) reduction efforts typically involve inspection and rehabilitation/replacement of components of the gravity collection system; including manholes, sewer mains, and lateral connections. In conjunction with closed circuit television (CCTV) inspection of sewer mains, defects are graded using a NASSCO Pipeline Assessment and Certification Program (PACP) system. Rehabilitation/replacement work is subsequently prioritized to address the most critical deficiencies. In larger collection systems, the collection system is segmented into sub-sheds for evaluation and prioritization. In some instances, hydrologic evaluations will be undertaken to quantity rainfall induced I&I on a sub-shed basis, for use in prioritizing future improvement activity.

FR XI.6

Pennsylvania-American Water Company
<u>XI. Other Data</u>

6. Provide a corporate history (include the dates of original incorporation, subsequent mergers or acquisitions, or both). Indicate all counties and cities and other governmental subdivisions to which service is provided, including service areas outside the state, and the total population in the area served.

Answer: Please refer to attached summary of corporate history.

PENNSYLVANIA-AMERICAN WATER COMPANY

(Incorporated July 15, 1904)

Pennsylvania-American Water Company, an investor-owned water company, with corporate offices at 852 Wesley Drive, Mechanicsburg, is a subsidiary of American Water Works Company, Inc. On February 1, 1989, the then-existing Pennsylvania-American Water Company (the result of the January 1, 1987 merger of Riverton Consolidated Water Company with and into Keystone Water Company) was merged with and into Western Pennsylvania Water Company, and the name of the surviving corporation was changed to Pennsylvania-American Water Company ("Company"). A brief summary of each of the three predecessor companies follows.

Riverton Consolidated Water Company ("Riverton") was formed by the merger and consolidation of six operating water companies in 1904. It subsequently acquired seven additional systems, and at the time of its merger with Keystone Water Company, supplied water to 12 municipalities on the Harrisburg west shore, Cumberland County and Fairview Township, York County.

Keystone Water Company ("Keystone") resulted from the 1973 merger of 14 companies with and into White Deer Mountain Water Company. Keystone later acquired four systems. It provided water service in 14 eastern Pennsylvania counties through the following distribution systems: Abington, Bangor, Berwick, Frackville, Hallstead, Hershey/Palmyra, Montrose, Moshannon Valley, Norristown, Northumberland, Susquehanna, Thompson, White Deer (Milton), and Yardley.

Western Pennsylvania Water Company ("WPW") was the product of the merger of 16 water companies with and into South Pittsburgh Water Company at various times from 1970 to 1973. WPW added seven water distribution systems, extending its service territory into portions of 12 western Pennsylvania counties. WPW operated through the following district offices: Butler, Clarion, Connellsville, Ellwood, Indiana, Kane, Kittanning, McDonald, Mon Valley, New Castle, Pittsburgh, Punxsutawney, Uniontown, Warren, and Washington.

After the merger of Riverton and Keystone in 1987, the former Pennsylvania-American Water Company purchased five systems: Red Land Water Company in York County, Campbelltown Water Company in Lebanon County, and three systems in the Moshannon Valley area, Clearfield County - Woodland-Bigler Area Authority, Allport Water Authority, and Graham Water Association.

Since the merger of the former Pennsylvania-American Water Company (Riverton and Keystone) into WPW on February 1, 1989, the Company has acquired the following water and wastewater systems: Smith Township Municipal Authority system (Washington County, February 27, 1989); Abington Township system (Lackawanna County, August 5, 1989); Summit Township Municipal Authority system (Butler County, August 31, 1993); Skyline Water Company (Dauphin County, December 2, 1993); Gregg Township Municipal Authority system (Union County, April 25, 1994); P-F Area Water Association system (Washington County, October 1, 1994); Country Place Water Company, Inc. and Country Place Waste Treatment Company, Inc. (Monroe County, June 30, 1995); Hickory Water Company, Pocono Farms East Water Company, Inc., and Silver Water Company (Monroe and Pike Counties, December 21, 1995); the water utility assets of Pennsylvania Gas and Water Company (Lackawanna, Luzerne, Susquehanna and Wayne

Counties, February 16, 1996); the Municipal Authority of the Township of Morris system (Clearfield County, April 24, 1996); Westford Water Company (Dauphin County, August 2, 1996); Lackawanna County Water System at Montage (Lackawanna County, April 11, 1997); Clarion Township General Authority (Clarion County, January 28, 1998); Fairview Water Company, National Utilities, Inc.-Pocono Division, and Pocono Mountains Industrial Park Authority (Monroe County, May 7, 1998); Coolbaugh Township-Fire System (Monroe County, July 28, 1998); Greene Valley Water Company (Lackawanna County, August 28, 1998); Franklin Manor Utilities, Ltd. (Washington County, September 22, 1998); Taylor Township (Lawrence County, December 21, 1998); Evansburg Water Company (Montgomery County, December 30, 1998); Applewold Borough (Armstrong County, March 26, 1999); Cedar Grove Water Association (Washington County, July 8, 1999); Independence Township Municipal Authority (Washington County, July 8, 1999); Koppel Borough (Beaver County, November 5, 1999); Center Township (Butler County, December 30, 1999); Strattanville Borough (Clarion County, April 6, 2000); Franklin Township Municipal Authority (Beaver County, August 30, 2000); Elk Forest Estates (Wayne County, November 18, 2000); T.O.W. Associates (Butler County, February 13, 2001); City of Coatesville Authority (Chester and Lancaster Counties, March 22, 2001); Fox Knoll Water Company (Chester County, April 26, 2001); Butler Township Area Water and Sewer Authority (Butler County, April 27, 2001); Citizens Utilities Water Company of Pennsylvania (Adams, Berks, Chester, Monroe, Montgomery and Northampton Counties, January 15, 2002); LP Water & Sewer Company (Monroe and Pike Counties, April 3, 2002); Mid-Monroe Water Company (Monroe County, August 23, 2002); West Decatur Authority (Clearfield County, March 31, 2003); Rustic Acres Water Association (Pike County, September 30, 2003); Sandy Ridge Water Authority (Center County, October 14, 2003); Connoquenessing Borough Authority (Butler County, October 23, 2003); Skytop Water Company (Luzerne County, December 3, 2003); Sligo Borough Authority (Clarion County, August 31, 2004); Snowshoe at Mt. Pocono Condominiums, Inc. (Monroe County, February 24, 2005); Shippenville Municipal Authority (Clarion County, March 31, 2005); Blue Mountain Lake Associates, L.P. (Monroe County, October 31, 2005); East Fallowfield Township (Chester County, December 22, 2005); Stillwater Lakes Water Corporation (Monroe County, January 17, 2006); Winona Lakes Utilities, Inc. (Monroe and Pike Counties, January 26, 2006); Saville Rustin Water Company, Inc./Pine Ridge Community Association, Inc. (Pike County, March 29, 2006); Lexington Woods Corporation (Monroe County, July 24, 2006); Community Association of Pocono Farms, Incorporated (Monroe County, July 31, 2006); Redstone Water Company (Fayette and Washington Counties, March 20, 2007); Mountain Top Estates Property Owners Association (Monroe County, May 30, 2008); Claysville-Donegal Joint Municipal Authority (Washington County, July 31, 2008); Three Lane Utilities, Inc. (Pike County, September 10, 2008); Clarion Area Authority (Clarion County, October 30, 2008); Boggs Township (Centre County, September 10, 2009); Amwell Township Water Authority (Washington County, September 23, 2009); Wallaceton Municipal Authority (Clearfield County, October 1, 2009); Saxonburg Area Authority (Butler County, October 28, 2009); Nittany Water Company (Centre and Clinton Counties, February 3, 2010); Sutton Hills Homeowners Association (Luzerne County, May 5, 2010); Birch Acres Water Works, Inc. (Monroe County, December 7, 2010); Helen Norella and Louis & Isabelle Norella (Lackawanna County, October 5, 2011); Wildcat Park Corporation (Schuylkill County, November 17, 2011); Estate of George Spangenberg d/b/a Lake Spangenberg Water Company (Lackawanna County, May 3, 2012); North Fayette County Municipal Authority-Balsinger Public Water System and Springfield Pike Public Water System

(Fayette County, October 4, 2012); All Seasons Water Company (Pike County, December 20, 2012); Ha Ra Corporation-Fernwood Community Water System (Monroe County, December 31, 2012); Olwen Heights Water Service Company, Inc. (Lackawanna County, February 4, 2013); Indian Rocks Water Association (Wayne County, March 13, 2013); Koppel Borough (Beaver County, May 31, 2013); Pocono Mountain Lake Forest Community Association (Pike County, July 22, 2013); Clean Treatment Sewage Company (Pike County, August 21, 2013); Franklin Township Municipal Authority (Adams County, August 29, 2013); Berry Hollow Water Company (Northampton County, April 3, 2014); Scott Township (Lackawanna County, May 22, 2014); Paint-Elk Joint Sewer Authority (Clarion County, July 31, 2014); Hamiltonban Township Municipal Authority (Adams County, November 3, 2014); Abbey Woods Homeowners Association (Butler County, July 14, 2015); Shippenville Borough (Clarion County, August 4, 2015); Paint Township Municipal Water Authority (Clarion County, October 1, 2015); McEwensville Municipal Authority (Northumberland County, October 21, 2015); Fairview Township (York County, December 22, 2015); Borough of New Cumberland (Cumberland County, October 31, 2016); Sewer Authority of the City of Scranton (Lackawanna County, December 29, 2016); The Municipal Authority of the City of McKeesport (Allegheny County, December 18, 2017); Township of Sadsbury (Chester County, March 6, 2019); Municipal Authority of the Borough of Turbotville (Northumberland County, July 23, 2019); Borough of Turbotville (Northumberland County, July 23, 2019); Steelton Borough Authority (Dauphin County, October 9, 2019) and Township of Exeter (Berks County, October 24, 2019). On July 2, 1990, Brownsville Water Company (Fayette County) and California Water Company (Washington County) were acquired and merged into the Company. On June 16, 1992, the former Forge Road Acres water system (Cumberland County) was sold to South Middleton Township. On March 24, 2003, Salisbury Water Supply Company (State of Massachusetts) was acquired and merged into the Company.

As a result of the various mergers and acquisitions, the Company furnishes water service to about 665,829 customers in the following municipalities:

All, or portions of, the Townships of Mount Joy, Mount Pleasant and Straban in Adams County;

All, or portions of, the Cities of Clairton and Pittsburgh (16th, 18th, 19th, 20th, 28th, 29th, 30th, 31st and 32nd Wards), the Boroughs of Baldwin, Bethel Park, Brentwood, Bridgeville, Carnegie, Castle Shannon, Crafton, Dormont, Dravosburg, Elizabeth, Glassport, Greentree, Heidelburg, Homestead, Ingram, Jefferson, Liberty, Lincoln, Mount Oliver, Munhall, Pleasant Hills, Rosslyn Farms, Thornburg, West Elizabeth, West Homestead, West Mifflin, Whitaker and Whitehall and the Townships of Baldwin, Collier, Elizabeth, Forward, Mt. Lebanon, North Fayette, Robinson, Scott, South Fayette, South Park and Upper St. Clair in Allegheny County;

All, or portions of, the Boroughs of Applewold and Kittanning and the Townships of Manor and Rayburn in Armstrong County;

All, or portions of, the Boroughs of Big Beaver, Ellwood City, Frankfort Springs and Koppel and the Townships of Franklin, Hanover and North Sewickly in Beaver County;

All, or portions of, the Boroughs of Sinking Spring, St. Lawrence and Wyomissing and the Townships of Amity, Cumru, Earl, Exeter, Lower Heidelberg, Ruscombmanor, South Heidelberg and Spring in Berks County;

All, or portions of, the Borough of Yardley and the Townships of Falls and Lower Makefield in Bucks County;

All, or portions of, the City of Butler, the Boroughs of Connoquenessing, East Butler and Saxonburg and the Townships of Butler, Center, Clinton, Connoquenessing, Donegal, Forward, Franklin, Jackson, Jefferson, Lancaster, Oakland, Penn and Summit in Butler County;

All, or portions of, the Boroughs of Philipsburg and South Philipsburg and the Townships of Boggs, Rush and Walker in Centre County;

All, or portions of, the City of Coatesville, the Boroughs of Atglen, Parkesburg, South Coatesville and Spring City and the Townships of Caln, East Coventry, East Fallowfield, East Pikeland, East Vincent, Highland, Sadsbury, Schuylkill, Valley, West Caln, West Sadsbury and West Vincent in Chester County;

All, or portions of, the Boroughs of Clarion, Shippenville, Sligo and Strattanville and the Townships of Clarion, Elk, Farmington, Highland, Knox, Limestone, Monroe, Paint and Piney in Clarion County;

All, or portions of, the Boroughs of Chester Hill, Osceola Mills and Wallaceton and the Townships of Boggs, Bradford, Decatur, Graham and Morris in Clearfield County;

All, or portions of, the Township of Porter in Clinton County;

All, or portions of, the Boroughs of Berwick and Briar Creek and the Township of Briar Creek in Columbia County;

All, or portions of, the Boroughs of Camp Hill, Lemoyne, New Cumberland, Shiremanstown and Wormleysburg and the Townships of East Pennsboro, Hampden, Lower Allen, Silver Spring and Upper Allen in Cumberland County;

All, or portions of, the Borough of Steelton and the Townships of Conewago, Derry, Londonderry, South Hanover, Swatara and West Hanover in Dauphin County;

All, or portions of, the Cities of Connellsville and Uniontown, the Boroughs of Brownsville and South Connellsville and the Townships of Brownsville, Bullskin, Connellsville, Dunbar, German, Jefferson, Luzerne, Menallen, North Union, Redstone and South Union in Fayette County;

All, or portions of, the Borough of Indiana and the Township of White in Indiana County;

All, or portions of, the Boroughs of Big Run and Punxsutawney and the Townships of Bell, Gaskill, Henderson, McCalmont and Young in Jefferson County;

All, or portions of, the Cities of Carbondale and Scranton, the Boroughs of Archbald, Blakely, Clarks Green, Clarks Summit, Dalton, Dickson City, Dunmore, Jermyn, Jessup, Mayfield, Moosic, Old Forge, Olyphant, Taylor, Throop and Vandling and the Townships of Carbondale, Fell, Glenburn, Jefferson, North Abington, Roaring Brook, Scott and South Abington in Lackawanna County;

All, or portions of, the Borough of Quarryville and the Townships of Bart, Colerain, Eden and Sadsbury in Lancaster County;

All, or portions of, the City of New Castle; the Boroughs of Ellport, Ellwood City, New Beaver and South New Castle and the Townships of Hickory, Mahoning, Neshannock, North Beaver, Perry, Shenango, Taylor, Union and Wayne in Lawrence County;

All, or portions of, the Borough of Palmyra and the Townships of Annville, North Annville, North Londonderry, South Annville and South Londonderry in Lebanon County;

All, or portions of, the Cities of Nanticoke, Pittston and Wilkes-Barre, the Boroughs of Ashley, Avoca, Courtdale, Dallas, Dupont, Duryea, Edwardsville, Exeter, Forty Fort, Hughestown, Kingston, Laflin, Larksville, Laurel Run, Luzerne, Nescopeck, Plymouth, Pringle, Shickshinny, Sugar Notch, Swoyersville, Warrior Run, West Pittston, West Wyoming, Wyoming and Yatesville and the Townships of Conyngham, Fairview, Hanover, Hunlock, Jackson, Jenkins, Kingston, Newport, Pittston, Plains, Plymouth, Rice, Salem, Union, Wilkes-Barre and Wright in Luzerne County;

All, or portions of, the Borough of Kane and the Township of Wetmore in McKean County;

All, or portions of, the Borough of Mount Pocono, the Townships of Coolbaugh, Hamilton, Middle Smithfield, Ross, Smithfield and Stroud and the Village of Tobyhanna in Monroe County;

All, or portions of, the Boroughs of Bridgeport, Norristown and Royersford and the Townships of East Norriton, Limerick, Lower Pottsgrove, Lower Providence, Perkiomen, Plymouth, Skippack, Upper Merion, Upper Providence, West Norriton, Whitemarsh, Whitpain and Worcester in Montgomery County;

All, or portions of, the Boroughs of Bangor, Nazareth, Pen Argyl, Roseto, Stockertown, Tatamy and Wind Gap and the Townships of Bushkill, Forks, Lower Mount Bethel, Lower Nazareth, Palmer, Plainfield, Upper Mount Bethel, Upper Nazareth and Washington in Northampton County;

All, or portions of, the Boroughs of McEwensville, Milton, Northumberland, Turbotville and Watsontown and the Townships of Delaware, East Chillisquaque, Lewis, Point, Turbot, Upper Augusta and West Chillisquaque in Northumberland County;

Portions of the Townships of Delaware, Lehman and Westfall in Pike County;

All, or portions of, the Borough of Frackville and the Townships of Butler, Mahanoy, New Castle, Walker and West Mahanoy in Schuylkill County;

All, or portions of, the Boroughs of Forest City, Great Bend, Hallstead, Lanesboro, Montrose, Susquehanna and Thompson and the Townships of Bridgewater, Great Bend, Harmony and Oakland in Susquehanna County;

All, or portions of, the Borough of Lewisburg and the Townships of Buffalo, East Buffalo, Gregg, Kelly and White Deer in Union County;

All, or portions of, the City of Warren and the Townships of Conewango, Glade, Meade, and Pleasant in Warren County;

All, or portions of, the Cities of Monongahela and Washington and the Boroughs of Burgettstown, California, Canonsburg, Claysville, Coal Center, East Washington, Finleyville, Houston, McDonald, Midway, New Eagle, West Brownsville and West Middletown and the Townships of Amwell, Buffalo, Canton, Carroll, Cecil, Chartiers, Cross Creek, Donegal, East Finley, East Pike Run, Fallowfield, Hanover, Hopewell, Independence, Jefferson, Morris, Mount Pleasant, North Franklin, North Strabane, Nottingham, Peters, Robinson, Smith, Somerset, South Franklin, South Strabane and Union in Washington County;

Portions of the Townships of Clinton and Salem in Wayne County; and

All, or portions of, the Townships of Fairview and Newberry in York County.

As a result of acquisitions, the Company furnishes wastewater service to about 74,354 customers in the following municipalities:

Portions of, the Townships of Franklin, Hamiltonban and Highland in Adams County;

All, or portions of, the Cities of Duquesne and McKeesport and the Boroughs of Dravosburg, Port Vue and West Mifflin in Allegheny County;

All of the Borough of Koppel in Beaver County;

All, or portions of, the City of Coatesville, the Boroughs of Parkesburg and South Coatesville and the Townships of Caln, East Fallowfield, Highland, Sadsbury, Valley, West Caln and West Sadsbury in Chester County;

All, or portions of, the Boroughs of Clarion and Shippenville and the Townships of Clarion, Elk, Monroe and Paint in Clarion County;

All, or portions of, the Borough of New Cumberland and the Township of Lower Allen in Cumberland County;

All of the City of Scranton and the Borough of Dunmore in Lackawanna County;

Portions of the Townships of Coolbaugh, Middle Smithfield, Smithfield and Stroud in Monroe County;

All, or portions of the Boroughs of McEwensville and Turbotville in Northumberland County;

Portions of the Townships of Delaware and Lehman in Pike County;

All, or portions of, the Borough of Claysville and the Township of Donegal in Washington County; and

A portion of the Township of Fairview in York County.

[408 municipalities in 36 counties.]

12/31/2019