

PAW STATEMENT NO. 3

**DIRECT TESTIMONY
OF
ROD P. NEVIRASKAS**

WITH REGARD TO

PENNSYLVANIA AMERICAN WATER

COATESVILLE WASTEWATER OPERATIONS

**RATE OF RETURN, CERTAIN O&M EXPENSES, INCOME TAXES, CUSTOMER
ASSISTANCE PROGRAM AND REVENUE DEFICIENCY SUMMARY**

DOCKET NO. R-2010-2166212

DATE: April 23, 2010

DIRECT TESTIMONY OF ROD P. NEVIRASKAS

I. INTRODUCTION

1 **1. Q. Please state your name and business address.**

2 A. My name is Rod P. Neviraskas and my business address is 800 West Hersheypark Drive,
3 Hershey, Pennsylvania 17033.

4 **2. Q. By whom are you employed and in what capacity?**

5 A. I am employed by Pennsylvania American Water (“PAW”) as Director of Rates and
6 Regulation.

7 **3. Q. Please describe your educational background and business experience.**

8 A. I received a Bachelor’s Degree in Economics from the University of Massachusetts.
9 Since beginning my employment with American Water Works in 1980, I have held various
10 positions of increasing responsibilities in rates and finance. In October 2004, I was named
11 Manager of Rates and Regulation for the AWW Shared Services Center (“SSC”), a financial
12 services organization providing national support to AWW subsidiary operating companies.
13 In 2005 I was promoted to the position of Director of Financial Services at the SSC. In that
14 capacity, I led the SSC Rates and Regulation group in supporting rate case filings for all
15 AWW regulated operating subsidiary companies. Effective January 1, 2009, I assumed my
16 present position as Director of Rates and Regulation for Pennsylvania American Water.

17 **4. Q. Have you previously testified before regulatory agencies?**

18 A. Yes, I have testified on numerous occasions on behalf of company rate filings and
19 financings in the States of Connecticut, Rhode Island, New Jersey, New Hampshire,
20 Maryland, New York, Ohio and the Commonwealths of Massachusetts and Pennsylvania.

II. PURPOSE OF TESTIMONY

1 **5. Q. Are you generally familiar with the books and records of the Company?**

2 A. Yes, I am.

3 **6. Q. What system is followed in keeping the general books of accounts and related records**
4 **of the Company's Coatesville Wastewater Operations?**

5 A. The general books of accounts and related records of the Company are kept in conformity
6 with the Uniform System of Accounts for Water Companies.

7 **7. Q. Have you prepared, or caused to be prepared, financial exhibits in support of the**
8 **Company's application to increase rates?**

9 A. Yes, I have. The Company has filed exhibits, which reflect its accounting and financial
10 condition and which support the Company's request for increased rates. In particular, PAW
11 Exhibit 3-A sets forth the Company's future test year revenue, expense and rate base claims.
12 Applicable work papers are also contained in the Company's filing in Exhibit No. 3-B.

13 **8. Q. Are the exhibits as currently filed correct to the best of your knowledge and belief?**

14 A. Yes, they are.

15 **9. Q. What is the source of data for these exhibits?**

16 A. The exhibits were prepared utilizing the general books and records of the Company and
17 other supporting data with an historic test year being established as the twelve months ended
18 December 31, 2009. Since the purpose of rate making is to set rates to be applied in the
19 future, based on test year data, recorded test year data have been adjusted on a pro forma
20 basis, where appropriate, to reflect known and measurable changes in operating conditions
21 which are not fully reflected in the test year results and which will continue to impact

1 operations in the future. The Company is relying principally on data for a future test year
2 ending December 31, 2010.

3 **10. Q. Are there any other items of discussion relevant to this case?**

4 A. PAW is committed to furnishing safe and adequate water and wastewater service to its
5 customers at just and reasonable rates that provide a fair return to its shareholders. As a
6 result of this commitment, which translates into an ongoing need for investment in new and
7 replacement infrastructure, as well as the ability to attract capital, the Company finds it
8 necessary to request a rate adjustment at this time.

9 **11. Q. What are the overall results shown in Exhibit No. 3-A?**

10 A. The total effect of the pro forma adjustments on the operations of the Company results in a
11 required annual revenue increase of \$8.2 million. This represents an approximate 197
12 percent increase over present rate revenue.

13 **12. Q. What is the scope of your testimony?**

14 A. My testimony will cover five areas. First, I will provide a ratemaking summary of the
15 requested increase in rates. Second, I am sponsoring the Company's claims for recovery of
16 post-in-service AFUDC and Deferred Depreciation associated with the new treatment plant.
17 Third, I am supporting the Company's pro forma capital structure and cost rates of debt and
18 preferred stock. Fourth, I discuss the Company's new customer assistance program for
19 wastewater customers. Finally, I support the Company's development of federal and state
20 income taxes appropriate for use in this proceeding.

1 **III. RATEMAKING SUMMARY**

2 **13. Q. Please summarize and then describe the major elements of the requested rate increase.**

3 A. The requested increase in revenues of \$8.2 million was calculated in accordance with
4 previously accepted principles used for ratemaking in Pennsylvania and is based on a
5 requested overall rate of return of 7.30%. The rate request is summarized in briefing sheet
6 format on Exhibit RPN-1, which is attached. Far and away, the most significant elements of
7 the requested increase involve the depreciation expense associated with and the return on
8 new treatment plant.

9 **14. Q. Please briefly explain what is set forth in Exhibit No. 3-A.**

10 A. This exhibit presents Coatesville's rate base, revenue, expense and tax information on the
11 basis of a historical test year ("HTY") ending December 31, 2009 and a future test year
12 ("FTY") ending December 31, 2010. As in previous rate cases, the requested increase is
13 based upon adjusted FTY data. In Exhibit No. 3-A, the HTY is identified as "Present Rates
14 at December 31, 2009" and the FTY as "Present Rates at December 31, 2010".

15 **15. Q. Please explain your specific areas of responsibility regarding Exhibit No. 3-A.**

16 A. As noted previously, I am sponsoring the Company's claim for post-in-service AFUDC and
17 Deferred Depreciation associated with the new treatment plant. I am also supporting the
18 Company's pro forma capital structure, the proposed customer assistance program for
19 wastewater customers and the calculations of state and federal income taxes which are
20 included in Exhibit No. 3-A.

1 **IV. DEFERRED TREATMENT PLANT COSTS**

2 **16. Q. Please explain the nature of the adjustment on page 34 of Exhibit 3-A.**

3 A. Page 34 includes an adjustment for post-in-service AFUDC and Deferred Depreciation. As
4 part of the settlement of its last Coatesville Wastewater case in 2008, PAW agreed to defer
5 its next wastewater rate filing to at least April 28, 2009. In recognition of the fact that the
6 Company's customers in Coatesville had experienced a somewhat significant increase in the
7 last case (in terms of percentage, not necessarily in dollars), the Company decided to defer
8 its rate filing for an additional year, or to April, 23, 2010.

9 **17. Q. How is this adjustment to O&M expenses related to the delay in this rate filing?**

10 A. Phase I of the new Coatesville wastewater treatment plant, which accounts for the vast
11 majority of the Company's increased revenue request in this case, went into service in July
12 2009, and has been used and useful to our Coatesville customers since that time. As the
13 statutory time period for conclusion of this case is January 2011, the Company is requesting
14 recognition of the carrying or investment costs related to Phase I of the new plant for the
15 period February 1, 2010 through January 2011. Phase II of the new treatment plant went
16 into service on March 31, 2010. As such, the Company is requesting a like adjustment for
17 the period April 1, 2010 through January 2011 for its Phase II investment.

18 **18. Q. Why is the Company not requesting recovery of the carrying or investment costs on**
19 **Phase I from the in-service date of July 2009?**

20 A. If the Company had filed for cost recovery of its Phase I costs in April 2009, which it was
21 entitled to do under the terms of the settlement agreement in its last case, the suspension
22 period for that filing would have extended into late January 2010. Consequently, the

1 Company is only claiming the carrying costs and depreciation from that point forward until
2 the statutory time period is concluded in this case.

3 **19. Q. Please highlight the details of the proposed adjustment on page 34 of Exhibit No. 3-A.**

4 A. Certainly. As previously stated, the Company has made a calculation of the cumulative
5 effect of ceasing to record AFUDC and beginning to record depreciation on the treatment
6 facility for the period February 1, 2010 through January 2011 for Phase I and April 1, 2010
7 through January 2011 for Phase II. It has calculated carrying costs based on its projected
8 AFUDC rate over those periods and has calculated depreciation based on the facility's
9 expected depreciable life of 34 years. We have then taken the cumulative effect of these
10 adjustments for the twelve month period February 2010 through January 2011 and the ten
11 month period April 2010 through January 2011, respectively, and amortized them over the
12 depreciable life of the new plant, producing an increase in annual revenue requirement of
13 \$161,440. The calculation of this adjustment is detailed in Exhibit No. 3-B of the
14 Company's filing.

15 **V. RATE OF RETURN**

16 **20. Q. Please describe the Company's proposed capital structure in this case.**

17 A. The Company has made every effort to mitigate the rate impact to its customers of its
18 investment in the new treatment plant. To that end, the Company has developed a pro forma
19 capital structure that includes the entire \$47 million of project-specific Pennsylvania
20 Economic Development Financing Authority ("PEDFA") financing that was utilized to
21 construct the plant. The remainder of the capital structure has been projected at the overall
22 debt/equity ratios of PAW as a whole. This process produced a proposed capital structure

1 for ratemaking purposes of approximately 80% debt and 20% common equity. While the
2 interest rate on the PEDFA funds is not materially different than the Company's overall cost
3 of debt, using a capital structure that includes only about 20% equity significantly reduces
4 the overall revenue requirement, as the cost of debt is much less than the cost of equity.
5 Attached to this testimony is Exhibit RPN-2, page 2, details the components of the
6 capitalization that produces the overall proposed rate of return of 7.30%.

7 **21. Q. Please describe the Company's method of determining the overall rate of return for**
8 **this filing.**

9 A. First, the Company identified the four components of the pro forma capital structure; long
10 term debt (LTD), specific PEDFA financing as discussed above, preferred stock and
11 common equity. Second, the portion of rate base not financed by the \$47 million of PEDFA
12 funds was assumed to be financed by proportionate shares of the Company's overall
13 capitalization (exclusive of the PEDFA funds). The weighted cost rates of the individual
14 components were then calculated and added together to develop an overall rate of return.

15 **22. Q. How did the Company determine the cost rates for each component of the capital**
16 **structure?**

17 A. For PAW as a whole, excluding the project specific PEDFA funding, the cost rate of the
18 LTD (6.16%) and preferred stock (8.11%) were developed based on a weighting of the
19 individual issuances, their respective interest rates, issuance cost and terms at December 31,
20 2010, as set forth on pages 4 and 5 of Exhibit RPN-2. The cost rate of the PEDFA LTD of
21 6.30% was incorporated into the overall capital structure. The requested common equity
22 return rate of 11.5% is supported by Mr. Moul. I should note that Mr. Moul actually
23 determined the Company's cost of equity to approximate 11.75%. However, for the purpose

1 of this proceeding, the Company has selected an 11.50% cost of equity in calculating its
2 requested overall rate of return in order to minimize the impact of the proposed increase on
3 customer rates, resulting in an overall recommended return on rate base of 7.30%.

4 5 **IV. CUSTOMER ASSISTANCE PROGRAM**

6 **23. Q. Are you proposing the implementation of a customer assistance program for the**
7 **Company's Coatesville wastewater customers?**

8 A. Yes. In the last Coatesville wastewater rate case, the Company agreed to propose, in its next
9 general base rate filing, a customer assistance program for its Coatesville wastewater
10 customers who may require financial assistance to meet their bill paying obligations. The
11 Company is pleased to report that it is proposing to establish a low income customer
12 assistance program not only for its Coatesville customers but for all of PAW's wastewater
13 customers, with the exception of the remaining customers being charged under an
14 availability rate.

15 **24. Q. How will the program for wastewater customers be structured?**

16 A. The program will be structured and administered in the same manner as the current program
17 for water customers. The program has two components; a grant program and a service fee
18 discount. The program will be administered by Dollar Energy and funded by PAW, and the
19 eligibility criteria will be the same as the Company's successful water program.

20 **25. Q. Please describe the customer assistance program funding.**

21 A. PAW presently funds the water program in the amount of \$250,000 per year. Extrapolating
22 that amount to the wastewater program based on the number of customers produces an

1 equivalent funding level of approximately \$6,900. The Company will initially fund the
2 wastewater program with an annual contribution of \$10,000.

3 VII. INCOME TAXES

4 **26. Q. How were the Company's proposed income tax expense allowances developed?**

5 A. No income taxes are shown on the first five columns of page one of Exhibit No. 3-A
6 because Coatesville has no taxable income at the revenue level produced by its present rates.
7 The derivation of state and federal income taxes at proposed rate levels is shown on pages
8 41 and 42 of Exhibit No. 3-A. As shown in those calculations, the tax effects of accelerated
9 depreciation were normalized for federal income tax purposes and flowed-through in
10 calculating state income taxes. Deferred taxes were calculated for the FTY and deducted
11 from rate base as reflected on Page 10 of Exhibit 3-A.

12 **27. Q. Does this conclude your testimony?**

13 A. Yes it does.

**Pennsylvania American Water
Coatesville Wastewater Operations
Summary of Rate Increase Request**

| | |
|-----------------------------|---|
| <u>Filing Date:</u> | April 23, 2010 |
| <u>Historic Test Year:</u> | 12 Months Ended December 31, 2009 |
| <u>Future Test Year:</u> | 12 Months Ended December 31, 2010 |
| <u>Increase Requested:</u> | \$8.2 Million |
| <u>Percentage Increase:</u> | 197% in overall revenues |
| <u>Effective Date:</u> | January 22, 2011 (based on full suspension) |
| <u>Rate of Return:</u> | 7.30% on rate base; 11.5% ROE |

| <u>Type of Capital</u> | <u>Proportion of Total</u> | <u>Cost Rate</u> | <u>Weighted Cost</u> |
|------------------------|----------------------------|------------------|----------------------|
| Debt | 79.97% | 6.27% | 5.01% |
| Preferred Stock | .28% | 8.11% | .02% |
| Common Stock | <u>19.75%</u> | 11.50% | <u>2.27%</u> |
| Total | <u>100%</u> | | <u>7.30%</u> |

Elements of Increase:

| | <u>Required Revenue</u> |
|------------------------------------|-------------------------|
| Capital Projects (Rate Base) | \$7.5 Million |
| Operation and Maintenance Expenses | <u>.7</u> Million |
| Total | \$8.2 Million |

Pennsylvania American Water Company
Capital Structure @ 12/31/09
Total Company

Exhibit RPN-2
Page 1 of 5

| | <u>Historic 12/31.2009</u> | <u>Ratios</u> | <u>Cost Rate</u> | <u>Weighted Cost Rate</u> |
|-------------------------|--------------------------------|----------------|----------------------|-------------------------------|
| Long term debt | \$ 998,447,759 | 51.02% | 6.25% | 3.19% |
| Preferred Stock | 14,171,700 | 0.72% | 8.11% | 0.06% |
| Common Equity | 944,413,846 | 48.26% | 11.50% | 5.55% |
| Total Permanent Capital | <u>\$ 1,957,033,305</u> | <u>100.00%</u> | | <u>8.80%</u> |

Coatesville Wastewater Including PEDFA - Specific Project Financing

| | Historic 12/31, 2009 | Ratios | Cost Rate | Weighted Cost Rate |
|-------------------------|-------------------------|----------------|--------------|-----------------------|
| Long term debt | \$ 15,071,763 | 19.42% | 6.16% | 1.20% |
| LTD PEDFA Financing | 47,000,000 | 60.55% | 6.30% | 3.81% |
| Preferred Stock | 220,518 | 0.28% | 8.11% | 0.02% |
| Common Equity | 15,335,158 | 19.75% | 11.50% | 2.27% |
| Total Permanent Capital | <u>\$ 77,627,439</u> | <u>100.00%</u> | | <u>7.30%</u> |
| Debt Combined | 62,071,763 | 79.97% | 6.26% | 5.01% |

PA AMERICAN WATER - TOTAL COMPANY
SCHEDULE OF DEBT AT DECEMBER 31, 2009

| DATE OF ISSUE | DATE OF MATURITY | AMOUNT ISSUED | AMOUNT OUTSTANDING | COUPON RATE | ANNUAL INTEREST | ISSUANCE EXPENSE | NET PROCEEDS | NET PROCEEDS Ratio | PERCENT TO TOTAL | EFFECTIVE COST RATE | WEIGHTED COST RATE |
|---|------------------|-----------------|--------------------|-------------|-----------------|------------------|-----------------|--------------------|------------------|---------------------|--------------------|
| Bonds and Notes | | | | | | | | | | | |
| 1-Nov-1993 | 1-Nov-2033 | 38,000,000 | 38,000,000 | 6.780% | 2,576,400 | 174,946 | 37,825,054 | 99.54% | 3.81% | 6.81% | 0.26% |
| 1-Sep-1996 | 1-Sep-2026 | 150,000,000 | 150,000,000 | 7.800% | 11,700,000 | 2,069,648 | 147,930,352 | 98.62% | 15.02% | 7.92% | 1.19% |
| 24-Aug-1989 | 1-Aug-2019 | 15,500,000 | 15,500,000 | 8.710% | 1,505,050 | 165,469 | 15,334,531 | 98.93% | 1.85% | 9.82% | 0.15% |
| 15-Feb-1991 | 15-Jan-2021 | 20,000,000 | 20,000,000 | 9.690% | 1,938,000 | 116,061 | 19,883,939 | 98.42% | 2.00% | 9.75% | 0.20% |
| 1-Nov-1991 | 1-Nov-2031 | 10,000,000 | 10,000,000 | 8.820% | 882,000 | 88,352 | 9,911,648 | 99.12% | 1.00% | 8.90% | 0.09% |
| 15-Aug-1995 | 1-Aug-2025 | 10,000,000 | 10,000,000 | 8.150% | 815,000 | 60,119 | 9,939,881 | 99.40% | 1.00% | 8.20% | 0.08% |
| 1-Nov-1997 | 1-Nov-2017 | 33,000,000 | 33,000,000 | 7.980% | 2,336,400 | 551,683 | 32,448,317 | 98.33% | 3.31% | 7.24% | 0.24% |
| 1-Jul-2001 | 1-Jul-2031 | 16,700,000 | 16,700,000 | 6.750% | 1,127,250 | 1,335,312 | 15,364,668 | 92.00% | 1.67% | 7.38% | 0.12% |
| 1-Sep-1998 | 1-Sep-2018 | 18,250,000 | 18,250,000 | 6.000% | 1,095,000 | 906,630 | 17,343,370 | 95.03% | 1.83% | 6.37% | 0.12% |
| 30-Sep-1991 | 15-Mar-2019 | 17,950,000 | 17,950,000 | 6.100% | 1,094,850 | 957,808 | 16,992,192 | 94.66% | 1.80% | 6.52% | 0.12% |
| 1-Apr-2001 | 29-Mar-2011 | 47,000,000 | 47,000,000 | 6.370% | 467,160 | 320,648 | 46,679,352 | 99.32% | 0.68% | 6.97% | 0.05% |
| 31-Dec-2006 | 21-Dec-2016 | 13,800,000 | 13,800,000 | 5.520% | 761,760 | 45,774 | 13,754,226 | 99.67% | 1.38% | 5.56% | 0.08% |
| 31-Dec-2006 | 21-Dec-2018 | 65,800,000 | 65,800,000 | 5.620% | 3,703,680 | 218,587 | 65,681,413 | 99.67% | 6.60% | 5.66% | 0.37% |
| 31-Dec-2006 | 21-Dec-2021 | 100,300,000 | 100,300,000 | 5.770% | 5,787,310 | 332,680 | 99,967,310 | 99.67% | 10.05% | 5.86% | 0.58% |
| 31-Mar-2007 | 29-Mar-2022 | 80,000,000 | 80,000,000 | 4.750% | 3,800,000 | 281,178 | 79,738,822 | 99.67% | 8.01% | 4.78% | 0.38% |
| 15-May-2008 | 15-May-2018 | 81,000,000 | 81,000,000 | 6.250% | 5,062,500 | 293,994 | 80,706,006 | 99.64% | 8.11% | 6.30% | 0.51% |
| 1-Jun-1999 | 1-Jun-2029 | 24,030,000 | 23,455,000 | 5.050% | 1,184,478 | 1,191,706 | 22,838,294 | 95.04% | 2.35% | 5.39% | 0.13% |
| 1-Aug-2004 | 1-Aug-2034 | 40,000,000 | 39,190,000 | 4.800% | 1,861,120 | 2,216,014 | 37,783,986 | 94.46% | 3.83% | 5.17% | 0.20% |
| 23-Sep-2004 | 1-Sep-2034 | 19,000,000 | 19,000,000 | 4.950% | 940,500 | 1,355,440 | 17,644,560 | 92.87% | 1.80% | 5.43% | 0.10% |
| 23-Sep-2004 | 1-Sep-2034 | 30,000,000 | 30,000,000 | 5.100% | 1,530,000 | 2,566,355 | 27,433,645 | 91.45% | 3.00% | 5.70% | 0.17% |
| 1-Dec-2009 | 1-Dec-2039 | 80,000,000 | 80,000,000 | 5.800% | 4,400,000 | 1,306,669 | 78,693,331 | 98.37% | 8.01% | 5.61% | 0.45% |
| 1-Dec-2009 | 1-Dec-2039 | 13,165,000 | 13,165,000 | 5.600% | 724,075 | 347,489 | 12,817,511 | 98.37% | 1.32% | 5.68% | 0.07% |
| 1-Apr-2009 | 1-Apr-2039 | 80,000,000 | 80,000,000 | 6.200% | 4,960,000 | 1,032,348 | 78,967,652 | 98.71% | 8.01% | 6.30% | 0.50% |
| Water Facility Restoration Loans | | | | | | | | | | | |
| 1-Mar-1986 | 1-Nov-2012 | 1,955,878 | 537,246 | 3.450% | 18,535 | 27,563 | 1,928,315 | 98.59% | 0.05% | 3.56% | 0.00% |
| Pennvest Loans | | | | | | | | | | | |
| 1-Jun-1998 | 1-Apr-2011 | 263,442 | 23,250 | 1.000% | 233 | 0 | 263,442 | 100.00% | 0.00% | 1.00% | 0.00% |
| 1-Aug-2001 | 1-May-2018 | 6,656,399 | 2,857,912 | 1.384% | 39,554 | 110,635 | 6,545,764 | 98.34% | 0.29% | 1.50% | 0.00% |
| 1-Jul-2000 | 1-Jan-2018 | 1,391,436 | 677,967 | 2.566% | 17,397 | 69,942 | 1,321,494 | 94.97% | 0.07% | 2.93% | 0.00% |
| 1-Jul-2000 | 1-Feb-2019 | 2,926,847 | 1,462,552 | 2.905% | 42,487 | 29,069 | 2,897,778 | 99.01% | 0.15% | 2.97% | 0.00% |
| 1-Jan-2003 | 1-Dec-2022 | 3,945,656 | 2,588,215 | 2.774% | 71,797 | 8,480 | 3,937,176 | 99.79% | 0.26% | 2.79% | 0.01% |
| 1-Oct-2000 | 1-Oct-2019 | 1,728,997 | 1,146,375 | 2.795% | 32,041 | 0 | 1,728,997 | 100.00% | 0.11% | 2.80% | 0.00% |
| 1-Oct-2001 | 1-Feb-2020 | 3,470,505 | 2,029,604 | 1.184% | 24,031 | 17,155 | 3,453,350 | 99.51% | 0.20% | 1.21% | 0.00% |
| 1-Apr-2000 | 1-Mar-2022 | 3,366,155 | 2,228,332 | 3.237% | 72,131 | 56,803 | 3,309,352 | 98.31% | 0.22% | 3.35% | 0.01% |
| 1-Apr-2000 | 1-Mar-2022 | 3,623,800 | 2,398,091 | 3.237% | 77,626 | 25,430 | 3,598,370 | 98.30% | 0.24% | 3.28% | 0.01% |
| 30-Aug-2000 | 1-Sep-2022 | 4,322,665 | 2,884,040 | 3.237% | 93,356 | 25,445 | 4,297,220 | 99.41% | 0.29% | 3.27% | 0.01% |
| 1-Aug-2004 | 1-Jul-2024 | 1,559,205 | 965,901 | 2.774% | 26,794 | 13,749 | 1,545,456 | 99.12% | 0.10% | 2.83% | 0.00% |
| 01-Jun-05 | 1-Nov-2024 | 5,121,348 | 4,198,767 | 1.000% | 41,988 | 29,484 | 5,099,283 | 99.48% | 0.42% | 1.03% | 0.00% |
| 1-Jan-2006 | 1-Dec-2025 | 5,386,606 | 3,977,295 | 1.385% | 55,086 | 34,130 | 5,352,476 | 99.37% | 0.40% | 1.42% | 0.01% |
| 1-Sep-2004 | 1-Aug-2024 | 5,240,631 | 3,908,599 | 2.774% | 108,425 | 7,951 | 5,232,680 | 99.85% | 0.39% | 2.78% | 0.01% |
| 1-Nov-2004 | 1-Oct-2024 | 3,099,441 | 2,338,505 | 2.432% | 56,897 | 5,660 | 3,083,781 | 98.82% | 0.23% | 2.44% | 0.01% |
| 1-Oct-2009 | 1-Sep-2029 | 2,241,702 | 2,214,108 | 1.274% | 28,208 | 0 | 2,241,702 | 100.00% | 0.22% | 1.27% | 0.00% |
| | | \$1,080,495,713 | \$998,447,759 | | \$61,079,119 | \$18,376,416 | \$1,042,119,297 | | 100.00% | | 6.25% |

General Ledger
LTD
Current Portion

992,058,242
6,389,517
998,447,759

PA AMERICAN WATER - TOTAL COMPANY EXCLUDING WASTEWATER SPECIFIC FINANCING
SCHEDULE OF DEBT AT DECEMBER 31, 2010

| DATE OF ISSUE | DATE OF MATURITY | AMOUNT ISSUED | AMOUNT OUTSTANDING | COUPON RATE | ANNUAL INTEREST | ISSUANCE EXPENSE | NET PROCEEDS | NET PROCEEDS Ratio | PERCENT TO TOTAL | EFFECTIVE COST RATE | WEIGHTED COST RATE | |
|---|------------------|---------------|--------------------|-------------|-----------------|------------------|-----------------|--------------------|------------------|---------------------|--------------------|--|
| Bonds and Notes | | | | | | | | | | | | |
| 1-Nov-1993 | 1-Nov-2033 | 38,000,000 | 38,000,000 | 6.780% | 2,576,400 | 174,946 | 37,825,054 | 99.54% | 3.93% | 6.81% | 0.27% | |
| 1-Sep-1996 | 1-Sep-2026 | 150,000,000 | 150,000,000 | 7.500% | 11,700,000 | 2,065,648 | 147,934,352 | 98.62% | 15.53% | 7.92% | 1.23% | |
| 24-Aug-1989 | 1-Aug-2019 | 15,500,000 | 15,500,000 | 9.710% | 1,505,050 | 165,469 | 15,334,531 | 98.93% | 1.60% | 9.82% | 0.16% | |
| 15-Feb-1991 | 15-Jan-2021 | 20,000,000 | 20,000,000 | 9.680% | 1,968,000 | 116,061 | 19,883,939 | 99.42% | 2.07% | 9.75% | 0.20% | |
| 1-Nov-1991 | 1-Nov-2031 | 10,000,000 | 10,000,000 | 8.820% | 882,000 | 88,352 | 9,911,648 | 99.12% | 1.04% | 8.90% | 0.09% | |
| 15-Aug-1995 | 1-Aug-2000 | 10,000,000 | 10,000,000 | 8.150% | 815,000 | 60,119 | 9,939,881 | 99.40% | 1.04% | 8.20% | 0.08% | |
| 1-Nov-1997 | 1-Nov-2017 | 33,000,000 | 33,000,000 | 7.080% | 3,336,400 | 551,683 | 32,448,317 | 98.33% | 3.42% | 7.24% | 0.25% | |
| 1-Jul-1996 | 1-Jul-2031 | 16,700,000 | 16,700,000 | 6.750% | 1,127,250 | 1,356,312 | 15,343,688 | 92.00% | 1.73% | 7.39% | 0.13% | |
| 1-Sep-1988 | 1-Sep-2018 | 18,250,000 | 18,250,000 | 6.000% | 1,095,000 | 906,630 | 17,343,370 | 95.03% | 1.89% | 6.37% | 0.12% | |
| 30-Sep-1991 | 15-Mar-2019 | 17,950,000 | 17,950,000 | 6.700% | 1,084,950 | 327,808 | 16,992,192 | 94.66% | 1.86% | 6.52% | 0.12% | |
| 1-Apr-2001 | 1-Apr-2011 | 47,000,000 | 3,400,000 | 6.870% | 233,580 | 957,808 | 46,079,352 | 99.32% | 0.35% | 6.97% | 0.02% | |
| 31-Dec-2006 | 21-Dec-2016 | 13,800,000 | 13,800,000 | 5.520% | 761,760 | 45,774 | 13,754,226 | 99.67% | 1.43% | 5.56% | 0.06% | |
| 31-Dec-2006 | 21-Dec-2018 | 65,900,000 | 65,900,000 | 5.620% | 3,703,580 | 218,587 | 65,681,413 | 99.67% | 6.82% | 5.66% | 0.06% | |
| 31-Mar-2007 | 29-Mar-2022 | 80,000,000 | 100,300,000 | 5.770% | 5,787,310 | 332,890 | 99,967,310 | 99.67% | 10.38% | 5.80% | 0.60% | |
| 15-May-2008 | 15-May-2018 | 81,000,000 | 80,000,000 | 4.750% | 3,800,000 | 261,178 | 79,738,822 | 99.67% | 8.28% | 4.78% | 0.40% | |
| 1-Jun-1999 | 1-Jun-2009 | 24,030,000 | 23,455,000 | 6.250% | 5,062,500 | 293,994 | 80,706,006 | 99.64% | 6.38% | 6.30% | 0.53% | |
| 1-Aug-2004 | 1-Aug-2034 | 40,000,000 | 38,590,000 | 5.050% | 1,184,478 | 1,191,706 | 22,838,294 | 95.04% | 2.43% | 5.39% | 0.13% | |
| 23-Sep-2004 | 1-Sep-2034 | 19,000,000 | 19,000,000 | 4.800% | 1,852,320 | 2,216,014 | 37,763,986 | 94.46% | 3.99% | 5.17% | 0.11% | |
| 23-Sep-2004 | 1-Sep-2034 | 30,000,000 | 30,000,000 | 4.950% | 940,500 | 1,355,440 | 17,644,560 | 92.87% | 1.97% | 5.43% | 0.11% | |
| 1-Dec-2009 | 1-Dec-2009 | 80,000,000 | 80,000,000 | 5.100% | 1,530,000 | 1,355,440 | 27,433,645 | 91.45% | 3.11% | 5.70% | 0.18% | |
| 1-Dec-2009 | 1-Dec-2009 | 80,000,000 | 80,000,000 | 5.500% | 4,400,000 | 2,566,359 | 78,683,331 | 98.37% | 8.28% | 5.61% | 0.46% | |
| 1-Dec-2009 | 1-Dec-2039 | 13,165,000 | 13,165,000 | 5.500% | 724,075 | 347,489 | 12,817,511 | 97.36% | 1.36% | 5.68% | 0.08% | |
| 1-Apr-2009 | 1-Apr-2039 | 33,000,000 | 33,000,000 | 6.200% | 2,046,000 | 425,844 | 32,574,156 | 98.71% | 3.42% | 6.30% | 0.22% | |
| | | | | | | | 1,928,315 | 98.59% | 0.04% | 3.56% | 0.00% | |
| Water Facility Restoration Loans | | | | | | | | | | | | |
| 1-Mar-1996 | 1-Nov-2012 | 1,955,878 | 359,098 | 3.450% | 12,389 | 27,563 | 1,928,315 | 100.00% | 0.00% | 1.00% | 0.00% | |
| Pennvest Loans | | | | | | | | | | | | |
| 1-Jun-1998 | 1-Apr-2011 | 263,442 | 5,799 | 1.000% | 58 | 0 | 263,442 | 100.00% | 0.00% | 1.00% | 0.00% | |
| 1-Aug-2001 | 1-May-2018 | 6,656,389 | 2,556,516 | 1.384% | 35,082 | 110,635 | 6,545,764 | 98.34% | 0.26% | 1.50% | 0.00% | |
| 1-Jan-2000 | 1-Jan-2018 | 1,391,436 | 601,509 | 2.566% | 15,435 | 69,942 | 1,321,494 | 94.97% | 0.06% | 2.93% | 0.00% | |
| 1-Jul-2000 | 1-Feb-2019 | 2,926,847 | 1,321,239 | 2.905% | 38,362 | 29,069 | 2,897,778 | 99.01% | 0.14% | 2.97% | 0.00% | |
| 1-Jan-2003 | 1-Dec-2022 | 3,945,656 | 2,420,518 | 2.774% | 67,145 | 8,480 | 3,937,176 | 99.79% | 0.25% | 2.79% | 0.01% | |
| 1-Oct-2000 | 1-Oct-2019 | 1,798,997 | 1,043,638 | 2.765% | 29,170 | 0 | 1,728,997 | 100.00% | 0.11% | 2.80% | 0.00% | |
| 1-Oct-2001 | 1-Feb-2020 | 3,470,505 | 1,840,823 | 1.184% | 21,793 | 17,155 | 3,453,350 | 99.51% | 0.19% | 1.21% | 0.00% | |
| 1-Apr-2000 | 1-Mar-2022 | 3,386,155 | 2,077,651 | 3.237% | 67,254 | 56,803 | 3,309,352 | 98.31% | 0.22% | 3.35% | 0.01% | |
| 1-Apr-2000 | 1-Mar-2020 | 3,623,800 | 2,235,831 | 3.237% | 72,377 | 25,430 | 3,598,370 | 99.30% | 0.23% | 3.28% | 0.01% | |
| 30-Aug-2000 | 1-Sep-2022 | 4,322,665 | 2,698,277 | 3.237% | 87,343 | 4,297,220 | 4,297,220 | 98.41% | 0.28% | 3.27% | 0.01% | |
| 1-Aug-2004 | 1-Jul-2024 | 1,559,205 | 911,399 | 2.774% | 25,282 | 13,749 | 1,545,456 | 99.12% | 0.09% | 2.83% | 0.00% | |
| 1-Jun-2005 | 1-Nov-2024 | 5,721,348 | 3,936,440 | 1.156% | 45,505 | 29,484 | 5,691,864 | 99.48% | 0.41% | 1.19% | 0.00% | |
| 1-Jun-2006 | 1-Dec-2025 | 5,986,606 | 3,461,279 | 1.365% | 47,939 | 34,130 | 5,952,476 | 99.37% | 0.36% | 1.42% | 0.01% | |
| 1-Sep-2004 | 1-Aug-2024 | 5,240,631 | 3,689,575 | 2.774% | 102,349 | 7,951 | 5,232,680 | 99.85% | 0.38% | 2.78% | 0.01% | |
| 1-Nov-2004 | 1-Oct-2024 | 3,099,441 | 2,206,898 | 2.432% | 53,672 | 5,680 | 3,083,781 | 99.82% | 0.23% | 2.44% | 0.01% | |
| 1-Oct-2000 | 1-Sep-2029 | 2,241,702 | 2,310,839 | 1.274% | 29,440 | 0 | 2,241,702 | 100.00% | 0.24% | 1.27% | 0.00% | |
| 1-Apr-2010 | 31-Mar-2035 | 12,150,000 | 12,150,000 | 1.559% | 189,419 | 0 | 12,150,000 | 100.00% | 1.26% | 1.56% | 0.01% | |
| 1-Apr-2010 | 31-Mar-2035 | 2,125,000 | 2,125,000 | 1.799% | 38,229 | 0 | 2,125,000 | 100.00% | 0.02% | 1.80% | 0.00% | |
| 1-Jul-2010 | 30-Jun-2030 | 2,125,000 | 2,125,000 | 1.595% | 33,979 | 0 | 2,125,000 | 100.00% | 0.22% | 1.60% | 0.00% | |
| 1-Jul-2010 | 30-Jun-2035 | 2,170,000 | 2,170,000 | 2.376% | 51,559 | 0 | 2,170,000 | 100.00% | 0.22% | 2.38% | 0.01% | |
| 1-Apr-2010 | 31-Mar-2040 | 2,819,283 | 2,819,283 | 1.000% | 28,193 | 0 | 2,819,283 | 100.00% | 0.29% | 1.00% | 0.00% | |
| | | | | | | | \$1,017,115,084 | 100.00% | 6.16% | 6.16% | 0.00% | |
| | | | | | | | \$17,769,912 | \$58,188,157 | | | | |
| | | | | | | | \$966,055,512 | | | | | |

PENNSYLVANIA AMERICAN WATER
SCHEDULE OF PREFERRED STOCK AT DECEMBER 2009 & 2010

| SERIES | DATE OF ISSUE | (1) | | PRINCIPAL AMOUNT ISSUED | AMOUNT OUTSTANDING | EXPENSE | NET PROCEEDS | PERCENT TO TOTAL | EFFECTIVE COST RATE | WEIGHTED COST RATE (2) |
|--------|---------------|----------------|------------|-------------------------|--------------------|---------|--------------|------------------|---------------------|------------------------|
| | | AVG TERM (YRS) | TERM (YRS) | | | | | | | |
| 4.50% | 2-Dec-40 | (3) | | 2,000,000 | 1,720,200 | - | 2,000,000 | 12.14% | 4.50% | 0.55% |
| 9.75% | 23-Apr-71 | 19.5 | | 300,000 | 178,000 | 5,473 | 294,527 | 1.26% | 9.96% | 0.13% |
| 9.35% | 23-Apr-71 | 22.5 | | 425,000 | 273,500 | 7,275 | 417,725 | 1.93% | 9.53% | 0.18% |
| 8.49% | 21-Nov-91 | 25.5 | | 12,000,000 | 12,000,000 | 82,714 | 11,917,286 | 84.68% | 8.56% | 7.25% |
| | | | | 14,725,000 | 14,171,700 | 95,462 | 14,629,538 | 100.00% | | 8.11% |

Notes:

- (1) Determined by taking into account the effect of the annual sinking fund requirements which are met by the retirement of stock which reduce the term of each issue
- (2) The effective cost for each issue is the yield to maturity using as inputs the average term of issue, stated dividend rate, and net proceeds ratio.
- (3) Series without sinking fund requirements are outstanding in perpetuity. For those series, the effective cost rate is the stated dividend rate divided by the net proceeds ratio.