BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

JOINT APPLICATION OF AQUA AMERICA, INC., AQUA PENNSYLVANIA, INC., AQUA PENNSYLVANIA WASTEWATER, INC., PEOPLES NATURAL GAS COMPANY LLC AND PEOPLES GAS COMPANY LLC FOR ALL OF THE AUTHORITY AND THE NECESSARY CERTIFICATES OF PUBLIC CONVENIENCE TO APPROVE A CHANGE IN CONTROL OF PEOPLES NATURAL GAS COMPANY LLC, AND PEOPLES GAS COMPANY LLC BY WAY OF THE PURCHASE OF ALL OF LDC FUNDING LLC'S MEMBERSHIP INTERESTS BY AQUA AMERICA, INC.	:	Docket Nos. A-2018-__________ A-2018-__________ A-2018-__________ A-2018-__________

JOINT APPLICATION OF AQUA AMERICA, INC., AQUA PENNSYLVANIA, INC., AQUA PENNSYLVANIA WASTEWATER, INC., PEOPLES NATURAL GAS COMPANY LLC AND PEOPLES GAS COMPANY LLC

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

I. INTRODUCTION

1. By this Application, Aqua America, Inc. ("Aqua America") and its subsidiaries, Aqua Pennsylvania, Inc. ("Aqua PA"), Aqua Pennsylvania Wastewater, Inc. ("Aqua PA Wastewater"), Peoples Natural Gas Company LLC ("Peoples Natural Gas") and Peoples Gas Company LLC ("Peoples Gas") (hereinafter, collectively the "Applicants") hereby request all necessary approvals from the Pennsylvania Public Utility Commission ("Commission") pursuant to Sections 1102(a)(3) and 2210(a)(1) of the Pennsylvania Public Utility Code ("Code"), 66 Pa. C.S. §§ 1102(a)(3) and 2210(a)(1), authorizing the change in control of Peoples Natural Gas and

Peoples Gas (collectively the "Peoples Companies") to Aqua America by way of the purchase of all of the membership interests of LDC Funding LLC ("Funding")[1] by Aqua America. The Applicants further seek all other approvals or certificates of public convenience that are appropriate, customary, or necessary under the Code to carry out the transaction contemplated in this Application in a lawful manner.

2. The complete names and addresses of the Applicants are as follows:

Aqua America, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010

Aqua Pennsylvania, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010

Aqua Pennsylvania Wastewater, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010

Peoples Natural Gas Company LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212

Peoples Gas Company LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212

3. The attorneys for the Applicants are:

Attorneys for Aqua America, Inc. and its subsidiaries, Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc.

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[1] As explained in Section II of this Application, Peoples Natural Gas and Peoples Gas are wholly-owned subsidiaries of PNG Companies LLC ("PNG"). PNG is in turn a wholly-owned subsidiary of LDC Holdings LLC ("Holdings"), which is the wholly-owned subsidiary of Funding.

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The Applicants' attorneys are authorized to receive all notices and communications regarding this Application.

4. Through this Application, the Applicants seek Commission approval of a transaction that will create one of the largest publicly-traded water utilities and natural gas

distribution companies in the United States. The transaction will also result in the strategic alignment of the Applicants' infrastructure-replacement philosophies, which will focus on improving Pennsylvania's aging essential service infrastructure, under the same, publicly-traded corporate umbrella. To accomplish this alignment, the owners of the Peoples Companies and Aqua America will engage in a single transaction that transfers the control of Funding, and thereby the Peoples Companies, to Aqua America. Importantly, while this transfer of control will result in new corporate ownership for the Peoples Companies, the employees of the Peoples Companies will be retained and, as a result, the existing, day-to-day operational expertise of the Peoples Companies will be unaffected. As further explained in this Application, the proposed transaction will result in numerous affirmative benefits, including but not limited to benefits from placing the Peoples Companies under public ownership, benefits from substantial infrastructure experience, benefits from retaining jobs in Pennsylvania, long-term efficiencies in information technology, and other benefits.

5. The contemplated transaction will be effectuated pursuant to a Purchase Agreement (the "Agreement"). The Agreement includes Buyer Disclosure Schedules 1.1(e), 4.4, 4.5(a) and 4.5(b) and Seller Disclosure Schedules 1.1 through 5.5(b). The Agreement and associated buyer and seller disclosure schedules contain highly sensitive commercial information that requires **HIGHLY CONFIDENTIAL** treatment and, therefore, are being filed under seal alongside this Application in a separate sealed envelope as "**HIGHLY CONFIDENTIAL Appendix A.**" The contemplated transaction is hereinafter referred to as the "Proposed Transaction."

6. The Application is organized as follows:

- Section II provides a description of the Applicants and the other entities involved in the Proposed Transaction.

- Section III provides an overview of the Proposed Transaction.
- Section IV sets forth the legal standards required for Commission approval of the Proposed Transaction.
- Section V addresses the effect of the Proposed Transaction on customer rates.
- Section VI addresses the effect of the Proposed Transaction on retail gas competition.
- Section VII demonstrates that Aqua America has the requisite technical, legal and financial fitness to assume control of the Peoples Companies through the Proposed Transaction.
- Section VIII demonstrates that the Proposed Transaction will promote the public interest by producing significant affirmative benefits for customers and Pennsylvania.
- Section IX sets forth the other regulatory approvals required.
- Section X sets forth additional supporting data filed alongside this Application.
- Section XI sets forth the conclusion and requested approvals.

7. The Applicants submit, as explained in more detail below, that all criteria necessary for approval of the Proposed Transaction under the Code have been met, and that the Proposed Transaction will benefit the Applicants' customers, employees and communities served. Therefore, the Applicants request that the Application be approved without condition to or modification of the Proposed Transaction.

II. THE PARTIES AND RELATED ENTITIES

A. APPLICANTS

1. Aqua America, Inc.

8. Aqua America is a water and wastewater utility holding company that currently provides service through its operating subsidiaries in Pennsylvania, Ohio, North Carolina,

Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America's subsidiaries provide drinking water and wastewater treatment infrastructure and services, and have substantial experience providing public utility service via pipes and pipelines. As explained below, Aqua Pennsylvania, Inc. ("Aqua PA") is a wholly-owned subsidiary of Aqua America and Aqua Pennsylvania Wastewater, Inc. ("Aqua PA Wastewater") is a wholly-owned subsidiary of Aqua PA.

9. Attached as "**Appendix B**" hereto is a chart showing the present ownership structure of the Aqua America-related entities.

10. Upon closing of the Proposed Transaction, it is anticipated that all of the membership interests of Funding (described in Section II.C. below) will be purchased by Aqua America. As further described in Section III below, Funding will become a wholly-owned subsidiary of Aqua America.

2. Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc.

11. Aqua PA is a corporation duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua PA is a wholly-owned subsidiary of Aqua America. Aqua PA Wastewater is a corporation duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua PA Wastewater is a wholly-owned subsidiary of Aqua PA.[2] Aqua PA and Aqua PA Wastewater are applicants for purposes of the Proposed Transaction because they are the public utility affiliates of the acquiring entity, Aqua America.

12. Aqua PA is a "public utility" as defined under Section 102 of the Code, 66 Pa. C.S. § 102. Aqua PA furnishes water service to approximately 435,000 water customer accounts and wastewater service, through Aqua PA Wastewater, to approximately 24,000 wastewater customer accounts (representing a population of approximately 1.4 million people) throughout Pennsylvania.

[2] Unless otherwise specified herein, references to Aqua PA also include Aqua PA Wastewater.

13. Aqua PA's existing service territory, including the service territory of Aqua PA Wastewater, includes all or portions of the following Pennsylvania counties: Adams, Berks, Bradford, Bucks, Carbon, Chester, Clarion, Clearfield, Columbia, Crawford, Cumberland, Delaware, Forest, Juniata, Lackawanna, Lawrence, Lehigh, Luzerne, Mckean, Mercer, Montgomery, Monroe, Northampton, Northumberland, Pike, Schuylkill, Snyder, Susquehanna, Venango, Warren, Wayne and Wyoming. A map of Aqua PA's existing service territory, including the service territory of Aqua PA Wastewater, is attached hereto as "**Appendix C**."

14. All of the annual reports, tariffs, certificates, applications, and other documents filed with the Commission by Aqua PA and Aqua PA Wastewater are made a part hereof by reference. Aqua PA and Aqua PA Wastewater have paid all special and general assessments made against them pursuant to Section 510 of the Code, 66 Pa. C.S. § 510. Aqua PA and Aqua PA Wastewater will remain responsible for the payment of any and all lawful special and general assessments related to their respective facilities that the Commission may make against them, pursuant to Section 510 of the Code, 66 Pa. C.S. § 510.

3. Peoples Natural Gas Company LLC

15. Peoples Natural Gas is a limited liability company formed under the laws of the Commonwealth of Pennsylvania for the purpose of providing natural gas transmission, distribution, and supplier of last resort services subject to the Commission's regulatory jurisdiction. Peoples Natural Gas is a wholly-owned subsidiary of PNG Companies LLC ("PNG"), indirectly owned by SteelRiver Infrastructure Fund North America LP ("SRIFNA") and an affiliated fund, which are managed by SteelRiver Infrastructure Associates LLC and its affiliated investment management entities (collectively "SteelRiver").[3]

[3] On February 1, 2010, PNG closed on its purchase of all of the issued and outstanding shares of capital stock of Peoples Natural Gas, which acquisition was approved by the Commission. *Joint Application for Approval of the*

16. Peoples Natural Gas is a "public utility" and a "natural gas distribution company" as those terms are defined in Sections 102 and 2202 of the Code, 66 Pa. C.S. §§ 102, 2202. Peoples Natural Gas, including its Equitable Division,[4] provides natural gas services to approximately 622,000 customers in all or portions of the following Pennsylvania counties: Allegheny, Armstrong, Beaver, Blair, Butler, Cambria, Clarion, Fayette, Greene, Indiana, Jefferson, Lawrence, Mercer, Somerset, Venango, Washington and Westmoreland. The existing areas served by Peoples Natural Gas, including its Equitable Division, are shown on the map attached as "**Appendix D**."

17. All of the annual reports, tariffs, certificates, applications, and other documents filed with the Commission by Peoples Natural Gas, including its Equitable Division, are made a part hereof by reference. Peoples Natural Gas, including its Equitable Division, has paid all special and general assessments made against it pursuant to Section 510 of the Code, 66 Pa. C.S. § 510. Peoples Natural Gas will remain responsible for the payment of any and all lawful special and general assessments related to Peoples Natural Gas' facilities, including the facilities of its Equitable Division, that the Commission may make against it, pursuant to Section 510 of the Code, 66 Pa. C.S. § 510.

Transfer of the Issued and Outstanding Shares of Capital Stock of the Peoples Natural Gas Company, Docket No. A-2008-2063737 (November 19, 2009).

[4] On November 14, 2013, the Commission approved a series of transactions involving, among other things, the merger of Equitable Gas Company, LLC with Peoples Natural Gas and the operation of Equitable Gas Company, LLC as an operating division of Peoples Natural Gas. *Joint Application of Peoples Natural Gas Company LLC, Peoples TWP LLC, and Equitable Gas Company, LLC for All of the Authority and the Necessary Certificates of Public Convenience (1) to Transfer All of the Issued and Outstanding Limited Liability Company Membership Interest of Equitable Gas Company, LLC to PNG Companies LLC, (2) to Merge Equitable Gas Company, LLC with Peoples Natural Gas Company LLC, (3) to Transfer Certain Storage and Transmission Assets of Peoples Natural Gas Company LLC to Affiliates of EQT Corporation, (4) to Transfer Certain Assets between Equitable Gas Company, LLC and Affiliates of EQT Corporation, (5) for Approval of Certain Ownership Changes Associated with the Transaction, (6) for Approval of Certain Associated Gas Capacity and Supply Agreements, and (7) for Approval of Certain Changes in the Tariff of Peoples Natural Gas Company LLC*, Docket Nos. A-2013-2353647, A-2013-2353649, A-2013-2353651 (Order entered Nov. 14, 2013).

4. Peoples Gas Company LLC

18. Peoples Gas, formerly Peoples TWP LLC, is a limited liability company formed under the laws of the Commonwealth of Pennsylvania for the purpose of providing natural gas transmission, distribution, and supplier of last resort services subject to the Commission's regulatory jurisdiction. Peoples Gas is a wholly-owned subsidiary of PNG.[5]

19. Peoples Gas is a "public utility" and a "natural gas distribution company" as those terms are defined in Code Sections 102 and 2202, 66 Pa. C.S. §§ 102, 2202. Peoples Gas provides natural gas services to approximately 61,000 customers throughout its service territory, which includes all or portions of the following Pennsylvania counties: Allegheny, Armstrong, Beaver, Butler, Cambria, Clarion, Clearfield, Indiana, Jefferson, and Westmoreland. The existing areas served by Peoples Gas are shown on the map attached as "**Appendix E**."

20. All of the annual reports, tariffs, certificates, applications, and other documents filed with the Commission by Peoples Gas are made a part hereof by reference. Peoples Gas has paid all special and general assessments made against it pursuant to Section 510 of the Code, 66 Pa. C.S. § 510. Peoples Gas will remain responsible for the payment of any and all lawful special and general assessments related to Peoples Gas's facilities that the Commission may make against it, pursuant to Section 510 of the Code, 66 Pa. C.S. § 510.

B. PEOPLES COMPANIES RELATED ENTITIES

21. SteelRiver manages infrastructure investments throughout North America.

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[5] On May 24, 2011, LDC Holdings II LLC, an indirect subsidiary of SRIFNA, closed on its purchase of all of the issued and outstanding shares of capital stock of T.W. Phillips Gas and Oil Company (predecessor of Peoples Gas), which acquisition was approved by the Commission. *Joint Application of T.W. Phillips Gas and Oil Company, TWP INC., and LDC Holdings II LLC for approval of a change of control of T.W. Phillips Gas and Oil Company from TWP INC. to LDC Holdings II LLC, an indirect subsidiary of SteelRiver Infrastructure Fund North America LP*, Docket No. A-2010-2210326 (Order entered May 23, 2011). The Commission subsequently approved the internal-reorganization and transfer of Peoples Gas from LDC Holdings II LLC to PNG. *Application for All of the Authority and Any Necessary Certificates of Public Convenience to Transfer All of the Membership Interests In Peoples Gas Company, LLC from LDC Holdings II, LLC to PNG Companies, LLC*, Docket No. A-2017-2624578 (Order entered Nov. 8, 2017).

22. Funding is a Delaware limited liability company and a wholly-owned direct subsidiary of LDC Parent LLC ("Parent"), which is indirectly owned by SRIFNA and an affiliated fund managed by SteelRiver. Funding directly owns a 100% interest in Holdings, which in turn owns a 100% interest in PNG.

23. PNG is a limited liability company organized, validly existing, and in good standing under the laws of Delaware. PNG directly owns a 100% interest the Peoples Companies. PNG also directly owns other non-jurisdictional entities, as explained in greater detail below.

24. Attached as "**Appendix F**" hereto is a chart showing the present ownership structure of the SRIFNA-related entities.

25. As noted above and explained in Section III.B. below, Aqua America would, upon closing of the Proposed Transaction, purchase 100% of the interests in Funding. As such, Funding and its direct and indirect subsidiaries, Holdings and PNG, would no longer be owned by SteelRiver's privately traded and managed funds; rather, Funding and its subsidiaries would be 100% indirectly owned and controlled by Aqua America, a publicly traded company.

III. DESCRIPTION OF THE PROPOSED TRANSACTION

A. THE ACQUISITION

26. Under the terms of the Purchase Agreement, Parent will sell, convey, transfer, assign and deliver to Aqua America all of the issued and outstanding membership interests in Funding. Funding currently owns all of the authorized, issued, and outstanding limited liability interests in Holdings, which in turn owns all of the authorized, issued, and outstanding limited liability members in PNG. PNG is the sole owner of the authorized, issued, and outstanding

limited liability interests of the Peoples Companies, as well as other non-jurisdictional natural gas utilities and service providers.

27. At the closing of the Proposed Transaction, Funding, its direct subsidiary (Holdings), and indirect subsidiary (PNG) would become wholly-owned direct and indirect subsidiaries of Aqua America. Thus, the Peoples Companies would become indirect subsidiaries of Aqua America.

28. Among other things, the Applicants are seeking Commission approval of the change in control of Peoples Natural Gas and Peoples Gas that would occur as a result of Aqua America's acquisition of Funding, pursuant to Section 1102(a)(3) of the Code. 66 Pa. C.S. § 1102(a)(3).

B. OWNERSHIP CHANGES ASSOCIATED WITH THE PROPOSED TRANSACTION

29. As explained above, after the close of the Proposed Transaction Aqua America would indirectly own and control 100% of Funding. No new intermediate corporate entity would be created between Aqua America and Funding.

30. Currently, the Peoples Companies are wholly-owned subsidiaries of PNG, PNG is the wholly-owned subsidiary of Holdings, and Holdings is the wholly-owned subsidiary of Funding. Therefore, Funding is the indirect parent of the Peoples Companies.

31. Currently, Funding is a wholly-owned subsidiary of Parent, which holds 100% of the membership interests in Funding. Immediately after the transfer by Parent, Aqua America would wholly own and hold 100% of the membership interests in Funding and become the indirect parent of the Peoples Companies. The post-closing structure of Aqua America is shown in "**Appendix G.**" In accordance with the structure set forth in "**Appendix G,**" the Applicants would continue to provide their respective services in their existing service territories.

32. Importantly, the Proposed Transaction would not result in any change of ownership associated with Aqua PA. As explained above, after the close of the Proposed Transaction, Funding would become a direct subsidiary of Aqua America and, therefore, a sister company to Aqua PA. As such, Aqua PA would remain a wholly-owned subsidiary of Aqua America.

33. The Applicants herein are seeking Commission approval of the ownership changes described above to Peoples Natural Gas and Peoples Gas, pursuant to Section 1102(a)(3) of the Code. 66 Pa. C.S. § 1102(a)(3).

C. NON JURISDICTIONAL OWNERSHIP CHANGES ASSOCIATED WITH THE PROPOSED TRANSACTION

34. As explained above, the Proposed Transaction would result in Aqua America becoming the indirect parent of PNG.

35. Along with the Peoples Companies, PNG owns 100% of the interests in certain non-Commission jurisdictional natural gas utilities: Peoples Gas KY LLC ("Peoples KY"); Delta Natural Gas Company, Inc. ("Delta"); and Peoples Gas WV LLC ("Peoples WV"). As explained in Section IX below, Aqua America would obtain the approval of the Kentucky Public Service Commission to acquire Peoples KY and Delta, and would also obtain the approval of the West Virginia Public Service Commission to acquire Peoples WV.

36. In addition, Aqua America's acquisition of Funding would also result in the change in control of certain non-Commission jurisdictional entities currently operating within the Funding and PNG corporate chain. Specifically, the acquisition of Funding would include the acquisition of the following non-jurisdictional indirect subsidiaries of Funding and direct subsidiaries of PNG: PA Gas Marketing LLC; Peoples Service Company LLC; Peoples Homeworks LLC; Peoples Gathering LLC; Enpro, LLC; Delta Resources, LLC; and Delgasco,

LLC. PA Gas Marketing LLC is an existing legal entity but has no function at this time.[6] Peoples Service Company LLC provides various administrative management services to the Peoples Companies and their affiliates and receives services from the Peoples Companies. Peoples Homeworks LLC provides heating and cooling protection and restoration programs for homeowners, as well as programs for furnaces and air conditioners. Peoples Gathering LLC provides natural gas gathering pipeline services in the Commonwealth. Enpro, LLC, Delta Resources, LLC, and Delgasco, LLC are former subsidiaries of Delta Natural Gas Company, Inc. in Kentucky and are currently engaged in the business of buying and selling gas and operating production properties.

37. The Applicants are not seeking Commission approval associated with Aqua America's acquisition of the aforementioned non-jurisdictional entities.

D. FINANCING THE PROPOSED TRANSACTION

38. The consideration to acquire Funding from Parent is a base price of $4.275 billion, which includes a projected $1.3 billion of assumed debt, as adjusted pursuant to the terms of the Agreement.

39. Aqua America would finance the consideration through a combination of equity capital and third party debt financing. Aqua America has secured a fully committed bridge facility to fund the transaction. However, it is Aqua America's intent to raise permanent debt and equity capital for the long term utilizing multiple options. The financing would be structured to maintain strong investment grade credit ratings. Aqua America anticipates issuing approximately $2.2 to $2.9 billion of common equity and equity linked securities. In addition,

[6] The Applicants anticipate that PA Gas Marketing LLC will be dissolved prior to closing on the Proposed Transaction.

Aqua America anticipates approximately \$0.4 to \$0.9 billion of incremental Aqua America debt issued to fund the remainder of the transaction.

40. After the close of the Proposed Transaction, PNG's externally-financed secured debt would remain outstanding. In addition, intercompany debt owed by the Peoples Companies to PNG would remain for its term.

41. PNG will maintain credit ratings with two credit rating agencies as long as it has outstanding notes.

42. Going forward, new debt would be raised either at the Aqua America or subsidiary level, as appropriate, based on market conditions. Aqua America would review private and public placement debt to achieve the best rates for ratepayers over the long term. The Applicants remain committed to securing financing sufficient to ensure that they continue to provide safe and reliable service to customers.

43. Aqua America would maintain its capital structure for its water companies, and appropriate capital structures for the acquired natural gas companies.

IV. LEGAL STANDARDS FOR COMMISSION APPROVAL

A. STANDARD FOR REQUIRED SECTION 1102(a)(3) APPROVALS

44. Section 1102(a)(3) of the Code, 66 Pa. C.S. § 1102(a)(3), provides, in pertinent part, that the Commission's prior approval, evidenced by a certificate of public convenience, is required:

> For any public utility or an affiliated interest of a public utility . . . to acquire from, or to transfer to, any person or corporation . . . by any method or device whatsoever, including the sale or transfer of stock and including a consolidation, merger, sale or lease, the title to, or the possession or use of, any tangible or intangible property used or useful in the public service.

45. To provide direction for future applicants, the Commission issued a Statement of Policy on October 22, 1994, to establish clear standards regarding the circumstances under which a transfer of voting interest constitutes a change in *de facto* control of the utility, which provides, in pertinent part, as follows:

> (1) A transaction or series of transactions resulting in a new controlling interest is jurisdictional when the transaction or transactions result in a different entity becoming the beneficial holder of the largest voting interest in the utility or parent, regardless of the tier. A transaction or series of transactions resulting in the elimination of a controlling interest is jurisdictional when the transaction or transactions result in the dissipation of the largest voting interest in the utility or parent, regardless of the tier.
>
> (2) For purposes of this section, a controlling interest is an interest, held by a person or group acting in concert, which enables the beneficial holders to control at least 20% of the voting interest in the utility or its parent, regardless of the remoteness of the transaction. In determining whether a controlling interest is present, voting power arising from a contingent right shall be disregarded.

52 Pa. Code § 69.901. Thus, Commission approval is required for any transaction that creates or eliminates a controlling interest and results in a different entity becoming the largest voting interest in a public utility company. The determination of the interests involved in a transaction considers all tiers of interest in the utility or parent of the utility and, thus, both direct and indirect ownership interests in a utility are considered under the Commission's Policy Statement.

46. Presently, 100% of the interests in Peoples Natural Gas and Peoples Gas are directly held by PNG and, therefore, are indirectly held by Funding. Under the terms of the Agreement, all of the issued and outstanding limited liability company membership interests of Funding would be transferred to Aqua America. As a result of the proposed transfer of Funding, Aqua America would indirectly own all of the Peoples Companies' tangible and intangible public service property.

47. Further, pursuant to the Commission's Policy Statement, there would be a direct *de facto* change of control as a result of the proposed transfer of Funding because Aqua America would become the beneficial holder of all the voting interests in the Peoples Companies.

48. Accordingly, each of Peoples Natural Gas and Peoples Gas must obtain a certificate of public convenience under Section 1102(a)(3) of the Code for Parent to transfer its ownership of Peoples Natural Gas and Peoples Gas to Aqua America. The Applicants also seek a certificate of public convenience under Section 1102(a)(3) of the Code to effectuate the Proposed Transaction because Aqua America, the parent of Aqua PA and Aqua PA Wastewater, would indirectly acquire 100% of the interests in Peoples Natural Gas and Peoples Gas.

49. Section 1103 of the Code sets forth the procedure to obtain certificates of public convenience. Under Sections 1102 and 1103, the Applicants must demonstrate that the party to whom the assets and service obligations are being transferred is technically, legally and financially fit. *Seaboard Tank Lines*, 502 A.2d 762, 764 (Pa. Cmwlth. 1985); *Warminster Township Mun. Auth. v. Pa. Pub. Util. Comm'n*, 138 A.2d 240, 243 (Pa. Super. 1958).

50. However, unlike a new utility seeking Commission certification for the first time, Aqua America is presumed to be technically, legally and financially fit to assume control of the Peoples Companies by virtue of its long-standing existence and ownership of jurisdictional public utility service providers, *e.g.*, Aqua PA. *South Hills Movers, Inc. v. Pa. Pub. Util. Comm'n*, 601 A.2d 1308 (Pa. Cmwlth. 1992); *Re Blue Bird Coach Lines, Inc.*, 72 PA PUC 262, 285-286 (1990); *Re V.I.P. Travel Services, Inc.*, 56 PA PUC 625, 631 (1982). Significantly, the Commission has previously applied this presumption where the acquiring public utility provided service of a different nature than that of the public utility it acquired. *See In re: Application of Pennsylvania Power & Light Company, PFG Gas, Inc., and North Penn Gas Company*, Docket

Nos. A-120650F0006, A-122050F0003, 1998 Pa. PUC LEXIS 23, at *36-37 (Initial Decision dated May 1, 1998), *adopted by*, Opinion and Order, Docket Nos. A-120650F0006, A-122050F0003, 1998 Pa. PUC LEXIS 33, *28 (Order dated July 24, 1998). Aqua America's technical, legal and financial fitness are described in Section VII of the Application.

51. The Commission may issue a certificate of public convenience upon a finding that "the granting of such certificate is necessary or proper for the service, accommodation, convenience, or safety of the public." 66 Pa. C.S. § 1103(a). This standard requires the Commission to find that the Proposed Transaction will "affirmatively promote the service, accommodation, convenience, or safety of the public in some substantial way." *City of York v. Pa. Pub. Util. Comm'n*, 449 Pa. 136, 151, 295 A.2d 825, 828 (1972). The "substantial public interest" standard is satisfied by a simple preponderance of the evidence of benefits, and such burden can be met by showing a likelihood or probability of public benefits that need not be quantified or guaranteed. *Popowsky v. Pa. Pub. Util. Comm'n*, 594 Pa. 583, 611, 937 A.2d 1040, 1057 (2007). Further, the substantial public benefit test does not require that every customer receive a benefit from the Proposed Transaction. *Popowsky*, at 617-18, 937 A.2d at 1061.

52. The substantial affirmative benefits of the Proposed Transaction are described in Section VIII of this Application.

B. STANDARD FOR REQUIRED SECTION 2210(a) APPROVALS

53. Section 2210(a) of the Code provides as follows:

> (a) General rule. --In the exercise of authority the commission otherwise may have to approve mergers or consolidations involving natural gas distribution companies or natural gas suppliers or the acquisition or disposition of assets or securities of natural gas distribution companies or natural gas suppliers, the commission shall consider:
>
> > (1) Whether the proposed merger, consolidation, acquisition or disposition is likely to result in

> anticompetitive or discriminatory conduct, including the unlawful exercise of market power, which will prevent retail gas customers from obtaining the benefits of a properly functioning and effectively competitive retail natural gas market.
>
> (2) The effect of the proposed merger, consolidation, acquisition or disposition on the employees of the natural gas distribution company and on any authorized collective bargaining agent representing those employees.

66 Pa. C.S. § 2210(a).

54. The Proposed Transaction is subject to the provisions of Section 2210 because it involves the acquisition of the property and securities of the Peoples Companies by Aqua America.

55. Under Section 2210(a)(1) of the Code, the Commission is required to consider whether a proposed acquisition of a natural gas distribution company is likely to result in anticompetitive or discriminatory conduct. 66 Pa. C.S. § 2210(a). Additionally, the Commission is required to consider the impact that a proposed acquisition of a natural gas distribution company may have on the employees of the natural gas distribution company. 66 Pa. C.S. § 2210(a)(2).

56. The requirements of Section 2210(a) are addressed in Section VI of this Application.

C. BURDEN OF PROOF

57. Section 332(a) of the Code provides that the party seeking a rule or order from the Commission has the burden of proof in that proceeding. 66 Pa. C.S. § 332(a). It is axiomatic that "[a] litigant's burden of proof before administrative tribunals as well as before most civil proceedings is satisfied by establishing a preponderance of evidence which is substantial and legally credible." *Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm'n*, 578 A.2d 600, 602 (Pa.

Cmwlth. 1990). The preponderance of evidence standard requires proof by a greater weight of the evidence. *Cmwlth. v. Williams*, 732 A.2d 1167 (Pa. 1999). Consequently, as the parties seeking relief, the Applicants bear the burden of proving that the Proposed Transaction satisfies the requirements of Sections 1102, 1103, and 2210.

58. Additionally, any finding of fact necessary to support an adjudication of the Commission must be based upon substantial evidence. *Met-Ed Indus. Users Group v. Pa. Pub. Util. Comm'n*, 960 A.2d 189, 193 n.2 (Pa. Cmwlth. 2008) (citing 2 Pa. C.S. § 704). Substantial evidence is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. *Borough of E. McKeesport v. Special/Temporary Civil Serv. Comm'n*, 942 A.2d 274, 281 (Pa. Cmwlth. 2008). The "presence of conflicting evidence in the record does not mean that substantial evidence is lacking." *Allied Mechanical and Elec., Inc. v. Pa. Prevailing Wage Appeals Bd.*, 923 A.2d 1220, 1228 (Pa. Cmwlth. 2007) (citation omitted).

V. <u>EFFECT OF THE PROPOSED TRANSACTION ON RATES</u>

59. The Proposed Transaction would not have an immediate effect on rates. At closing of the Proposed Transaction, the water and wastewater tariffs of Aqua PA and the natural gas tariffs of Peoples Natural Gas and Peoples Gas would remain in full force and effect. Because the Applicants' base rates would remain in effect, as they may be amended from time to time in accordance with the law, the Proposed Transaction would not have an adverse effect on the Applicants' base rates.

60. The Proposed Transaction is not expected to have any adverse impact on the cost of equity for ratemaking purposes. The Peoples Companies would have access to equity capital raised by Aqua America in the public marketplace, as explained further in Section VIII.

61. Finally, the Applicants note that no claim to recover the transaction costs and/or acquisition premium associated with the Proposed Transaction would be made in future base rate cases.

VI. EFFECT OF THE PROPOSED TRANSACTION ON COMPETITION AND EMPLOYEES

62. As noted above, under Section 2210(a)(1) of the Code, the Commission is required to consider whether a proposed acquisition of the securities of a natural gas distribution company is likely to result in anticompetitive or discriminatory conduct. 66 Pa. C.S. § 2210(a).

63. The Proposed Transaction would not result in anti-competitive or discriminatory conduct in the retail market for natural gas in Pennsylvania, nor would it have any adverse effect on the retail natural gas market in Pennsylvania. The Proposed Transaction would not result in any changes to the gas operations or customer choice programs of Peoples Natural Gas and Peoples Gas. All rates, terms and conditions that have an impact on retail competition in the Peoples Companies' respective service territories would remain unaffected by the Proposed Transaction.

64. In addition, under Section 2210(a)(2) of the Code, the Commission is also required to consider the impact that a proposed acquisition of a natural gas distribution company may have on the employees of the natural gas distribution company. 66 Pa. C.S. § 2210(a)(2).

65. Unlike an acquisition situation where an existing gas company, potentially from outside Pennsylvania, would acquire the Peoples Companies, the Proposed Transaction through Aqua America ownership would not have an adverse impact on the employees of the Peoples Companies. Under the Proposed Transaction, the Peoples Companies would maintain current employees and Pittsburgh-based leadership. The Proposed Transaction does not contemplate the elimination of employees or leadership; rather, it would maintain the existing expertise in the

field of natural gas operations and management provided by the existing employees and Pittsburgh-based leadership of PNG, Peoples Natural Gas and Peoples Gas.

66. Moreover, the combined, larger entity would provide employees with enhanced opportunities for career development, as explained in greater detail in Section VIII below.

67. Furthermore, after the acquisition, the Peoples Companies would continue to honor the requirements of all union collective bargaining agreements, and treat all union employees in accordance with the National Labor Relations Act and other legal requirements. The Peoples Companies would also maintain their outstanding pension fund balances.

VII. TECHNICAL, LEGAL AND FINANCIAL FITNESS

A. AQUA AMERICA IS TECHNICALLY FIT TO OWN AND CONTROL THE PEOPLES COMPANIES

68. Aqua America is the second largest investor-owned water utility in the country and is a financially strong, owner and manager of pipe-based utility assets in the United States. Aqua America owns and operates 1,486 water systems across its eight-state footprint, producing more than 82 billion gallons of quality drinking water in 2017. The average capital budget for Aqua America's subsidiaries is approximately $500 million per year throughout its eight state service territories. Its sources of drinking water include three different types of water sources serving 2.3 million people.

69. In addition, Aqua America, Peoples Natural Gas and Peoples Gas utilize surcharge mechanisms to manage their capital investments. Seven states in which Aqua America operates water utilities and five states in which Aqua America operates wastewater utilities permit Aqua America's subsidiaries to add a surcharge to their respective bills to offset the additional depreciation and capital costs associated with capital expenditures related to replacing and rehabilitating infrastructure systems, with a focus on distribution pipe. Similarly, both

Peoples Natural Gas and Peoples Gas utilize surcharge mechanisms to manage their capital investments within Pennsylvania.

70. Moreover, Aqua America has significant experience owning and managing public utility infrastructure in Pennsylvania. Its wholly-owned subsidiaries, Aqua PA and Aqua PA Wastewater, provide water and wastewater services to over 435,000 water customer accounts and 24,000 wastewater customer accounts (representing a population of approximately 1.4 million people). In providing water and wastewater service to Pennsylvania customers, Aqua PA has significant expertise in owning and operating pipeline public utility assets in conformance with the Code and the Commission's regulations and orders.

71. Aqua PA's investment in the state's water and wastewater infrastructure continues to benefit customers and the environment alike. When Aqua PA first began to accelerate pipeline replacement in 1996, Aqua PA's pipes were on a 900-year replacement cycle. Today, that has been significantly reduced to a 90-year replacement cycle. The benefits of Aqua PA's main replacement program have been most dramatic in its southeastern division, which is the largest division with 4,600 miles of main that serve approximately one million people. Main breaks in the southeastern division have been reduced by 70% to an all-time low of eight breaks per 100 miles of pipe, per year, and customer complaints have fallen by 59%. Non-revenue water also continues to trend downward, reducing expenses for power and treatment chemicals.

72. Importantly, Aqua America also has significant experience implementing and managing Commission-approved Long Term Infrastructure Improvement Plans ("LTIIPs") involving the replacement of aging pipeline infrastructure throughout the Commonwealth of Pennsylvania. Aqua PA currently maintains separate LTIIPs for its water and wastewater assets, and regularly meets its LTIIP goals. Over the past 10 years, Aqua PA has replaced more than

1,300 miles of pipe, and invested over $1.1 billion in pipeline replacement. Aqua PA is currently replacing 2.3% of its mains per year, consistent with its Commission-approved LTIIP.

73. An additional, important key factor in demonstrating technical fitness is the fact that the same highly-experienced teams already in place at PNG and the Peoples Companies would continue to lead the natural gas operations of the Peoples Companies after closing. The Proposed Transaction retains the existing employees and Pittsburgh-based leadership of the Peoples Companies responsible for the safe, reliable and efficient operation of these companies. This includes Morgan O'Brien and his leadership team. As a result, Aqua America would have access to the intellectual capital and expertise in natural gas operations and management of the Peoples Companies' existing teams. Maintaining the existing management and experience of the Peoples Companies will be a valuable tool in addressing the challenges faced by natural gas distribution companies.

74. For these reasons, Aqua America, together with the Peoples Companies' current management and employees, have the managerial and utility experience necessary to effectuate the change of control contemplated by the Proposed Transaction and operate Peoples Natural Gas and Peoples Gas in the public interest.

B. AQUA AMERICA IS LEGALLY FIT TO OWN AND CONTROL THE PEOPLES COMPANIES

75. Aqua America is also legally fit to own and operate Peoples Natural Gas and Peoples Gas. Aqua America and its subsidiaries are in compliance with all federal and state laws, and have never been prosecuted, indicted or investigated for criminal activity in the United States or any other country.

76. In order to reinforce its culture of compliance, Aqua America has also engaged numerous outside law firms to handle various specialized matters, including on-going

compliance with the Public Utility Code and this Commission's regulations, rules and orders. Additionally, Aqua America has access to an internal team of legal counsel and regulatory experts responsible for ensuring compliance with all applicable laws. Similarly. the Peoples Companies also have an internal team of legal counsel and regulatory experts, who would be retained following the acquisition.

77. For these reasons, Aqua America is legally fit to own and operate Peoples Natural Gas and Peoples Gas.

C. AQUA AMERICA IS FINANCIALLY FIT TO OWN AND CONTROL THE PEOPLES COMPANIES

78. Aqua America is a publicly traded company that has substantial experience in raising both debt and equity capital in the public marketplace for approximately 130 years. Throughout its history, Aqua America has made major acquisitions of public utility companies and assets. For example, Philadelphia Suburban Corporation ("PSC"), the predecessor entity of Aqua America, acquired Consumers Water Company ("Consumers") for a total enterprise value of approximately $464 million in a deal that closed on March 11, 1999. The equity consideration consisted of approximately $289 million in PSC stock. At the time of the transaction, Consumers had approximately 230,000 connections throughout five states. The acquisition, when closed, created the second largest water utility in the United States, adding significant scale and efficiency as it combined two of the best-run water utilities in the country. In addition, PSC acquired AquaSource, Inc. ("AquaSource") in a transaction that closed on July 31, 2003. PSC acquired AquaSource for a total enterprise value of approximately $205 million. The consideration consisted of 100% cash, financed with equity and debt raised by PSC. The deal expanded PSC's customer count by 20%, adding 130,000 new customers from 11 states. The acquisition allowed PSC (which later changed its name to Aqua America) to invest in and

rehabilitate infrastructure across an increased geographic platform and further improve our nation's infrastructure.

79. Aqua America also has substantial experience with post-acquisition integration planning and execution. More recently, Aqua America has added approximately $100 million of rate base from three municipal acquisitions in 2018 and expects to add another approximately $100 million in 2019 from other binding commitments. Aqua America and its subsidiaries have worked cooperatively with state agencies over time and been willing to step in and take over or assist with troubled water and wastewater systems for the public good that typically need significant infrastructure upgrades. Examples of Aqua America's efforts to acquire or assist troubled water and wastewater systems in Pennsylvania include its acquisitions of the Sun Valley, Emlenton and Washington Park systems, and its assistance of the North Heidelberg system. These acquisitions demonstrate Aqua America's ability: (1) to acquire companies and assets and finance the growing capital needs associated with owning and operating public utility companies and assets; and (2) to finance and meet the growing capital needs associated with owning and operating public utility companies and assets.

80. Furthermore, Aqua American's ownership and operation of Aqua PA demonstrates a substantial commitment to invest significant, publicly-raised capital resources to further improve customer service, customer satisfaction, and pipeline infrastructure, while maintaining reasonable and competitive rates. Through these capital investments, Aqua PA has satisfied, and in many cases exceeded, its prior commitments regarding the replacement of aging water and wastewater pipeline infrastructure and has successfully completed the acquisition of numerous troubled municipally-owned water and wastewater systems. In addition, Aqua PA

regularly completes successful base water and wastewater rate proceedings before the Commission.

81. Aqua America is a publicly traded company and, therefore, has access to a broad range of capital in all markets. Similar to Aqua PA, significant, publicly-raised capital resources, obtained through Aqua America, will be readily available to support Peoples Natural Gas's and Peoples Gas's ongoing operations, including necessary and appropriate future changes and improvements.

82. In addition, Aqua America would be able to meet the increased capital requirements of Peoples Natural Gas and Peoples Gas in Pennsylvania, and the capital requirements of the other PNG subsidiaries in other states. In order to finance the Proposed Transaction, Aqua America would secure a combination of equity capital and third party debt financing. *See* Section III.D, *supra*. Furthermore, after the close of the Proposed Transaction, Aqua America would continue securing financing sufficient to ensure that Aqua PA and the Peoples Companies continue to provide safe and reliable service to customers. *See* Section III.D., *supra*.

83. Finally, Aqua America would be able to raise and secure an additional $300-400 million annually to support Peoples Natural Gas's and Peoples Gas's commitments for the replacement of aging pipeline infrastructure. As evidenced by Aqua America's history of raising capital for its $500 million annual capital program, Aqua America would be able to secure financing to support the Peoples Companies' infrastructure replacement program.

VIII. THE PROPOSED TRANSACTION WILL BENEFIT CUSTOMERS AND THE COMMUNITIES SERVED

A. THE PEOPLES COMPANIES WILL BE PUBLICLY OWNED

84. The Peoples Companies have prospered under SteelRiver ownership. In addition, both SteelRiver and SRIFNA made substantial commitments in prior acquisition proceedings to address the concerns raised by equity fund ownership of public utilities in response to the ten-factor test set forth in *Application of Penn Estates Utilities, Inc.*, Docket Nos. A-210072F0003, et al., 2006 Pa. PUC LEXIS 88, 252 P.U.R.4th 131 (Order dated Oct. 2, 2006).

85. Notwithstanding, the transfer to a publicly-traded corporation would provide important benefits.

86. One benefit from public ownership would be expanded access to equity capital. Aqua America raises equity capital through public stock issuances. As a result, the Peoples Companies, through Aqua America, would have access to equity capital that can be raised in all markets.

87. As explained in Section VII, above, Aqua America has been and is anticipated to be able to obtain the equity capital needed to finance substantial infrastructure investment.

88. As a subsidiary of Aqua America, the Peoples Companies are expected to be able to raise the substantial amount of debt needed for infrastructure replacement at a cost equal to, or lower than, the current cost incurred by the Peoples Companies, at comparable tenors.

89. Following acquisition by Aqua America, corporate governance of the Peoples Companies would be transparent. As a publicly traded company, Aqua America is subject to numerous reporting requirements that provide information to shareholders, government agencies including the Commission, and the public. Among the various reporting requirements that would apply to corporate governance of the Peoples Companies following the acquisition would

be the Sarbanes-Oxley Act of 2002. Aqua America is currently subject to the provisions of Sarbanes-Oxley. Further, Aqua America is subject to all reporting requirements of the New York Stock Exchange and the United States Securities and Exchange Commission, including requirements to submit executive compensation to its shareholders, hold annual voting on all of its directors, hold all employees accountable pursuant to a comprehensive and published Code of Ethics, provide oversight and governance pursuant to published Corporate Governance Guidelines, and provide a detailed report on its operations and maintenance expenses, revenues, and other financial reporting.

90. Aqua America is also a long-term investor in utility operations, focused on long-term ownership of utility assets. Aqua has owned and operated water systems in Pennsylvania for over 130 years. Aqua has owned and operated water systems in other states since 1999, and has owned and operated wastewater systems since 1996. Aqua America's overwhelming focus has been on regulated utility operations, and currently less than 1% of Aqua America's revenues come from unregulated operations.

91. Aqua America would bring substantial transparency as to capital structure. As explained above, acquisition debt would be raised publicly, and current plans are to raise debt to support the capital programs at either holding company or operating company levels through either public or private markets. Separate capital structures would be maintained for gas and water/wastewater operations for the foreseeable future, to appropriately reflect the separate business risks of these utility operations.

92. Aqua America would also provide full transparency with respect to its corporate structure. As a publicly held corporation, Aqua America's subsidiary ownership and

organization will be completely transparent, including the ownership of subsidiaries that are not in the chain of ownership of Aqua PA or the Peoples Companies.

93. Finally, as a publicly held corporation, Aqua America's creditworthiness is and would be a matter of public knowledge.

B. AQUA AMERICA'S AND THE PEOPLES COMPANIES' COMBINED INFRASTRUCTURE EXPERIENCE WILL BENEFIT BOTH GAS AND WATER/WASTEWATER OPERATIONS.

94. Aqua America's water and wastewater subsidiaries and the Peoples Companies both have substantial experience in infrastructure replacement. This experience will be beneficial to customers and the public in a combined company in the future.

95. Aqua America's subsidiaries have replaced a substantial amount of infrastructure. Over the past 10 years, Aqua America water subsidiaries have invested approximately $3.5 billion in infrastructure improvements which includes replacement of approximately 1,600 miles of mains. Aqua America's subsidiaries would continue these levels of expenditures over the foreseeable future.

96. The Peoples Companies have substantially increased their expenditures on infrastructure replacement. Under their current Commission-approved Combined Distribution LTIIP, the Peoples Companies will replace approximately 650 miles of main, and remove the "at risk" pipe from approximately 71,000 customers over the next five years.[7] Over the five-year term of their Combined Distribution LTIIP, the Peoples Companies will spend approximately $880 million on infrastructure replacement. Aqua America commits to continue the Combined Distribution LTIIP following the acquisition as approved by the Commission. In addition, Aqua America commits to reviewing the current Combined Distribution LTIIP and considering a more aggressive program to benefit the Peoples Companies' customers.

[7] The Peoples Companies will be replacing both company-owned and customer-owned at-risk services.

97. Sharing of best practices in infrastructure replacement is anticipated to further improve efficiency in replacement of underground pipe for both gas and water/wastewater operations. Some of the ways in which best practices may improve efficiency in pipeline replacement include contracting, tracking of pipe in need of replacement and experience in replacing pipe in urban areas.

98. The Peoples Companies have submitted their annual Section 1307(f) filing regarding the Peoples Companies' annual adjustment and reconciliation of their natural gas costs through the ratemaking process. Under the terms and conditions of the Commission-approved partial settlement of the Peoples Companies' 2018 Section 1307(f) proceedings, the Peoples Companies agreed to Unaccounted for Gas ("UFG") targets and the Combined UFG Mitigation Plan related to their gathering systems for the upcoming three-year period. Aqua America commits to support continuation of the Combined UFG Mitigation Plan following the acquisition.

C. EMPLOYMENT BENEFITS

99. The acquisition of the Peoples Companies by Aqua America would maintain jobs in Pennsylvania, and provide expanded job opportunities for both gas and water/wastewater employees.

100. The sale of the Peoples Companies to a public company based in Pennsylvania would retain Pennsylvania jobs. Aqua America intends to maintain separate headquarters for its gas (Pittsburgh) and water/wastewater (Bryn Mawr) operations.

101. Aqua America will honor the existing union contracts and pension plans of the Peoples Companies.

102. Aqua America will not alter its water and wastewater employee levels as a result of the acquisition and will continue to execute the infrastructure replacement plans of its water and wastewater subsidiaries, as disclosed in its LTIIPs filed with the Commission.

103. The combination of ownership of the gas and water/wastewater operations also will provide additional advancement opportunities for employees. Aqua America intends to allow employees from the Peoples Companies to bid on job openings at Aqua America and the Aqua water/wastewater operations, and vice versa.

D. LONG-TERM EFFICIENCIES FROM THE ACQUISITION

104. Both Aqua America and the Peoples Companies share complementary core competencies. These include expertise in pipeline replacement, strong relationships with customers, credibility with regulators and advanced operational efficiency. All of these would create long-term value for stakeholders.

105. To the extent shared information technology ("IT") systems can be utilized and create efficiencies, Aqua America would seek to implement these efficiencies over time. A shared IT system will likely be developed in the next several years following the Proposed Transaction, which will benefit both gas and water operations.

106. The Peoples Companies installed a new SAP Technology Platform, following acquisition by SRIFNA. Aqua America does not currently utilize a standardized technology platform and would certainly benefit from transitioning onto a new SAP Technology Platform in the future for its water and wastewater operations.

107. If both the gas and water/wastewater operations operate from the same platform, Aqua America would be able to develop a large, multi-utility service company. At that time, Aqua America can leverage a larger platform to create a more efficient and effective overhead structure than can be possible for each operation on a standalone basis. This may benefit areas

such as finance, human resources, regulatory, IT and supply chain. A single IT platform also may improve the efficiency of customer services.

108. Economies of scale with a larger customer base of both gas and water will allow for greater investment in technology solutions that will enhance customer service tools as well as technology tools for enhanced management of similar activities, including the design and engineering of pipe replacement programs, mapping of pipelines, and other improvements and work efficiency tools that might not be economical on a standalone basis.

E. COMMUNITY PRESENCE

109. Aqua America has a substantial community presence throughout Pennsylvania. Aqua PA currently serves customers in 32 counties across Pennsylvania. This community presence will increase with the acquisition of the Peoples Companies, which currently serve customers in 18 counties in western Pennsylvania.

110. Aqua America's mission is to protect and provide Earth's most essential resource. Aqua America, and in particular Aqua PA, is committed to the communities it serves, its customers, and the environment. Giving back to the communities in which Aqua America's subsidiaries operate is part of the Aqua America culture. For instance, Aqua America's subsidiaries, including Aqua PA, participate in various volunteer opportunities throughout the year including food banks, bike-a-thons, Habitat for Humanity, and the American Red Cross, with specific focus on making an impact in the communities within its operating subsidiaries' service territories. Additionally, environmental initiatives serve as a focal point for the Aqua America, through support of river and watershed associations and volunteer opportunities such as tree planting and stream clean ups. Supporting nonprofit organizations through volunteer activities furthers the mission of Aqua America's corporate giving and volunteer program.

111. Community commitment is one of the Peoples Companies' core values and the Peoples Companies have an active community presence in western Pennsylvania. The Peoples Companies make financial commitments to community and charitable organizations throughout their service territories – to both large organizations and small. Among the organizations that the Peoples Companies support are the Salvation Army, United Way, Leukemia/Lymphoma Society, Dollar Energy Fund, March of Dimes, and Greater Pittsburgh Literacy Council. The Peoples Companies also have a very active Volunteer Activities Committee and offer ongoing volunteer events such as collecting and packaging food in partnership with local food banks, cleaning the rivers with Paddle without Pollution, mentoring youths through Big Brothers Big Sisters or providing winter outerwear for children with the Salvation Army's Project Bundle Up.

112. Aqua America would maintain the community presence of the Peoples Companies following consummation of the acquisition, including retaining gas operations headquarters in Pittsburgh.

F. AFFILIATE RELATIONSHIPS

113. Aqua America has very limited non-utility operations. Excluding its service company, less than 1% of revenues and 0.2% of assets are from non-utility operations.

114. The assets to be acquired through the Proposed Transaction also would be overwhelmingly utility assets. There are no current plans to expand the scope of non-utility operations.

115. After closing, the current plan will be to evaluate specific functions that more appropriately belong in a shared services company.

116. Aqua America commits to updating and filing the necessary affiliated transaction agreements at the appropriate time.

IX. OTHER REGULATORY AND SHAREHOLDER APPROVALS

117. Aqua America plans to complete the Proposed Transaction as soon as possible, after all regulatory approvals have been obtained. The Applicants respectfully request approval of the Application on or before the May 23, 2019 public meeting date.

118. In addition to approval from this Commission, the Proposed Transaction also requires approval from the Kentucky Public Service Commission and the West Virginia Public Service Commission for the change in control of the natural gas utilities operating in those states.

119. The Proposed Transaction is also subject to federal clearances under the Hart-Scott-Rodino Antitrust Improvements Act. No approvals from the Federal Energy Regulatory Commission are required to effectuate the Proposed Transaction.

120. Shareholder approvals are not required to effectuate the Proposed Transaction.

121. Finally, to the extent that any affiliated interest agreement approvals by the Commission are required by the Proposed Transaction, the Applicants will submit the relevant affiliated interest agreements for Commission review and approval after the close of the Proposed Transaction.

X. ADDITIONAL SUPPORTING DATA

122. The following appendices, containing additional information in support of this Application, are attached hereto:

- Appendix A – The Agreement and Associated Buyer and Seller Disclosures **[HIGHLY CONFIDENTIAL – FILED UNDER SEAL]**
- Appendix B – Chart of Present Ownership Structure of Aqua Entities
- Appendix C – Map of Existing Aqua PA Water and Wastewater Service Territories
- Appendix D – Map of Existing Peoples Natural Gas Service Territory

- Appendix E – Map of Existing Peoples Gas Service Territory
- Appendix F – Chart of Present Ownership Structure of SRIFNA Entities
- Appendix G – *Pro Forma* Post-Acquisition Corporate Organization Chart of Aqua Entities
- Appendix H – Form 10-K of Aqua America as of December 31, 2017.
- Appendix I – Income Statement and Balance Sheet of Aqua PA as of December 31, 2017.
- Appendix J – Income Statement and Balance Sheet of Peoples Natural Gas as of December 31, 2017.
- Appendix K – Income Statement and Balance Sheet of Peoples Gas as of December 31, 2017.

123. The Applicants also intend to file the following pieces of Direct Testimony, and incorporate these statements as a part of this Application by reference:

- Joint Applicants' Statement No. 1 – Direct Testimony of Christopher H. Franklin, Chairman, Chief Executive Officer and President of Aqua America
- Joint Applicants' Statement No. 2 – Direct Testimony of Dan Schuller, Executive Vice President and Chief Financial Officer of Aqua America
- Joint Applicants' Statement No. 3 – Direct Testimony of Morgan O'Brien, President and Chief Executive Officer of Peoples Natural Gas and PNG
- Joint Applicants' Statement No. 4 – Direct Testimony of Rick Fox, Executive Vice President and Chief Operating Office, Regulated Operations of Aqua America
- Joint Applicants' Statement No. 5 – Direct Testimony of Jim Barbato, Vice President, Corporate Engineering of Aqua America

124. Finally, all annual reports, tariffs, certificates of public convenience, applications, securities certificates, and similar documents previously filed by the Applicants are made a part hereof by reference.

XI. CONCLUSION

WHEREFORE, for all the foregoing reasons, the Applicants respectfully request that the Pennsylvania Public Utility Commission approve and issue the necessary certificates of public convenience to:

(1) Transfer the control of Peoples Natural Gas Company LLC and Peoples Gas Company LLC to Aqua America, Inc., by way of the purchase of LDC Funding LLC by Aqua America, Inc.; and

(2) Grant any other approvals or certificates appropriate, customary, or necessary under the Public Utility Code to carry out the transactions contemplated in this Application in a lawful manner.

Respectfully submitted,

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Date: November 13, 2018

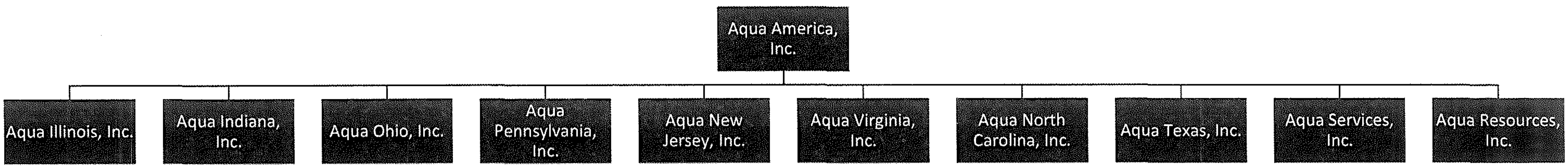
Counsel for Peoples Natural Gas Company LLC and Peoples Gas Company LLC

HIGHLY CONFIDENTIAL Appendix A

No Public Version Available

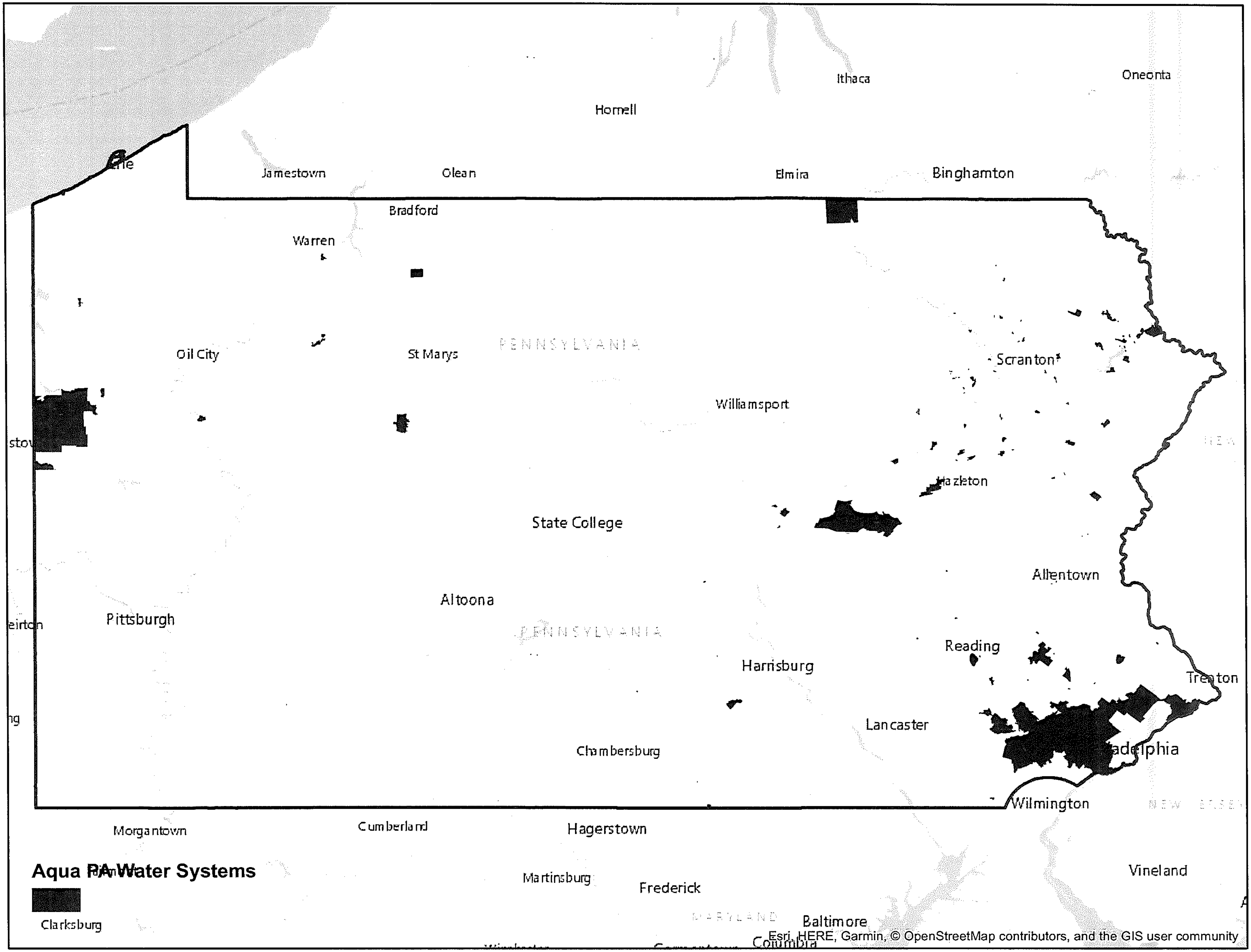
Appendix B

Aqua America Corporate Structure

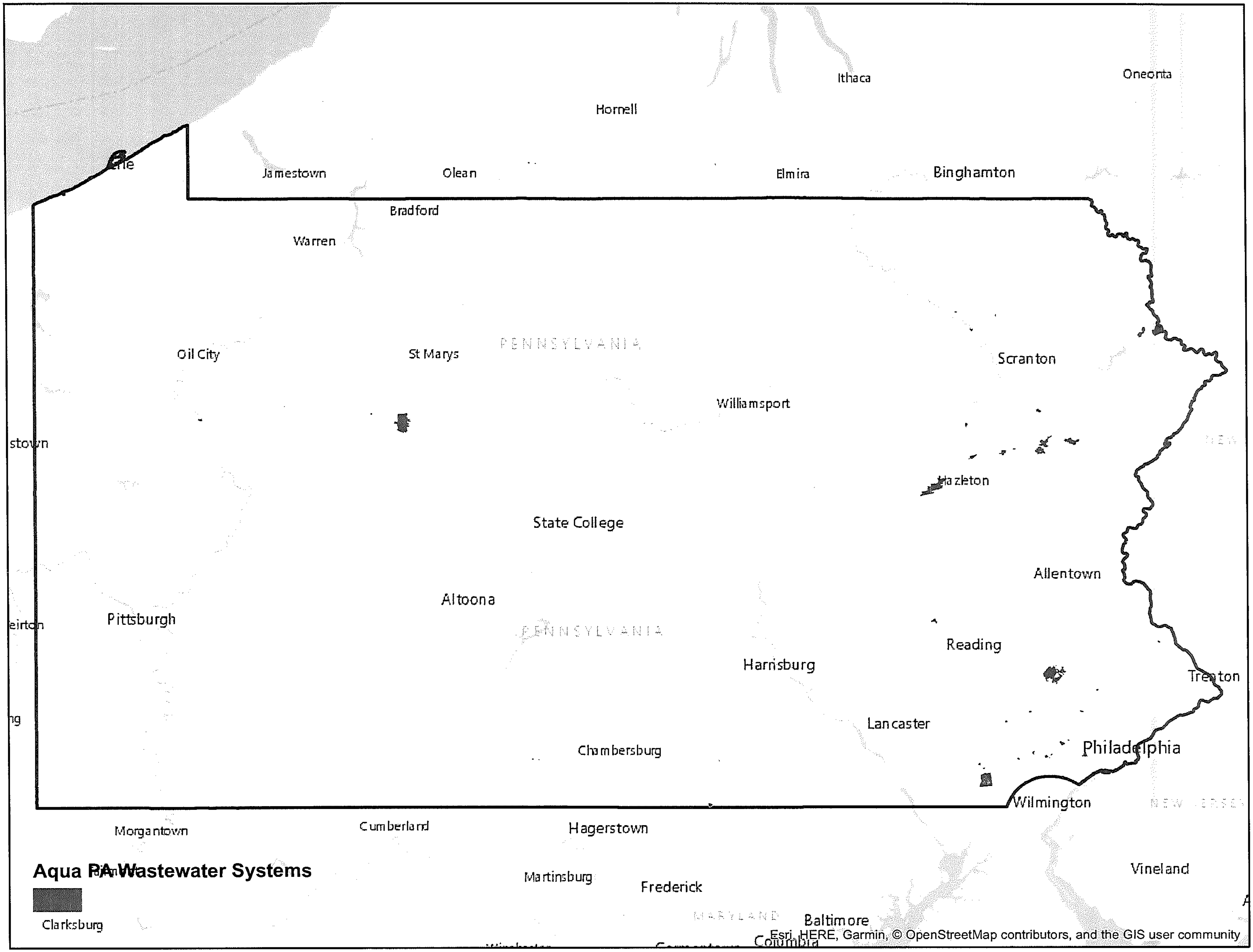


*The above corporate structure shows the active first tier operating subsidiaries of Aqua America

Appendix C



Aqua PA Water Systems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Hornell
Erie
Jamestown
Olean
Elmira
Binghamton
Bradford
Warren
PENNSYLVANIA
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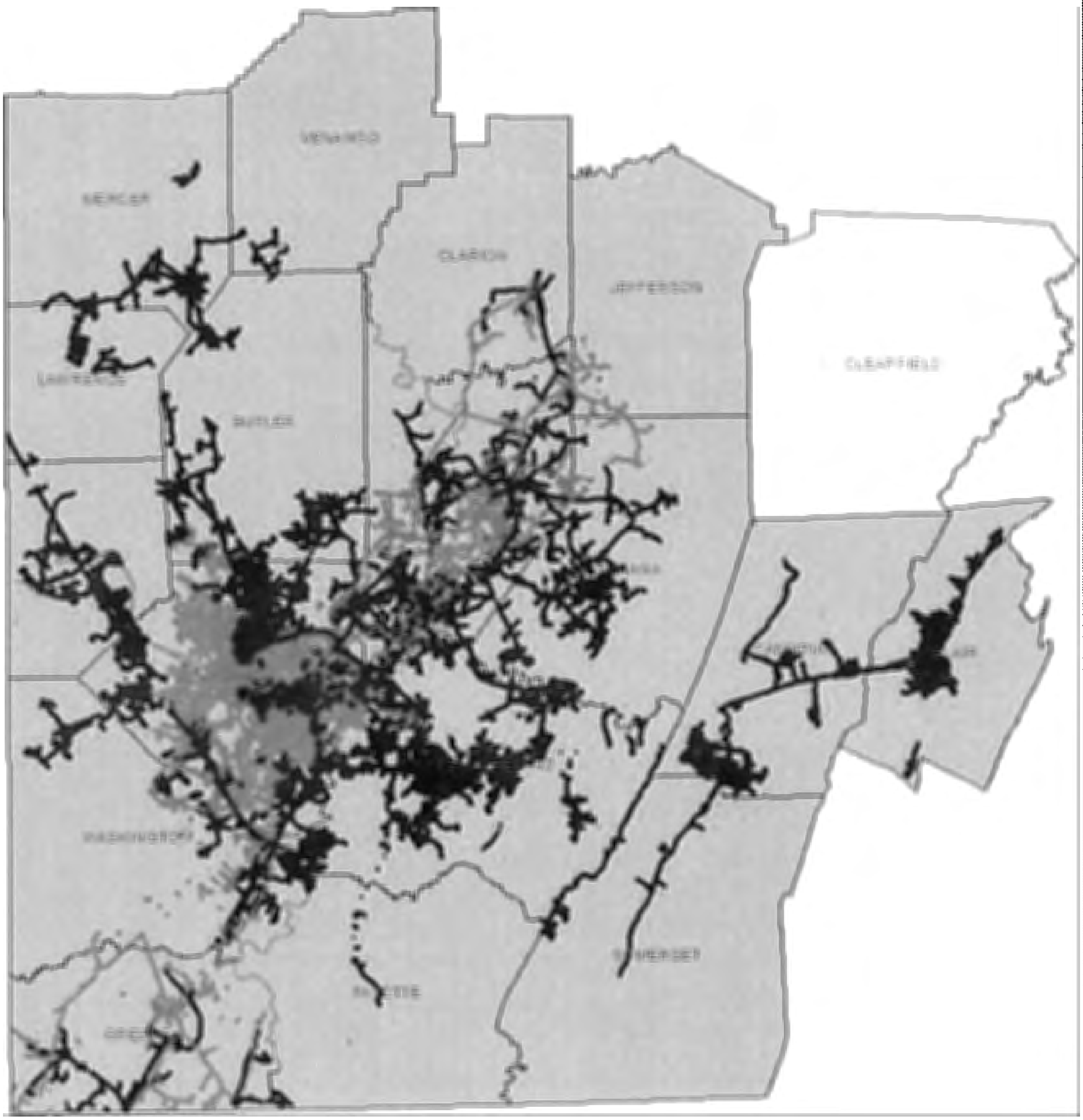
Scranton
Williamsport
stown
Hazleton
State College
Allentown
Altoona
Pittsburgh
eirton
PENNSYLVANIA
Reading
Harrisburg
Trenton
Lancaster
Chambersburg
Philadelphia
Wilmington
Morgantown
Cumberland
Hagerstown
Aqua PA Wastewater Systems
Martinsburg
Frederick
Vineland
MARYLAND
Baltimore
Clarksburg
Columbia
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Appendix D

Peoples Natural Gas - PA



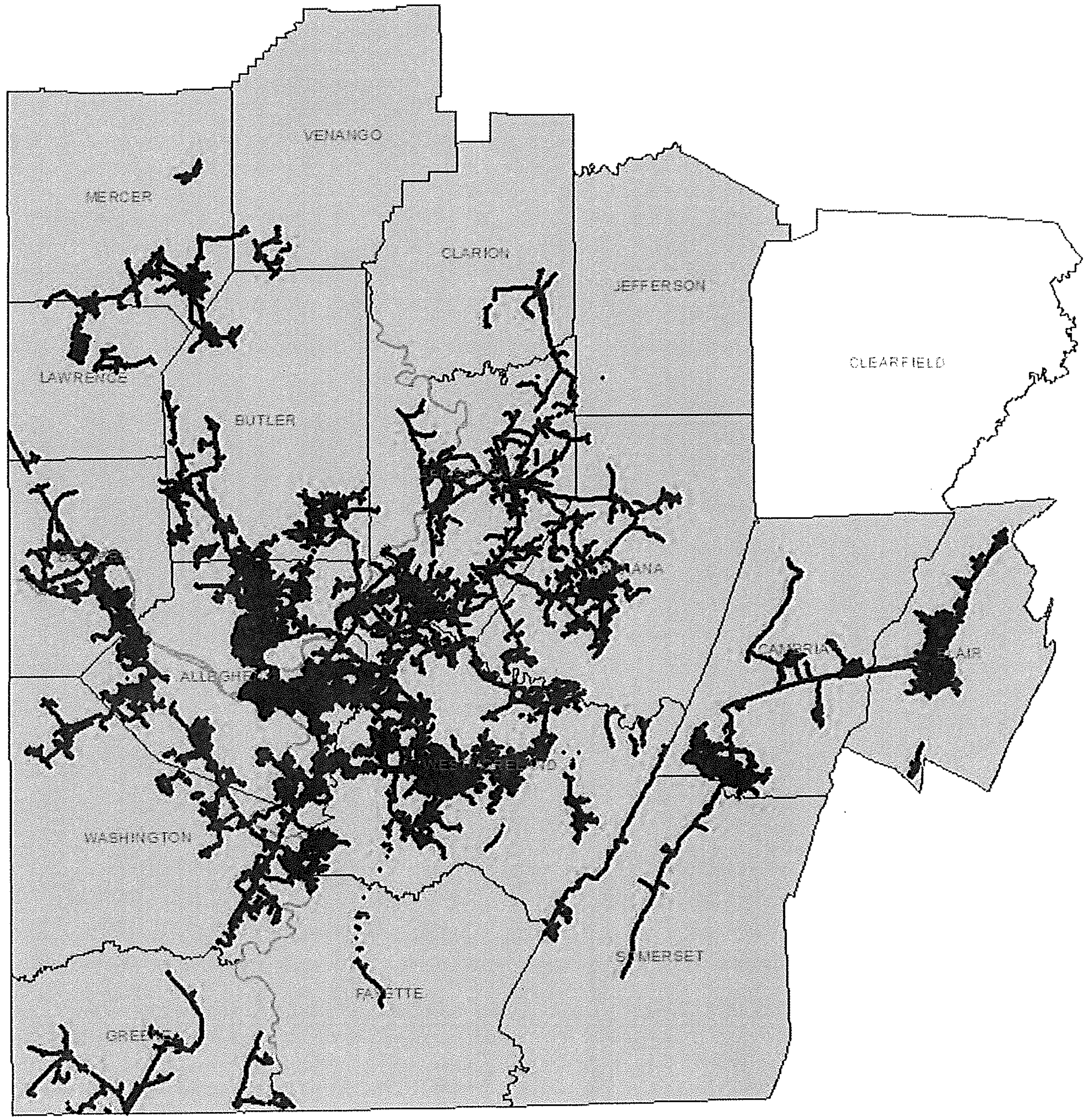
Legend

- EGC
- PNG
- Major Rivers
- Peoples Natural Gas Service Area

PEOPLES

Peoples Natural Gas - PA

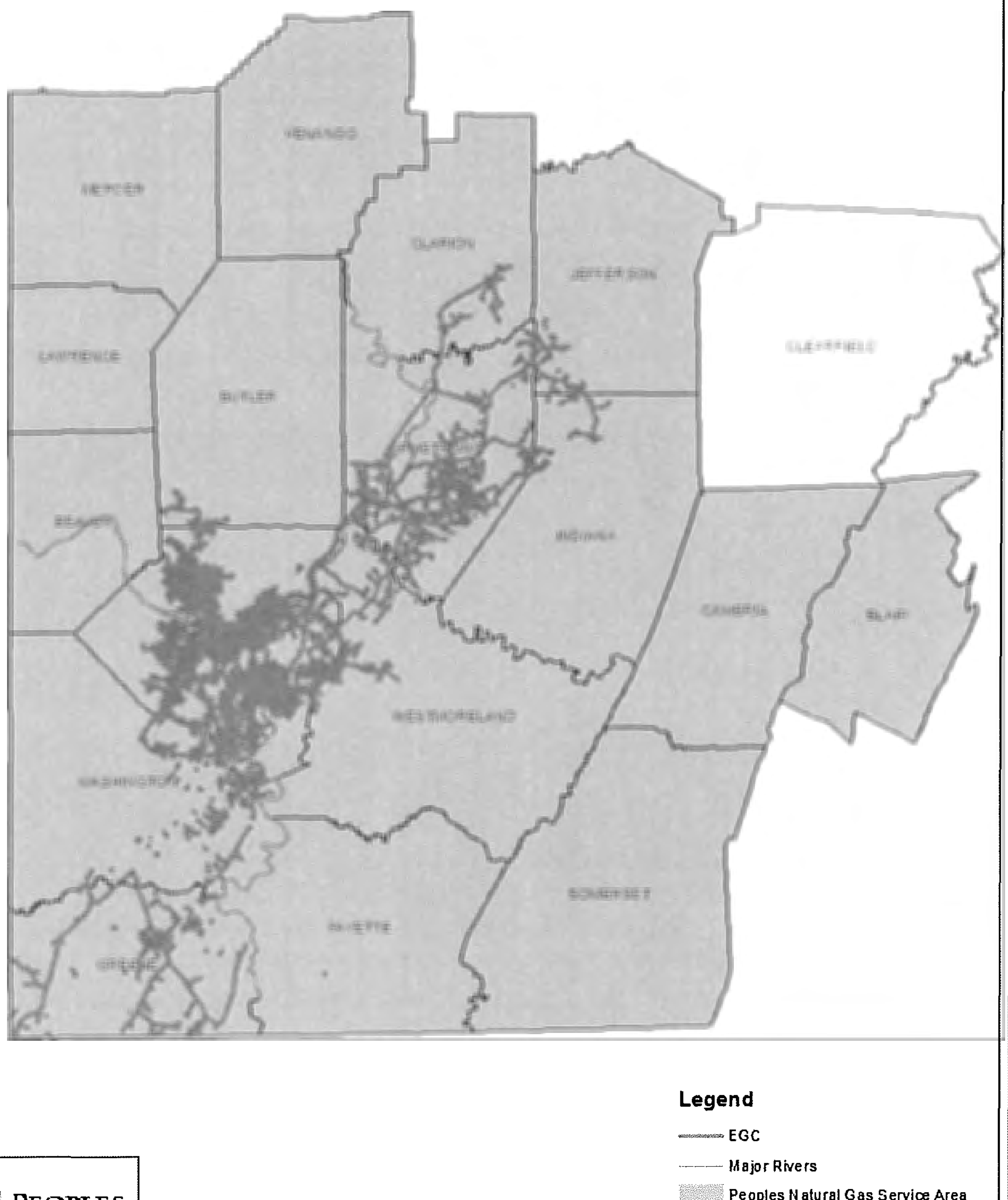
Legacy PNG



PEOPLES

Peoples Natural Gas - PA

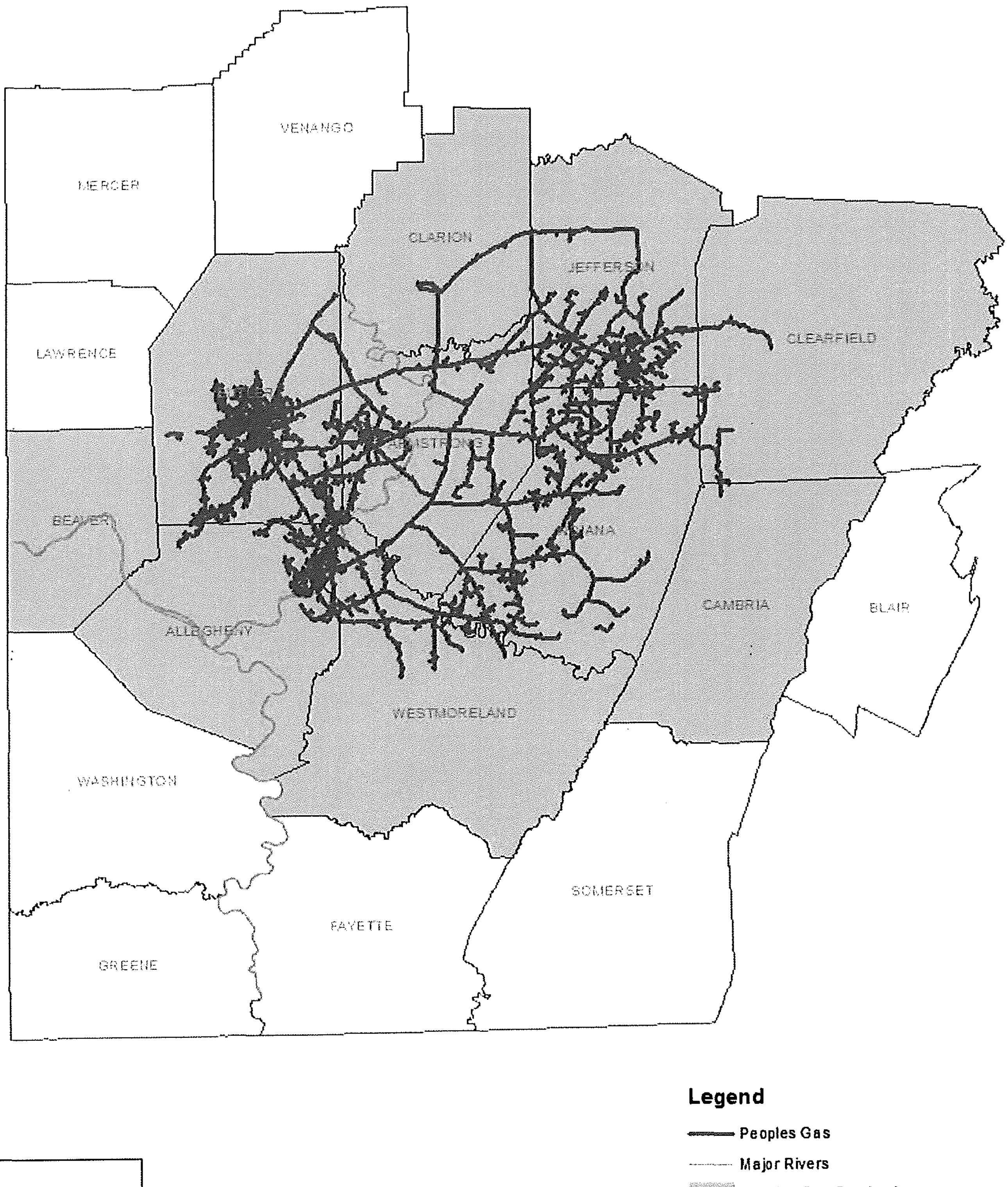
Legacy Equitable Division



PEOPLES

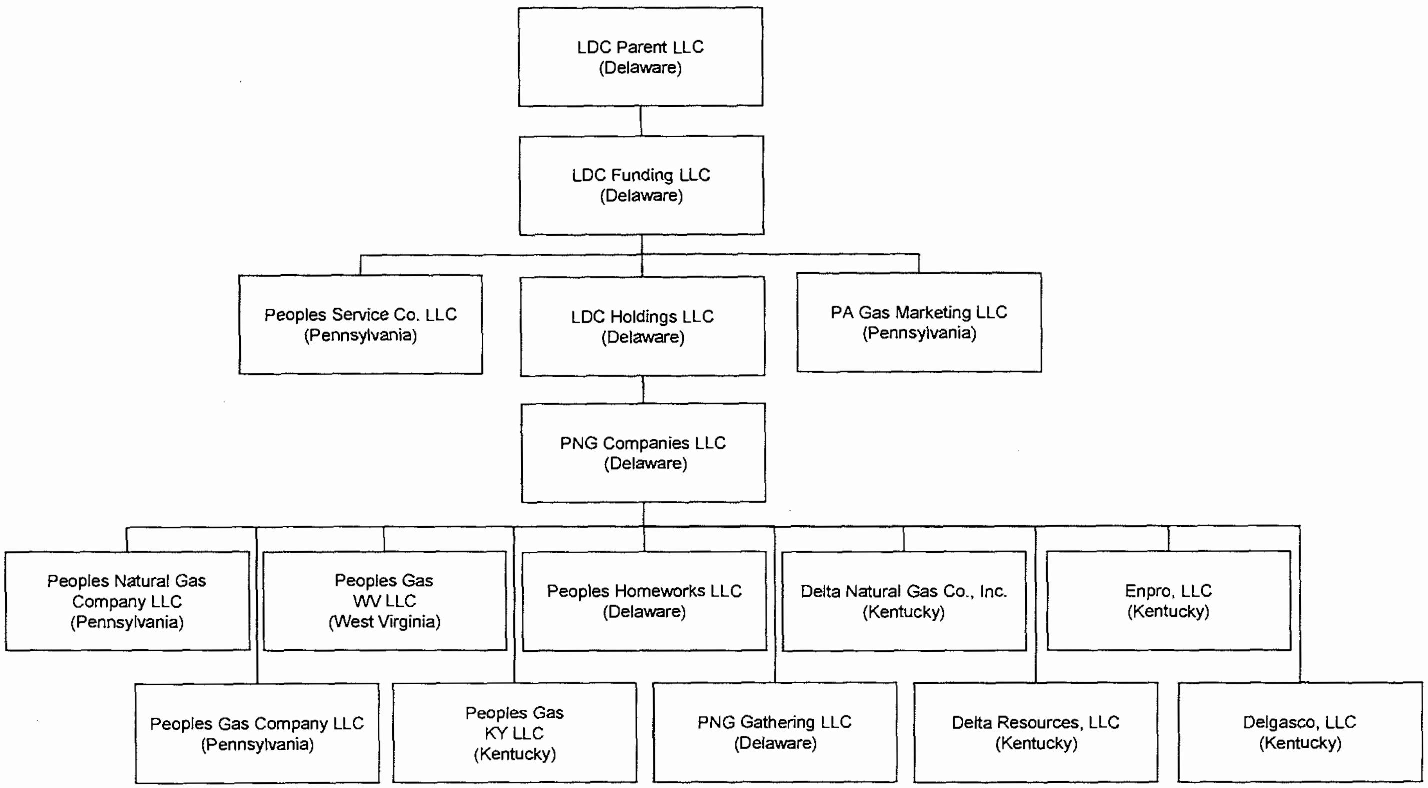
Appendix E

Peoples Gas



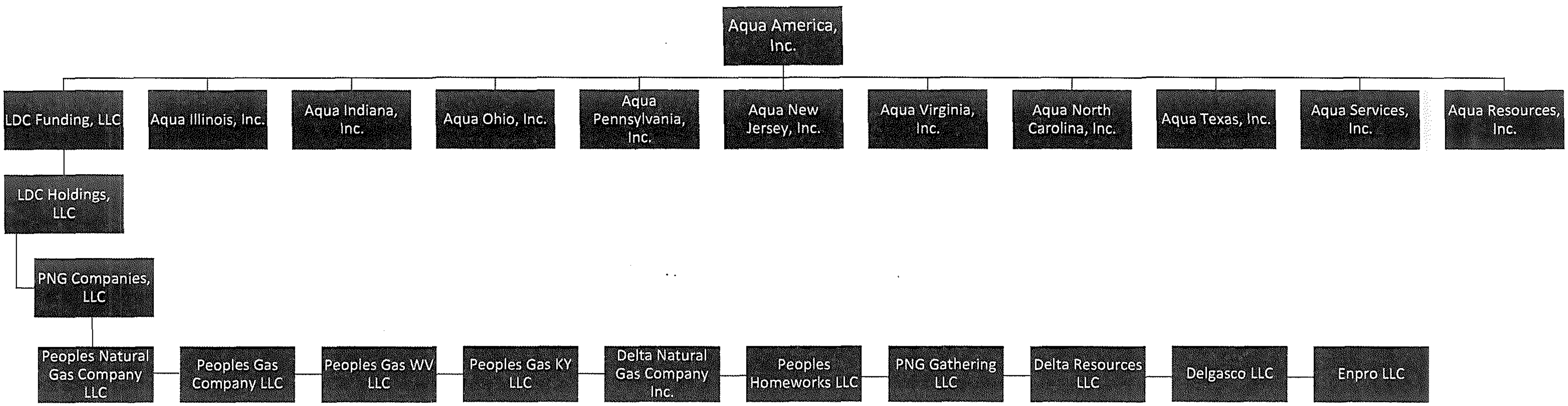
PEOPLES

Appendix F


LDC Parent LLC (Delaware)
LDC Funding LLC (Delaware)
Peoples Service Co. LLC (Pennsylvania)
LDC Holdings LLC (Delaware)
PA Gas Marketing LLC (Pennsylvania)
PNG Companies LLC (Delaware)
Peoples Natural Gas Company LLC (Pennsylvania)
Peoples Gas WV LLC (West Virginia)
Peoples Homeworks LLC (Delaware)
Delta Natural Gas Co., Inc. (Kentucky)
Enpro, LLC (Kentucky)
Peoples Gas Company LLC (Pennsylvania)
Peoples Gas KY LLC (Kentucky)
PNG Gathering LLC (Delaware)
Delta Resources, LLC (Kentucky)
Delgasco, LLC (Kentucky)

Appendix G

Post-Transaction Corporate Structure



*The above corporate structure shows the active first tier operating subsidiaries of AA

Appendix H

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)
☑ ANNUAL REPORT PURSUANT TO SECTION 13 or 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2017

Or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from __________ to __________

Commission File number 1-6659

AQUA AMERICA, INC.
(Exact name of registrant as specified in its charter)

Pennsylvania	23-1702594
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
762 W Lancaster Avenue, Bryn Mawr, Pennsylvania	19010-3489
(Address of principal executive offices)	(Zip Code)

(610) 527-8000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common stock, par value $.50 per share	New York Stock Exchange, Inc.

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
☑ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
☐ Yes ☑ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☑ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
☑ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "small reporting company," and "emerging growth company" in Rule 12(b)-2 of the Exchange Act.:
Large accelerated filer ☑ Accelerated filer ☐
Non-accelerated filer ☐ (do not check if smaller reporting company) Small reporting company ☐
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☑No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2017: $5,901,277,615

The number of shares outstanding of the registrant's common stock as of February 13, 2018: 177,750,505

DOCUMENTS INCORPORATED BY REFERENCE

(1) Portions of the definitive Proxy Statement, relating to the 2018 annual meeting of shareholders of registrant, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, have been incorporated by reference into Part III of this Form 10-K

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Part I

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 10-K (the "Annual Report") are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 that are made based upon, among other things, our current assumptions, expectations, plans, and beliefs concerning future events and their potential effect on us. These forward-looking statements involve risks, uncertainties and other factors, many of which are outside our control that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. In some cases you can identify forward-looking statements where statements are preceded by, followed by or include the words "believes," "expects," "anticipates," "plans," "future," "potential," "probably," "predictions," "intends," "will," "continue," "in the event" or the negative of such terms or similar expressions. Forward-looking statements in this Annual Report include, but are not limited to, statements regarding:

- recovery of capital expenditures and expenses in rates;
- projected capital expenditures and related funding requirements;
- our capability to pursue timely rate increase requests;
- the availability and cost of capital financing;
- developments, trends and consolidation in the water and wastewater utility and infrastructure industries;
- dividend payment projections;
- opportunities for future acquisitions, both within and outside the water and wastewater industry, the success of pending acquisitions and the impact of future acquisitions;
- the capacity of our water supplies, water facilities and wastewater facilities;
- the impact of federal and/or state tax policies, including changes in tax laws and policies as a result of the recently enacted Tax Cuts and Jobs Act, and the regulatory treatment of the effects of those policies;
- the impact of geographic diversity on our exposure to unusual weather;
- the impact of conservation awareness of customers and more efficient plumbing fixtures and appliances on water usage per customer;
- our authority to carry on our business without unduly burdensome restrictions;
- the continuation of investments in strategic ventures;
- our ability to obtain fair market value for condemned assets;
- the impact of fines and penalties;
- the impact of changes in and compliance with governmental laws, regulations and policies, including those dealing with taxation, the environment, health and water quality, and public utility regulation;
- the impact of decisions of governmental and regulatory bodies, including decisions to raise or lower rates;
- the development of new services and technologies by us or our competitors;
- the availability of qualified personnel;
- the condition of our assets;
- the impact of legal proceedings;
- general economic conditions;
- acquisition-related costs and synergies;
- the sale of water and wastewater divisions; and
- the amount of income tax deductions for qualifying utility asset improvements and the Internal Revenue Service's ultimate acceptance of the deduction methodology.

Because forward-looking statements involve risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements, including but not limited to:

- changes in general economic, business, credit and financial market conditions;
- changes in governmental laws, regulations and policies, including those dealing with taxation, the environment, health and water quality, and public utility regulation;
- the profitability of future acquisitions;
- changes to the rules or our assumptions underlying our determination of what qualifies for an income tax deduction for qualifying utility asset improvements;
- the decisions of governmental and regulatory bodies, including decisions on rate increase requests;
- our ability to file rate cases on a timely basis to minimize regulatory lag;
- abnormal weather conditions, including those that result in water use restrictions;
- changes in, or unanticipated, capital requirements;
- changes in our credit rating or the market price of our common stock;
- changes in valuation of strategic ventures;
- our ability to integrate businesses, technologies or services which we may acquire;
- our ability to manage the expansion of our business;
- our ability to treat and supply water or collect and treat wastewater;
- the extent to which we are able to develop and market new and improved services;
- the effect of the loss of major customers;
- our ability to retain the services of key personnel and to hire qualified personnel as we expand;
- labor disputes;
- increasing difficulties in obtaining insurance and increased cost of insurance;
- cost overruns relating to improvements to, or the expansion of, our operations;
- increases in the costs of goods and services;
- civil disturbance or terroristic threats or acts;
- the continuous and reliable operation of our information technology systems, including the impact of cyber security attacks or other cyber-related events;
- changes in accounting pronouncements;
- litigation and claims; and
- changes in environmental conditions, including the effects of climate change.

Given these risks and uncertainties, you should not place undue reliance on any forward-looking statements. You should read this Annual Report completely and with the understanding that our actual future results, performance and achievements may be materially different from what we expect. These forward-looking statements represent assumptions, expectations, plans, and beliefs only as of the date of this Annual Report. Except for our ongoing obligations to disclose certain information under the federal securities laws, we are not obligated, and assume no obligation, to update these forward-looking statements, even though our situation may change in the future. For further information or other factors which could affect our financial results and such forward-looking statements, see *Risk Factors*. We qualify all of our forward-looking statements by these cautionary statements.

PART I

Item 1. *Business*

The Company

Aqua America, Inc. (referred to as "Aqua America", the "Company", "we", "us", or "our"), a Pennsylvania corporation, is the holding company for regulated utilities providing water or wastewater services to an estimated three million people in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, and Virginia. Our largest operating subsidiary is Aqua Pennsylvania, Inc., which accounted for approximately 52% of our operating revenues and approximately 74% of our net income for 2017. As of December 31, 2017, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of people we serve. Aqua Pennsylvania's service territory is located in the suburban areas in counties north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. Our other regulated utility subsidiaries provide similar services in seven other states. In addition, the Company's market-based activities are conducted through Aqua Infrastructure, LLC and Aqua Resources Inc. Aqua Infrastructure provides non-utility raw water supply services for firms in the natural gas drilling industry. Aqua Resources provides water and wastewater service through two operating and maintenance contracts with municipal authorities close to our utility companies' service territory; and offers, through a third party, water and wastewater line repair service and protection solutions to households. In 2017, we completed the sale of business units that are reported within Aqua Resources, which installed and tested devices that prevent the contamination of potable water and repaired water and wastewater systems, and repaired and performed maintenance on water and wastewater systems. Additionally, during 2016, we completed the sale of business units within Aqua Resources, which provided liquid waste hauling and disposal services and inspection, and cleaning and repair of storm and sanitary wastewater lines.

Aqua America, which prior to its name change in 2004 was known as Philadelphia Suburban Corporation, was formed in 1968 as a holding company for its primary subsidiary, Aqua Pennsylvania, formerly known as Philadelphia Suburban Water Company. In the early 1990s, we embarked on a growth through acquisition strategy focused on water and wastewater operations. Our most significant transactions to date have been the merger with Consumers Water Company in 1999, the acquisition of the regulated water and wastewater operations of AquaSource, Inc. in 2003, the acquisition of Heater Utilities, Inc. in 2004, and the acquisition of American Water Works Company, Inc.'s regulated water and wastewater operations in Ohio in 2012. Since the early 1990s, our business strategy has been primarily directed toward the regulated water and wastewater utility industry, where we have more than quadrupled the number of regulated customers we serve, and have extended our regulated operations from southeastern Pennsylvania to include our current regulated utility operations throughout Pennsylvania and in seven other states. During 2010 through 2013, we sold our utility operations in six states, pursuant to a portfolio rationalization strategy to focus our operations in areas where we have critical mass and economic growth potential. Currently, the Company seeks to acquire businesses in the U.S. regulated sector, which includes water and wastewater utilities and other regulated utilities, and to pursue growth ventures in market-based activities, such as infrastructure opportunities that are supplementary and complementary to our regulated businesses.

The following table reports our operating revenues, by principal state, for the Regulated segment and Other and eliminations for the year ended December 31, 2017:

	Operating Revenues (000's)		Operating Revenues (%)
Pennsylvania	$	419,594	51.9%
Ohio		106,254	13.1%
Texas		72,312	8.9%
Illinois		64,129	7.9%
North Carolina		54,991	6.8%
Other states (1)		87,625	10.8%
Regulated segment total		804,905	99.4%
Other and eliminations		4,620	0.6%
Consolidated	$	809,525	100.0%

(1) Includes our operating subsidiaries in the following states: New Jersey, Indiana, and Virginia.

Information concerning revenues, net income, identifiable assets and related financial information for the Regulated segment and Other and eliminations for 2017, 2016, and 2015 is set forth in *Management's Discussion and Analysis of Financial Condition and Results of Operations* and in Note 17 – *Segment Information* in the *Notes to Consolidated Financial Statements* which is contained in Item 8 of this Annual Report.

The following table summarizes our operating revenues, by utility customer class, for the Regulated segment and Other and eliminations for the year ended December 31, 2017:

	Operating Revenues (000's)		Operating Revenues (%)
Residential water	$	483,865	59.8%
Commercial water		130,373	16.1%
Fire protection		30,619	3.8%
Industrial water		27,880	3.4%
Other water		34,705	4.3%
Total water		707,442	87.4%
Wastewater		87,560	10.8%
Other utility		9,903	1.2%
Regulated segment total		804,905	99.4%
Other and eliminations		4,620	0.6%
Consolidated	$	809,525	100.0%

Our utility customer base is diversified among residential water, commercial water, fire protection, industrial water, other water, wastewater customers, and other utility customers (consisting of operating contracts that are closely associated with the utility operations). Residential water and wastewater customers make up the largest component of our utility customer base, with these customers representing approximately 70% of our water and wastewater revenues for 2017, 2016, and 2015, respectively. Substantially all of our water customers are metered, which allows us to measure and bill for our customers' water consumption. Water consumption per customer is affected by local weather conditions during the year, especially during late spring, summer, and early fall. In general, during these seasons, an extended period of dry weather increases consumption, while above average rainfall decreases consumption. Also, an increase in the average temperature generally causes an increase in water consumption. On occasion, abnormally dry weather in our service areas can result in governmental authorities declaring drought warnings and imposing water use restrictions in the affected areas, which could reduce water consumption. See "Business – *Water Utility Supplies, and Facilities and Wastewater Utility Facilities*" for a discussion of water use restrictions that may impact water consumption during abnormally dry weather. The geographic diversity of our utility customer base reduces the effect of our exposure to extreme or unusual weather conditions in any one area of our service territory. Water usage is also affected by changing consumption patterns by our customers, resulting from such causes as increased water conservation and the installation of water saving devices and appliances that can result in decreased water usage. It is estimated that in the event we experience a 0.50% decrease in residential water consumption it would result in a decrease in annual residential water revenue of approximately $2,400,000, and would likely be partially offset by a reduction in incremental water production expenses such as chemicals and power.

Our growth in revenues over the past five years is primarily a result of increases in water and wastewater rates and customer growth. See *Economic Regulation* for a discussion of water and wastewater rates. The increase in our utility customer base has been due to customers added through acquisitions, partnerships with developers, and organic growth (excluding dispositions) as shown below:

Year	Utility Customer Growth Rate
2017	1.1%
2016	1.6%
2015	1.9%
2014	1.3%
2013	1.3%

In 2017, our customer count increased by 10,584 customers, primarily due to utility systems that we acquired and organic growth. Overall, for the five-year period of 2013 through 2017, our utility customer base, adjusted to exclude customers associated with utility system dispositions, increased at an annual compound rate of 1.4%. During the five-year period ended December 31, 2017, our utility customer base including customers associated with utility system acquisitions and dispositions increased from 968,357 at January 1, 2013 to 982,849 at December 31, 2017. This five-year period includes the impact of the condemnation of our Fort Wayne, IN system in 2014, which resulted in the loss of approximately 13,000 connections.

Acquisitions and Other Growth Ventures

We believe that acquisitions will continue to be an important source of customer growth for us. We intend to continue to pursue acquisitions of government-owned and regulated water and wastewater systems that provide services in areas near our existing service territories or in new service areas. We engage in continuing activities with respect to potential acquisitions, including calling on prospective sellers, performing analyses of and due diligence on acquisition candidates, making preliminary acquisition proposals, and negotiating the terms of potential acquisitions. Further, we are also seeking other potential business opportunities, including but not limited to, partnering with public and regulated utilities to invest in infrastructure projects, growing our market-based activities by acquiring businesses that provide water and wastewater or other utility-related services, and investing in infrastructure projects.

According to the U.S. Environmental Protection Agency ("EPA"), approximately 85% of the U.S. population obtains its water from community water systems, and 15% of the U.S. population obtains its water from private wells. With approximately 53,000 community water systems in the U.S. (82% of which serve less than 3,300 customers), the water industry is the most fragmented of the major utility industries (telephone, natural gas, electric, water and wastewater). The majority of these community water systems are government-owned, and the balance of the systems are regulated utilities. The nation's water systems range in size from large government-owned systems, such as the New York City water system which serves approximately 8.5 million people, to small systems, where a few customers share a common well. In the states where we operate regulated utilities, we believe there are approximately 14,500 community water systems of widely-varying size, with the majority of the population being served by government-owned water systems.

Although not as fragmented as the water industry, the wastewater industry in the U.S. also presents opportunities for consolidation. According to the EPA's most recent survey of wastewater treatment facilities (which includes both government-owned facilities and regulated utility systems) in 2012, there are approximately 15,000 such facilities in the nation serving approximately 76% of the U.S. population. The remaining population represents individual homeowners with their own treatment facilities; for example, community on-lot disposal systems and septic tank systems. A majority of wastewater facilities are government-owned rather than regulated utilities. The EPA's survey also indicated that there are approximately 4,000 wastewater facilities in operation in the states where we operate regulated utilities.

Because of the fragmented nature of the water and wastewater utility industries, we believe there are many potential water and wastewater system acquisition candidates throughout the U.S. We believe the factors driving consolidation of these systems are:

- the benefits of economies of scale;
- the increasing cost and complexity of environmental regulations;
- the need for substantial capital investment;
- the need for technological and managerial expertise;
- the desire to improve water quality and service;
- limited access to cost-effective financing;
- the monetizing of public assets to support, in some cases, the declining financial condition of municipalities; and
- the use of system sale proceeds by a municipality to accomplish other public purposes.

We are actively exploring opportunities to expand our utility operations through acquisitions or other growth ventures. During the five-year period ended December 31, 2017, we expanded our utility operations by completing 70 acquisitions or other growth ventures.

Water Utility Supplies and Facilities and Wastewater Utility Facilities

Our water utility operations obtain their water supplies from surface water sources, underground aquifers, and water purchased from other water suppliers. Our water supplies are primarily self-supplied and processed at twenty-one surface water treatment plants located in four states, and numerous well stations located in all of the states in which we conduct business. Approximately 7% of our water supplies are provided through water purchased from other water suppliers. It is our policy to obtain and maintain the permits necessary to obtain the water we distribute.

We believe that the capacities of our sources of supply, and our water treatment, pumping and distribution facilities, are generally sufficient to meet the present requirements of our customers under normal conditions. We plan system improvements and additions to capacity in response to normal replacement and renewal needs, changing regulatory standards, changing patterns of consumption, and increased demand from customer growth. The various state utility commissions have generally recognized the operating and capital costs associated with these improvements in setting water and wastewater rates.

On occasion, drought warnings and water use restrictions are issued by governmental authorities for portions of our service territories in response to extended periods of dry weather conditions. The timing and duration of the warnings and restrictions can have an impact on our water revenues and net income. In general, water consumption in the summer months is more affected by drought warnings and restrictions because discretionary and recreational use of water is at its highest during the summer months. At other times of the year, warnings and restrictions generally have less of an effect on water consumption. Currently, portions of our northern and central Texas service areas have conservation water restrictions. Drought warnings and watches result in the public being asked to voluntarily reduce water consumption.

We believe that our wastewater treatment facilities are generally adequate to meet the present requirements of our customers under normal conditions. Additionally, we own several wastewater collection systems that convey the wastewater to a municipally-owned facility for treatment. Changes in regulatory requirements can be reflected in revised permit limits and conditions when permits are renewed, typically on a five-year cycle, or when treatment capacity is expanded. Capital improvements are planned and budgeted to meet normal replacement and renewal needs, anticipated changes in regulations, needs for increased capacity related to projected growth, and to reduce inflow and infiltration to collection systems. The various state utility commissions have generally recognized the operating and capital costs associated with these improvements in setting wastewater rates for current and new customers. It is our policy to obtain and maintain the permits necessary for the treatment of the wastewater that we return to the environment.

Economic Regulation

Most of our water and wastewater utility operations are subject to regulation by their respective state utility commissions, which have broad administrative power and authority to regulate billing rates, determine franchise areas and conditions of service, approve acquisitions and authorize the issuance of securities. The utility commissions also establish uniform systems of accounts and approve the terms of contracts with affiliates and customers, business combinations with other utility systems, and loans and other financings. The policies of the utility commissions often differ from state to state, and may change over time. A small number of our operations are subject to rate regulation by county or city governments. The profitability of our utility operations is influenced to a great extent by the timeliness and adequacy of rate allowances we are granted by the respective utility commissions or authorities in the various states in which we operate.

Rate Case Management Capability – We maintain a rate case management capability, the objective of which is to provide that the tariffs of our utility operations reflect, to the extent practicable, the timely recovery of increases in costs of operations, capital expenditures, interest expense, taxes, energy, materials, and compliance with environmental regulations. We file rate increase requests to recover and earn a fair return on the infrastructure investments that we make in improving or replacing our facilities and to recover expense increases. In the states in which we operate, we are primarily subject to economic regulation by the following state utility commissions:

State	Utility Commission
Pennsylvania	Pennsylvania Public Utility Commission
Ohio	Public Utilities Commission of Ohio
Texas	Public Utility Commission of Texas
Illinois	Illinois Commerce Commission
North Carolina	North Carolina Utilities Commission
New Jersey	New Jersey Board of Public Utilities
Indiana	Indiana Utility Regulatory Commission
Virginia	Virginia State Corporation Commission

Our water and wastewater operations are comprised of 53 rate divisions, each of which requires a separate rate filing for the evaluation of the cost of service, including the recovery of investments, in connection with the establishment of rates for that rate division. When feasible and beneficial to our utility customers, we will seek approval from the applicable state regulatory commission to consolidate rate divisions to achieve a more even distribution of costs over a larger customer base. All of the states in which we operate permit us to file a revenue requirement for some form of consolidated rates for all, or some of the rate divisions in that state.

In Virginia, we may seek authorization to bill our utility customers in accordance with a rate filing that is pending before the respective regulatory commission. As of December 31, 2017, we have no billings under interim rate arrangements for rate case filings in progress. Furthermore, some utility commissions authorize the use of expense deferrals and amortization in order to provide for an impact on our operating income by an amount that approximates the requested amount in a rate request. In these states, the additional revenue billed and collected prior to the final regulatory commission ruling is subject to refund to customers based on the outcome of the ruling. The revenue recognized and the expenses deferred by us reflect an estimate as to the final outcome of the ruling. If the request is denied completely or in part, we could be required to refund to customers some or all of the revenue billed to date and write-off some or all of the deferred expenses.

Revenue Surcharges – Six states in which we operate water utilities, and five states in which we operate wastewater utilities, permit us to add a surcharge to their respective bills to offset the additional depreciation and capital costs associated with capital expenditures related to replacing and rehabilitating infrastructure systems. Without this surcharge, a water and wastewater utility absorbs all of the depreciation and capital costs of these projects between base rate increases. The gap between the time that a capital project is completed and the recovery of its costs in rates is known as regulatory lag. This surcharge is intended to substantially reduce regulatory lag, which often acted as a disincentive to water and wastewater utilities to rehabilitate their infrastructure. In addition, our subsidiaries in some states use a surcharge or credit on their bills to reflect changes in costs, such as changes in state tax rates, other taxes and purchased water costs, until such time as the new cost levels are incorporated into base rates.

Currently, New Jersey allows for an infrastructure rehabilitation surcharge for water utilities, while Pennsylvania, Illinois, Ohio, Indiana, and North Carolina allow for the use of an infrastructure rehabilitation surcharge for both water and wastewater utility systems. The infrastructure rehabilitation surcharge typically adjusts periodically based on additional qualified capital expenditures completed or anticipated in a future period, and is capped at a percentage of base rates, generally at 5% to 12.75%, and is reset to zero when new base rates that reflect the costs of those additions become effective or when a utility's earnings exceed a regulatory benchmark. This surcharge provided revenues of $10,255,284 in 2017, $7,379,000 in 2016, and $3,261,000 in 2015.

Income Tax Accounting Change – In December 2012, Aqua Pennsylvania adopted an income tax accounting change, implemented on Aqua America's 2012 federal income tax return, which was filed in September 2013. This accounting change allows a tax deduction for qualifying utility asset improvements that were formerly capitalized for tax purposes, and was implemented in response to a June 2012 rate order issued by the Pennsylvania Public Utility Commission. The Pennsylvania rate order requires use of the flow-through method of income tax benefits which results in a reduction in current income tax expense as a result of the recognition of income tax benefits resulting from the accounting change. This tax accounting change and its treatment under the Pennsylvania rate order provided sufficient income tax benefits to permit the suspension of the Pennsylvania infrastructure rehabilitation surcharge from January 1, 2013 to September 30, 2017. Beginning on October 1, 2017, Aqua Pennsylvania initiated a water infrastructure rehabilitation surcharge for the capital invested since the last rate proceeding and expects to file a base rate case in 2018.

Fair Market Value Legislation – In April 2016, Pennsylvania enacted legislation allowing the public utility commission to utilize fair market value to set ratemaking rate base instead of the depreciated original cost of water or wastewater assets for certain qualifying municipal acquisitions. The legislation includes a process for engaging two independent utility valuation experts to perform appraisals that are filed with the public utility commission and then averaged and compared to the purchase price. The ratemaking rate base is the lower of the average of the appraisals or the purchase price and is subject to regulatory approval. Illinois, Indiana, and New Jersey also have legislation that allows the use of fair market value under varying rules and circumstances. We believe that this legislation will encourage consolidation in the water and wastewater industry providing municipalities with an option for exiting the business if they are dealing with their aging, deteriorating water and wastewater assets, do not have the expertise or technical capabilities to continue to comply with ever increasing environmental regulations or simply want to focus on other community priorities.

Competition

In general, we believe that Aqua America and its subsidiaries have valid authority, free from unduly burdensome restrictions, to enable us to carry on our business as presently conducted in the franchised or contracted areas we now serve. The rights to provide water or wastewater service to a particular franchised service territory are generally non-exclusive, although the applicable utility commissions usually allow only one regulated utility to provide service to a given area. In some instances, another water utility provides service to a separate area within the same political subdivision served by one of our subsidiaries. Therefore, as a regulated utility, there is little or no competition for the daily water and wastewater service we provide to our customers. Water and wastewater utilities may compete for the acquisition of other water and wastewater utilities or for acquiring new customers in new service territories. Competition for these acquisitions generally comes from nearby utilities, either other regulated utilities or municipal-owned, and sometimes from strategic or financial purchasers seeking to enter or expand in the water and wastewater industry. We compete for new service territories and the acquisition of other utilities on the following bases:

- economic value;
- economies of scale;
- our ability to provide quality water and wastewater service;
- our existing infrastructure network;
- our ability to perform infrastructure improvements;

- our ability to comply with environmental, health, and safety regulations;
- our technical, regulatory, and operational expertise;
- our ability to access capital markets; and
- our cost of capital.

The addition of new service territories and the acquisition of other utilities by regulated utilities such as us are generally subject to review and approval by the applicable state utility commissions.

In a very few number of instances, in one of our southern states, where there are municipally-owned water or wastewater systems near our operating divisions, the municipally-owned system may either have water distribution or wastewater collection mains that are located adjacent to our division's mains or may construct new mains that parallel our mains. In these rare circumstances, the municipally-owned system may attempt to voluntarily offer service to customers who are connected to our mains, resulting in our mains becoming surplus or underutilized without compensation.

In the states where our subsidiaries operate, it is possible that portions of our subsidiaries' operations could be acquired by municipal governments by one or more of the following methods:

- eminent domain;
- the right of purchase given or reserved by a municipality or political subdivision when the original franchise was granted; and
- the right of purchase given or reserved under the law of the state in which the subsidiary was incorporated or from which it received its permit.

The price to be paid upon such an acquisition by the municipal government is usually determined in accordance with applicable law under eminent domain. In other instances, the price may be negotiated, fixed by appraisers selected by the parties or computed in accordance with a formula prescribed in the law of the state or in the particular franchise or charter. We believe that our operating subsidiaries will be entitled to fair market value for any assets that are condemned, and we believe the fair market value will be in excess of the book value for such assets.

Despite maintaining a program to monitor condemnation interests and activities that may affect us over time, one of our primary strategies continues to be to acquire additional water and wastewater systems, to maintain our existing systems where there is a business or a strategic benefit, and to actively oppose unilateral efforts by municipal governments to acquire any of our operations, particularly for less than the fair market value of our operations or where the municipal government seeks to acquire more than it is entitled to under the applicable law or agreement. On occasion, we may voluntarily agree to sell systems or portions of systems in order to help focus our efforts in areas where we have more critical mass and economies of scale or for other strategic reasons.

Environmental, Health and Safety Regulation

Provision of water and wastewater services is subject to regulation under the federal Safe Drinking Water Act, the Clean Water Act, and related state laws, and under federal and state regulations issued under these laws. These laws and regulations establish criteria and standards for drinking water and for wastewater discharges. In addition, we are subject to federal and state laws and other regulations relating to solid waste disposal, dam safety and other aspects of our operations. Capital expenditures and operating costs required as a result of water quality standards and environmental requirements have been traditionally recognized by state utility commissions as appropriate for inclusion in establishing rates.

From time to time, Aqua America has acquired, and may acquire, systems that have environmental compliance issues. Environmental compliance issues also arise in the course of normal operations or as a result of regulatory changes. Aqua America attempts to align capital budgeting and expenditures to address these issues in due course. We believe that the capital expenditures required to address outstanding environmental compliance issues have been budgeted in our capital program and represent approximately $63,237,000, or approximately 3.0% of our expected total capital expenditures over the next five years. We are parties to agreements with regulatory agencies in Pennsylvania, Texas, North Carolina, and Indiana under which we have committed to make improvements for environmental compliance. These agreements are intended to provide the regulators with assurance that problems covered by these agreements will be addressed, and the agreements generally provide protection from fines, penalties and other actions while corrective measures are being implemented. We are actively working directly with state environmental officials in Pennsylvania, Texas, and North Carolina to implement or amend regulatory agreements as necessary.

Safe Drinking Water Act - The Safe Drinking Water Act establishes criteria and procedures for the EPA to develop national quality standards for drinking water. Regulations issued pursuant to the Safe Drinking Water Act set standards regarding the amount of microbial and chemical contaminants and radionuclides in drinking water. Current requirements under the Safe Drinking Water Act are not expected to have a material impact on our business, financial condition, or results of operations as we have made and are making investments to meet existing water quality standards. We may, in the future, be required to change our method of treating drinking water at some sources of supply and make additional capital investments if additional regulations become effective.

Clean Water Act - The Clean Water Act regulates discharges from drinking water and wastewater treatment facilities into lakes, rivers, streams, and groundwater. It is our policy to obtain and maintain all required permits and approvals for the discharges from our water and wastewater facilities, and to comply with all conditions of those permits and other regulatory requirements. A program is in place to monitor facilities for compliance with permitting, monitoring and reporting for wastewater discharges. From time to time, discharge violations may occur which may result in fines. These fines and penalties, if any, are not expected to have a material impact on our business, financial condition, or results of operations. We are also parties to agreements with regulatory agencies in several states where we operate while improvements are being made to address wastewater discharge issues.

Solid Waste Disposal - The handling and disposal of waste generated from water and wastewater treatment facilities is governed by federal and state laws and regulations. A program is in place to monitor our facilities for compliance with regulatory requirements, and we are not aware of any significant environmental remediation costs necessary from our handling and disposal of waste material from our water and wastewater operations.

Dam Safety - Our subsidiaries own thirty dams, of which fifteen are classified as high hazard dams that are subject to the requirements of the federal and state regulations related to dam safety, which undergo regular inspections and an annual engineering inspection. After a thorough review and inspection of our dams by professional outside engineering firms, we believe that all fifteen dams are structurally sound and well-maintained, except as described below. These inspections provide recommendations for ongoing rehabilitation which we include in our capital improvement program.

We performed studies of our dams that identified three dams in Pennsylvania and two dams in Ohio requiring capital improvements. These capital improvements result from the adoption by state regulatory agencies of revised formulas for calculating the magnitude of a possible maximum flood event. The most significant capital improvement remaining to be performed in our dam improvement program is on one dam in Pennsylvania at a total estimated cost of $13,300,000. Design for this dam commenced in 2013 and construction is expected to be completed in 2021.

A recent dam inspection in Illinois found cracks on two control gate mechanisms, and as a result, temporary gates were installed to eliminate reliance on the cracked control gates. An inspection of the other control gates was conducted in the fourth quarter of 2017, and it was determined that certain of the dam's control gates could be replaced. Although we are unable to estimate the amount of this planned capital expenditure at this time, the amount may be significant, and we believe such capital investments will be recoverable in ratemaking.

One of our Ohio dams needing capital improvements is no longer used for water supply, and may be sold to a third party. Should that sale not be consummated, we will need to breech the dam or rehabilitate portions of the dam at a cost of up to approximately $2,600,000.

Lead and Copper Rule – The events in Flint, Michigan, which commenced in 2014, and other communities have brought attention to the issue of lead in drinking water from home plumbing. Lead in drinking water can come from lead that leaches from service lines, home plumbing solder, and fixtures or faucets. Since the Lead and Copper Rule in 1992, we have been working to prevent lead leaching from home plumbing sources by reducing water corrosivity and adding chemicals that can prevent leaching of lead in pipes and homes. We also focus on identifying and removing lead service lines and encouraging customers to replace the customer-owned portion of the service line if it is lead as they are identified during our main replacement program or during other maintenance activities. We are currently developing a lead service line inventory. We support the recommendations of The Lead Service Line Replacement Collaborative, a collaborative of leading water industry organizations that has recommended full replacement of lead service lines as a "best practice" to reduce lead in drinking water, but we only have control over the company-owned portion of each service line. In cases where we are replacing a company-owned lead service line, our standard approach is to replace the company-owned portion and advise and encourage the customer to replace the customer-owned portion of the service line, all the way to the customer's home. We also advise customers of the potential health impacts of lead in drinking water, and conduct lead testing at homes following replacement of a lead service line. We do not plan on replacing customer-owned lead service lines at locations where our portion of the service line does not contain lead, but if we become aware of such situations we will notify the customer. It is anticipated that the EPA will propose updated regulations for the Lead and Copper Rule in 2018.

Partnership for Safe Water Program – Aqua America is a proud participant in the American Water Works Association's (AWWA) Partnership for Safe Water Program. This voluntary program is a commitment to excellence within the drinking water community above and beyond EPA's stringent treatment goals. All of our active surface water treatment plants (within Pennsylvania, Ohio, Illinois, and Virginia) maintain good standing in the program which includes many awards of achievement. The honors include the "Director's Award" (achieved at 5 systems) which recognizes plants that have: 1) completed a comprehensive self-assessment report, 2) created an action plan for continuous improvement, and 3) provided several evaluations of performance demonstrating operational excellence. Several of our systems have met these criteria annually and have received 5, 10, 15, and 20 year subscriber awards. Furthermore, our Roaring Creek Pennsylvania treatment plant has received the Phase IV Excellence Award, the highest honor achieved in the Partnership Program.

Safety Standards - Our facilities and operations may be subject to inspections by representatives of the Occupational Safety and Health Administration from time to time. We maintain safety policies and procedures to comply with the Occupational Safety and Health Administration's rules and regulations, but violations may occur from time to time, which may result in fines and penalties, which are not expected to have a material impact on our business, financial condition, or results of operations. We endeavor to correct such violations promptly when they come to our attention.

Security

We maintain security measures at our facilities, and collaborate with federal, state and local authorities and industry trade associations regarding information on possible threats and security measures for water and wastewater utility operations. The costs incurred are expected to be recoverable in water and wastewater rates and are not expected to have a material impact on our business, financial condition, or results of operations.

We also maintain cyber security protection measures with respect to our information technology, including our customer data, and, in some cases, the monitoring and operation of our treatment, storage and pumping facilities.

Employee Relations

As of December 31, 2017, we employed a total of 1,530 full-time employees. Our subsidiaries are parties to 15 labor agreements with labor unions covering 527 employees. The labor agreements expire at various times between March 2018 and October 2022.

Available Information

We file annual, quarterly, current reports, proxy statements, and other information with the Securities and Exchange Commission ("SEC"). You may read and copy any document we file with the SEC at the SEC's public reference room at 100 F Street, NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. You may also obtain our SEC filings from the SEC's web site at www.sec.gov.

Our internet web site address is www.aquaamerica.com. We make available free of charge through our web site's *Investor Relations* page all of our filings with the SEC, including our annual report on Form 10-K, quarterly reports on

Form 10-Q, current reports on Form 8-K, and other information. These reports and information are available as soon as reasonably practicable after such material is electronically filed with the SEC.

In addition, you may request a copy of the foregoing filings, at no cost by writing or telephoning us at the following address or telephone number:

Investor Relations Department
Aqua America, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489
Telephone: 610-527-8000

Our Board of Directors has various committees including an audit committee, an executive compensation committee, a corporate governance committee, and a risk mitigation and investment policy committee. Each of these committees has a formal charter. We also have Corporate Governance Guidelines and a Code of Ethical Business Conduct. Copies of these charters, guidelines, and codes can be obtained free of charge from our *Investor Relations* page on our web site, www.aquaamerica.com. In the event we change or waive any portion of the Code of Ethical Business Conduct that applies to any of our directors, executive officers, or senior financial officers, we will post that information on our web site.

The references to our web site and the SEC's web site are intended to be inactive textual references only, and the contents of those web sites are not incorporated by reference herein and should not be considered part of this or any other report that we file with or furnish to the SEC.

Item 1A. *Risk Factors*

In addition to the other information included in this Annual Report, the following factors should be considered in evaluating our business and future prospects. Any of the following risks, either alone or taken together, could materially harm our business, financial condition, and results of operations. If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, our business, financial condition, and results of operations could be materially harmed.

Contamination of our water supply, including water provided to our customers, may result in disruption in our services, additional costs and litigation which could harm our business, financial condition, and results of operations.

Our water supplies, including water provided to our customers, are subject to possible contamination, including from:

- naturally occurring compounds or man-made substances;
- chemicals and other hazardous materials;
- lead and other materials;
- pharmaceuticals and personal care products; and
- possible deliberate or terrorist attacks.

Depending on the nature of the water contamination, we may have to interrupt the use of that water supply until we are able to substitute, where feasible, the flow of water from an uncontaminated water source, including if practicable, the purchase of water from other suppliers, or continue the water supply under restrictions on use for drinking or broader restrictions against all use except for basic sanitation and essential fire protection. We may incur significant costs, including, but not limited to, costs for water quality testing and monitoring, treatment of the contaminated source through modification of our current treatment facilities or development of new treatment methods, or the purchase of alternative water supplies. In addition, the costs we could incur to decontaminate a water source or our water distribution system and dispose of waste could also be significant. The costs resulting from the contamination may not be recoverable in rates we charge our customer, or may not be recoverable in a timely manner. If we are unable to adequately treat the contaminated water supply or substitute a water supply from an uncontaminated water source in a timely or cost-effective manner, there may be an adverse effect on our business, financial condition, and results of operations. We could also be subject to:

- claims for consequences arising out of human exposure to contamination and/or hazardous substances in our water supplies, including toxic torts;
- claims for other environmental damage;
- claims for customers' business interruption as a result of an interruption in water service;
- claims for breach of contract;
- criminal enforcement actions; or
- other claims.

The events in Flint, Michigan, which commenced in 2014, and other communities have brought attention to the issue of lead in drinking water from home plumbing. Lead in drinking water can come from lead that leaches from service lines, home plumbing solder, and fixtures or faucets. We have been working to prevent lead leaching from home plumbing sources by reducing water corrosivity and adding chemicals that can prevent leaching of lead in pipes and homes. We also focus on identifying and removing lead service lines and encouraging customers to replace the customer-owned portion of the service line if it is lead as they are identified during our main replacement program or during other maintenance activities. We support the recommendations of The Lead Service Line Replacement Collaborative, a collaborative of leading water industry organizations that has recommended full replacement of lead service lines as a "best practice" to reduce lead in drinking water, but we only have control over the company-owned portion of each service line. In cases where we are replacing a company-owned lead service line, our standard approach is to replace the company-owned portion and advise and encourage the customer to replace the customer-owned portion of the service line, all the way to the customer's home. We also advise customers of the potential health impacts of lead in drinking water, and conduct lead testing at homes following replacement of a lead service line. We do not plan on replacing customer-owned lead service lines at locations where our portion of the service line does not contain lead, but if we become aware of such situations we will notify the customer. We anticipate that the EPA will propose updated regulations for the 1992 Lead and Copper Rule in 2018. Any such regulatory changes could have an impact on our business.

We may incur costs to defend our position and/or incur reputational damage even if we are not liable for consequences arising out of human exposure to contamination and/or hazardous substances in our water supplies or other environmental damage. Our insurance policies may not be sufficient to cover the costs of these claims, and losses incurred may make it difficult for us to secure insurance in the future at acceptable rates. Such claims or actions could harm our business, financial condition, and results of operations.

The rates we charge our customers are subject to regulation. If we are unable to obtain government approval of our requests for rate increases or if approved rate increases are untimely or inadequate to recover and earn a return on our capital investments, to recover expenses or taxes, or to take into account changes in water usage, our profitability may suffer.

The rates we charge our customers are subject to approval by utility commissions in the states in which we operate. We file rate increase requests, from time to time, to recover our investments in utility plant and expenses. Our ability to maintain and meet our financial objectives is dependent upon the recovery of, and return on, our capital investments and expenses through the rates we charge our customers. Once a rate increase petition is filed with a utility commission, the ensuing administrative and hearing process may be lengthy and costly, and our costs may not always be fully recoverable. The timing of our rate increase requests are therefore partially dependent upon the estimated cost of the administrative process in relation to the investments and expenses that we hope to recover through the rate increase. In addition, the amount or frequency of rate increases may be decreased or lengthened as a result of many factors including changes in regulatory oversight in the states in which we operate water and wastewater utilities and income tax laws, including regulations regarding tax-basis depreciation as it applies to our capital expenditures or qualifying utility asset improvements. We can provide no assurances that any future rate increase request will be approved by the appropriate utility commission; and, if approved, we cannot guarantee that these rate increases will be granted in a timely or sufficient manner.

In Virginia, we may seek authorization to bill our utility customers in accordance with a rate filing that is pending before the respective regulatory commission. Furthermore, some utility commissions authorize the use of expense deferrals and amortization in order to provide for an impact on our operating income by an amount that approximates the requested amount in a rate request. The additional revenue billed and collected prior to the final ruling is subject to refund to customers based on the outcome of the ruling. The revenue recognized and the expenses deferred by us reflect an estimate as to the final outcome of the ruling. If the request is denied completely or in part, we could be required to refund to customers some or all of the revenue billed to date, and write-off some or all of the deferred expenses.

Our business requires significant capital expenditures that are partially dependent on our ability to secure appropriate funding. Disruptions in the capital markets may limit our access to capital. If we are unable to obtain sufficient capital, or if the cost of borrowing increases, it may harm our business, financial condition, results of operations, and our ability to pay dividends.

Our business is capital intensive. In addition to the capital required to fund customer growth through our acquisition strategy, on an annual basis, we spend significant sums for additions to or replacement of property, plant and equipment. We obtain funds for our capital expenditures from operations, contributions and advances by developers and others, debt issuances, and equity issuances. We have paid dividends consecutively for 73 years and our Board of Directors recognizes the value that our common shareholders place on both our historical payment record and on our future dividend payments. Our ability to maintain and meet our financial objectives is dependent upon the availability of adequate capital, and we may not be able to access the capital markets on favorable terms or at all. If in the future, our credit facilities are not renewed or our short-term borrowings are called for repayment, we would need to seek alternative financing sources; however, there can be no assurance that these alternative financing sources would be available on terms acceptable to us. In the event we are unable to obtain sufficient capital, we may need to take steps to conserve cash by reducing our capital expenditures or dividend payments and our ability to pursue acquisitions may be limited. The reduction in capital expenditures may result in reduced potential earnings growth, affect our ability to meet environmental laws and regulations, and limit our ability to improve or expand our utility systems to the level we believe appropriate. There is no guarantee that we will be able to obtain sufficient capital in the future on reasonable terms and conditions for expansion, construction and maintenance. In addition, delays in completing major capital projects could delay the recovery of the capital expenditures associated with such projects through rates. If the cost of borrowing increases, we might not be able to recover increases in our cost of capital through rates. The inability to recover higher borrowing costs through rates, or the regulatory lag associated with the time that it takes to begin recovery, may harm our business, financial condition, and results of operations.

Our inability to comply with debt covenants under our credit facilities could result in prepayment obligations.

We are obligated to comply with debt covenants under some of our loan and debt agreements. Failure to comply with covenants under our credit facilities could result in an event of default, which if not cured or waived, could result in us being required to repay or finance these borrowings before their due date, limit future borrowings, cause us to default on other obligations, and increase borrowing costs. If we are forced to repay or refinance (on less favorable terms) these borrowings, our business, financial condition, and results of operations could be harmed by reduced access to capital and increased costs and rates.

One of the important elements of our growth strategy is the acquisition of water and wastewater utility systems. Any future acquisitions we decide to undertake may involve risks. Further, competition for acquisition opportunities from other regulated utilities, governmental entities, and strategic and financial buyers may hinder our ability to grow our business.

One important element of our growth strategy is the acquisition and integration of water and wastewater utility systems in order to broaden our service areas. We will not be able to acquire other businesses if we cannot identify suitable acquisition opportunities or reach mutually agreeable terms with acquisition candidates. It is our intent, when practical, to integrate any businesses we acquire with our existing operations. The negotiation of potential acquisitions as well as the integration of acquired businesses could require us to incur significant costs and cause diversion of our management's time and resources. Future acquisitions by us could result in:

- dilutive issuances of our equity securities;
- incurrence of debt, contingent liabilities, and environmental liabilities;
- unanticipated capital expenditures;

- failure to maintain effective internal control over financial reporting;
- recording goodwill and other intangible assets for which we may never realize their full value and may result in an asset impairment that may negatively affect our results of operations;
- fluctuations in quarterly results;
- other acquisition related expenses; and
- exposure to unknown or unexpected risks and liabilities.

Some or all of these items could harm our business and our ability to finance our business and to comply with regulatory requirements. The businesses we acquire in the future may not achieve sales and profitability that would justify our investment, and any difficulties we encounter in the integration process, including in the integration of processes necessary for internal control and financial reporting, could interfere with our operations, reduce our operating margins and harm our internal controls.

Some states in which we operate allow the respective public utility commissions to use fair market value to set ratemaking rate base instead of the traditional depreciated original cost of water or wastewater assets for certain qualifying municipal acquisitions. Depending on the state, there are varying rules and circumstances in which fair value is determined. One state's regulations allows ratemaking rate base to equal the lower of the average of the appraisals or the purchase price, and is subject to regulatory approval. There may be situations where we may pay more than the ultimate fair value of the utility assets as set by the regulatory commission, despite the fair value legislation suggesting its full recovery. In these situations, goodwill may be recognized to the extent there is an excess purchase price over the fair value of net tangible and identifiable intangible assets acquired through acquisition. Our financial condition and results of operations can be harmed by an inability to earn a return on, and recover our purchase price as a component of rate base.

We compete with governmental entities, other regulated utilities, and strategic and financial buyers, for acquisition opportunities. As consolidation becomes more prevalent in the utility industry and competition for acquisitions increases, the prices for suitable acquisition candidates may increase to unacceptable levels and limit our ability to grow through acquisitions. In addition, our competitors may impede our growth by purchasing utilities near our existing operations, thereby preventing us from acquiring them. Governmental entities or environmental / social activist groups have challenged, and may in the future challenge our efforts to acquire new service territories, particularly from municipalities or municipal authorities. Higher purchase prices and resulting rates may limit our ability to invest additional capital for system maintenance and upgrades in an optimal manner. Our growth could be hindered if we are not able to compete effectively for new companies and/or service territories with other companies or strategic and financial buyers that have lower costs of operations or capital, or that submit more attractive bids. Any of these risks may harm our business, financial condition, and results of operations.

Our facilities could be the target of a possible terrorist or other deliberate attack which could harm our business, financial condition and results of operations.

In addition to the potential contamination of our water supply as described in a separate risk factor herein, we maintain security measures at our facilities and have heightened employee and public safety official awareness of potential threats to our water systems. We have and will continue to bear increases in costs for security precautions to protect our facilities, operations, and supplies, most of which have been recoverable under state regulatory policies. While the costs of increases in security, including capital expenditures, may be significant, we expect these costs to continue to be recoverable in water and wastewater rates. Despite our security measures, we may not be in a position to control the outcome of terrorist events, or other attacks on our water systems, should they occur. Such an event could harm our business, financial condition, and results of operations.

The failure of, or the requirement to repair, upgrade or dismantle any of our dams or reservoirs may harm our business, financial condition, and results of operations.

Several of our water systems include impounding dams and reservoirs of various sizes. Although we believe our dam review program, which includes regular inspections and other engineering studies, will ensure our dams are structurally sound and well-maintained, the failure of a dam could result in significant downstream damage and could result in claims for property damage or for injuries or fatalities. We periodically inspect our dams and purchase liability insurance to cover such risks, but depending on the nature of the downstream damage and cause of the failure, the policy limits of insurance coverage may not be sufficient, and losses incurred may make it difficult for us to secure insurance in the future at acceptable rates. A dam failure could also result in damage to, or disruption of, our water treatment and pumping facilities that are often located downstream from our dams and reservoirs. Significant damage to these facilities, or a significant decline in the storage of the raw water impoundment, could affect our ability to provide water to our customers until the facilities and a sufficient raw water impoundment can be restored. The estimated costs to maintain our dams are included in our capital budget projections and, although such costs to date have been recoverable in rates, there can be no assurance that rate increases will be granted in a timely or sufficient manner to recover such costs in the future, if at all.

Any failure of our water and wastewater treatment plants, network of water and wastewater pipes, or water reservoirs could result in damages that may harm our business, financial condition, and results of operations.

Our operating subsidiaries treat water and wastewater, distribute water and collect wastewater through an extensive network of pipes, and store water in reservoirs. A failure of a major treatment plant, pipe, or reservoir could result in claims for injuries or property damage. The failure of a major treatment plant, pipe, or reservoir may also result in the need to shut down some facilities or parts of our network in order to conduct repairs. Such failures and shutdowns may limit our ability to supply water in sufficient quality and quantities to our customers or collect and treat wastewater in accordance with standards prescribed by governmental regulators, including state utility commissions, and may harm our business, financial condition, and results of operations. Any business interruption or other losses might not be covered by insurance policies or be recoverable in rates, and such losses may make it difficult for us to secure insurance in the future at acceptable rates.

We are increasingly dependent on the continuous and reliable operation of our information technology systems, and a disruption of these systems, resulting from cyber security attacks or other cyber-related events, could harm our business.

We rely on our information technology systems in connection with the operation of our business, especially with respect to customer service and billing, accounting and, in some cases, the monitoring and operation of our treatment, storage and pumping facilities. In addition, we rely on our systems to track our utility assets and to manage maintenance and construction projects, materials and supplies, and our human resource functions. A loss of these systems, or major problems with the operation of these systems, could harm our business, financial condition, and results of operations. Our information technology systems may be vulnerable to damage or interruption from the following types of cyber security attacks or other cyber-related events:

- power loss, computer systems failures, and internet, telecommunications or data network failures;
- operator negligence or improper operation by, or supervision of, employees;
- physical and electronic loss of data;
- computer viruses, cyber security attacks, intentional security breaches, hacking, denial of service actions, misappropriation of data and similar events;
- difficulties in the implementation of upgrades or modification to our information technology systems; and
- hurricanes, fires, floods, earthquakes and other natural disasters.

Although we do not believe that our systems are at a materially greater risk of cyber security attacks than other similar organizations, our information technology systems may be vulnerable to damage or interruption from the types of cyber security attacks or other events listed above or other similar actions, and such incidents may go undetected for a period of time. Such cyber security attacks or other events may result in:

- the loss or compromise of customer, financial, employee, or operational data;
- disruption of billing, collections or normal field service activities;
- disruption of electronic monitoring and control of operational systems; and
- delays in financial reporting and other normal management functions.

Possible impacts associated with a cyber security attack or other events may include: remediation costs related to lost, stolen, or compromised data; repairs to data processing systems; increased cyber security protection costs; adverse effects on our compliance with regulatory and environmental laws and regulation, including standards for drinking water; litigation; and reputational damage. We maintain insurance to help defray costs associated with cyber security attacks or other events, but we cannot provide assurance that such insurance will provide coverage for any particular type of incident or event or that such insurance will be adequate, and losses incurred may make it difficult for us to secure insurance in the future at acceptable rates.

Our business is impacted by weather conditions and is subject to seasonal fluctuations, which could harm demand for our water service and our revenues and earnings.

Demand for our water during the warmer months is generally greater than during cooler months due primarily to additional requirements for water in connection with irrigation systems, swimming pools, cooling systems, and other outside water use. Throughout the year, and particularly during typically warmer months, demand will vary with temperature, rainfall levels and rainfall frequency. In the event that temperatures during the typically warmer months are cooler than normal, if there is more rainfall than normal, or rainfall is more frequent than normal, the demand for our water may decrease and harm our business, financial condition, and results of operations.

Decreased residential customer water consumption as a result of water conservation efforts may harm demand for our water service and may reduce our revenues and earnings.

There has been a general decline in water usage per residential customer as a result of an increase in conservation awareness, and the impact of an increased use of more efficient plumbing fixtures and appliances. These gradual, long-term changes are normally taken into account by the utility commissions in setting rates, whereas short-term changes in water usage, if significant, may not be fully reflected in the rates we charge. We are dependent upon the revenue generated from rates charged to our residential customers for the volume of water used. If we are unable to obtain future rate increases to offset decreased residential customer water consumption to cover our investments, expenses, and return for which we initially sought the rate increase, our business, financial condition, and results of operations may be harmed.

Drought conditions and government imposed water use restrictions may impact our ability to serve our current and future customers, and may impact our customers' use of our water, which may harm our business, financial condition, and results of operations.

We depend on an adequate water supply to meet the present and future demands of our customers. Drought conditions could interfere with our sources of water supply and could harm our ability to supply water in sufficient quantities to our existing and future customers. An interruption in our water supply could harm our business, financial condition, and results of operations. Moreover, governmental restrictions on water usage during drought conditions may result in a decreased demand for our water, even if our water supplies are sufficient to serve our customers during these drought conditions, which may harm our business, financial condition, and results of operations.

We employ a portfolio rationalization strategy to focus our operations in areas where we have critical mass and economic growth potential and to divest operations where limited customer growth opportunities exist or where we are unable to achieve favorable operating results or a return on equity that we consider acceptable. Dispositions we decide to undertake may involve risks which could harm our business, operating results, and financial condition.

In the event we determine a division, utility system or business should be sold, we may be unable to reach terms that are agreeable to us or find a suitable buyer. If the business is part of our regulated operations, we may face additional challenges in obtaining regulatory approval for the disposition, and the regulatory approval obtained may include restrictive conditions. We may be required to continue to hold or assume residual liabilities with respect to the business sold. The negotiation of potential dispositions as well as the efforts to divest the acquired business could require us to incur significant costs and cause diversion of our management's time and resources. Any of these risks may harm our business, financial condition, and results of operations.

Our operations are geographically concentrated in Pennsylvania, which make us susceptible to risks affecting Pennsylvania.

Although we operate water and wastewater facilities in a number of states, our operations are concentrated in Pennsylvania. As a result, our financial results are largely subject to political, water supply, labor, utility cost and regulatory risks, economic conditions, natural disasters and other risks affecting Pennsylvania.

General economic conditions may affect our financial condition and results of operations.

A general economic downturn may lead to a number of impacts on our business and may affect our financial condition and results of operations. Such impacts may include:

- a reduction in discretionary and recreational water use by our residential water customers, particularly during the summer months when such discretionary usage is normally at its highest;
- a decline in usage by industrial and commercial customers as a result of decreased business activity;
- an increased incidence of customers' inability to pay or delays in paying their utility bills, or an increase in customer bankruptcies, which may lead to higher bad debt expense and reduced cash flow;
- a lower natural customer growth rate due to a decline in new housing starts; and
- a decline in the number of active customers due to housing vacancies.

General economic turmoil may also lead to an investment market downturn, which may result in our pension and other post-retirement plans' asset market values suffering a decline and significant volatility. A decline in our plans' asset market values could increase our required cash contributions to the plans and expense in subsequent years.

Our water and wastewater systems may be subject to condemnations or other methods of taking by governmental entities.

In the states where our subsidiaries operate, it is possible that portions of our subsidiaries' operations could be acquired by municipal governments by one or more of the following methods:

- eminent domain;
- the right of purchase given or reserved by a municipality or political subdivision when the original franchise was granted; and
- the right of purchase given or reserved under the law of the state in which the subsidiary was incorporated or from which it received its permit.

The price to be paid upon such an acquisition by the municipal government is usually determined in accordance with applicable law under eminent domain. In other instances, the price may be negotiated, fixed by appraisers selected by the parties or computed in accordance with a formula prescribed in the law of the state or in the particular franchise or charter. We believe that our operating subsidiaries will be entitled to receive fair market value for any assets that are condemned. However, there is no assurance that the fair market value received for assets condemned will be in excess of book value.

In a very few number of instances, in one of our southern states where there are municipally-owned water or wastewater systems near our operating divisions, the municipally-owned system may either have water distribution or wastewater collection mains that are located adjacent to our division's mains or may construct new mains that parallel our mains. In these circumstances, on occasion, the municipally-owned system may attempt to offer service to customers who are connected to our mains, resulting in our mains becoming surplus or underutilized without compensation.

The final determination of our income tax liability may be materially different from our income tax provision.

Significant judgment is required in determining our provision for income taxes. Our calculation of the provision for income taxes is subject to our interpretation of applicable business tax laws in the jurisdictions in which we file. In addition, our income tax returns are subject to periodic examination by the Internal Revenue Service and other taxing authorities. In December 2012, Aqua Pennsylvania changed its tax method of accounting to permit the expensing of qualifying utility asset improvement costs that were previously being capitalized and depreciated for tax purposes. Subsequently, the Company's Ohio and North Carolina regulated subsidiaries similarly changed their tax method of accounting. Our determination of what qualifies as a capital cost versus a tax deduction for utility asset improvements is subject to subsequent adjustment and may impact the income tax benefits that have been recognized.

On December 22, 2017, President Trump signed into law legislation referred to as 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 makes significant changes to the Internal Revenue Code of 1986, as amended (the "Code"), and the taxation of business entities, and includes specific provisions related to regulated public utilities. Changes in the Code from the TCJA had a material impact on our financial statements in 2017. Significant changes that impact the Company in the TCJA include a reduction in the corporate federal income tax rate from 35% to 21%, and a limitation on the utilization of Net Operating Losses ("NOLs") arising after December 31, 2017 to 80% of taxable income with an indefinite carryforward. In addition, specific provisions related to regulated public utilities in the TCJA generally allow for the continued deductibility of interest expense, the elimination of full expensing for tax purposes of certain property acquired after September 27, 2017, and the continuation of certain rate normalization requirements for accelerated depreciation benefits. Since the tax effects of changes in tax law must be recognized in the period in which TCJA was enacted, our deferred income tax assets and liabilities have been remeasured in the period of enactment. This generally results in amounts previously collected from utility customers for these deferred taxes to be refundable to such customers, generally through reductions in future rates. In certain states there is not yet complete guidance as to how to account for the TCJA. With respect to these states, we will account for the changes in income tax balances by making a reasonable estimate. The estimate may differ from the actual tax amount determined once the state regulators provide specific guidance. To the extent such estimates are adjusted or prove to be incorrect, there could be an impact on the Company's financial statements.

Although we believe our income tax estimates, including any tax reserves for uncertain tax positions or valuation allowances on deferred tax assets are appropriate, there is no assurance that the final determination of our income tax liability will not be materially different; either higher or lower, from what is reflected in our income tax provision. In the event we are assessed additional income taxes, our business, financial condition, and results of operations could be harmed.

Federal and state environmental laws and regulations impose substantial compliance requirements on our operations. Our operating costs could be significantly increased in order to comply with new or stricter regulatory standards imposed by federal and state environmental agencies.

Our water and wastewater services are governed by various federal and state environmental protection and health and safety laws and regulations, including the federal Safe Drinking Water Act, the Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act and similar state laws, and federal and state regulations issued under these laws by the EPA and state environmental regulatory agencies. These laws and regulations establish, among other things, criteria and standards for drinking water and for discharges into the waters of the U.S. as well as dam safety, air emissions, and residuals management. Pursuant to these laws, we are required to obtain various environmental permits from environmental regulatory agencies for our operations. We cannot assure you that we will be at all times in total compliance with these laws, regulations and permits. If we fail to comply with these laws, regulations or permits, we could be fined or otherwise sanctioned by regulators and such noncompliance could result in civil suits. Environmental laws and regulations are complex and change frequently. These laws, and the enforcement thereof, have tended to become more stringent over time. While we have budgeted for future capital and operating expenditures to comply with these laws and our permits, it is possible that new or stricter standards could be imposed that will require additional capital expenditures or raise our operating costs. Although these expenditures and costs may be recovered in the form of higher rates, there can be no assurance that the various state utility commissions that govern our business would approve rate increases to enable us to recover such expenditures and costs. In summary, we cannot assure you that our costs of complying with, current and future environmental and health and safety laws will not harm our business, financial condition, and results of operations.

Federal and state environmental laws, regulatory initiatives relating to hydraulic fracturing, changes in technology or hydraulic fracturing processes, and volatility in natural gas prices, could result in reduced demand for raw water utilized in hydraulic fracturing and harm our joint venture business, financial condition, or results of operations.

We have invested in a joint venture for the construction and operation of a private pipeline system to supply raw water to natural gas drilling operations for hydraulic fracturing. Hydraulic fracturing involves the injection under pressure of water, along with other materials such as sand, into rock formations to stimulate natural gas production. In general, the environmental community has taken an interest in monitoring and understanding the potential environmental impact of hydraulic fracturing. Although hydraulic fracturing is currently regulated, in the event the use of hydraulic fracturing is further limited through regulation, our investment in the raw water pipeline may be harmed in the event that demand for raw water is reduced.

Changes in technology or hydraulic fracturing processes may occur which allows drillers to reuse injected water on a limited basis, or apply treatment processes to allow further reuse of water for drilling. These changes may reduce demand for raw water.

Furthermore, natural gas prices have historically been volatile, and are likely to continue to be volatile. A decrease in demand for natural gas, due to price volatility, could result in reduced demand for raw water utilized in hydraulic fracturing. In the fourth quarter of 2015, the joint venture recognized an impairment charge on its long-lived assets, which reduced the carrying value of our investment in the joint venture. The impairment resulted from a marked decline in natural gas prices in 2015, a further reduction in the volume of water sales by the joint venture, which led to a lowered forecast on future sales volumes, as well as changes in the natural gas industry activities in the Marcellus Shale region and general market conditions. In the event hydraulic fracturing is limited, due to a further reduction in demand for natural gas or other factors affecting the industry, our investment in the raw water pipeline may be harmed should the demand for raw water be reduced.

Wastewater operations entail significant risks and may impose significant costs.

Wastewater collection and treatment and septage pumping and sludge hauling involve various unique risks. If collection or treatment systems fail or do not operate properly, or if there is a spill, untreated or partially treated wastewater could discharge onto property or into nearby streams and rivers, causing various damages and injuries, including environmental damage. These risks are most acute during periods of substantial rainfall or flooding, which are the main causes of wastewater overflow and system failure. Liabilities resulting from such damages and injuries could harm our business, financial condition, and results of operations.

Work stoppages and other labor relations matters could harm our operating results.

Approximately 34% of our workforce is unionized under 15 labor contracts with labor unions, which expire over several years. In light of rising costs for healthcare and retirement benefits, contract negotiations in the future may be difficult. We are subject to a risk of work stoppages and other labor actions as we negotiate with the unions to address these issues, which could harm our business, financial condition, and results of operations. We cannot assure you that issues with our labor forces will be resolved favorably to us in the future or that we will not experience work stoppages.

Significant or prolonged disruptions in the supply of important goods or services from third parties could harm our business, financial condition, and results of operations.

We are dependent on a continuing flow of important goods and services from suppliers for our water and wastewater businesses. A disruption or prolonged delays in obtaining important supplies or services, such as maintenance services, purchased water, chemicals, water pipe, valves, hydrants, electricity, or other materials, could harm our water or wastewater services and our ability to operate in compliance with all regulatory requirements, which could harm our business, financial condition, and results of operations. In some circumstances, we rely on third parties to provide important services (such as customer bill print and mail activities or utility service operations in some of our divisions) and a disruption in these services could harm our business, financial condition, and results of operations. Some possible reasons for a delay or disruption in the supply of important goods and services include:

- our suppliers may not provide materials that meet our specifications in sufficient quantities;
- our suppliers may provide us with water that does not meet applicable quality standards or is contaminated;
- our suppliers may face production delays due to natural disasters, strikes, lock-outs, or other such actions;
- one or more suppliers could make strategic changes in the lines of products and services they offer; and
- some of our suppliers, such as small companies, may be more likely to experience financial and operational difficulties than larger, well-established companies, because of their limited financial and other resources.

As a result of any of these factors, we may be required to find alternative suppliers for the materials and services on which we rely. Accordingly, we may experience delays in obtaining appropriate materials and services on a timely basis and in sufficient quantities from such alternative suppliers at a reasonable price, which could interrupt services to our customers and harm our business, financial condition, and results of operations.

We depend significantly on the services of the members of our management team, and the departure of any of those persons could cause our operating results to suffer.

Our success depends significantly on the continued individual and collective contributions of our management team. The loss of the services of any member of our management team or the inability to hire and retain experienced management personnel could harm our business, financial condition, and results of operations.

Climate change laws and regulations have been passed and are being proposed that require compliance with greenhouse gas emissions standards, as well as other climate change initiatives, which could impact our business, financial condition or results of operations.

Climate change is receiving ever increasing attention worldwide. Many scientists, legislators, and others attribute global warming to increased levels of greenhouse gases ("GHG"), including carbon dioxide. Climate change laws and regulations enacted and proposed limit GHG emissions from covered entities, and require additional monitoring/reporting. At this time, the existing GHG laws and regulations are not expected to materially harm the Company's operations or capital expenditures. While the trend of increased regulation on climate change could change in light of the current federal administration's agenda, the uncertainty of future climate change regulatory requirements still remains. We cannot predict the potential impact of future laws and regulations on our business, financial condition, or results of operations. Although these future expenditures and costs for regulatory compliance may be recovered in the form of higher rates, there can be no assurance that the various state utility commissions that govern our business would approve rate increases to enable us to recover such expenditures and costs.

Some scientific experts are predicting a worsening of weather volatility in the future, possibly created by the climate change greenhouse gases. Changing severe weather patterns could require additional expenditures to reduce the risk associated with any increasing storm, flood and drought occurrences.

The issue of climate change is receiving ever increasing attention worldwide. Many climate change predictions, if true, present several potential challenges to water and wastewater utilities, such as: increased frequency and duration of droughts, increased precipitation and flooding, potential degradation of water quality, and changes in demand for services. We maintain an ongoing facility planning process, and this planning or the enactment of new standards may result in the need for additional capital expenditures or raise our operating costs. Because of the uncertainty of weather volatility related to climate change, we cannot predict its potential impact on our business, financial condition, or results of operations. Although any potential expenditures and costs may be recovered in the form of higher rates, there can be no assurance that the various state utility commissions that govern our business would approve rate increases to enable us to recover such expenditures and costs. We cannot assure you that our costs of complying with any climate change weather related measures will not harm our business, financial condition, or results of operations.

Item 1B *Unresolved Staff Comments*

None

Item 2. *Properties*

Our properties consist of water transmission and distribution mains and wastewater collection pipelines, water and wastewater treatment plants, pumping facilities, wells, tanks, meters, pipes, dams, reservoirs, buildings, vehicles, land, easements, rights-of-way, and other facilities and equipment used for the operation of our systems, including the collection, treatment, storage, and distribution of water and the collection and treatment of wastewater. Substantially all of our treatment, storage, and distribution properties are owned by our subsidiaries, and a substantial portion of our property is subject to liens of mortgage or indentures. These liens secure bonds, notes and other evidences of long-term indebtedness of our subsidiaries. For some properties that we acquired through the exercise of the power of eminent domain and other properties we purchased, we hold title for water supply purposes only. We own, operate and maintain over 12,800 miles of transmission and distribution mains, 21 surface water treatment plants, many well treatment stations, and 187 wastewater treatment plants. A small portion of the properties are leased under long-term leases.

The following table indicates our net property, plant and equipment, in thousands of dollars, as of December 31, 2017 in the principal states where we operate:

	Net Property, Plant and Equipment	
Pennsylvania	$ 3,433,582	63.6%
Ohio	457,238	8.5%
Illinois	395,136	7.3%
North Carolina	343,556	6.4%
Texas	299,872	5.6%
Other (1)	470,476	8.6%
Consolidated	$ 5,399,860	100.0%

(1) Consists primarily of our operating subsidiaries in the following states: New Jersey, Indiana, and Virginia.

We believe that our properties are generally maintained in good condition and in accordance with current standards of good water and wastewater industry practice. We believe that our facilities are adequate and suitable for the conduct of our business and to meet customer requirements under normal circumstances.

Our corporate offices are leased from our subsidiary, Aqua Pennsylvania, and are located in Bryn Mawr, Pennsylvania.

Item 3. *Legal Proceedings*

There are various legal proceedings in which we are involved. Although the results of legal proceedings cannot be predicted with certainty, there are no pending legal proceedings to which we or any of our subsidiaries is a party or to which any of our properties is the subject that we believe are material or are expected to materially harm our business, operating results or financial condition.

Item 4. *Mine Safety Disclosures*

Not applicable.

PART II

Item 5. *Market for the Registrant's Common Stock, Related Stockholder Matters and Purchases of Equity Securities*

Our common stock is traded on the New York Stock Exchange under the ticker symbol WTR. As of February 13, 2018, there were approximately 23,683 holders of record of our common stock.

The following table shows the high and low intraday sales prices for our common stock as reported on the New York Stock Exchange composite transactions reporting system and the cash dividends paid per share for the periods indicated:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2017					
Dividend paid per common share	$ 0.1913	$ 0.1913	$ 0.2047	$ 0.2047	$ 0.7920
Dividend declared per common share	0.1913	0.1913	0.2047	0.2047	0.7920
Price range of common stock:					
high	32.32	34.41	34.66	39.55	39.55
low	29.41	31.18	32.30	33.12	29.41
2016					
Dividend paid per common share	$ 0.178	$ 0.178	$ 0.1913	$ 0.1913	$ 0.7386
Dividend declared per common share	0.178	0.178	0.1913	0.1913	0.7386
Price range of common stock:					
high	32.44	35.66	35.83	31.29	35.83
low	28.35	30.31	29.53	28.03	28.03

We have paid dividends consecutively for 73 years. On August 1, 2017, our Board of Directors authorized an increase of 7.0% in the September 1, 2017 quarterly dividend over the dividend Aqua America paid in the previous quarter. As a result of this authorization, beginning with the dividend payment in September 2017, the annualized dividend rate increased to $0.8188 per share. This is the 27th dividend increase in the past 26 years and the 19th consecutive year that we have increased our dividend in excess of five percent. We presently intend to pay quarterly cash dividends in the future, on March 1, June 1, September 1, and December 1, subject to our earnings and financial condition, restrictions set forth in our debt instruments, regulatory requirements and such other factors as our Board of Directors may deem relevant. In 2017, our dividends paid represented 58.7% of net income.

Information with respect to restrictions set forth in our debt instruments is disclosed in Note 10 – *Long-term Debt and Loans Payable* in the *Notes to Consolidated Financial Statements* which is contained in Item 8 of this Annual Report.

The following table summarizes the Company's purchases of its common stock for the quarter ending December 31, 2017:

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plan or Programs
October 1-31, 2017	-	$ -	-	-
November 1-30, 2017	-	$ -	-	-
December 1-31, 2017	1,335	$ 37.80	-	-
Total	1,335	$ 37.80	-	-

(1) These amounts include 1,355 shares we acquired from our employees who elected to pay the exercise price of their stock options (and then hold shares of the stock), upon exercise, by delivering to us shares of our common stock in accordance with the terms of our equity compensation plan that was previously approved by our shareholders and disclosed in our proxy statements. This feature of our equity compensation plan is available to all employees who receive stock-based compensation under the plan. We purchased these shares at their fair market value, as determined by reference to the closing price of our common stock on the day prior to the option exercise.

Item 6. *Selected Financial Data*

Summary of Selected Financial Data (Unaudited)
Aqua America, Inc. and Subsidiaries
(In thousands of dollars, except per share amounts)

Years ended December 31,	2017	2016	2015	2014	2013
PER COMMON SHARE:					
Income from continuing operations:					
Basic	$ 1.35	$ 1.32	$ 1.14	$ 1.21	$ 1.15
Diluted	1.35	1.32	1.14	1.20	1.15
Income from discontinued operations:					
Basic	-	-	-	0.11	0.10
Diluted	-	-	-	0.11	0.10
Net income:					
Basic	1.35	1.32	1.14	1.32	1.26
Diluted	1.35	1.32	1.14	1.31	1.25
Cash dividends declared and paid	0.79	0.74	0.69	0.63	0.58
Return on Aqua America stockholders' equity	12.2%	12.7%	11.7%	14.1%	14.4%
Book value at year end	$ 11.02	$ 10.43	$ 9.78	$ 9.37	$ 8.68
Market value at year end	39.23	30.04	29.80	26.70	23.59
INCOME STATEMENT HIGHLIGHTS:					
Operating revenues	$ 809,525	$ 819,875	$ 814,204	$ 779,903	$ 761,893
Depreciation and amortization	136,724	133,008	128,737	126,535	123,985
Interest expense, net	88,341	80,594	76,536	76,397	77,316
Income from continuing operations before income taxes (1)	256,652	255,160	216,752	239,103	224,104
Provision for income taxes	16,914	20,978	14,962	25,219	21,233
Income from continuing operations (1)	239,738	234,182	201,790	213,884	202,871
Income from discontinued operations	-	-	-	19,355	18,429
Net income (1)	239,738	234,182	201,790	233,239	221,300
BALANCE SHEET HIGHLIGHTS:					
Total assets	$ 6,332,463	$ 6,158,991	$ 5,717,873	$ 5,383,243	$ 5,027,430
Property, plant and equipment, net	5,399,860	5,001,615	4,688,925	4,401,990	4,138,568
Aqua America stockholders' equity	1,957,621	1,850,068	1,725,930	1,655,343	1,534,835
Long-term debt, including current portion, excluding debt issuance costs (3)	2,143,127	1,910,633	1,779,205	1,619,270	1,554,871
Total debt, excluding debt issuance costs (3)	2,146,777	1,917,168	1,795,926	1,637,668	1,591,611
ADDITIONAL INFORMATION:					
Operating cash flows from continuing operations	$ 381,318	$ 396,163	$ 370,794	$ 364,888	$ 365,803
Capital expenditures	478,089	382,996	364,689	328,605	307,908
Net cash expended for acquisitions of utility systems and other	5,860	9,423	28,989	14,616	14,997
Dividends on common stock	140,660	130,923	121,248	112,106	102,889
Number of utility customers served (2)	982,849	972,265	957,866	940,119	928,200
Number of shareholders of common stock	23,511	24,750	25,269	25,780	25,833
Common shares outstanding (000)	177,714	177,394	176,544	176,753	176,751
Employees (full-time) (2)	1,530	1,551	1,617	1,617	1,542

(1) 2015 results includes Aqua America's share of a joint venture impairment charge of $21,433 ($32,975 pre-tax)
(2) Reflects continuing operations
(3) Debt issuance costs for the years ended December 31, 2017, 2016, 2015, 2014, and 2013 were $21,605, $22,357, $23,165, $23,509, and $24,387, respectively

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*

OVERVIEW

The following discussion and analysis of our financial condition and results of operations should be read together with our Consolidated Financial Statements and related Notes included in this Annual Report. This discussion contains forward-looking statements that are based on management's current expectations, estimates and projections about our business, operations and financial performance. All dollar amounts are in thousands of dollars, except per share amounts.

The Company
Aqua America, Inc., (referred to as "Aqua America", the "Company", "we", "us", or "our"), a Pennsylvania corporation, is the holding company for regulated utilities providing water or wastewater services to an estimated three million people in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, and Virginia. Our largest operating subsidiary is Aqua Pennsylvania, Inc., which accounted for approximately 52% of our operating revenues and approximately 74% of our net income for 2017. As of December 31, 2017, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of people we serve. Aqua Pennsylvania's service territory is located in the suburban areas in counties north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. Our other regulated utility subsidiaries provide similar services in seven other states. In addition, the Company's market-based activities are conducted through Aqua Infrastructure, LLC and Aqua Resources, Inc. Aqua Infrastructure provides non-utility raw water supply services for firms in the natural gas drilling industry. Aqua Resources provides water and wastewater service through two operating and maintenance contracts with municipal authorities close to our utility companies' service territory; and offers, through a third party, water and sewer line repair service and protection solutions to households. In 2017, we completed the sale of business units that are reported within the Company's market-based subsidiary, Aqua Resources, which installed and tested devices that prevent the contamination of potable water and repaired water and wastewater systems, and repaired and performed maintenance on water and wastewater systems. Additionally, during 2016 we completed the sale of business units within Aqua Resources, which were reported as assets held for sale in the Company's consolidated balance sheets, which provided liquid waste hauling and disposal services, and inspection, and cleaning and repair of storm and sanitary wastewater lines.

Industry Mission
The mission of the regulated water utility industry is to provide quality and reliable water service at reasonable rates to customers, while earning a fair return for shareholders. A number of challenges face the industry, including:

- strict environmental, health and safety standards;
- aging utility infrastructure and the need for substantial capital investment;
- economic regulation by state, and/or, in some cases, local government;
- declining consumption per customer as a result of conservation;
- lawsuits and the need for insurance; and
- the impact of weather and sporadic drought conditions on water sales demand.

Economic Regulation
Most of our water and wastewater utility operations are subject to regulation by their respective state utility commissions, which have broad administrative power and authority to regulate billing rates, determine franchise areas and conditions of service, approve acquisitions, and authorize the issuance of securities. The utility commissions also generally establish uniform systems of accounts and approve the terms of contracts with affiliates and customers, business combinations with other utility systems, and loans and other financings. The policies of the utility commissions often differ from state to state, and may change over time. A small number of our operations are subject to rate regulation by county or city government. Over time, the regulatory party in a particular state may change, as was the case for our Texas operations where, in 2014, economic regulation changed from the Texas Commission on Environmental Quality to the Public Utility Commission of Texas. The profitability of our utility operations is influenced to a great extent by the timeliness and adequacy of rate allowances in the various states in which we operate. One consideration we may undertake in evaluating which states to focus our growth and investment strategy is whether a state provides for consolidated rates, a surcharge for

replacing and rehabilitating infrastructure and other systems, and other regulatory policies that promote infrastructure investment and efficiency in processing rate cases.

Rate Case Management Capability – We strive to achieve the industry's mission by effective planning, efficient investments, and productive use of our resources. We maintain a rate case management capability to pursue timely and adequate returns on the capital investments that we make in improving our distribution system, treatment plants, information technology systems, and other infrastructure. This capital investment creates assets that are used and useful in providing utility service, and is commonly referred to as rate base. Timely and adequate rate relief is important to our continued profitability and in providing a fair return to our shareholders; thus, providing access to capital markets to help fund these investments. Accordingly, the objective of our rate case management strategy is to provide that the rates of our utility operations reflect, to the extent practicable, the timely recovery of increases in costs of operations (primarily labor and employee benefits, electricity, chemicals, transportation, maintenance expenses, insurance and claims costs, and costs to comply with environmental regulations), capital, and taxes. In pursuing our rate case strategy, we consider the amount of net utility plant additions and replacements made since the previous rate decision, the changes in the cost of capital, changes in our capital structure, and changes in operating and other costs. Based on these assessments, our utility operations periodically file rate increase requests with their respective state utility commissions or local regulatory authorities. In general, as a regulated enterprise, our water and wastewater rates are established to provide full recovery of utility operating costs, taxes, interest on debt used to finance capital investments, and a return on equity used to finance capital investments. Our ability to recover our expenses in a timely manner and earn a return on equity employed in the business helps determine the profitability of the Company. As of December 31, 2017, the Company's rate base is estimated to be $4,125,000, which is comprised of:

- $2,874,000 filed with respective state utility commissions or local regulatory authorities; and
- $1,251,000 not yet filed with respective state utility commissions or local regulatory authorities.

Our water and wastewater operations are composed of 53 rate divisions, each of which requires a separate rate filing for the evaluation of the cost of service and recovery of investments in connection with the establishment of tariff rates for that rate division. When feasible and beneficial to our utility customers, we have sought approval from the applicable state utility commission to consolidate rate divisions to achieve a more even distribution of costs over a larger customer base. All of the eight states in which we operate currently permit us to file a revenue requirement using some form of consolidated rates for some or all of the rate divisions in that state.

Revenue Surcharges – Six states in which we operate water utilities, and five states in which we operate wastewater utilities, permit us to add a surcharge to their respective bills to offset the additional depreciation and capital costs associated with capital expenditures related to replacing and rehabilitating infrastructure systems. In all other states, water and wastewater utilities absorb all of the depreciation and capital costs of these projects between base rate increases without the benefit of additional revenues. The gap between the time that a capital project is completed and the recovery of its costs in rates is known as regulatory lag. This surcharge is intended to substantially reduce regulatory lag, which often acts as a disincentive to water and wastewater utilities to rehabilitate their infrastructure. In addition, some states permit our subsidiaries to use a surcharge or credit on their bills to reflect allowable changes in costs, such as changes in state tax rates, other taxes and purchased water costs, until such time as the new costs are fully incorporated in base rates.

Effects of Inflation – Recovery of the effects of inflation through higher water and wastewater rates is dependent upon receiving adequate and timely rate increases. However, rate increases are not retroactive and often lag increases in costs caused by inflation. On occasion, our regulated utility companies may enter into rate settlement agreements, which require us to wait for a period of time to file the next base rate increase request. These agreements may result in regulatory lag whereby inflationary increases in expenses may not yet be reflected in rates, or a gap may exist between when a capital project is completed and the start of its recovery in rates. Even during periods of moderate inflation, the effects of inflation can have a negative impact on our operating results.

Growth-Through-Acquisition Strategy

Part of our strategy to meet the industry challenges is to actively explore opportunities to expand our utility operations through acquisitions of water and wastewater utilities either in areas adjacent to our existing service areas or in new service areas, and to explore acquiring market-based businesses that are complementary to our regulated water and wastewater operations. To complement our growth strategy, we routinely evaluate the operating performance of our individual utility systems, and in instances where limited economic growth opportunities exist or where we are unable to achieve favorable operating results or a return on equity that we consider acceptable, we will seek to sell the utility system and reinvest the proceeds in other utility systems. Consistent with this strategy, we are focusing our acquisitions and resources in states where we have critical mass of operations in an effort to achieve economies of scale and increased efficiency. Our growth-through-acquisition strategy allows us to operate more efficiently by sharing operating expenses over more utility customers and provides new locations for future earnings growth through capital investment. Another element of our growth strategy is the consideration of opportunities to expand by acquiring other utilities, including those that may be in a new state if they provide promising economic growth opportunities and a return on equity that we consider acceptable. The ability to successfully execute this strategy and meet the industry challenges is largely due to our core competencies, financial position, and our qualified and trained workforce, which we strive to retain by treating employees fairly and providing our employees with development and growth opportunities.

During 2017, we completed four acquisitions, which along with the organic growth in our existing systems, represents 10,584 new customers. During 2016, we completed 19 acquisitions, which along with the organic growth in our existing systems, represents 15,282 new customers. During 2015, we completed 16 acquisitions, which along with the organic growth in our existing systems, represents 17,747 new customers.

We believe that utility acquisitions, organic growth, and a potential expansion of our market-based business will continue to be the primary sources of growth for us. With approximately 53,000 community water systems in the U.S., 82% of which serve less than 3,300 customers, the water industry is the most fragmented of the major utility industries (telephone, natural gas, electric, water, and wastewater). In the states where we operate regulated utilities, we believe there are approximately 14,500 community water systems of widely-varying size, with the majority of the population being served by government-owned water systems.

Although not as fragmented as the water industry, the wastewater industry in the U.S. also presents opportunities for consolidation. According to the U.S. Environmental Protection Agency's ("EPA") most recent survey of wastewater treatment facilities (which includes both government-owned facilities and regulated utility systems) in 2012, there are approximately 15,000 such facilities in the nation serving approximately 76% of the U.S. population. The remaining population represents individual homeowners with their own treatment facilities; for example, community on-lot disposal systems and septic tank systems. The vast majority of wastewater facilities are government-owned rather than regulated utilities. The EPA survey also indicated that there are approximately 4,000 wastewater facilities in operation in the states where we operate regulated utilities.

Because of the fragmented nature of the water and wastewater utility industries, we believe that there are many potential water and wastewater system acquisition candidates throughout the United States. We believe the factors driving the consolidation of these systems are:

- the benefits of economies of scale;
- the increasing cost and complexity of environmental regulations;
- the need for substantial capital investment;
- the need for technological and managerial expertise;
- the desire to improve water quality and service;
- limited access to cost-effective financing;
- the monetizing of public assets to support, in some cases, the declining financial condition of municipalities; and
- the use of system sale proceeds by a municipality to accomplish other public purposes.

We are actively exploring opportunities to expand our water and wastewater utility operations through regulated utility acquisitions or otherwise, including the management of publicly-owned facilities in a public-private partnership. We intend to continue to pursue acquisitions of government-owned and regulated water and wastewater utility systems that provide services in areas near our existing service territories or in new service areas. It is our intention to focus on growth opportunities in states where we have critical mass, which allows us to improve economies of scale through spreading our fixed costs over more customers – this cost efficiency should enable us to reduce the size of future rate increases. Currently, the Company seeks to acquire businesses in the U.S. regulated sector, which includes water and wastewater utilities and other regulated utilities, and to pursue growth ventures in market-based activities, by acquiring businesses that provide water and wastewater or other utility-related services, and investing in infrastructure projects.

Sendout

Sendout represents the quantity of treated water delivered to our distribution systems. We use sendout as an indicator of customer demand. Weather conditions tend to impact water consumption, particularly during the late spring, summer, and early fall when discretionary and recreational use of water is at its highest. Consequently, a higher proportion of annual operating revenues are realized in the second and third quarters. In general, during this period, an extended period of hot and dry weather increases water consumption, while above-average rainfall and cool weather decreases water consumption. Conservation efforts, construction codes that require the use of low-flow plumbing fixtures, as well as mandated water use restrictions in response to drought conditions can reduce water consumption. We believe an increase in conservation awareness by our customers, including the increased use of more efficient plumbing fixtures and appliances, may continue to result in a long-term structural trend of declining water usage per customer. These gradual long-term changes are normally taken into account by the utility commissions in setting rates, whereas significant short-term changes in water usage, resulting from drought warnings, water use restrictions, or extreme weather conditions, may not be fully reflected in the rates we charge between rate proceedings.

On occasion, drought warnings and water use restrictions are issued by governmental authorities for portions of our service territories in response to extended periods of dry weather conditions, regardless of our ability to meet unrestricted customer water demands. The timing and duration of the warnings and restrictions can have an impact on our water revenues and net income. In general, water consumption in the summer months is affected by drought warnings and restrictions to a higher degree because discretionary and recreational use of water is highest during the summer months, particularly in our northern service territories. At other times of the year, warnings and restrictions generally have less of an effect on water consumption. Currently, portions of our northern and central Texas service areas have conservation water restrictions. Drought warnings and watches result in the public being asked to voluntarily reduce water consumption.

The geographic diversity of our utility customer base reduces the effect of our exposure to extreme or unusual weather conditions in any one area of the country. During the year ended December 31, 2017, our operating revenues were derived principally from the following states: approximately 52% in Pennsylvania, 13% in Ohio, 9% in Texas, 8% in Illinois, and 7% in North Carolina.

Performance Measures Considered by Management

We consider the following financial measures (and the period to period changes in these financial measures) to be the fundamental basis by which we evaluate our operating results:

- earnings per share;
- operating revenues;
- income from continuing operations;
- earnings before interest, taxes, and depreciation ("EBITD");
- earnings before income taxes as compared to our operating budget;
- net income; and
- the dividend rate on common stock.

In addition, we consider other key measures in evaluating our utility business performance within our Regulated segment:

- our number of utility customers;
- the ratio of operations and maintenance expense compared to operating revenues (this percentage is termed "operating expense ratio");
- return on revenues (income from continuing operations divided by operating revenues);
- rate base growth;
- return on equity (net income divided by stockholders' equity); and
- the ratio of capital expenditures to depreciation expense.

Furthermore, we review the measure of earnings before unusual items that are noncash and not directly related to our core business, such as the measure of adjusted earnings to remove the joint venture impairment charge, which was recognized in 2015. Refer to Note 1 – *Summary of Significant Accounting Policies – Investment in Joint Venture* in this Annual Report for information regarding the impairment charge. We review these measurements regularly and compare them to historical periods, to our operating budget as approved by our Board of Directors, and to other publicly-traded water utilities.

Our operating expense ratio is one measure that we use to evaluate our operating efficiency and management effectiveness of our regulated operations. Our operating expense ratio is affected by a number of factors, including the following:

- ***Regulatory lag*** – Our rate filings are designed to provide for the recovery of increases in costs of operations (primarily labor and employee benefits, electricity, chemicals, transportation, maintenance expenses, insurance and claim costs, and costs to comply with environmental regulations), capital, and taxes. The revenue portion of the operating expense ratio can be impacted by the timeliness of recovery of, and the return on capital investments. The operating expense ratio is further influenced by regulatory lag (increases in operations and maintenance expenses not yet recovered in rates or a gap between the time that a capital project is completed and the start of its cost recovery in rates). The operating expense ratio is also influenced by decreases in operating revenues without a commensurate decrease in operations and maintenance expense, such as changes in customer water consumption as impacted by adverse weather conditions, conservation trends, or as a result of utility rates incorporating the effects of income tax benefits derived from deducting qualifying utility asset improvements for tax purposes that are capitalized for book purposes in Aqua Pennsylvania and consequently forgoing operating revenue increases. During periods of inflation, our operations and maintenance expenses may increase, impacting the operating expense ratio, as a result of regulatory lag, since our rate cases may not be filed timely and are not retroactive.

- ***Acquisitions*** – In general, acquisitions of smaller undercapitalized utility systems in some areas may initially increase our operating expense ratio if the operating revenues generated by these operations are accompanied by a higher ratio of operations and maintenance expenses as compared to other operational areas of the company that are more densely populated and have integrated operations. In these cases, the acquired operations are characterized as having relatively higher operating costs to fixed capital costs, in contrast to the majority of our operations, which generally consist of larger, interconnected systems, with higher fixed capital costs (utility plant investment) and lower operating costs per customer. In addition, we operate market-based subsidiary companies, Aqua Resources and Aqua Infrastructure. The cost-structure of these market-based companies differs from our utility companies in that, although they may generate free cash flow, these companies have a higher ratio of operations and maintenance expenses to operating revenues and a lower capital investment and, consequently, a lower ratio of fixed capital costs versus operating revenues in contrast to our regulated operations. As a result, the operating expense ratio is not comparable between the businesses. These market-based subsidiary companies are not a component of our Regulated segment.

We continue to evaluate initiatives to help control operating costs and improve efficiencies.

Consolidated Selected Financial and Operating Statistics

Our selected five-year consolidated financial and operating statistics follow:

Years ended December 31,	2017	2016	2015	2014	2013
Utility customers:					
Residential water	807,872	801,190	791,404	779,665	771,660
Commercial water	40,956	40,582	40,151	39,614	39,237
Industrial water	1,338	1,349	1,353	1,357	1,368
Other water	19,430	19,036	17,420	17,412	17,230
Wastewater	113,253	110,108	107,538	102,071	98,705
Total utility customers	982,849	972,265	957,866	940,119	928,200
Operating revenues:					
Residential water	$ 483,865	$ 484,901	$ 477,773	$ 460,013	$ 457,404
Commercial water	130,373	131,170	126,677	122,795	121,178
Industrial water	27,880	27,916	28,021	27,369	25,263
Other water	65,324	62,983	56,997	59,474	57,446
Wastewater	87,560	82,780	79,399	76,472	73,062
Other utility	9,903	10,357	10,746	9,934	10,174
Regulated segment total	804,905	800,107	779,613	756,057	744,527
Other and eliminations	4,620	19,768	34,591	23,846	17,366
Consolidated operating revenues	$ 809,525	$ 819,875	$ 814,204	$ 779,903	$ 761,893
Operations and maintenance expense	$ 287,206	$ 304,897	$ 309,310	$ 288,556	$ 283,561
Joint venture impairment charge (1)	$ -	$ -	$ 21,433	$ -	$ -
Income from continuing operations	$ 239,738	$ 234,182	$ 201,790	$ 213,884	$ 202,871
Net income	$ 239,738	$ 234,182	$ 201,790	$ 233,239	$ 221,300
Capital expenditures	$ 478,089	$ 382,996	$ 364,689	$ 328,605	$ 307,908
Operating Statistics					
Selected operating results as a percentage of operating revenues:					
Operations and maintenance	35.5%	37.2%	38.0%	37.0%	37.2%
Depreciation and amortization	16.9%	16.2%	15.8%	16.2%	16.3%
Taxes other than income taxes	7.0%	6.9%	6.8%	6.5%	6.9%
Interest expense, net	10.9%	9.8%	9.4%	9.8%	10.1%
Income from continuing operations	29.6%	28.6%	24.8%	27.4%	26.6%
Return on Aqua America stockholders' equity	12.2%	12.7%	11.7%	14.1%	14.4%
Ratio of capital expenditures to depreciation expense	3.5	2.9	2.9	2.7	2.6
Effective tax rate	6.6%	8.2%	6.9%	10.5%	9.5%

(1) Represents a $21,433 ($32,975 pre-tax) joint venture impairment charge. This amount represents our share of the impairment charge recognized by our joint venture that operates a private pipeline to supply raw water to firms with natural gas well drilling operations.

RESULTS OF OPERATIONS

Our income from continuing operations has grown at an annual compound rate of approximately 5.7% and our net income has grown at an annual compound rate of approximately 4.1% during the five-year period ended December 31, 2017. During the past five years, operating revenues grew at a compound rate of 1.5% and operating expenses grew at a compound rate of 2.1%.

Operating Segments

We have identified ten operating segments and we have one reportable segment based on the following:

- Eight segments are composed of our water and wastewater regulated utility operations in the eight states where we provide these services. These operating segments are aggregated into one reportable segment since each of these operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution and/or wastewater collection methods, and the nature of the regulatory environment. Our single reportable segment is named the Regulated segment.

- Two segments are not quantitatively significant to be reportable and are composed of Aqua Resources and Aqua Infrastructure. These segments are included as a component of "Other," in addition to corporate costs that have not been allocated to the Regulated segment and intersegment eliminations. Corporate costs include general and administrative expenses, and interest expense.

The following table provides the Regulated segment and consolidated information for the years ended December 31, 2017, 2016, and 2015:

	2017			2016		
	Regulated	Other and Eliminations	Consolidated	Regulated	Other and Eliminations	Consolidated
Operating revenues	$ 804,905	$ 4,620	$ 809,525	$ 800,107	$ 19,768	$ 819,875
Operations and maintenance expense	286,962	244	287,206	285,347	19,550	304,897
Taxes other than income taxes	54,524	2,104	56,628	53,916	2,469	56,385
Earnings (loss) before interest, taxes, depreciation and amortization	$ 463,419	$ 2,272	465,691	$ 460,844	$ (2,251)	458,593
Depreciation and amortization			136,724			133,008
Operating income			328,967			325,585
Other expense (income):						
Interest expense, net			88,341			80,594
Allowance for funds used during construction			(15,211)			(8,815)
Gain on sale of other assets			(484)			(378)
Equity income in joint venture			(331)			(976)
Provision for income taxes			16,914			20,978
Net income			$ 239,738			$ 234,182

	2015		
	Regulated	Other and Eliminations	Consolidated
Operating revenues	$ 779,613	$ 34,591	$ 814,204
Operations and maintenance expense	282,866	26,444	309,310
Taxes other than income taxes	52,361	2,696	55,057
Earnings before interest, taxes, depreciation and amortization	$ 444,386	$ 5,451	449,837
Depreciation and amortization			128,737
Operating income			321,100
Other expense (income):			
Interest expense, net			76,536
Allowance for funds used during construction			(6,219)
Gain on sale of other assets			(468)
Gain on extinguishment of debt			(678)
Equity loss in joint venture			35,177
Provision for income taxes			14,962
Net income			$ 201,790

Consolidated Results

Operating Revenues – Operating revenues totaled $809,525 in 2017, $819,875 in 2016, and $814,204 in 2015. Our Regulated segment's revenues totaled $804,905 in 2017, $800,107 in 2016, and $779,613 in 2015. The growth in our Regulated segment's revenues over the past three years is a result of increases in our water and wastewater rates and our customer base. Rate increases implemented during the past three years have provided additional operating revenues of $6,143 in 2017, $4,319 in 2016, and $8,503 in 2015. Negatively impacting revenues in 2017 was a decrease in customer water consumption primarily due to unfavorable weather conditions during the year. The number of customers increased at an annual compound rate of 1.4% over the past three years due to acquisitions and organic growth, adjusted to exclude customers associated with utility system dispositions. Acquisitions in our Regulated segment have provided additional water and wastewater revenues of $1,695 in 2017, $8,201 in 2016, and $8,900, in 2015.

On June 7, 2012, Aqua Pennsylvania reached a settlement agreement in its last rate filing with the Pennsylvania Public Utility Commission, which in addition to a water rate increase, provided for a reduction in current income tax expense as a result of the recognition of qualifying income tax benefits upon Aqua Pennsylvania changing its tax accounting method to permit the expensing of qualifying utility asset improvement costs that historically had been capitalized and depreciated for book and tax purposes. In December 2012, Aqua Pennsylvania implemented this change which provides for the flow-through of income tax benefits that resulted in a substantial reduction in income tax expense and greater net income and cash flow. As a result, Aqua Pennsylvania was able to suspend its water Distribution System Improvement Charges from January 1, 2013 to September 30, 2017, when it resumed the use of a water Distribution System Improvement Charge on October 1, 2017. Aqua Pennsylvania was able to lengthen the amount of time until its next base rate case, which is expected to be filed in 2018. During 2017, 2016, and 2015, the income tax accounting change resulted in income tax benefits of $84,766, $78,530, and $72,944 that reduced the Company's current income tax expense and increased net income. The Company recognized a tax deduction on its 2012 Federal tax return of $380,000 for qualifying capital expenditures made prior to 2012. Based on the settlement agreement, beginning in 2013, the Company began to amortize 1/10th of these expenditures, or $38,000 annually, which reduced income tax expense and increased the Company's net income by $16,734, which is included in the income tax benefits noted previously. In accordance with the settlement agreement, this amortization is expected to reduce income tax expense during periods when qualifying parameters are met.

Our operating subsidiaries received rate increases representing estimated annualized revenues of $7,558 in 2017 resulting from five base rate decisions, $3,434 in 2016 resulting from six rate decisions, and $3,347 in 2015 resulting from four rate decisions. Revenues from these increases realized in the year of grant were $6,343 in 2017, $1,788 in 2016, and $2,887 in 2015. As of December 31, 2017, our operating subsidiaries have filed two rate requests, which are being reviewed by the state utility commissions, proposing an aggregate increase of $13,888 in annual revenues. During 2018, we intend to file five additional rate requests proposing an aggregate of approximately $80,000 of increased annual revenues; the timing and extent to which our rate increase requests may be granted will vary by state. Our planned rate filings for 2018 are subject to the issuance of procedural orders directing how the Federal tax law changes are to be reflected in our utility customer rates.

Currently, Pennsylvania, Illinois, Ohio, Indiana, New Jersey, and North Carolina allow for the use of a surcharge for replacing and rehabilitating infrastructure systems. The rate increases under this surcharge typically adjust periodically based on additional qualified capital expenditures completed or anticipated in a future period. This surcharge is capped as a percentage of base rates, generally at 5% to 12.75% of base rates, and is reset to zero when new base rates that reflect the costs of those additions become effective or when a utility's earnings exceed a regulatory benchmark. These surcharges provided revenues of $10,255 in 2017, $7,379 in 2016, and $3,261 in 2015.

Our Regulated segment also includes operating revenues of $9,903 in 2017, $10,357 in 2016, and $10,746 in 2015 associated with contract operations that are integrated into the regulated utility business and operations. These amounts vary over time according to the level of activity associated with the utility contract operations.

In addition to the Regulated segment operating revenues, we recognized market-based revenues that are associated with Aqua Resources and Aqua Infrastructure of $4,798 in 2017, $20,091 in 2016, and $34,909 in 2015. The decrease in revenues in 2017 and 2016 is due to the disposition of business units within Aqua Resources.

Operations and Maintenance Expenses – Operations and maintenance expenses totaled $287,206 in 2017, $304,897 in 2016, and $309,310 in 2015. Most elements of operating costs are subject to the effects of inflation and changes in the number of customers served. Several elements are subject to the effects of changes in water consumption, weather, and the degree of water treatment required due to variations in the quality of the raw water. The principal elements of operating costs are labor and employee benefits, electricity, chemicals, transportation, maintenance expenses, insurance and claims costs, and costs to comply with environmental regulations. Electricity and chemical expenses vary in relationship to water consumption, raw water quality, and price changes. Maintenance expenses are sensitive to extremely cold weather, which can cause water mains to rupture, resulting in additional costs to repair the affected main.

Operations and maintenance expenses decreased in 2017, as compared to 2016, by $17,691 or 5.8%, primarily due to:

- decreases in market-based activities expenses of $15,933 due to the disposition of business units within Aqua Resources;
- a decrease in water production costs of $6,301 primarily due to a reduction in purchased water expense of $4,794 due to replacing a purchased water supply with the Company's own water supply source;
- a decrease in the Company's self-insured employee medical benefit program expense of $4,838;
- offset by $4,102 for the timing of expenses incurred for the maintenance of our utility systems and the purchase of supplies, as well as other increases in operations and maintenance expenses.

Operations and maintenance expenses decreased in 2016 as compared to 2015 by $4,413 or 1.4%, primarily due to:

- decreases in market-based activities expenses of $10,393 due to the disposition of business units within Aqua Resources;
- a decrease in water production costs of $3,156;
- the effects of the recognition in 2015 of:
  - leadership transition expenses of $2,510,
  - the recording of a reserve of $1,862 for water rights held for future use, and
  - the recording of a legal contingency reserve of $1,580;
- the reversal of a reserve for a legal contingency of $1,580;
- offset by an increase in postretirement benefits of $5,554; and
- additional operating costs associated with acquisitions of $4,538, as well as other increases in operations and maintenance expenses.

Depreciation and Amortization Expenses – Depreciation expense was $136,302 in 2017, $130,987 in 2016, and $125,290 in 2015, and has increased principally as a result of the significant capital expenditures made to expand and improve our utility facilities, and our acquisitions of new utility systems.

Amortization expense was $422 in 2017, $2,021 in 2016, and $3,447 in 2015, and has decreased primarily due to the completion of the recovery of our costs associated with various rate filings. Expenses associated with filing rate cases are deferred and amortized over periods that generally range from one to three years.

Taxes Other than Income Taxes – Taxes other than income taxes totaled $56,628 in 2017, $56,385 in 2016, and $55,057 in 2015. The increase in 2017 was primarily due to an increase in gross receipts, excise and franchise taxes of $949, and an increase in taxes assessed resulting from the pumping of ground water in Texas of $486 due to higher water production volume and rates, offset by a $978 decrease in property taxes primarily due to a favorable ruling on a property tax appeal in Ohio. The increase in 2016 was primarily due to an increase of $578 for pumping fees in Texas due to higher water production, a rate increase, and the addition of two water systems, and an increase in gross receipts, excise and franchise taxes of $502.

Interest Expense, net – Net interest expense was $88,341 in 2017, $80,594 in 2016, and $76,536 in 2015. Interest income of $202 in 2017, $217 in 2016, and $272 in 2015 was netted against interest expense. Net interest expense increased in 2017 due to an increase in average borrowings of $157,768 and an increase in short-term and long-term interest rates. Net interest expense increased in 2016 due to an increase in average short-term borrowings of $9,808 at higher short-term interest rates and an increase in average outstanding fixed rate long-term debt of $98,006 partially offset by a decline in long-term interest rates. Interest income decreased in 2017 due to lower investment rates. The weighted average cost of fixed rate long-term debt was 4.35% at December 31, 2017, 4.26% at December 31, 2016, and 4.57% at December 31, 2015. The weighted average cost of fixed and variable rate long-term debt was 4.29% at December 31, 2017, 4.23% at December 31, 2016, and 4.44% at December 31, 2015.

Allowance for Funds Used During Construction – The allowance for funds used during construction ("AFUDC") was $15,211 in 2017, $8,815 in 2016, and $6,219 in 2015, and varies as a result of changes in the average balance of utility plant construction work in progress, to which AFUDC is applied, changes in the AFUDC rate which is based predominantly on short-term interest rates, changes in the balance of short-debt, and changes in the amount of AFUDC related to equity. The increase in 2017 and 2016 is primarily due to an increase in the AFUDC rate as a result of an increase in the amount of AFUDC related to equity and in 2017 and 2016, and an increase in the average balance of utility plant construction work in progress, to which AFUDC is applied. The amount of AFUDC related to equity was $11,633 in 2017, $6,561 in 2016, and $4,621 in 2015.

Gain on Sale of Other Assets – Gain on sale of other assets totaled $484 in 2017, $378 in 2016, and $468 in 2015, and consists of the sales of property, plant and equipment and marketable securities.

Gain on Extinguishment of Debt – The gain on extinguishment of debt of $678 in 2015 results from the recognition of the unamortized issuance premium for the early redemption of $95,985 of tax-exempt bonds at 5.00% that were originally maturing between 2035 and 2038.

Equity (Earnings) Loss in Joint Venture – Equity (earnings) loss in joint venture totaled $(331) in 2017, $(976) in 2016, and $35,177 in 2015. The equity earnings in 2017 primarily resulted from the sale of raw water to firms in the natural gas drilling industry. The equity earnings in 2016 resulted from the recognition of a connection fee earned by the joint venture in 2016 for which our share was $1,831 and a reduction in depreciation expense resulting from the noncash impairment charge recognized by the joint venture on its long-lived assets in 2015. In 2015, a noncash impairment charge was recognized by the joint venture on its long-lived assets for which our share was $32,975. The impairment charge was recognized in 2015 as a result of a determination that the long-lived assets, primarily consisting of a pipeline and pump station, had become impaired due to a marked decline in natural gas prices in 2015, a distinguishable reduction in the volume of water sales by the joint venture which led to a lowered forecast in 2015 on future water sales volumes by the joint venture, as well as changes in the natural gas industry and market conditions. At the time of the impairment, these market conditions were largely associated with natural gas prices, which sharply declined in 2015 and this downturn no longer appeared to be temporary and instead was expected to be a long-term condition.

Income Taxes – Our effective income tax rate was 6.6% in 2017, 8.2% in 2016, and 6.9% in 2015. The effective income tax rate for 2017, 2016, and 2015 was affected by the 2012 income tax accounting change for qualifying utility asset improvements at Aqua Pennsylvania which resulted in a $84,766, $78,530, and $72,944 net reduction to the Company's 2017, 2016, and 2015 Federal and state income tax expense, respectively. As of December 31, 2017, the Company has an unrecognized tax benefit related to the Company's change in its tax accounting method for qualifying utility asset improvement costs, of which up to $24,243 of these tax benefits would further reduce the Company's effective income tax rate in the event the Company does sustain all, or a portion, of its tax position in the period this information is determined. Offsetting this reduction was the effect of the revaluation of our deferred income tax assets and liabilities, triggered by the TCJA, which resulted in the recognition of additional income tax expense of $3,141 to the extent revalued deferred income taxes are not believed to be recoverable in utility customer rates.

Summary –

	Years ended December 31,		
	2017	2016	2015
Operating income	$ 328,967	$ 325,585	$ 321,100
Net income	239,738	234,182	201,790
Diluted net income per share	1.35	1.32	1.14

The changes in diluted net income per share in 2017 and 2016 over the previous years were due to the aforementioned changes.

Although we have experienced increased income in the recent past, continued adequate rate increases reflecting increased operating costs and new capital investments, are important to the future realization of improved profitability.

Fourth Quarter Results – The following table provides our fourth quarter results:

	Three Months Ended December 31,	
	2017	2016
Operating revenues	$ 203,312	$ 196,799
Operations and maintenance	79,243	77,550
Depreciation	34,794	33,342
Amortization	64	654
Taxes other than income taxes	12,238	13,291
	126,339	124,837
Operating income	76,973	71,962
Other expense (income):		
Interest expense, net	23,217	20,458
Allowance for funds used during construction	(4,641)	(2,369)
(Gain) loss on sale of other assets	(162)	12
Equity loss in joint venture	71	167
Income before income taxes	58,488	53,694
Provision for income taxes	5,015	4,045
Net income	$ 53,473	$ 49,649

The increase in operating revenues of $6,513 was primarily due to an increase in water and wastewater rates and infrastructure rehabilitation surcharges of $4,247, an increase in customer water consumption, and additional revenues of $438 associated with a larger customer base due to utility acquisitions, offset by a decrease in market-based activities revenue of $2,323 due to dispositions.

The increase in operations and maintenance expense of $1,693 is due primarily to $3,490 associated with the timing of expenses incurred for the maintenance of our utility systems and the purchase of supplies, an increase in postretirement benefits expense of $1,249, offset by a decrease in market-based activities expenses of $2,952, and a decrease in water production costs of $1,842 due to replacing a purchased water supply with the Company's own water supply source.

Depreciation expense increased by $1,452 primarily due to the utility plant placed in service since December 31, 2016.

The decrease in other taxes of $1,053 is primarily due to a decrease in property taxes of $1,466 due to a favorable property tax appeal in Ohio, offset by an increase in capital stock taxes of $199 due to the effect of a reversal of a reserve from the prior year, and an increase in taxes assessed resulting from the pumping of ground water in Texas of $166 due to higher water production volume and rates.

Interest expense increased by $2,759 due to an increase in the average outstanding debt balance.

AFUDC increased by $2,272 due to an increase in the average balance of utility plant construction work in progress, to which AFUDC is applied, and an increase in the AFUDC rate as a result of an increase in the amount of AFUDC related to equity.

The provision for income taxes increased by $970 primarily as a result of the revaluation of our deferred income tax assets and liabilities, triggered by the TCJA, which resulted in the recognition of additional income tax expense of $3,141 to the extent revalued deferred income taxes are not believed to be recoverable in utility customer rates, offset by the effect of additional tax deductions recognized in the fourth quarter of 2017 for certain qualifying infrastructure improvements for Aqua Pennsylvania.

LIQUIDITY AND CAPITAL RESOURCES

Consolidated Cash Flow and Capital Expenditures

Net operating cash flows from continuing operations, dividends paid on common stock, capital expenditures used in continuing operations, including allowances for funds used during construction, and expenditures for acquiring water and wastewater systems for our continuing operations for the five years ended December 31, 2017 were as follows:

	Net Operating Cash Flows	Dividends	Capital Expenditures	Acquisitions
2013	$ 365,803	$ 102,889	$ 307,908	$ 14,997
2014	364,888	112,106	328,605	14,616
2015	370,794	121,248	364,689	28,989
2016	396,163	130,923	382,996	9,423
2017	381,318	140,660	478,089	5,860
	$ 1,878,966	$ 607,826	$ 1,862,287	$ 73,885

Included in capital expenditures for the five-year period are: expenditures for the rehabilitation of existing water and wastewater systems, the expansion of our water and wastewater systems, modernization and replacement of existing treatment facilities, water meters, office facilities, information technology, vehicles, and equipment. During this five-year period, we received $31,657 of customer advances and contributions in aid of construction to finance new water mains and related facilities that are not included in the capital expenditures presented in the above table. In addition, during this period, we have made repayments of debt of $978,762, and have refunded $22,607 of customers' advances for construction. Dividends increased during the past five years as a result of annual increases in the dividends declared and paid and increases in the number of shares outstanding.

Our planned 2018 capital program, exclusive of the costs of new mains financed by advances and contributions in aid of construction, is estimated to be approximately $500,000 in infrastructure improvements for the communities we serve. The 2018 capital program is expected to include $213,200 for infrastructure rehabilitation surcharge qualified projects. On January 1, 2013, Aqua Pennsylvania reset its water infrastructure rehabilitation surcharge to zero resulting from the change in its tax method of accounting for qualifying utility asset improvements as described below. Although we were not eligible to use an infrastructure rehabilitation surcharge with our Aqua Pennsylvania water customers from January 1, 2013 to September 30, 2017, we were able to use the income tax savings derived from the qualifying utility asset improvements to maintain Aqua Pennsylvania's capital investment program. Our planned 2018 capital program in Pennsylvania is estimated to be approximately $337,000, a portion of which is expected to be eligible as a deduction for qualifying utility asset improvements for Federal income tax purposes. Our overall 2018 capital program, along with $113,769 of debt repayments and $160,973 of other contractual cash obligations, as reported in the section captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations – *Contractual Obligations*", has been, or is expected to be, financed through internally-generated funds, our revolving credit facilities, and the issuance of long-term debt.

Future utility construction in the period 2019 through 2020, including recurring programs, such as the ongoing replacement or rehabilitation of water meters and water mains, water treatment plant upgrades, storage facility renovations, and additional transmission mains to meet customer demands, exclusive of the costs of new mains financed by advances and contributions in aid of construction, is estimated to require aggregate expenditures of approximately $875,000. We anticipate that approximately one-half of these expenditures will require external financing. We expect to refinance $189,025 of long-term debt during this period as they become due with new issues of long-term debt, internally-generated funds, and our revolving credit facilities. The estimates discussed above do not include any amounts for possible future acquisitions of water and wastewater systems or the financing necessary to support them.

Our primary sources of liquidity are cash flows from operations (including the allowed deferral of Federal income tax payments), borrowings under various short-term lines of credit and other credit facilities, and customer advances and contributions in aid of construction. Our cash flow from operations, or internally-generated funds, is impacted by the timing of rate relief, water consumption, and changes in Federal tax laws with respect to the reduction in the corporate income tax rate, and accelerated tax depreciation or deductions for utility construction projects. We fund our capital and typical acquisitions through internally-generated funds, supplemented by short-term lines of credit. Over time, we partially repay or pay-down our short-term lines of credit with long-term debt. The ability to finance our future construction programs, as well as our acquisition activities, depends on our ability to attract the necessary external financing and maintain internally-generated funds. Timely rate orders permitting compensatory rates of return on invested capital will be required by our operating subsidiaries to achieve an adequate level of earnings and cash flow to enable them to secure the capital they will need to operate and to maintain satisfactory debt coverage ratios.

On June 7, 2012, Aqua Pennsylvania reached a settlement agreement in its rate filing with the Pennsylvania Public Utility Commission, which in addition to a water rate increase, provided for a reduction in current income tax expense as a result of the recognition of qualifying income tax benefits upon Aqua Pennsylvania changing its tax accounting method to permit the expensing of qualifying utility asset improvement costs that have historically been capitalized and depreciated for book and tax purposes. In December 2012, Aqua Pennsylvania implemented this change, which resulted in a substantial reduction in income tax expense and greater net income and cash flow, and as a result allowed Aqua Pennsylvania to suspend its water Distribution System Improvement Charges from January 1, 2013 to September 30, 2017, and lengthen the amount of time until the next Aqua Pennsylvania rate case, which is expected to be filed in 2018. As a result of the Pennsylvania rate order, income tax benefits reduced the Company's current income tax expense and increased net income by $84,766 in 2017, $78,530 in 2016, and $72,944 in 2015. The Company recognized a tax deduction on its 2012 Federal tax return of $380,000 for qualifying capital expenditures made prior to 2012, and based on the settlement agreement, beginning in 2013, the Company began to amortize 1/10th of these expenditures or $38,000 annually, which reduced income tax expense and increased the Company's net income by $16,734. In accordance with the settlement agreement, this amortization is expected to reduce income tax expense during periods when qualifying parameters are met.

Acquisitions

As part of the Company's growth-through-acquisition strategy, the Company has entered into purchase agreements to acquire the water or wastewater utility system assets of six municipalities for a total combined purchase price in cash of $150,700. The purchase price for these pending acquisitions is subject to certain adjustments at closing, and the pending acquisitions are subject to regulatory approvals, including the final determination of the fair value of the rate base acquired. Closings for these acquisitions are expected to occur by the end of 2018, which is subject to the timing of the regulatory approval process. These acquisitions are expected to add approximately 16,325 customers in two of the states in which the Company operates.

During the past five years, we have expended cash of $73,885 and issued 439,943 shares of common stock, valued at $12,845 at the time of acquisition, related to the acquisition of utility systems, both water and wastewater utilities, as well as investments in supplying raw water to the natural gas drilling industry.

In 2017, we completed four acquisitions of water and wastewater utility systems for $5,860 in cash in two of the states in which we operate, adding 1,003 customers.

In January 2016, we acquired the water and wastewater utility system assets of Superior Water Company, Inc., which provided public water service to 4,108 customers in portions of Berks, Chester, and Montgomery counties in

Pennsylvania. The total purchase price for the utility system was $16,750, which consisted of the issuance of 439,943 shares of the Company's common stock and $3,905 in cash. Additionally, during 2016, we completed 18 acquisitions of water and wastewater utility systems for $5,518 in cash in eight of the states in which we operate, adding 2,469 customers.

In April 2015, we acquired the water and wastewater utility system assets of North Maine Utilities, located in the Village of Glenview, Illinois serving 7,409 customers. The total purchase price consisted of $23,079 in cash. Additionally, during 2015, we completed 14 acquisitions of water and wastewater utility systems for $5,210 in cash in six of the states in which we operate, adding 3,170 customers.

During 2014, we completed 16 acquisitions of water and wastewater utility systems for $10,530 in cash in seven of the states in which we operate, adding 6,148 customers. Further, in 2014, we acquired two market-based businesses that specialized in inspecting, cleaning and repairing storm and sanitary sewer lines, as well as providing water distribution system services and training to waterworks operators. The total purchase price in aggregate was $4,810 and both these businesses were subsequently sold in November 2016 and January 2017.

During 2013, we completed 15 acquisitions of water and wastewater utility systems for $14,997 in cash in four of the states in which we operate, adding 5,991 customers.

We continue to pursue the acquisition of water and wastewater utility systems, and explore other utility acquisitions that may be in a new state. Our typical acquisitions are expected to be financed with short-term debt with subsequent repayment from the proceeds of long-term debt, retained earnings, or equity issuances.

Joint Venture
In September 2011, one of our subsidiaries entered into a joint venture with a firm that operates natural gas pipelines and processing plants for the construction and operation of a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale in north-central Pennsylvania (the "Joint Venture"). We own 49% of the Joint Venture. The 56 mile pipeline construction and permitted intake on the Susquehanna River cost $109,000. As of December 31, 2017, our capital contributions since inception totaled $53,643 in cash. This investment has been financed through the issuance of long-term debt. Our 49% investment in the Joint Venture is an unconsolidated affiliate and is accounted for under the equity method of accounting. Our initial investment is carried at cost. Subsequently, the carrying amount of our investment is adjusted to reflect capital contributions or distributions, our equity in earnings and losses since the commencement of the system's operations, and a decline in the fair value of our investment. In 2015, an impairment charge was recognized by the joint venture on its long-lived assets, of which the Company's share totaled $32,975 ($21,433 after-tax), representing our share of the noncash impairment charge as further described in Note 1 – *Summary of Significant Accounting Policies – Investment in Joint Venture* in this Annual Report.

Dispositions
We routinely review and evaluate areas of our business and operating divisions and, over time, may sell utility systems or portions of systems. In 2017, the Company sold two business units within Aqua Resources, which resulted in total proceeds of $867, and recognized a net loss of $324. In 2016, the Company sold two business units within Aqua Resources, which resulted in total proceeds of $4,459, and recognized a net loss of $543.

In December 2014, we completed the sale of our water utility system in southwest Allen County Indiana to the City of Fort Wayne, Indiana for $67,011, which is comprised of $50,100 in addition to $16,911 the city initially paid the Company towards its water and wastewater system assets in the northern part of Fort Wayne in 2008. We recognized a gain on sale of $29,210 ($17,611 after-tax) in the fourth quarter of 2014. In addition, as a result of this transaction, Aqua Indiana expanded its sewer customer base by accepting new wastewater flows from the City. Additionally, in March, 2014, we completed the sale of our wastewater treatment facility in Georgia.

In 2013, in accordance with our strategy to focus our resources on states where we have critical mass to improve our economies of scale and expect future economic growth, we sold water and wastewater systems in Florida, through five separate sales transactions. The Company received total net proceeds from these sales of $88,934, and recognized a gain on sale of $21,178 ($13,766 after-tax).

Additionally, in June 2013, the Company sold a water and wastewater utility system in Texas for net proceeds of $3,400. The sale resulted in the recognition of a gain on sale of these assets, net of expenses, of $1,025 ($615 after-tax).

Despite these transactions, one of our primary strategies continues to be to acquire additional utility systems, to maintain our existing systems where there is a strategic business benefit, and to actively oppose unilateral efforts by municipal governments to acquire any of our operations.

Sources of Capital

Since net operating cash flow plus advances and contributions in aid of construction have not been sufficient to fully fund cash requirements, we issued $1,670,223 of long-term debt and obtained other short-term borrowings during the past five years. At December 31, 2017, we have a $250,000 long-term revolving credit facility that expires in February 2021, of which $19,811 was designated for letter of credit usage, $170,189 was available for borrowing, and $60,000 of borrowings were outstanding at December 31, 2017. In addition, we have short-term lines of credit of $135,500, of which $131,850 was available as of December 31, 2017. These short-term lines of credit are subject to renewal on an annual basis. Although we believe we will be able to renew these facilities, there is no assurance that they will be renewed, or what the terms of any such renewal will be.

Our consolidated balance sheet historically has had a negative working capital position, whereby routinely our current liabilities exceed our current assets. Management believes that internally-generated funds along with existing credit facilities and the proceeds from the issuance of long-term debt will be adequate to provide sufficient working capital to maintain normal operations and to meet our financing requirements for at least the next twelve months.

Our loan and debt agreements require us to comply with certain financial covenants, which among other things, subject to specific exceptions, limit the Company's ratio of consolidated total indebtedness to consolidated total capitalization, and require a minimum level of earnings coverage over interest expense. During 2017, we were in compliance with our debt covenants under our credit facilities. Failure to comply with our debt covenants could result in an event of default, which could result in us being required to repay or refinance our borrowings before their due date, possibly limiting our future borrowings, and increasing our borrowing costs.

The Company has a universal shelf registration statement, which was filed with the SEC in February 2015, which allows for the potential future offer and sale by us, from time to time, in one or more public offerings, of an indeterminate amount of our common stock, preferred stock, debt securities, and other securities specified therein at indeterminate prices. The Company's Board of Directors has authorized the Company to issue up to $500,000 of our common stock, preferred stock, debt securities, and other securities specified therein under this universal shelf registration statement. The Company has not issued any securities to date under this universal shelf registration statement. This registration statement expires in February 2018, and we intend to file a new three-year universal shelf registration statement.

In addition, we have a shelf registration statement, which was filed with the SEC on February 27, 2015, to permit the offering from time to time of an aggregate of $500,000 of our common stock and shares of preferred stock in connection with acquisitions. During 2016, we issued 439,943 shares of common stock totaling $12,845 to acquire a water system. The balance remaining available for use under the acquisition shelf registration as of December 31, 2017 is $487,155.

We will determine the form and terms of any securities issued under the universal shelf registration statement and the acquisition shelf registration statement at the time of issuance.

We offer a Dividend Reinvestment and Direct Stock Purchase Plan (the "Plan") that provides a convenient and economical way to purchase shares of the Company. Under the direct stock purchase portion of the Plan, shares are issued throughout the year. The dividend reinvestment portion of the Plan offers a five percent discount on the purchase of shares of common stock with reinvested dividends. As of the December 2017 dividend payment, holders of 9.9% of the common shares outstanding participated in the dividend reinvestment portion of the Plan. The shares issued under the Plan are either original issue shares or shares purchased by the Company's transfer agent in the open-market. During the past five years, we have sold 551,788 original issue shares of common stock for net proceeds of $13,625 through the dividend reinvestment portion of the Plan, and we used the proceeds to invest in our operating subsidiaries, to repay short-term debt, and for general corporate purposes. In 2017, 2016, and 2015, 447,753, 484,645, and 535,439 shares of common stock were purchased under the dividend reinvestment portion of the Plan by the Company's transfer agent in the open-market for $15,168, $14,916, and $14,380, respectively.

The Company's Board of Directors has authorized us to repurchase our common stock, from time to time, in the open market or through privately negotiated transactions. In 2014, we repurchased 560,000 shares of our common stock in the open market for $13,280. In December 2014, the Company's Board of Directors authorized a share buyback program of up to 1,000,000 shares to minimize share dilution through timely and orderly share repurchases. In December 2015, the Company's Board of Directors added 400,000 shares to this program. In 2015, we repurchased 805,000 shares of our common stock in the open market for $20,502. In 2016, we did not repurchase any shares of our common stock in the open market under this program. This program expired on December 31, 2016.

Off-Balance Sheet Financing Arrangements

We do not engage in any off-balance sheet financing arrangements. We do not have any interest in entities referred to as variable interest entities, which includes special purpose entities and other structured finance entities.

Contractual Obligations
The following table summarizes our contractual cash obligations as of December 31, 2017:

		Payments Due By Period			
	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Long-term debt	$ 2,143,127	$ 113,769	$ 189,025	$ 121,966	$ 1,718,367
Interest on fixed-rate, long-term debt (1)	1,366,407	77,497	148,277	131,248	1,009,385
Operating leases (2)	20,080	1,919	2,957	2,148	13,056
Unconditional purchase obligations (3)	31,510	4,853	8,989	8,024	9,644
Other purchase obligations (4)	63,064	63,064	-	-	-
Pension plan obligation (5)	12,484	12,484	-	-	-
Other obligations (6)	11,932	1,156	2,035	2,118	6,623
Total	$ 3,648,604	$ 274,742	$ 351,283	$ 265,504	$ 2,757,075

(1) Represents interest payable on fixed rate, long-term debt. Amounts reported may differ from actual due to future refinancing of debt.

(2) Represents operating leases that are noncancelable, before expiration, for the lease of motor vehicles, buildings, land and other equipment.

(3) Represents our commitment to purchase minimum quantities of water as stipulated in agreements with other water purveyors. We use purchased water to supplement our water supply, particularly during periods of peak customer demand. Our actual purchases may exceed the minimum required levels.

(4) Represents an approximation of the open purchase orders for goods and services purchased in the ordinary course of business.

(5) Represents contributions to be made to pension plan.

(6) Represents expenditures estimated to be required under legal and binding contractual obligations.

In addition to these obligations, we pay refunds on customers' advances for construction over a specific period of time based on operating revenues related to developer-installed water mains or as new customers are connected to and take service from such mains. After all refunds are paid, any remaining balance is transferred to contributions in aid of construction. The refund amounts are not included in the above table because the refund amounts and timing are dependent upon several variables, including new customer connections, customer consumption levels and future rate increases, which cannot be accurately estimated. Portions of these refund amounts are payable annually through 2027 and amounts not paid by the contract expiration dates become non-refundable.

In addition to the obligations disclosed in the contractual obligations table above, we have uncertain tax positions of $17,583. Although we believe our tax positions comply with applicable law, we have made judgments as to the sustainability of each uncertain tax position based on its technical merits. Due to the uncertainty of future cash outflows, if any, associated with our uncertain tax positions, we are unable to make a reasonable estimate of the timing or amounts that may be paid. See Note 7 – *Income Taxes* in this Annual Report for further information on our uncertain tax positions.

We will fund these contractual obligations with cash flows from operations and liquidity sources held by or available to us.

The Company is routinely involved in legal matters, including both asserted and unasserted legal claims, during the ordinary course of business. See Note 9 – *Commitments and Contingencies* in this Annual Report for a discussion of the Company's legal matters. It is not always possible for management to make a meaningful estimate of the potential loss or range of loss associated with such litigation. Also, unanticipated changes in circumstances and/or revisions to the assessed probability of the outcomes of legal matters could result in expenses being incurred in future periods as well as an increase in actual cash required to resolve the legal matter.

Capitalization
The following table summarizes our capitalization during the past five years:

December 31,	2017	2016	2015	2014	2013
Long-term debt (1)	52.3%	50.8%	50.8%	49.4%	50.3%
Aqua America stockholders' equity	47.7%	49.2%	49.2%	50.6%	49.7%
	100.0%	100.0%	100.0%	100.0%	100.0%

(1) Includes current portion, as well as our borrowings under a variable rate revolving credit agreement of $60,000 at December 31, 2017, $25,000 at December 31, 2016, $60,000 at December 31, 2015, $72,000 at December 31, 2014, and $0 at December 31, 2013.

Over the past five years, the changes in the capitalization ratios primarily resulted from the issuance of debt to finance our acquisitions and capital program, growth in net income, the issuance of common stock, and the declaration of dividends.

INCOME TAX MATTERS

Tax Cuts and Jobs Act of 2017
On December 22, 2017, President Trump signed the TCJA into law. Substantially all of the provisions of the TCJA are effective for tax years beginning after December 31, 2017, except as noted below. The TCJA includes significant changes to the Code and the taxation of business entities, and includes specific provisions related to regulated public utilities. Significant changes include a reduction in the corporate federal income tax rate from 35% to 21%, and a limitation on the utilization of NOLs arising after December 31, 2017 to 80% of taxable income with an indefinite carryforward. The specific provisions related to regulated public utilities in the TCJA generally allow for the continued deductibility of interest expense, the elimination of full expensing for tax purposes of certain property acquired after September 27, 2017 and the continuation of certain rate normalization requirements for accelerated depreciation benefits. Our market-based companies still qualify for 100% deductibility of qualifying property acquired after September 27, 2017.

The Company's regulated operations accounting for income taxes are impacted by the FASB's accounting guidance for regulated operations. Reductions in accumulated deferred income tax balances due to the reduction in the corporate income tax rates to 21% under the provisions of the TCJA results in amounts previously collected from utility customers for these deferred taxes to be refundable to such customers, generally through reductions in future rates. The TCJA includes provisions that stipulate how these excess deferred taxes are to be passed back to customers for certain accelerated tax depreciation benefits. Potential refunds of other deferred taxes will be determined by our state regulators. Our state regulatory commissions have or are in the process of issuing procedural orders directing how the tax law changes are to be reflected in our utility customer rates. In addition, we have two rate cases currently in progress in two states in which TCJA is expected to be addressed in the new base rates. The December 31, 2017 consolidated balance sheet reflects the impact of the TCJA on our regulatory assets and liabilities, which reduced our regulatory assets by $357,262 and increased our regulatory liabilities by $303,320. These adjustments had no impact on our 2017 cash flows.

As of December 31, 2017, resulting from the TCJA enactment, our deferred income tax assets and liabilities were revalued based upon the new corporate income tax rate of 21%. The revaluation of our deferred income tax assets and liabilities resulted in the recognition of additional income tax expense of $3,141 to the extent revalued deferred income taxes are not believed to be recoverable in utility customer rates.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our financial condition and results of operations are impacted by the methods, assumptions, and estimates used in the application of critical accounting policies. The following accounting policies are particularly important to our financial condition or results of operations, and require estimates or other judgments of matters of uncertainty. Changes in the estimates or other judgments included within these accounting policies could result in a significant change to the financial statements. We believe our most critical accounting policies include revenue recognition, the use of regulatory assets and liabilities, the valuation of our long-lived assets (which consist primarily of utility plant in service, regulatory assets, and goodwill) our accounting for post-retirement benefits, and our accounting for income taxes. We have discussed the selection and development of our critical accounting policies and estimates with the Audit Committee of the Board of Directors.

Revenue Recognition — Our utility revenues recognized in an accounting period include amounts billed to customers on a cycle basis and unbilled amounts based on estimated usage from the last billing to the end of the accounting period. The estimated usage is based on our judgment and assumptions; our actual results could differ from these estimates, which would result in operating revenues being adjusted in the period that the revision to our estimates is determined. In Virginia, we commence the billing of our utility customers, under new rates, upon authorization from the respective utility commission and before the final commission rate order is issued. The revenue recognized reflects an estimate based on our judgment of the final outcome of the commission's ruling. We monitor the applicable facts and circumstances regularly, and revise the estimate as required. The revenue billed and collected prior to the final ruling is subject to refund based on the commission's final ruling.

Regulatory Assets and Liabilities — We defer costs and credits on the balance sheet as regulatory assets and liabilities when it is probable that these costs and credits will be recognized in the rate-making process in a period different from when the costs and credits were incurred. These deferred amounts, both assets and liabilities, are then recognized in the income statement in the same period that they are reflected in our rates charged for water or wastewater service. In the event that our assessment as to the probability of the inclusion in the rate-making process is incorrect, the associated regulatory asset or liability would be adjusted to reflect the change in our assessment or change in regulatory approval.

Valuation of Long-Lived Assets, Goodwill and Intangible Assets — We review our long-lived assets for impairment, including utility plant in service and investment in joint venture. We also review regulatory assets for the continued application of the Financial Accounting Standards Board's ("FASB") accounting guidance for regulated operations. Our review determines whether there have been changes in circumstances or events, such as regulatory disallowances, or abandonments, that have occurred that require adjustments to the carrying value of these assets. Adjustments to the carrying value of these assets would be made in instances where their inclusion in the rate-making process is unlikely. For utility plant in service, we would recognize an impairment loss for any amount disallowed by the respective utility commission. For our equity method investment in joint venture, the Company evaluates whether it has experienced a decline in the value of its investment that is other than temporary in nature. We would recognize an impairment loss if the fair value of our investment is less than the carrying amount of the investment, and the decline in value is considered other than temporary. Additionally, the Company would recognize its share of an impairment loss if the joint venture determines that the carrying amount of the joint venture's assets exceeds the sum of the joint venture's undiscounted estimated cash flows.

Our long-lived assets, which consist primarily of utility plant in service, regulatory assets and investment in joint venture, are reviewed for impairment when changes in circumstances or events occur. These circumstances or events could include a decline in the market value or physical condition of a long-lived asset, an adverse change in the manner in which long-lived assets are used or planned to be used, a change in historical trends, operating cash flows associated with the long-lived assets, changes in macroeconomic conditions, industry and market conditions, or overall financial performance. When these circumstances or events occur, we determine whether it is more likely than not that the fair value of those assets is less than their carrying amount. If we determine that it is more likely than not (that is, the likelihood of more than 50 percent), we would recognize an impairment charge if it is determined that the carrying amount of an asset exceeds the sum of the undiscounted estimated cash flows. In this circumstance, we would recognize an impairment charge equal to the difference between the carrying amount and the fair value of the asset. Fair value is estimated to be the present value of future net cash flows associated with the asset, discounted using a discount rate commensurate with the risk and remaining life of the asset. This assessment requires significant management judgment and estimates that are based on budgets, general strategic business plans, historical trends and other data and relevant factors. These estimates include significant inherent uncertainties, since they involve forecasting future events. If changes in circumstances or events occur, or estimates and assumptions that were used in this review are changed, we may be required to record an impairment charge on our long-lived assets.

We have an investment in a joint venture, for which we own 49%, and use the equity method of accounting to account for this joint venture. The joint venture operates a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale in north central Pennsylvania. In the fourth quarter of 2015, the joint venture recognized an impairment charge on its long-lived assets, of which the Company's share totaled $32,975 ($21,433 after-tax), representing our share of the noncash impairment charge. Refer to Note 1 – *Summary of Significant Accounting Policies – Property, Plant and Equipment and Depreciation*, and *Investment in Joint Venture* in this Annual Report for additional information regarding the review of long-lived assets for impairment. See also *Consolidated Results – Equity (Earnings) Loss in Joint Venture* above in this Annual Report.

We test the goodwill attributable for each of our reporting units for impairment at least annually on July 31, or more often, if circumstances indicate a possible impairment may exist. When testing goodwill for impairment, we may assess qualitative factors, including macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, and entity specific events, for some or all of our reporting units to determine whether it's more likely than not that the fair value of a reporting unit is less than its carrying amount. Alternatively, based on our assessment of the qualitative factors previously noted, we may perform a quantitative goodwill impairment test by determining the fair value of a reporting unit based on a discounted cash flow analysis. If we perform a quantitative test and determine that the fair value of a reporting unit is less than its carrying amount, we would record an impairment loss for the amount by which a reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill. The assessment requires significant management judgment and estimates that are based on budgets, general strategic business plans, historical trends and other data and relevant factors. If changes in circumstances or events occur, or estimates and assumptions that were used in our impairment test change, we may be required to record an impairment charge for goodwill. Refer to Note 1 – *Summary of Significant Accounting Policies – Goodwill* in this Annual Report for information regarding the results of our annual impairment test.

Accounting for Post-Retirement Benefits — We maintain a qualified and a non-qualified defined benefit pension plan and plans that provide for post-retirement benefits other than pensions. Accounting for pension and other post-retirement benefits requires an extensive use of assumptions about the discount rate, expected return on plan assets, the rate of future compensation increases received by our employees, mortality, turnover and medical costs. Each assumption is reviewed annually with assistance from our actuarial consultant, who provides guidance in establishing the assumptions. The assumptions are selected to represent the average expected experience over time and may differ in any one year from actual experience due to changes in capital markets and the overall economy. These differences will impact the amount of pension and other post-retirement benefits expense that we recognize.

Our discount rate assumption, which is used to calculate the present value of the projected benefit payments of our post-retirement benefits, was determined by selecting a hypothetical portfolio of high quality corporate bonds appropriate to match the projected benefit payments of the plans. The selected bond portfolio was derived from a universe of Aa-graded corporate bonds, all of which were noncallable (or callable with make-whole provisions), and have at least $50,000 in outstanding value. The discount rate was then developed as the rate that equates the market value of the bonds purchased to the discounted value of the projected benefit payments of the plans. A decrease in the discount rate would increase our post-retirement benefits expense and benefit obligation. After reviewing the hypothetical portfolio of bonds, we selected a discount rate of 3.66% for our pension plan and 3.73% for our other post-retirement benefit plans as of December 31, 2017, which represent a 47 and 52 basis-point decrease as compared to the discount rates selected at December 31, 2016, respectively. Our post-retirement benefits expense under these plans is determined using the discount rate as of the beginning of the year, which was 4.13% for our pension plan and 4.25% for our other-postretirement benefit plans for 2017, and will be 3.66% for our pension plan and 3.73% for our other post-retirement benefit plans for 2018.

Our expected return on plan assets is determined by evaluating the asset class return expectations with our advisors as well as actual, long-term, historical results of our asset returns. The Company's market-related value of plan assets is equal to the fair value of the plans' assets as of the last day of its fiscal year, and is a determinant for the expected return on plan assets, which is a component of post-retirement benefits expense. The allocation of our plans' assets impacts our expected return on plan assets. In 2017, we changed the targeted allocation of the plans' assets to reflect 50% to 70% return seeking assets, and 30% to 50% liability hedging assets, which replaced the former targeted allocation of 25% to 75% domestic equities, 0% to 10% international equities, 25% to 50% fixed income, 0% to 5% alternative investments, and 0% to 20% cash and cash equivalents. Our post-retirement benefits expense increases as the expected return on plan assets decreases. We believe that our actual long-term asset allocations on average will approximate our targeted allocations. Our targeted allocations are driven by our investment strategy to earn a reasonable rate of return while maintaining risk at acceptable levels through the diversification of investments across and within various asset categories. For 2017, we used a 7.00% expected return on plan assets assumption which will decrease to 6.75% for 2018.

Funding requirements for qualified defined benefit pension plans are determined by government regulations and not by accounting pronouncements. In accordance with funding rules and our funding policy, during 2018 our pension contribution is expected to be $12,484. Future years' contributions will be subject to economic conditions, plan participant data and the funding rules in effect at such time as the funding calculations are performed, though we expect future changes in the amount of contributions and expense recognized to be generally included in customer rates.

Accounting for Income Taxes — We estimate the amount of income tax payable or refundable for the current year and the deferred income tax liabilities and assets that results from estimating temporary differences resulting from the treatment of specific items, such as depreciation, for tax and financial statement reporting. Generally, these differences result in the recognition of a deferred tax asset or liability on our consolidated balance sheet and require us to make judgments regarding the probability of the ultimate tax impact of the various transactions we enter into. Based on these judgments, we may record tax reserves or adjustments to valuation allowances on deferred tax assets to reflect the expected realization of future tax benefits. Actual income taxes could vary from these estimates and changes in these estimates can increase income tax expense in the period that these changes in estimates occur.

Our determination of what qualifies as a capital cost versus a tax deduction, for qualifying utility asset improvements, as it relates to our income tax accounting method change beginning in 2012, is subject to subsequent adjustment as well as IRS audits, changes in income tax laws, including regulations regarding tax-basis depreciation as it applies to our capital expenditures, or qualifying utility asset improvements, the expiration of a statute of limitations, or other unforeseen matters could impact the tax benefits that have already been recognized. We establish reserves for uncertain tax positions based upon management's judgment as to the sustainability of these positions. These accounting estimates related to the uncertain tax position reserve require judgments to be made as to the sustainability of each uncertain tax position based on its technical merits. We believe our tax positions comply with applicable law and that we have adequately recorded reserves as required. However, to the extent the final tax outcome of these matters is different than our estimates recorded, we would then need to adjust our tax reserves which could result in additional income tax expense or benefits in the period that this information is known.

IMPACT OF RECENT ACCOUNTING PRONOUNCEMENTS

We describe the impact of recent accounting pronouncements in Note 1 – *Summary of Significant Accounting Policies* in this Annual Report.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

We are subject to market risks in the normal course of business, including changes in interest rates and equity prices. The exposure to changes in interest rates is a result of financings through the issuance of fixed rate long-term debt. Such exposure is typically related to financings between utility rate increases, since generally our rate increases include a revenue level to allow recovery of our current cost of capital. Interest rate risk is managed through the use of a combination of long-term debt, which is at fixed interest rates, and short-term debt, which is at floating interest rates. As of December 31, 2017, the debt maturities by period, in thousands of dollars, and the weighted average interest rate for long-term debt are as follows:

	2018	2019	2020	2021	2022	Thereafter	Total	Fair Value
Long-term debt:								
Fixed rate	$ 113,769	$ 144,622	$ 44,403	$ 36,811	$ 25,155	$ 1,718,367	$ 2,083,127	$ 2,202,785
Variable rate	-	-	-	60,000	-	-	60,000	60,000
Total	$ 113,769	$ 144,622	$ 44,403	$ 96,811	$ 25,155	$ 1,718,367	$ 2,143,127	$ 2,262,785
Weighted average interest rate*	4.36%	4.09%	5.06%	3.40%	4.95%	3.66%		

*Weighted average interest rate of 2021 long-term debt maturity is as follows: fixed rate debt of 4.36% and variable rate debt of 2.20%.

From time to time, we make investments in marketable equity securities. As a result, we are exposed to the risk of changes in equity prices for the "available-for-sale" marketable equity securities. As of December 31, 2017, we have assets of, in thousands of dollars, $21,776 that are classified as "available-for-sale" securities to fund our deferred compensation and non-qualified pension plan liabilities. The market risk of the deferred compensation plan assets are borne by the participants in the deferred compensation plan.

Item 8. *Financial Statements and Supplementary Data*

Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Aqua America, Inc.:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets and statements of capitalization of Aqua America Inc. and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of net income, of comprehensive income, of equity and of cash flows for each of the three years in the period ended December 31, 2017, including the related notes and schedule of condensed parent company financial statements for each of the three years in the period ended December 31, 2017 appearing under Item 15 (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Philadelphia, Pennsylvania

February 28, 2018

We have served as the Company's auditor since 2000.

AQUA AMERICA, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In thousands of dollars, except per share amounts)

	December 31, 2017	December 31, 2016
Assets		
Property, plant and equipment, at cost	$ 7,003,993	$ 6,509,117
Less: accumulated depreciation	1,604,133	1,507,502
Net property, plant and equipment	5,399,860	5,001,615
Current assets:		
Cash and cash equivalents	4,204	3,763
Accounts receivable and unbilled revenues, net	98,596	97,394
Inventory, materials and supplies	14,361	12,961
Prepayments and other current assets	12,542	12,804
Assets held for sale	1,543	1,728
Total current assets	131,246	128,650
Regulatory assets	713,971	948,647
Deferred charges and other assets, net	38,485	30,845
Investment in joint venture	6,671	7,026
Goodwill	42,230	42,208
Total assets	$ 6,332,463	$ 6,158,991
Liabilities and Equity		
Aqua America stockholders' equity:		
Common stock at $.50 par value, authorized 300,000,000 shares, issued 180,700,251 and 180,311,345 in 2017 and 2016	$ 90,350	$ 90,155
Capital in excess of par value	807,135	797,513
Retained earnings	1,132,556	1,032,844
Treasury stock, at cost, 2,986,308 and 2,916,969 shares in 2017 and 2016	(73,280)	(71,113)
Accumulated other comprehensive income	860	669
Total stockholders' equity	1,957,621	1,850,068
Long-term debt, excluding current portion	2,029,358	1,759,962
Less: debt issuance costs	21,605	22,357
Long-term debt, excluding current portion, net of debt issuance costs	2,007,753	1,737,605
Commitments and contingencies (See Note 9)		
Current liabilities:		
Current portion of long-term debt	113,769	150,671
Loans payable	3,650	6,535
Accounts payable	59,165	47,256
Book overdraft	21,629	12,616
Accrued interest	21,359	18,367
Accrued taxes	23,764	25,607
Other accrued liabilities	41,152	40,484
Total current liabilities	284,488	301,536
Deferred credits and other liabilities:		
Deferred income taxes and investment tax credits	769,073	1,269,253
Customers' advances for construction	93,186	91,843
Regulatory liabilities	541,910	250,635
Other	107,341	115,583
Total deferred credits and other liabilities	1,511,510	1,727,314
Contributions in aid of construction	571,091	542,468
Total liabilities and equity	$ 6,332,463	$ 6,158,991

See accompanying notes to consolidated financial statements.

AQUA AMERICA, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF NET INCOME
(In thousands of dollars)

	Years ended December 31,		
	2017	2016	2015
Operating revenues	$ 809,525	$ 819,875	$ 814,204
Operating expenses:			
Operations and maintenance	287,206	304,897	309,310
Depreciation	136,302	130,987	125,290
Amortization	422	2,021	3,447
Taxes other than income taxes	56,628	56,385	55,057
Total operating expenses	480,558	494,290	493,104
Operating income	328,967	325,585	321,100
Other expense (income):			
Interest expense, net	88,341	80,594	76,536
Allowance for funds used during construction	(15,211)	(8,815)	(6,219)
Gain on sale of other assets	(484)	(378)	(468)
Gain on extinguishment of debt	-	-	(678)
Equity (earnings) loss in joint venture	(331)	(976)	35,177
Income before income taxes	256,652	255,160	216,752
Provision for income taxes	16,914	20,978	14,962
Net income	$ 239,738	$ 234,182	$ 201,790
Net income per common share:			
Basic	$ 1.35	$ 1.32	$ 1.14
Diluted	$ 1.35	$ 1.32	$ 1.14
Average common shares outstanding during the period:			
Basic	177,612	177,273	176,788
Diluted	178,175	177,846	177,517
Cash dividends declared per common share	$ 0.7920	$ 0.7386	$ 0.6860

See accompanying notes to consolidated financial statements.

AQUA AMERICA, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In thousands of dollars)

	Years ended December 31,		
	2017	2016	2015
Net income	$ 239,738	$ 234,182	$ 201,790
Other comprehensive income, net of tax:			
Unrealized holding gain (loss) on investments, net of tax expense (benefit) of $102, $21, and $(53) for the years ended December 31, 2017, 2016, and 2015, respectively	191	39	(101)
Reclassification of gain on sale of investment to net income, net of tax expense of $30 for the twelve months ended December 31, 2016 (1)	-	(57)	-
Comprehensive income	$ 239,929	$ 234,164	$ 201,689

See accompanying notes to consolidated financial statements.

(1) Amount of pre-tax gain of $87 reclassified from accumulated other comprehensive income to gain on sale of other assets on the consolidated statement of net income for the year ended December 31, 2016.

AQUA AMERICA, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CAPITALIZATION

(In thousands of dollars, except per share amounts)

		December 31, 2017	December 31, 2016
Aqua America stockholders' equity:			
Common stock, $.50 par value		$ 90,350	$ 90,155
Capital in excess of par value		807,135	797,513
Retained earnings		1,132,556	1,032,844
Treasury stock, at cost		(73,280)	(71,113)
Accumulated other comprehensive income		860	669
Total stockholders' equity		1,957,621	1,850,068
Long-term debt of subsidiaries (substantially collateralized by utility plant):			
Interest Rate Range	Maturity Date Range		
0.00% to 0.99%	2023 to 2033	4,196	4,661
1.00% to 1.99%	2019 to 2035	12,914	15,539
2.00% to 2.99%	2019 to 2033	19,254	19,668
3.00% to 3.99%	2019 to 2056	475,232	381,944
4.00% to 4.99%	2020 to 2057	631,599	487,318
5.00% to 5.99%	2019 to 2043	205,578	213,078
6.00% to 6.99%	2018 to 2036	44,000	52,985
7.00% to 7.99%	2022 to 2027	32,335	33,066
8.00% to 8.99%	2021 to 2025	6,092	6,565
9.00% to 9.99%	2018 to 2026	25,700	26,400
10.00% to 10.99%	2018	6,000	6,000
		1,462,900	1,247,224
Notes payable to bank under revolving credit agreement, variable rate, due 2021		60,000	25,000
Unsecured notes payable:			
Bank notes at 1.975% and 2.48% due 2018 and 2019		100,000	100,000
Notes at 3.01% and 3.59% due 2027 and 2041		245,000	245,000
Notes ranging from 4.62% to 4.87%, due 2018 through 2024		122,800	133,600
Notes ranging from 5.20% to 5.95%, due 2018 through 2037		152,427	159,809
Total long-term debt		2,143,127	1,910,633
Current portion of long-term debt		113,769	150,671
Long-term debt, excluding current portion		2,029,358	1,759,962
Less: debt issuance costs		21,605	22,357
Long-term debt, excluding current portion, net of debt issuance costs		2,007,753	1,737,605
Total capitalization		$ 3,965,374	$ 3,587,673

See accompanying notes to consolidated financial statements.

AQUA AMERICA, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY
(In thousands of dollars)

	Common stock	Capital in excess of par value	Retained earnings	Treasury stock	Accumulated Other Comprehensive Income	Noncontrolling Interest	Total
Balance at December 31, 2014	$ 89,296	$ 758,145	$ 849,952	$ (42,838)	$ 788	$ 40	$ 1,655,383
Net income	-	-	201,790	-	-	-	201,790
Other comprehensive loss, net of income tax benefit of $53	-	-	-	-	(101)	-	(101)
Dividends	-	-	(121,248)	-	-	-	(121,248)
Sale of stock (26,295 shares)	13	664	-	-	-	-	677
Repurchase of stock (981,585 shares)	-	-	-	(25,247)	-	-	(25,247)
Equity compensation plan (321,402 shares)	161	(161)	-	-	-	-	-
Exercise of stock options (424,709 shares)	212	7,328	-	-	-	-	7,540
Stock-based compensation	-	5,860	(433)	-	-	-	5,427
Employee stock plan tax benefits	-	2,602	-	-	-	-	2,602
Other	-	(853)	-	-	-	(40)	(893)
Balance at December 31, 2015	89,682	773,585	930,061	(68,085)	687	-	1,725,930
Net income	-	-	234,182	-	-	-	234,182
Other comprehensive loss, net of income tax benefit of $9	-	-	-	-	(18)	-	(18)
Dividends	-	-	(130,923)	-	-	-	(130,923)
Stock issued for acquisition (439,943 shares)	220	12,625	-	-	-	-	12,845
Sale of stock (47,478 shares)	24	1,364	-		-	-	1,388
Repurchase of stock (97,400 shares)	-	-	-	(3,028)	-	-	(3,028)
Equity compensation plan (231,502 shares)	115	(115)	-	-	-	-	-
Exercise of stock options (228,762 shares)	114	4,146	-	-	-	-	4,260
Stock-based compensation	-	5,390	(476)	-	-	-	4,914
Employee stock plan tax benefits	-	1,329	-	-	-	-	1,329
Other	-	(811)	-	-	-	-	(811)
Balance at December 31, 2016	90,155	797,513	1,032,844	(71,113)	669	-	1,850,068
Net income	-	-	239,738	-	-	-	239,738
Other comprehensive income, net of income tax of $102	-	-	-	-	191	-	191
Dividends	-	-	(140,660)	-	-	-	(140,660)
Sale of stock (45,121 shares)	23	1,430	-	-	-	-	1,453
Repurchase of stock (69,339 shares)	-	-	-	(2,167)	-	-	(2,167)
Equity compensation plan (169,258 shares)	85	(85)	-	-	-	-	-
Exercise of stock options (174,527 shares)	87	2,786	-	-	-	-	2,873
Stock-based compensation	-	6,342	(348)	-	-	-	5,994
Cumulative effect of change in accounting principle - windfall tax benefit	-	-	982	-	-	-	982
Other	-	(851)	-	-	-	-	(851)
Balance at December 31, 2017	$ 90,350	$ 807,135	$ 1,132,556	$ (73,280)	$ 860	$ -	$ 1,957,621

See accompanying notes to consolidated financial statements.

AQUA AMERICA, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands of dollars)

	Years ended December 31,		
	2017	2016	2015
Cash flows from operating activities:			
Net income	$ 239,738	$ 234,182	$ 201,790
Adjustments to reconcile net income to net cash flows from operating activities:			
Depreciation and amortization	136,724	133,008	128,737
Deferred income taxes	13,780	17,250	16,506
Provision for doubtful accounts	4,986	5,505	5,765
Stock-based compensation	6,342	5,390	5,860
(Gain) loss on sale of utility system and market-based business unit	774	(744)	-
Gain on sale of other assets	(484)	(378)	(468)
Gain on extinguishment of debt	-	-	(678)
Equity (earnings) loss in joint venture	(331)	(976)	35,177
Net change in receivables, inventory and prepayments	(6,458)	(3,974)	(6,520)
Net change in payables, accrued interest, accrued taxes and other accrued liabilities	(763)	4,756	(3,469)
Pension and other postretirement benefits contributions	(16,240)	(9,505)	(16,184)
Other	3,250	11,649	4,278
Net cash flows from operating activities	381,318	396,163	370,794
Cash flows from investing activities:			
Property, plant and equipment additions, including the debt component of allowance for funds used during construction of $3,578, $2,220, and $1,598	(478,089)	(382,996)	(364,689)
Acquisitions of utility systems and other, net	(5,860)	(9,423)	(28,989)
Release of funds previously restricted for construction activity	-	-	47
Net proceeds from the sale of utility systems and other assets	1,342	7,746	648
Other	2,223	1,464	(1,079)
Net cash flows used in investing activities	(480,384)	(383,209)	(394,062)
Cash flows from financing activities:			
Customers' advances and contributions in aid of construction	7,312	7,263	5,904
Repayments of customers' advances	(6,536)	(3,763)	(3,977)
Net repayments of short-term debt	(2,885)	(10,186)	(1,677)
Proceeds from long-term debt	591,024	503,586	560,544
Repayments of long-term debt	(359,068)	(373,087)	(400,407)
Change in cash overdraft position	9,012	(8,076)	(739)
Proceeds from issuing common stock	1,453	1,388	677
Proceeds from exercised stock options	2,873	4,260	7,540
Share-based compensation windfall tax benefits	-	1,332	1,842
Repurchase of common stock	(2,167)	(3,028)	(25,247)
Dividends paid on common stock	(140,660)	(130,923)	(121,248)
Other	(851)	(1,186)	(853)
Net cash flows (used in) from financing activities	99,507	(12,420)	22,359
Net increase (decrease) in cash and cash equivalents	441	534	(909)
Cash and cash equivalents at beginning of year	3,763	3,229	4,138
Cash and cash equivalents at end of year	$ 4,204	$ 3,763	$ 3,229
Cash paid during the year for:			
Interest, net of amounts capitalized	$ 81,771	$ 72,662	$ 74,724
Income taxes	3,177	2,739	6,902
Non-cash investing activities:			
Property, plant and equipment additions purchased at the period end, but not yet paid	$ 45,385	$ 35,145	$ 25,612
Non-cash customer advances for construction	39,220	26,234	27,992

See accompanying notes to consolidated financial statements.

See Note 2 – *Acquisitions,* Note 10 – *Long-term Debt and Loans Payable*, and Note 14 – *Employee Stock and Incentive Plan* for a description of non-cash activities.

AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(In thousands of dollars, except per share amounts)

Note 1 – *Summary of Significant Accounting Policies*

Nature of Operations – Aqua America, Inc. ("Aqua America," the "Company," "we," "our", or "us") is the holding company for regulated utilities providing water or wastewater services concentrated in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, and Virginia. Our largest operating subsidiary is Aqua Pennsylvania, Inc., which accounted for approximately 52% of our operating revenues and approximately 74% of our net income for 2017. As of December 31, 2017, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of people we serve. Aqua Pennsylvania's service territory is located in the suburban areas north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. The Company's other regulated utility subsidiaries provide similar services in seven other states. In addition, the Company's market-based activities are conducted through Aqua Infrastructure LLC and Aqua Resources, Inc. Aqua Infrastructure provides non-utility raw water supply services for firms in the natural gas drilling industry. Aqua Resources provides water and wastewater services through two operating and maintenance contracts with municipal authorities close to our utility companies' service territory; and offers, through a third party, water and wastewater line repair service and protection solutions to households. In 2017, we completed the sale of business units that are reported within the Company's market-based subsidiary, Aqua Resources, which installed and tested devices that prevent the contamination of potable water and repaired water and wastewater systems, and repaired and performed maintenance on water and wastewater systems. Additionally, during 2016 we completed the sale of business units within Aqua Resources, which were reported as assets held for sale in the Company's consolidated balance sheets, which provided liquid waste hauling and disposal services, and inspection, and cleaning and repair of storm and sanitary wastewater lines.

The Company has identified ten operating segments and has one reportable segment named the Regulated segment. The reportable segment is comprised of eight operating segments for our water and wastewater regulated utility companies which are organized by the states where we provide these services. These operating segments are aggregated into one reportable segment since each of the Company's operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution or wastewater collection methods, and the nature of the regulatory environment. In addition, Aqua Resources and Aqua Infrastructure are not quantitatively significant to be reportable and are included as a component of "Other," in addition to corporate costs that have not been allocated to the Regulated segment and intersegment eliminations.

Regulation – Most of the operating companies that are regulated public utilities are subject to regulation by the utility commissions of the states in which they operate. The respective utility commissions have jurisdiction with respect to rates, service, accounting procedures, issuance of securities, acquisitions and other matters. Some of the operating companies that are regulated public utilities are subject to rate regulation by county or city government. Regulated public utilities follow the Financial Accounting Standards Board's ("FASB") accounting guidance for regulated operations, which provides for the recognition of regulatory assets and liabilities as allowed by regulators for costs or credits that are reflected in current rates or are considered probable of being included in future rates. The regulatory assets or liabilities are then relieved as the cost or credit is reflected in rates.

Use of Estimates in Preparation of Consolidated Financial Statements – The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Basis of Presentation – The consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated. Certain prior period amounts have been reclassified to conform to the current period presentation in the consolidated statements of cash flows:

- pension and other postretirement benefit contributions; and
- as a result of the adoption in 2017 of the FASB's accounting guidance on the classification of certain cash receipts and cash payments, the presentation of debt extinguishment costs (refer to Note 1 – *Summary of Significant Accounting Policies, Recent Accounting Pronouncements)*.

Additionally, certain prior period amounts have been reclassified to conform to the current period presentation:

- in the consolidated balance sheets for the presentation of book overdraft, and
- in Note 17 – *Segment Information* of total assets for Other and Eliminations for the reclassification of regulatory assets previously reflected within Other and Eliminations that are now presented with the Regulated segment.

Recognition of Revenues — Revenues in our Regulated segment principally include amounts billed to customers on a cycle basis and unbilled amounts based on estimated usage from the latest billing to the end of the accounting period. In addition, the Company's market-based subsidiary Aqua Resources recognizes revenues when services are performed and Aqua Infrastructure recognizes revenues when services are performed. The Company's market-based subsidiaries recognized revenues of $4,798 in 2017, $20,091 in 2016, and $34,909 in 2015.

Property, Plant and Equipment and Depreciation — Property, plant and equipment consist primarily of utility plant. The cost of additions includes contracted cost, direct labor and fringe benefits, materials, overheads, and for additions meeting certain criteria, allowance for funds used during construction. Water systems acquired are typically recorded at estimated original cost of utility plant when first devoted to utility service and the applicable depreciation is recorded to accumulated depreciation. The difference between the estimated original cost, less applicable accumulated depreciation, and the purchase price is recorded as goodwill, or as an acquisition adjustment within utility plant as permitted by the applicable regulatory jurisdiction. At December 31, 2017, utility plant includes a net credit acquisition adjustment of $24,550, which is generally being amortized from 2 to 59 years. Amortization of the acquisition adjustments totaled $2,774 in 2017, $2,223 in 2016, and $2,556 in 2015.

Utility expenditures for maintenance and repairs, including major maintenance projects and minor renewals and betterments, are charged to operating expenses when incurred in accordance with the system of accounts prescribed by the utility commissions of the states in which the company operates. The cost of new units of property and betterments are capitalized. Utility expenditures for water main cleaning and relining of pipes are deferred and recorded in net property, plant and equipment in accordance with the FASB's accounting guidance for regulated operations. As of December 31, 2017, $16,430 of these costs have been incurred since the last respective rate proceeding and the Company expects to recover these costs in future rates.

The cost of software upgrades and enhancements are capitalized if they result in added functionality, which enables the software to perform tasks it was previously incapable of performing. Information technology costs associated with major system installations, conversions and improvements, such as software training, data conversion and business process reengineering costs, are deferred as a regulatory asset if the Company expects to recover these costs in future rates. If these costs are not deferred, then these costs are charged to operating expenses when incurred. As of December 31, 2017, $34,775 of these costs have been deferred since the last respective rate proceeding as a regulatory asset, and the deferral is reported as a component of net property, plant and equipment.

When units of utility property are replaced, retired or abandoned, the recorded value thereof is credited to the asset account and such value, together with the net cost of removal, is charged to accumulated depreciation. To the extent the Company anticipates recovery of the cost of removal or other retirement costs through rates after the retirement costs are incurred, a regulatory asset is recorded as those costs are incurred. 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, which are not yet utilized, result in a regulatory liability being reported based on the amounts previously recovered through customer rates.

The straight-line remaining life method is used to compute depreciation on utility plant. Generally, the straight-line method is used with respect to transportation and mechanical equipment, office equipment and laboratory equipment.

Long-lived assets of the Company, which consist primarily of utility plant in service, regulatory assets, and investment in joint venture, are reviewed for impairment when changes in circumstances or events occur. These circumstances or events could include a disallowance of utility plant in service or regulatory assets by the respective utility commission, a decline in the market value or physical condition of a long-lived asset, an adverse change in the manner in which long-lived assets are used or planned to be used, a change in historical trends, operating cash flows associated with the long-lived assets, changes in macroeconomic conditions, industry and market conditions, or overall financial performance. When these circumstances or events occur, the Company determines whether it is more likely than not that the fair value of those assets is less than their carrying amount. If the Company determines that it is more likely than not (that is, the likelihood of more than 50 percent), the Company would recognize an impairment charge if it is determined that the carrying amount of an asset exceeds the sum of the undiscounted estimated cash flows. In this circumstance, the Company would recognize an impairment charge equal to the difference between the carrying amount and the fair value of the asset. Fair value is estimated to be the present value of future net cash flows associated with the asset, discounted using a discount rate commensurate with the risk and remaining life of the asset. There has been no change in circumstances or events that have occurred that require adjustments to the carrying values of the Company's long-lived assets, except for an impairment charge recognized by the joint venture on its long-lived assets in 2015.

Allowance for Funds Used During Construction — The allowance for funds used during construction ("AFUDC") represents the capitalized cost of funds used to finance the construction of utility plant. In general, AFUDC is applied to construction projects requiring more than one month to complete. No AFUDC is applied to projects funded by customer advances for construction, contributions in aid of construction, or applicable state-revolving fund loans. AFUDC includes the net cost of borrowed funds and a rate of return on other funds when used, and is recovered through water rates as the utility plant is depreciated. The amount of AFUDC related to equity funds in 2017 was $11,633, 2016 was $6,561, and 2015 was $4,621. No interest was capitalized by our market-based businesses.

Cash and Cash Equivalents — The Company considers all highly liquid investments with an original maturity of three months or less, which are not restricted for construction activity, to be cash equivalents.

The Company had a book overdraft, which represents transactions that have not cleared the bank accounts at the end of the period, for specific disbursement cash accounts of $21,629 and $12,616 at December 31, 2017 and 2016, respectively. The Company transfers cash on an as-needed basis to fund these items as they clear the bank in subsequent periods. The balance of the book overdraft is reported as book overdraft and the change in the book overdraft balance is reported as cash flows from financing activities, due to our ability to fund the overdraft with the Company's credit facility.

Funds Restricted for Construction Activity — The proceeds received from specific financings for construction and capital improvement of utility facilities are held in escrow until the designated expenditures are incurred. These amounts are reported as funds restricted for construction activity and are expected to be released over time as the capital projects are funded. As of December 31, 2017 and 2016, the Company did not have any funds restricted for construction activity.

Accounts Receivable — Accounts receivable are recorded at the invoiced amounts, which consists of billed and unbilled revenues. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in our existing accounts receivable, and is determined based on historical write-off experience and the aging of account balances. The Company reviews the allowance for doubtful accounts quarterly. Account balances are written off against the allowance when it is probable the receivable will not be recovered. When utility customers request extended payment terms, credit is extended based on regulatory guidelines, and collateral is not required.

Inventories, Materials and Supplies — Inventories are stated at cost. Cost is determined using the first-in, first-out method.

Regulatory Assets, Deferred Charges and Other Assets — Deferred charges and other assets consist primarily of assets held to compensate employees in the future who participate in the Company's deferred compensation plan and other costs. Other costs, for which the Company has received or expects to receive prospective rate recovery, are deferred as a regulatory asset and amortized over the period of rate recovery in accordance with the FASB's accounting guidance for regulated operations. See Note – 6 *Regulatory Assets and Liabilities* for further information regarding the Company's regulatory assets.

Marketable equity securities are carried on the balance sheet at fair market value, and changes in fair value are included in other comprehensive income.

Investment in Joint Venture – The Company uses the equity method of accounting to account for our 49% investment in a joint venture with a firm in the natural gas industry for the construction and operation of a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale in north-central Pennsylvania, which commenced operations in 2012. Our initial investment is carried at cost. Subsequently, the carrying amount of our investment is adjusted to reflect capital contributions or distributions, and our equity in earnings or losses since the commencement of the system's operations, as well as a decline in the fair value of our investment. Our share of equity earnings or losses in the joint venture is reported in the consolidated statements of net income as equity (earnings) losses in joint venture. During 2017 and 2016 we received distributions of $686 and $1,666, respectively. For our equity method investment in joint venture, the Company evaluates whether it has experienced a decline in the value of its investment that is other than temporary in nature. We would recognize an impairment loss if the fair value of our investment is less than the carrying amount of the investment, and the decline in value is considered other than temporary. Additionally, the Company would recognize its share of an impairment loss if the joint venture determines that the carrying amount of the joint venture's assets exceeds the sum of the joint venture's undiscounted estimated cash flows.

During 2015, the joint venture experienced the following events:

- a decline in natural gas prices, in 2015,
- a distinguishable reduction in the volume of water sales by the joint venture which led to a lowered forecast in 2015 on future water sales volumes by the joint venture, and
- changes in the natural gas industry and market conditions.

At the time, these market conditions were largely associated with natural gas prices, which sharply declined in 2015 and this downturn no longer appeared temporary and instead was expected to be a long-term condition. It was then determined that the carrying amount of the joint venture's long-lived assets exceeded the sum of the joint venture's undiscounted estimated cash flows, which resulted in the recognition of a noncash impairment charge of $32,975 ($21,433 after-tax) in 2015, representing the Company's share of the impairment charge. The impairment charge, on a pre-tax basis, is reported as equity loss in joint venture on the Company's consolidated statements of income. The amount of the impairment charge recognized by the joint venture is equal to the difference between the carrying value and the fair value of the long-lived assets. Fair value is estimated to be the present value of the future net cash flows associated with the assets, discounted using a rate commensurate with the risk and remaining life of the assets.

(In thousands of dollars, except per share amounts)

Goodwill — Goodwill represents the excess cost over the fair value of net tangible and identifiable intangible assets acquired through acquisitions. Goodwill is not amortized but is tested for impairment annually, or more often, if circumstances indicate a possible impairment may exist. When testing goodwill for impairment, we may assess qualitative factors, including macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, and entity specific events, for some or all of our reporting units to determine whether it's more likely than not that the fair value of a reporting unit is less than its carrying amount. Alternatively, based on our assessment of the qualitative factors previously noted, we may perform a quantitative goodwill impairment test by determining the fair value of a reporting unit based on a discounted cash flow analysis. If we perform a quantitative test and determine that the fair value of a reporting unit is less than its carrying amount, we would record an impairment loss for the amount by which a reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill. The Company tested the goodwill attributable for each of our reporting units for impairment as of July 31, 2017, and concluded that the estimated fair value of each reporting unit, which has goodwill recorded, exceeded the reporting unit's carrying amount, indicating that none of the Company's goodwill was impaired. The following table summarizes the changes in the Company's goodwill:

	Regulated Segment	Other	Consolidated
Balance at December 31, 2015	$ 27,246	$ 6,620	$ 33,866
Goodwill acquired during year	10,378	-	10,378
Reclassifications to utility plant acquisition adjustment	(98)	-	(98)
Disposition	(159)	(1,232)	(1,391)
Classified as assets held for sale		(547)	(547)
Balance at December 31, 2016	37,367	4,841	42,208
Goodwill acquired during year	72	-	72
Reclassifications to utility plant acquisition adjustment	(50)	-	(50)
Balance at December 31, 2017	$ 37,389	$ 4,841	$ 42,230

The reclassification of goodwill to utility plant acquisition adjustment results from a mechanism approved by the applicable utility commission. The mechanism provides for the transfer over time, and the recovery through customer rates, of goodwill associated with some acquisitions upon achieving specific objectives.

The goodwill allocated to a disposition or classified as assets held for sale results from the allocation of goodwill for market-based business units based on their relative fair value as compared to Aqua Resource's fair value.

Income Taxes — The Company accounts for some income and expense items in different time periods for financial and tax reporting purposes. Deferred income taxes are provided on specific temporary differences between the tax basis of the assets and liabilities, and the amounts at which they are carried in the consolidated financial statements. The income tax effect of temporary differences not currently recovered in rates is recorded as deferred taxes with an offsetting regulatory asset or liability. These deferred income taxes are based on the enacted tax rates expected to be in effect when such temporary differences are projected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amount more likely than not to be realized. Investment tax credits are deferred and amortized over the estimated useful lives of the related properties. Judgment is required in evaluating the Company's Federal and state tax positions. Despite management's belief that the Company's tax return positions are fully supportable, the Company establishes reserves when it believes that its tax positions are likely to be challenged and it may not fully prevail in these challenges. The Company's provision for income taxes includes interest, penalties and reserves for uncertain tax positions.

In 2012, the Company changed its tax method of accounting for qualifying utility asset improvement costs in Aqua Pennsylvania effective with the tax year ended December 31, 2012 and for prior tax years. The tax accounting method was changed to permit the expensing of qualifying utility asset improvement costs that were previously being capitalized and depreciated for book and tax purposes. This change was implemented in response to a June 2012 rate order issued by the Pennsylvania Public Utility Commission to Aqua Pennsylvania, which provides for a reduction in current income tax expense as a result of the recognition of income tax benefits for qualifying utility asset improvements. This change results in a significant reduction in the effective income tax rate, a reduction in current income tax expense, and reduces the amount of taxes currently payable. For qualifying capital expenditures made prior to 2012, the resulting tax benefits have been deferred as of December 31, 2012 and, in accordance with the rate order, a ten year amortization of the income tax benefits, which reduces future income tax expense, commenced in 2013.

Customers' Advances for Construction and Contributions in Aid of Construction — Water mains, other utility property or, in some instances, cash advances to reimburse the Company for its costs to construct water mains or other utility property, are contributed to the Company by customers, real estate developers and builders in order to extend utility service to their properties. The value of these contributions is recorded as customers' advances for construction. Over time, the amount of non-cash contributed property will vary based on the timing of the contribution of the non-cash property and the volume of non-cash contributed property received in connection with development in our service territories. The Company makes refunds on these advances over a specific period of time based on operating revenues related to the property, or as new customers are connected to and take service from the applicable water main. After all refunds are made, any remaining balance is transferred to contributions in aid of construction. Contributions in aid of construction include direct non-refundable contributions and the portion of customers' advances for construction that become non-refundable.

Based on regulatory conventions in states where the Company operates, generally our subsidiaries depreciate contributed property and amortize contributions in aid of construction at the composite rate of the related property. Contributions in aid of construction and customers' advances for construction are deducted from the Company's rate base for rate-making purposes, and therefore, no return is earned on contributed property.

Stock-Based Compensation — The Company records compensation expense in the financial statements for stock-based awards based on the grant date fair value of those awards. Stock-based compensation expense includes an estimate for pre-vesting forfeitures and is recognized over the requisite service periods of the awards on either a straight-line basis, or the graded vesting method, which is generally commensurate with the vesting term.

Fair Value Measurements – The Company follows the FASB's accounting guidance for fair value measurements and disclosures, which defines fair value and establishes a framework for using fair value to measure assets and liabilities. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

- Level 1: unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access;
- Level 2: inputs other than Level 1 that are observable, either directly or indirectly, such as quoted market prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in non-active markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or
- Level 3: inputs that are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs. Additionally, assets that are measured at fair value using the net asset value ("NAV") per share practical expedient are not classified in the fair value hierarchy. There have been no changes in the valuation techniques used to measure fair value or asset or liability transfers between the levels of the fair value hierarchy for the years ended December 31, 2017 and 2016.

Recent Accounting Pronouncements – In March 2017, the FASB issued updated accounting guidance on the presentation of net periodic pension and postretirement benefit cost (net benefit cost). Historically, net benefit cost is reported as an employee cost within operating income, net of amounts capitalized. The guidance requires the bifurcation of net benefit cost. The service cost component will be presented with other employee compensation costs in operating income and the other components of net benefit cost will be reported separately outside of operating income, and will not be eligible for capitalization. The guidance is effective for annual reporting periods beginning after December 15, 2017, and interim periods within that reporting period, and is to be applied retrospectively for the presentation of the service cost component and the other components of net benefit cost, and on a prospective basis for the capitalization of only the service cost component of net benefit cost. On January 1, 2018, the Company adopted the updated guidance, which did not have a material impact on its results of operations or financial position.

In January 2017, the FASB issued updated accounting guidance that eliminates step 2 of the current goodwill impairment test, which requires a hypothetical purchase price allocation to measure goodwill impairment. A goodwill impairment loss will instead be measured at the amount by which a reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill. The guidance will be effective for annual reporting periods beginning after December 15, 2019, and interim periods within that reporting period, with early adoption permitted for any impairment test performed on testing dates after January 1, 2017. The Company elected to early adopt the provisions of the updated guidance, for its annual impairment valuation performed in the third quarter of 2017, and the provisions of the updated guidance did not have an impact on its results of operations or financial position.

In August 2016, the FASB issued updated accounting guidance on the classification of certain cash receipts and cash payments in the statement of cash flows, which is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and early adoption is permitted. The Company has elected to early adopt the provisions of the updated guidance, which resulted in the reclassification of $375 debt extinguishment costs for 2016, from cash flows from operating to financing activities to conform to the new classification.

In March 2016, the FASB issued updated accounting guidance on simplifying the accounting for share-based payments, which includes several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The updated guidance was effective for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years, with early adoption available. On January 1, 2017, the Company adopted the updated guidance, prospectively, and recognized a previously unrecognized windfall tax benefit for stock-based compensation of $982, associated with the Company's 2012 Federal net operating loss, which was recorded as an adjustment to deferred income taxes and retained earnings (refer to the presentation of "cumulative effect of change in accounting principle – windfall tax benefit" on the Company's Consolidated Statement of Equity). Additionally, income tax benefits in excess of compensation costs or tax deficiencies for share-based compensation are now recorded to our income tax provision, instead of historically to stockholder's equity, which impacts our effective tax rate. Lastly, all tax-related cash flows resulting from share-based payments are reported prospectively as operating activities on the statement of cash flows, a change from the historical requirement to present tax benefits as an inflow from financing activities and an outflow from operating activities.

In February 2016, the FASB issued updated accounting guidance on accounting for leases, which requires lessees to establish a right-of-use asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. For income statement purposes, leases will be classified as either operating or finance. Operating leases will result in straight-line expense while finance leases will result in a front-loaded expense pattern. The updated accounting guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, with early adoption available. The Company is evaluating the requirements of the updated guidance to determine the impact of adoption. Refer to Note 9 – *Commitments and Contingencies* for further information on the Company's leases.

In January 2016, the FASB issued updated accounting guidance on the recognition and measurement of financial assets and financial liabilities, which amends certain aspects of recognition, measurement, presentation, and disclosure of financial instruments, including the requirement to measure certain equity investments at fair value with changes in fair value recognized in net income. The updated guidance is effective for interim and annual periods beginning after December 31, 2017. On January 1, 2018, the Company adopted the updated guidance, which did not have a material impact on its results of operations or financial position.

In May 2014, the FASB issued updated accounting guidance on recognizing revenue from contracts with customers, which outlines a single comprehensive model that an entity will apply to determine the measurement of revenue and timing of recognition. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. The updated guidance also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to fulfill a contract. The updated guidance is effective for annual periods beginning after December 15, 2017, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the updated guidance in each prior reporting period, or (ii) a modified retrospective approach with the cumulative effect of initially adopting the updated guidance recognized through retained earnings at the date of adoption. In 2016, the Company performed an evaluation of the requirements of the updated guidance and believes that the impact of adoption will not result in a material change in the Company's measurement of revenue. In 2017, the American Institute of Certified Public Accountants ("AICPA") power and utility entities revenue recognition task force determined that contributions in aid of construction are not in the scope of the new standard, and submitted its recommendation to the AICPA's revenue recognition working group for approval. The Company implemented the updated guidance using the modified retrospective approach on January 1, 2018, which did not result in a change in the Company's measurement of revenue, and reached the following conclusions:

- The Company's tariff sale contracts, including those with lower credit quality customers, are generally deemed to be probable of collection, and thus the timing of revenue recognition will continue to be concurrent with the delivery of water and wastewater services, consistent with our current practice.
- Contributions in aid of construction are outside of the scope of the standard, and will continue to be accounted for as a noncurrent liability.

Note 2 – ***Acquisitions***

As part of the Company's growth-through-acquisition strategy, the Company has entered into purchase agreements to acquire the water or wastewater utility system assets of six municipalities for a total combined purchase price in cash of $150,700. The purchase price for these pending acquisitions is subject to certain adjustments at closing, and the pending acquisitions are subject to regulatory approvals, including the final determination of the fair value of the rate base acquired. Closings for these acquisitions are expected to occur by the end of 2018, which is subject to the timing of the regulatory approval process. These acquisitions are expected to add approximately 16,325 customers in two of the states in which the Company operates.

Pursuant to the Company's growth-through-acquisition strategy, the Company completed the following acquisitions:

In 2017, the Company completed four acquisitions of water and wastewater utility systems in two states adding 1,003 customers. The total purchase price of these utility systems consisted of $5,860 in cash, which resulted in $72 of goodwill being recorded. The operating revenues included in the consolidated financial statements of the Company during the period owned by the Company for the utility systems acquired in 2017 are $461. The pro forma effect of the businesses acquired is not material either individually or collectively to the Company's results of operations.

In January 2016, the Company acquired Superior Water Company, Inc., which provides public water service to 4,108 customers in portions of Berks, Chester, and Montgomery counties in Pennsylvania. The total purchase price for the utility system was $16,750, which consisted of the issuance of 439,943 shares of the Company's common stock and $3,905 in cash. The purchase price allocation for this acquisition consisted primarily of acquired property, plant and equipment of $25,167, contributions in aid of construction of $16,565, and goodwill of $8,622. Additionally, during 2016, the Company completed 18 acquisitions of water and wastewater utility systems in various states adding 2,469 customers. The total purchase price of these utility systems consisted of $5,518 in cash. The operating revenues included in the consolidated financial statements of the Company during the period owned by the Company for the utility systems acquired were $4,896 in 2017 and $3,809 in 2016. The pro forma effect of the businesses acquired is not material either individually or collectively to the Company's results of operations.

In April 2015, the Company acquired the water and wastewater utility system assets of North Maine Utilities, located in the Village of Glenview, Illinois serving approximately 7,400 customers. The total purchase price consisted of $23,079 in cash. The purchase price allocation for this acquisition consists primarily of acquired property, plant and equipment. Additionally, in 2015, the Company completed 14 acquisitions of water and wastewater utility systems in various states adding 3,170 customers. The total purchase price of these utility systems consisted of $5,210 in cash. The operating revenues included in the consolidated financial statements of the Company during the period owned by the Company for the utility systems acquired were $10,868 in 2017, $10,708 in 2016, and $6,662 in 2015. The pro forma effect of the businesses acquired is not material either individually or collectively to the Company's results of operations.

Note 3 –*Dispositions*

The following dispositions have not been presented as discontinued operations in the Company's consolidated financial statements as they do not qualify as discontinued operations, since their disposal does not represent a strategic shift that has a major effect on our operations or financial results. The gains or loss disclosed below are reported in the consolidated statements of net income as a component of operations and maintenance expense. These business units were reported within the Company's market-based subsidiary, Aqua Resources, and were included in "Other" in the Company's segment information.

Dispositions Completed in 2017 and 2016

In the second quarter of 2016, the Company decided to market for sale two business units that are reported within the Company's market-based subsidiary, Aqua Resources. One business unit installed and tested devices that prevent the contamination of potable water and repaired water and wastewater systems, for which the sale was completed in January 2017. The other business unit repaired and performed maintenance on water and wastewater systems, for which the sale was completed in June 2017. These business units were reported as assets held for sale in the Company's December 31, 2016 consolidated balance sheet included in this Annual Report. These transactions resulted in total proceeds of $867 and the recognition of a net loss of $324.

In the third quarter of 2016, the Company marketed for sale a business unit which inspects, cleans and repairs storm and sanitary wastewater lines. In November 2016, this business unit was sold for $1,059 in cash and resulted in a loss on sale of $1,081. Further, in December 2015, the Company decided to sell a business unit which provides liquid waste hauling and disposal services. During the second quarter of 2016, this business unit was sold for $3,400 in cash and resulted in a gain on sale of $537.

(In thousands of dollars, except per share amounts)

Dispositions Reported as Assets Held for Sale at December 31, 2017

In the first quarter of 2017, the Company decided to market for sale a water system that serves approximately 265 customers. This water system is reported as assets held for sale in the Company's consolidated balance sheet.

Note 4 – *Property, Plant and Equipment*

	December 31, 2017	December 31, 2016	Approximate Range of Useful Lives	Weighted Average Useful Life
Utility plant and equipment:				
Mains and accessories	$ 3,134,900	$ 2,898,560	30 - 93 years	79 years
Services, hydrants, treatment plants and reservoirs	1,753,433	1,621,972	5 - 85 years	51 years
Operations structures and water tanks	296,736	283,635	14 - 85 years	47 years
Miscellaneous pumping and purification equipment	768,962	733,074	12 - 90 years	41 years
Meters, data processing, transportation and operating equipment	768,655	733,837	4 - 63 years	25 years
Land and other non-depreciable assets	103,357	98,529	-	-
Utility plant and equipment	6,826,043	6,369,607		
Utility construction work in progress	201,902	163,565	-	-
Net utility plant acquisition adjustment	(24,550)	(25,683)	2 - 59 years	31 years
Non-utility plant and equipment	598	1,628	3 - 25 years	13 years
Total property, plant and equipment	$ 7,003,993	$ 6,509,117		

Note 5 – *Accounts Receivable*

	December 31, 2017	December 31, 2016
Billed utility revenue	$ 65,695	$ 63,518
Unbilled revenue	35,042	34,635
Other	4,930	6,336
	105,667	104,489
Less allowance for doubtful accounts	7,071	7,095
Net accounts receivable	$ 98,596	$ 97,394

The Company's utility customers are located principally in the following states: 47% in Pennsylvania, 15% in Ohio, 10% in North Carolina, 8% in Texas, and 7% in Illinois. No single customer accounted for more than one percent of the Company's regulated operating revenues during the years ended December 31, 2017, 2016, and 2015. The following table summarizes the changes in the Company's allowance for doubtful accounts:

	2017	2016	2015
Balance at January 1,	$ 7,095	$ 5,873	$ 5,365
Amounts charged to expense	4,986	5,500	5,762
Accounts written off	(6,135)	(5,410)	(6,513)
Recoveries of accounts written off	1,125	1,132	1,259
Balance at December 31,	$ 7,071	$ 7,095	$ 5,873

AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

Note 6 – ***Regulatory Assets and Liabilities***

The regulatory assets represent costs that are probable to be fully recovered from customers in future rates while regulatory liabilities represent amounts that are expected to be refunded to customers in future rates or amounts recovered from customers in advance of incurring the costs. Except for income taxes, regulatory assets and regulatory liabilities are excluded from the Company's rate base and do not earn a return. The components of regulatory assets and regulatory liabilities are as follows:

	December 31, 2017		December 31, 2016	
	Regulatory Assets	Regulatory Liabilities	Regulatory Assets	Regulatory Liabilities
Income taxes	$ 584,067	$ 438,750	$ 814,418	$ 157,266
Utility plant retirement costs	5,367	35,249	4,986	31,288
Post-retirement benefits	112,532	65,964	119,519	59,882
Accrued vacation	2,198	-	1,984	-
Water tank painting	3,259	1,855	2,111	2,143
Fair value adjustment of long-term debt assumed in acquisition	2,901	-	3,268	-
Rate case filing expenses and other	3,647	92	2,361	56
	$ 713,971	$ 541,910	$ 948,647	$ 250,635

Items giving rise to deferred state income taxes, as well as a portion of deferred Federal income taxes related to specific differences between tax and book depreciation expense, are recognized in the rate setting process on a cash basis or as a reduction in current income tax expense and will be recovered as they reverse. Amounts include differences that arise between specific utility asset improvement costs capitalized for book and deducted as an expense for tax purposes. Additionally, the recording of AFUDC for equity funds results in the recognition of a regulatory asset for income taxes, which represents amounts due related to the revenue requirement.

A portion of the regulatory liability for income taxes is related to Aqua Pennsylvania's income tax accounting change for the tax benefits realized on the Company's 2012 tax return, which have not yet reduced current income tax expense due to the ten year amortization period which began in 2013. This amortization was stipulated in a June 2012 rate order issued to Aqua Pennsylvania and is subject to specific parameters being met each year. Beginning in 2013, the Company amortized $38,000, annually, of its deferred income tax benefits, which reduced current income tax expense and increased the Company's net income by $16,734.

On December 22, 2017, President Trump signed the TCJA into law, which reduced the Federal corporate income tax rate from 35% to 21%. Reductions in accumulated deferred income tax balances due to the reduction in the corporate income tax rate to 21% under the provisions of the TCJA will result in amounts previously collected from utility customers for these deferred taxes to be refundable to such customers, generally through reductions in future rates. The TCJA includes provisions that stipulate how these excess deferred taxes relating to certain accelerated tax depreciation benefits are to be passed back to customers. Potential refunds of other deferred taxes will be determined by our state regulators. The December 31, 2017 consolidated balance sheet reflects the impact of the TCJA on our regulatory assets and liabilities, and reduces our regulatory assets by $357,262 and increases our regulatory liabilities by $303,320. These adjustments had no impact on our 2017 cash flows.

The regulatory asset for utility plant retirement costs, including cost of removal, represents costs already incurred that are expected to be recovered in future rates over a five year recovery period. The regulatory liability for utility plant retirement costs represents amounts recovered through rates during the life of the associated asset and before the costs are incurred.

The regulatory asset for accrued vacation represents costs that would otherwise be charged to operations and maintenance expense for vacation that is earned by employees, which is recovered as a cost of service.

(In thousands of dollars, except per share amounts)

The regulatory asset for post-retirement benefits, which includes pension and other post-retirement benefits, primarily reflects a regulatory asset that has been recorded for the costs that would otherwise be charged to stockholders' equity for the underfunded status of the Company's pension and other post-retirement benefit plans. The Company also has a regulatory asset related to post-retirement benefits costs that represent costs already incurred which are now being recovered in rates over 10 years. The regulatory liability for post-retirement benefits represents costs recovered in rates in excess of post-retirement benefits expense.

Expenses associated with water tank painting are deferred and amortized over a period of time as approved in the regulatory process. Water tank painting costs are generally being amortized over a period ranging from 1 to 15 years. The regulatory liability for water tank painting costs represents amounts recovered through rates and before the costs are incurred.

The Company recorded a fair value adjustment for fixed rate, long-term debt assumed in acquisitions that matures in various years ranging from 2022 to 2029. The regulatory asset or liability results from the rate setting process continuing to recognize the historical interest cost of the assumed debt.

The regulatory asset related to rate case filing expenses and other represents the costs associated with filing for rate increases that are deferred and amortized over periods that generally range from one to five years, and costs incurred by the Company for which it has received or expects to receive rate recovery.

The regulatory asset related to the costs incurred for information technology software projects and water main cleaning and relining projects are described in Note 1 – *Summary of Significant Accounting Policies – Property, Plant and Equipment and Depreciation.*

Note 7 – *Income Taxes*

The provision for income taxes consists of:

	Years Ended December 31,		
	2017	2016	2015
Current:			
Federal	$ 1,297	$ 2,046	$ 2,624
State	1,837	1,682	(4,168)
	3,134	3,728	(1,544)
Deferred:			
Federal	21,376	21,489	12,649
State	(7,596)	(4,239)	3,857
	13,780	17,250	16,506
Total tax expense	$ 16,914	$ 20,978	$ 14,962

The statutory Federal tax rate is 35% and for states with a corporate net income tax, the state corporate net income tax rates range from 3% to 9.99% for all years presented.

AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

The reasons for the differences between amounts computed by applying the statutory Federal corporate income tax rate to income before income tax expense are as follows:

	Years Ended December 31,		
	2017	2016	2015
Computed Federal tax expense at statutory rate	$ 89,828	$ 89,306	$ 75,863
Decrease in Federal tax expense related to an income tax accounting change for qualifying utility asset improvement costs	(69,325)	(62,831)	(59,488)
State income taxes, net of Federal tax benefit	(3,743)	(1,662)	(202)
Increase in tax expense for depreciation expense to be recovered in future rates	199	199	199
Stock-based compensation	(595)	(227)	(174)
Deduction for Aqua America common dividends paid under employee benefit plan	(455)	(455)	(456)
Amortization of deferred investment tax credits	(376)	(405)	(421)
Federal tax rate change	3,141	-	-
Other, net	(1,760)	(2,947)	(359)
Actual income tax expense	$ 16,914	$ 20,978	$ 14,962

In 2012, the Company changed its tax method of accounting for qualifying utility system repairs in Aqua Pennsylvania effective with the tax year ended December 31, 2012 and for prior tax years. The tax accounting method was changed to permit the expensing of qualifying utility asset improvement costs that were previously being capitalized and depreciated for book and tax purposes. This change was implemented in response to a June 2012 rate order issued by the Pennsylvania Public Utility Commission to Aqua Pennsylvania which provides for a reduction in current income tax expense as a result of the flow-through recognition of some income tax benefits due to the income tax accounting change. The Company recorded income tax benefits of $84,766, $78,530, and $72,944 during 2017, 2016, and 2015, respectively. The Company recognized a tax deduction on its 2012 Federal tax return of $380,000 for qualifying capital expenditures made prior to 2012, and based on the rate order, in 2013, the Company began to amortize 1/10th of these expenditures. In accordance with the rate order, the amortization is expected to reduce current income tax expense during periods when qualifying parameters are met. Beginning in 2013, the Company amortized the qualifying capital expenditures made prior to 2012 and recognized $38,000, annually, of deferred income tax benefits, which reduced current income tax expense and increased the Company's net income by $16,734. The Company's effective income tax rate for 2017, 2016, and 2015 was 6.6%, 8.2%, and 6.9%, respectively.

The Company establishes reserves for uncertain tax positions based upon management's judgment as to the sustainability of these positions. These accounting estimates related to the uncertain tax position reserve require judgments to be made as to the sustainability of each uncertain tax position based on its technical merits. The Company believes its tax positions comply with applicable law and that it has adequately recorded reserves as required. However, to the extent the final tax outcome of these matters is different than the estimates recorded, the Company would then adjust its tax reserves or unrecognized tax benefits in the period that this information becomes known. The Company has elected to recognize accrued interest and penalties related to uncertain tax positions as income tax expense.

(In thousands of dollars, except per share amounts)

The following table provides the changes in the Company's unrecognized tax benefits:

	2017	2016
Balance at January 1,	$ 28,099	$ 28,016
Additions based on tax position related to the current year	705	83
Effect of Federal tax rate change	(11,221)	-
Balance at December 31,	$ 17,583	$ 28,099

The unrecognized tax benefits relate to the income tax accounting change, and the tax position is attributable to a temporary difference. The Company does not anticipate material changes to its unrecognized tax benefits within the next year. As a result of the regulatory treatment afforded by the income tax accounting change in Pennsylvania and despite this position being a temporary difference, as of December 31, 2017 and 2016, $24,243 and $20,674 and, respectively, of these tax benefits would have an impact on the Company's effective income tax rate in the event the Company does sustain all, or a portion, of its tax position.

The following table provides the components of net deferred tax liability:

	December 31,	
	2017	2016
Deferred tax assets:		
Customers' advances for construction	$ 17,123	$ 21,738
Costs expensed for book not deducted for tax, principally accrued expenses	12,956	15,751
Utility plant acquisition adjustment basis differences	1,752	3,114
Post-retirement benefits	36,353	38,269
Tax loss and credit carryforwards	56,642	77,911
Other	2,348	2,137
	127,174	158,920
Less valuation allowance	11,623	9,486
	115,551	149,434
Deferred tax liabilities:		
Utility plant, principally due to depreciation and differences in the basis of fixed assets due to variation in tax and book accounting	795,537	1,104,032
Deferred taxes associated with the gross-up of revenues necessary to recover, in rates, the effect of temporary differences	46,143	269,773
Tax effect of regulatory asset for post-retirement benefits	36,353	38,269
Deferred investment tax credit	6,591	6,613
	884,624	1,418,687
Net deferred tax liability	$ 769,073	$ 1,269,253

At December 31, 2017, the Company has a cumulative Federal NOL of $63,302. The Company believes the Federal NOLs are more likely than not to be recovered and require no valuation allowance. The Company's Federal NOLs do not begin to expire until 2032.

In 2012 and 2011, as a result of the Company's Federal cumulative NOLs the Company ceased recognizing the windfall tax benefit associated with stock-based compensation, because the deduction did not reduce income taxes payable. As of December 31, 2015, the Company utilized all of the 2011 NOL and recognized a windfall tax benefit of $588. As a result of the adoption on January 1, 2017 of the FASB's updated accounting guidance on simplifying the accounting for share-based payments, the Company recognized a windfall tax benefit of $982 associated with the Company's 2012 Federal NOL, which was recorded as an adjustment to retained earnings.

At December 31, 2017, the Company has a cumulative state NOL of $627,258, a portion of which is offset by a valuation allowance because the Company does not believe these NOLs are more likely than not to be realized. The state NOLs do not begin to expire until 2023.

The Company has unrecognized tax positions that result in the associated tax benefit being unrecognized. The Company's Federal and state NOL carryforwards are reduced by an unrecognized tax position, on a gross basis, of $64,476 and $85,380, respectively, which results from the Company's adoption in 2013 of the FASB's accounting guidance on the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The amounts of the Company's Federal and state NOL carryforwards prior to being reduced by the unrecognized tax positions are $127,778 and $712,638, respectively. The Company records its unrecognized tax benefit as a reduction to its deferred income tax liability.

As of December 31, 2017, the Company's Federal income tax returns for all years through 2011 have been closed. Tax years 2012 through 2017 remain open to Federal examination. The statute remains open for the Company's state income tax returns for tax years 2014 through 2017 in the various states in which it conducts business.

On December 22, 2017, President Trump signed the TCJA into law. 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 Code and the taxation of business entities, and includes specific provisions related to regulated public utilities. Significant changes that impact the Company included in the TCJA are a reduction in the corporate federal income tax rate from 35% to 21%, effective January 1, 2018, and a limitation of the utilization of NOLs arising after December 31, 2017 to 80% of taxable income with an indefinite carryforward. The specific TCJA provisions related to our regulated entities generally allow for the continued deductibility of interest expense, the elimination of full expensing for tax purposes of certain property acquired after September 27, 2017 and the continuation of certain rate normalization requirements for accelerated depreciation benefits. Our market-based companies still qualify for 100% deductibility of qualifying property acquired after September 27, 2017.

Changes in the Code from the TCJA had a material impact on our financial statements in 2017. In accordance with the FASB's accounting guidance for income taxes, the tax effects of changes in tax laws must be recognized in the period in which the law is enacted, or December 22, 2017 for the TCJA. Additionally, deferred tax assets and liabilities are required 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 taxes were re-measured based upon the new tax rate. For our regulated entities, the change in deferred taxes is recorded as either an offset to a regulatory asset or liability and may be subject to refund to customers. In instances where the deferred tax balances are not in ratemaking, such as the Company's market-based operations, the change in deferred taxes is recorded as an adjustment to our deferred tax provision. To the extent the revalued deferred income tax assets and liabilities were outside of our regulated operations and are not believed to be recoverable in utility customer rates, the revalued amount of $3,141 was recognized as additional deferred income tax expense during the quarter ended December 31, 2017.

The staff of the SEC has recognized the complexity of reflecting the impacts of the TCJA, and on December 22, 2017 issued guidance, which clarifies accounting for income taxes 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 (the measurement period). The guidance 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 the FASB's accounting guidance, based on the provisions of the tax laws that were in effect immediately prior to the TCJA being enacted.

(In thousands of dollars, except per share amounts)

The Company has completed or has made a reasonable estimate for the measurement and accounting of the effect of the TCJA which have been reflected in the December 31, 2017 financial statements. The accounting for these completed and provisional items, described below, increased the 2017 deferred income tax provision by $3,141 for the year ending December 31, 2017, and decreased the accumulated deferred income tax liability by $303,320 at December 31, 2017.

One of our states, Pennsylvania, has not yet issued an accounting or procedural order addressing how the TCJA changes are to be reflected in our utility customer rates. As of December 31, 2017, the Company has provisionally estimated that $175,108 of deferred income tax liabilities for our Pennsylvania subsidiary will be a regulatory liability. Additionally, two operating divisions in one of our states operate under locally-negotiated contractual rates with their respective counties, and it is expected that negotiations will results in a contract that will pass back the effects of the reduction in the corporate net income tax rate under the TCJA; however, these negotiations have not yet started. As of December 31, 2017, the Company has provisionally estimated that $9,419 of deferred income tax liabilities for these two divisions will be a regulatory liability. Overall, the Company has applied a reasonable interpretation of the impact of the TCJA and a reasonable estimate of the regulatory resolution. Further clarification of the TCJA and regulatory resolution may change the amounts estimated of the deferred income tax provision and the accumulated deferred income tax liability.

The Company's regulated operations accounting for income taxes are impacted by the FASB's accounting guidance for regulated operations. Reductions in accumulated deferred income tax balances due to the reduction in the Federal corporate income tax rates to 21% under the provisions of the TCJA will result in amounts previously collected from utility customers for these deferred taxes to be refundable to such customers, generally through reductions in future rates. The TCJA includes provisions that stipulate how these excess deferred taxes related to certain accelerated tax depreciation deduction benefits are to be passed back to customers. Potential refunds of other deferred taxes will be determined by our state regulators. Our state regulatory commissions have or are in the process of issuing procedural orders directing how the tax law changes are to be reflected in our utility customer rates. In addition, we have two rate cases currently in progress in two states in which the TCJA is expected to be addressed in the new base rates. The December 31, 2017 consolidated balance sheet reflects the impact of the TCJA on our regulatory assets and liabilities which reduced our regulatory assets by $357,262 and increased our regulatory liabilities by $303,320. These adjustments had no impact on our 2017 cash flows.

Note 8 – *Taxes Other than Income Taxes*

The following table provides the components of taxes other than income taxes:

	Years Ended December 31,		
	2017	2016	2015
Property	$ 25,810	$ 26,788	$ 26,545
Gross receipts, excise and franchise	13,458	12,510	11,847
Payroll	9,477	9,772	9,539
Regulatory assessments	2,552	2,630	2,689
Pumping fees	5,057	4,571	3,993
Other	274	114	444
Total taxes other than income taxes	$ 56,628	$ 56,385	$ 55,057

(In thousands of dollars, except per share amounts)

Note 9 – ***Commitments and Contingencies***

Commitments – The Company leases motor vehicles, buildings and other equipment under operating leases that are noncancelable. The future annual minimum lease payments due are as follows:

2018	2019	2020	2021	2022	Thereafter
$ 1,312	$ 1,010	$ 743	$ 585	$ 365	$ 250

The Company leases parcels of land on which treatment plants and other facilities are situated and adjacent parcels that are used for watershed protection. The operating leases are noncancelable, expire between 2019 and 2052, and contain renewal provisions. Some leases are subject to an adjustment every five years based on changes in the Consumer Price Index. Subject to the aforesaid adjustment, during each of the next five years, an average of $602 of annual lease payments for land is due, and the aggregate of the years remaining approximates $12,806.

The Company maintains agreements with other water purveyors for the purchase of water to supplement its water supply, particularly during periods of peak demand. The agreements stipulate purchases of minimum quantities of water to the year 2026. The estimated annual commitments related to such purchases through 2022 are expected to average $4,373 and the aggregate of the years remaining approximates $9,644.

The Company has entered into purchase obligations, in the ordinary course of business, that include agreements for water treatment processes at some of its wells in a small number of its divisions. The 20 year term agreement provides for the use of treatment equipment and media used in the treatment process and are subject to adjustment based on changes in the Consumer Price Index. The future contractual cash obligations related to these agreements are as follows:

2018	2019	2020	2021	2022	Thereafter
$ 1,157	$ 1,007	$ 1,028	$ 1,048	$ 1,069	$ 6,623

Rent expense under operating leases, purchased water expense, and water treatment expenses under these agreements were as follows:

	Years Ended December 31,		
	2017	2016	2015
Operating lease expense	$ 2,241	$ 2,776	$ 2,440
Purchased water under long-term agreements	8,558	13,955	13,718
Water treatment expense under contractual agreement	945	940	972

Contingencies – The Company is routinely involved in various disputes, claims, lawsuits and other regulatory and legal matters, including both asserted and unasserted legal claims, in the ordinary course of business. The status of each such matter, referred to herein as a loss contingency, is reviewed and assessed in accordance with applicable accounting rules regarding the nature of the matter, the likelihood that a loss will be incurred, and the amounts involved. As of December 31, 2017, the aggregate amount of $18,961 is accrued for loss contingencies and is reported in the Company's consolidated balance sheet as other accrued liabilities and other liabilities. These accruals represent management's best estimate of probable loss (as defined in the accounting guidance) for loss contingencies or the low end of a range of losses if no single probable loss can be estimated. For some loss contingencies, the Company is unable to estimate the amount of the probable loss or range of probable losses. While the final outcome of these loss contingencies cannot be predicted with certainty, and unfavorable outcomes could negatively impact the Company, at this time in the opinion of management, the final resolution of these matters are not expected to have a material adverse effect on the Company's financial position, results of operations or cash flows. Further, Aqua America has insurance coverage for a number of these loss contingencies, and as of December 31, 2017, estimates that approximately $7,131 of the amount accrued for these matters are probable of recovery through insurance, which amount is also reported in the Company's consolidated balance sheet as deferred charges and other assets, net.

(In thousands of dollars, except per share amounts)

Although the results of legal proceedings cannot be predicted with certainty, there are no pending legal proceedings to which the Company or any of its subsidiaries is a party or to which any of its properties is the subject that are material or are expected to have a material effect on the Company's financial position, results of operations or cash flows.

Additionally, the Company self-insures its employee medical benefit program, and maintains stop-loss coverage to limit the exposure arising from these claims. The Company's reserve for these claims totaled $1,451 and $1,770 at December 31, 2017 and 2016 and represents a reserve for unpaid claim costs, including an estimate for the cost of incurred but not reported claims.

Note 10 – ***Long-term Debt and Loans Payable***

Long-term Debt – The consolidated statements of capitalization provide a summary of long-term debt as of December 31, 2017 and 2016. The supplemental indentures with respect to specific issues of the first mortgage bonds restrict the ability of Aqua Pennsylvania and other operating subsidiaries of the Company to declare dividends, in cash or property, or repurchase or otherwise acquire the stock of these companies. Loan agreements for Aqua Pennsylvania and other operating subsidiaries of the Company have restrictions on minimum net assets. As of December 31, 2017, restrictions on the net assets of the Company were $1,443,473 of the total $1,957,621 in net assets. Included in this amount were restrictions on Aqua Pennsylvania's net assets of $1,090,062 of their total net assets of $1,528,172. As of December 31, 2017, $1,396,003 of Aqua Pennsylvania's retained earnings of $1,416,003 and $142,700 of the retained earnings of $189,000 of other subsidiaries were free of these restrictions. Some supplemental indentures also prohibit Aqua Pennsylvania and some other subsidiaries of the Company from making loans to, or purchasing the stock of, the Company.

Sinking fund payments are required by the terms of specific issues of long-term debt. Excluding amounts due under the Company's revolving credit agreement, the future sinking fund payments and debt maturities of the Company's long-term debt are as follows:

Interest Rate Range	2018	2019	2020	2021	2022	Thereafter
0.00% to 0.99%	$ 464	$ 464	$ 463	$ 464	$ 466	$ 1,875
1.00% to 1.99%	51,327	1,222	1,158	910	888	7,409
2.00% to 2.99%	1,766	51,813	1,863	1,913	1,965	9,934
3.00% to 3.99%	2,807	2,758	2,555	2,594	2,541	706,977
4.00% to 4.99%	11,195	50,404	16,616	15,297	237	660,650
5.00% to 5.99%	20,595	36,126	18,120	8,402	17,979	256,783
6.00% to 6.99%	13,000	-	-	-	-	31,000
7.00% to 7.99%	484	569	615	666	358	29,643
8.00% to 8.99%	431	566	613	1,665	721	2,096
9.00% to 9.99%	5,700	700	2,400	4,900	-	12,000
10.00% to 10.99%	6,000	-	-	-	-	-
Total	$ 113,769	$ 144,622	$ 44,403	$ 36,811	$ 25,155	$ 1,718,367

In October 2017, Aqua Pennsylvania issued $75,000 of first mortgage bonds, of which $35,000 is due in 2054, $20,000 is due in 2055, and $20,000 is due in 2057 with interest rates of 4.06%, 4.07%, and 4.09%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

(In thousands of dollars, except per share amounts)

In July 2017 Aqua Illinois issued $100,000 of first mortgage bonds consisting of the following:

Amount	Interest Rate	Maturity
$25,000	3.64%	2032
$6,000	3.89%	2037
$15,000	3.90%	2038
$10,000	4.18%	2047
$22,000	4.22%	2049
$22,000	4.24%	2050

The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

In July 2017, Aqua Pennsylvania issued $80,000 of first mortgage bonds, of which $40,000 is due in 2055 and $40,000 is due in 2057 with interest rates of 4.04% and 4.06%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

In January 2017, Aqua Pennsylvania issued $50,000 of first mortgage bonds, of which $10,000 is due in 2042 and $40,000 is due in 2044 with interest rates of 3.65% and 3.69%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

In December 2016, Aqua Pennsylvania issued $85,000 of first mortgage bonds, of which $25,000 is due in 2051 and $60,000 is due in 2056 with interest rates of 3.85% and 3.95%, respectively. In January 2017, Aqua Pennsylvania issued $50,000 of first mortgage bonds, of which $10,000 is due in 2042 and $40,000 is due in 2044 with interest rates of 3.65% and 3.69%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

In November 2016, the Company issued $125,000 of senior notes, of which $35,000 is due in 2031, $30,000 is due in 2034, $25,000 is due in 2035, $10,000 is due in 2038, and $25,000 is due in 2041 with interest rates of 3.01%, 3.19%, 3.25%, 3.41%, and 3.57%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

As of December 31, 2017 and 2016, the Company did not have any funds restricted for construction activity.

The weighted average cost of long-term debt at December 31, 2017 and 2016 was 4.29% and 4.23%, respectively. The weighted average cost of fixed rate long-term debt at December 31, 2017 and 2016 was 4.36% and 4.26%, respectively.

The Company has a five-year $250,000 unsecured revolving credit facility, with four banks that expires in February 2021. This facility includes a $15,000 sublimit for daily demand loans. Funds borrowed under this facility are classified as long-term debt and are used to provide working capital as well as support for letters of credit for insurance policies and other financing arrangements. As of December 31, 2017, the Company has the following sublimits and available capacity under the credit facility: $50,000 letter of credit sublimit, $30,189 of letters of credit available capacity, $0 borrowed under the swing-line commitment, and $60,000 of funds borrowed under the agreement. Interest under this facility is based at the Company's option, on the prime rate, an adjusted Euro-Rate, an adjusted federal funds rate or at rates offered by the banks. A facility fee is charged on the total commitment amount of the agreement. Under this facility the average cost of borrowings was 1.91% and 1.54%, and the average borrowing was $48,333 and $89,374, during 2017 and 2016, respectively.

The Company is obligated to comply with covenants under some of its loan and debt agreements. These covenants contain a number of restrictive financial covenants, which among other things limit, subject to specific exceptions, the Company's ratio of consolidated total indebtedness to consolidated total capitalization, and require a minimum level of earnings coverage over interest expense. During 2017, the Company was in compliance with its debt covenants under its loan and debt agreements. Failure to comply with the Company's debt covenants could result in an event of default, which could result in the Company being required to repay or finance its borrowings before their due date, possibly limiting the Company's future borrowings, and increasing its borrowing costs.

Loans Payable – In November 2017, Aqua Pennsylvania renewed its $100,000 364-day unsecured revolving credit facility with four banks. The funds borrowed under this agreement are classified as loans payable and used to provide working capital. As of December 31, 2017 and 2016, funds borrowed under the agreement were $3,650 and $5,545, respectively. Interest under this facility is based, at the borrower's option, on the prime rate, an adjusted federal funds rate, an adjusted London Interbank Offered Rate corresponding to the interest period selected, an adjusted Euro-Rate corresponding to the interest period selected or at rates offered by the banks. This agreement restricts short-term borrowings of Aqua Pennsylvania. A commitment fee of 0.05% is charged on the total commitment amount of Aqua Pennsylvania's revolving credit agreement. The average cost of borrowing under the facility was 1.78% and 1.18%, and the average borrowing was $21,913 and $29,760, during 2017 and 2016, respectively. The maximum amount outstanding at the end of any one month was $66,466 and $52,905 in 2017 and 2016, respectively.

At December 31, 2017 and 2016, the Company had other combined short-term lines of credit of $35,500. Funds borrowed under these lines are classified as loans payable and are used to provide working capital. As of December 31, 2017 and 2016, funds borrowed under the short-term lines of credit were $0 and $990, respectively. The average borrowing under the lines was $908 and $2,944 during 2017 and 2016, respectively. The maximum amount outstanding at the end of any one month was $990 in 2017 and $9,440 in 2016, respectively. Interest under the lines is based at the Company's option, depending on the line, on the prime rate, an adjusted Euro-Rate, an adjusted federal funds rate or at rates offered by the banks. The average cost of borrowings under all lines during 2017 and 2016 was 1.81% and 1.24%, respectively.

Interest Income and Expense– Interest income of $202, $217, and $272 was netted against interest expense on the consolidated statement of net income for the years ended December 31, 2017, 2016, and 2015, respectively. The total interest cost was $88,543, $80,811, and $76,808 in 2017, 2016, and 2015, including amounts capitalized for borrowed funds of $3,578, $2,220, and $1,598, respectively.

Note 11 – *Fair Value of Financial Instruments*

Financial instruments are recorded at carrying value in the financial statements and approximate fair value, with the exception of long-term debt, as of the dates presented. The fair value of these instruments is disclosed below in accordance with current accounting guidance related to financial instruments.

The fair value of cash and cash equivalents, which is comprised of uninvested cash, is determined based on level 1 methods and assumptions. As of December 31, 2017 and 2016, the carrying amounts of the Company's cash and cash equivalents were $4,204 and $3,763, which equates to their fair value. The fair value of "available-for-sale" securities to fund our deferred compensation and non-qualified pension plan liabilities, which represents mutual and money market funds, is determined based on quoted market prices from active markets utilizing level 1 methods and assumptions. As of December 31, 2017 and 2016, the carrying amount of these securities was $21,776 and $20,342. As of December 31, 2017 and 2016, the carrying amount of the Company's loans payable was $3,650 and $6,535, respectively, which equates to their estimated fair value.

(In thousands of dollars, except per share amounts)

The carrying amounts and estimated fair values of the Company's long-term debt is as follows:

	December 31,	
	2017	2016
Carrying amount	$ 2,143,127	$ 1,910,633
Estimated fair value	2,262,785	2,018,933

The fair value of long-term debt has been determined by discounting the future cash flows using current market interest rates for similar financial instruments of the same duration utilizing level 2 methods and assumptions. The Company's customers' advances for construction have a carrying value of $93,186 and $91,843 at December 31, 2017 and 2016, respectively. Their relative fair values cannot be accurately estimated because future refund payments depend on several variables, including new customer connections, customer consumption levels and future rate increases. Portions of these non-interest bearing instruments are payable annually through 2027 and amounts not paid by the respective contract expiration dates become non-refundable. The fair value of these amounts would, however, be less than their carrying value due to the non-interest bearing feature.

Note 12 – ***Stockholders' Equity***

At December 31, 2017, the Company had 300,000,000 shares of common stock authorized; par value $0.50. Shares outstanding and treasury shares held were as follows:

	December 31,		
	2017	2016	2015
Shares outstanding	177,713,943	177,394,376	176,544,091
Treasury shares	2,986,308	2,916,969	2,819,569

At December 31, 2017, the Company had 1,770,819 shares of authorized but unissued Series Preferred Stock, $1.00 par value.

The Company has a universal shelf registration statement with the SEC to allow for the potential future sale by the Company, from time to time, in one or more public offerings, of an indeterminate amount of our common stock, preferred stock, debt securities and other securities specified therein at indeterminate prices. This registration statement expires in February 2018, and we intend to file a new three-year universal shelf registration statement.

In 2015, the Company filed a registration statement with the SEC which permits the offering, from time to time, of an aggregate of $500,000 in shares of common stock and shares of preferred stock in connection with acquisitions. During 2016, 439,943 shares of common stock totaling $12,845 were issued by the Company to acquire a water utility system. The balance remaining available for use under the acquisition shelf registration as of December 31, 2017 is $487,155.

The form and terms of any securities issued under the universal shelf registration statement and the acquisition shelf registration statement will be determined at the time of issuance.

The Company has a Dividend Reinvestment and Direct Stock Purchase Plan ("Plan") that allows reinvested dividends to be used to purchase shares of common stock at a five percent discount from the current market value. Under the direct stock purchase program, shares are purchased by investors at a five percent discount from the market price. The shares issued under the Plan are either shares purchased by the Company's transfer agent in the open-market or original issue shares. In 2017, 2016, and 2015, 447,753 484,645, and 535,439 shares of the Company were purchased under the dividend reinvestment portion of the Plan by the Company's transfer agent in the open-market for $15,168, $14,916, and $14,380, respectively. During 2017 and 2016, under the dividend reinvestment portion of the Plan, 45,121 and 47,478 original issue shares of common stock were sold, providing the Company with proceeds of $1,453 and $1,388, respectively.

In December 2014, the Company's Board of Directors authorized a share buyback program, commencing in 2015, of up to 1,000,000 shares to minimize share dilution through timely and orderly share repurchases. In December 2015, the Company's Board of Directors added 400,000 shares to this program. The specific timing, amount and other terms of repurchases depend on market conditions, regulatory requirements and other factors. In 2016, we did not repurchase any shares of our common stock in the open market. In 2015, we repurchased 805,000 shares of the Company's common stock in the open market for $20,502. In 2014, we repurchased 560,000 shares of our common stock in the open market for $13,280. This program expired on December 31, 2016.

The Company's accumulated other comprehensive income is reported in the stockholders' equity section of the consolidated balance sheets, the consolidated statements of equity, and the related components of other comprehensive income are reported in the consolidated statements of comprehensive income. The Company reports its unrealized gains or losses on investments as other comprehensive income and accumulated other comprehensive income. The Company recorded a regulatory asset for its underfunded status of its pension and other post-retirement benefit plans that would otherwise be charged to other comprehensive income, as it anticipates recovery of its costs through customer rates.

Note 13 – *Net Income per Common Share and Equity per Common Share*

Basic net income per share is based on the weighted average number of common shares outstanding. Diluted net income per share is based on the weighted average number of common shares outstanding and potentially dilutive shares. The dilutive effect of employee stock-based compensation is included in the computation of diluted net income per share. The dilutive effect of stock-based compensation is calculated by using the treasury stock method and expected proceeds upon exercise or issuance of the stock-based compensation. The following table summarizes the shares, in thousands, used in computing basic and diluted net income per share:

	Years ended December 31,		
	2017	2016	2015
Average common shares outstanding during the period for basic computation	177,612	177,273	176,788
Effect of dilutive securities:			
Employee stock-based compensation	563	573	729
Average common shares outstanding during the period for diluted computation	178,175	177,846	177,517

For the years ended December 31, 2017, 2016, and 2015, all of the Company's employee stock options were included in the calculation of diluted net income per share as the calculated cost to exercise the stock options was less than the average market price of the Company's common stock during these periods.

Equity per common share was $11.02 and $10.43 at December 31, 2017 and 2016, respectively. These amounts were computed by dividing Aqua America stockholders' equity by the number of shares of common stock outstanding at the end of each year.

Note 14 – *Employee Stock and Incentive Plan*

Under the Company's 2009 Omnibus Equity Compensation Plan, as amended as of February 27, 2014 (the "2009 Plan"), as approved by the Company's shareholders to replace the 2004 Equity Compensation Plan (the "2004 Plan"), stock options, stock units, stock awards, stock appreciation rights, dividend equivalents, and other stock-based awards may be granted to employees, non-employee directors, and consultants and advisors. No further grants may be made under the 2004 Plan. The 2009 Plan authorizes 6,250,000 shares for issuance under the plan. A maximum of 3,125,000 shares under the 2009 Plan may be issued pursuant to stock award, stock units and other stock-based awards, subject to adjustment as provided in the 2009 Plan. During any calendar year, no individual may be granted (i) stock options and stock appreciation rights under the 2009 Plan for more than 500,000 shares of common stock in the aggregate or (ii) stock awards, stock units or other stock-based awards under the 2009 Plan for more than 500,000 shares of Company stock in the aggregate, subject to adjustment as provided in the 2009 Plan. Awards to employees and consultants under the 2009 Plan are made by a committee of the Board of Directors, except that with respect to awards to the Chief Executive Officer, the committee recommends those awards for approval by the non-employee directors of the Board of Directors. In the case of awards to non-employee directors, the Board of Directors makes such awards. At December 31, 2017, 3,720,624 shares underlying stock-based compensation awards were still available for grant under the 2009 Plan.

(In thousands of dollars, except per share amounts)

The recording of compensation expense for share-based compensation has no impact on net cash flows and results in the reclassification on the consolidated cash flow statements of related tax benefits from cash flows from operating activities to cash flows from financing activities to the extent these tax benefits exceed the associated compensation cost.

Performance Share Units – During 2017, 2016, and 2015, the Company granted performance share units. A performance share unit ("PSU") represents the right to receive a share of the Company's common stock if specified performance goals are met over the three year performance period specified in the grant, subject to exceptions through the respective vesting periods, generally three years. Each grantee is granted a target award of PSUs, and may earn between 0% and 200% of the target amount depending on the Company's performance against the performance goals.

The performance goals of the 2017, 2016, and 2015 PSU grants consisted of the following metrics:

	Performance Grant of:		
	2017	2016	2015
Metric 1 – Company's total shareholder return ("TSR") compared to the TSR for a specific peer group of investor-owned water companies (a market-based condition)	26.47%	27.5%	30%
Metric 2 – Company's TSR compared to the TSR for the companies listed in the Standard and Poor's Midcap Utilities Index (a market-based condition)	26.47%	27.5%	30%
Metric 3 – Achievement of a targeted cumulative level of rate base growth as a result of acquisitions (a performance-based condition)	23.53%	-	-
Metric 4 – Achievement of targets for maintaining consolidated operations and maintenance expenses over the three year measurement period (a performance-based condition)	23.53%	-	-
Metric 5 – Achievement of a targeted cumulative level of rate base growth as a result of acquisitions (a performance-based condition)	-	25.0%	-
Metric 6 – Achievement of targets for maintaining consolidated operations and maintenance expenses over the three year measurement period (a performance-based condition)	-	20.0%	-
Metric 7 – Maintaining an average ratio of operations and maintenance expenses as a percentage of revenues at Aqua Pennsylvania compared to a target average ratio for the three year performance period (a performance-based condition)	-	-	20%
Metric 8 – Earning a cumulative total earnings before taxes for the Company's operations other than Aqua Pennsylvania for the three year performance period compared to a target (a performance-based condition)	-	-	20%

The following table provides the compensation expense and income tax benefit for PSUs:

	Years ended December 31,		
	2017	2016	2015
Stock-based compensation within operations and maintenance expense	$ 4,351	$ 3,823	$ 4,419
Income tax benefit	1,766	1,552	1,796

(In thousands of dollars, except per share amounts)

The following table summarizes nonvested PSU transactions for the year ended December 31, 2017:

	Number of Share Units	Weighted Average Fair Value
Nonvested share units at beginning of period	476,896	$ 27.96
Granted	125,202	30.79
Performance criteria adjustment	(33,502)	28.14
Forfeited	(22,664)	28.68
Share units vested in prior period and issued in current period	32,400	25.31
Share units issued	(125,999)	36.37
Nonvested share units at end of period	452,333	26.16

A portion of the fair value of PSUs was estimated at the grant date based on the probability of satisfying the market-based conditions associated with the PSUs using the Monte Carlo valuation method, which assesses the probabilities of various outcomes of market conditions. The other portion of the fair value of the PSUs associated with performance-based conditions was based on the fair market value of the Company's stock at the grant date, regardless of whether the market-based condition is satisfied. The fair value of each PSU grant is amortized into compensation expense on a straight-line basis over their respective vesting periods, generally 36 months. The accrual of compensation costs is based on an estimate of the final expected value of the award, and is adjusted as required for the portion based on the performance-based condition. The Company assumes that forfeitures will be minimal, and recognizes forfeitures as they occur, which results in a reduction in compensation expense. As the payout of the PSUs includes dividend equivalents, no separate dividend yield assumption is required in calculating the fair value of the PSUs. The recording of compensation expense for PSUs has no impact on net cash flows. The following table provides the assumptions used in the pricing model for the grant, the resulting grant date fair value of PSUs, and the intrinsic value and fair value of PSUs that vested during the year:

	Years ended December 31,		
	2017	2016	2015
Expected term (years)	3.0	3.0	3.0
Risk-free interest rate	1.49%	0.91%	1.03%
Expected volatility	17.9%	17.9%	16.9%
Weighted average fair value of PSUs granted	$ 30.79	$ 28.89	$ 26.46
Intrinsic value of vested PSUs	$ 3,926	$ 5,912	$ 7,964
Fair value of vested PSUs	$ 3,207	$ 5,104	$ 6,416

As of December 31, 2017, $4,945 of unrecognized compensation costs related to PSUs is expected to be recognized over a weighted average period of approximately 1.7 years. The aggregate intrinsic value of PSUs as of December 31, 2017 was $18,114. The aggregate intrinsic value of PSUs is based on the number of nonvested share units and the market value of the Company's common stock as of the period end date.

(In thousands of dollars, except per share amounts)

Restricted Stock Units – A restricted stock unit ("RSU") represents the right to receive a share of the Company's common stock and is valued based on the fair market value of the Company's stock on the date of grant. RSUs are eligible to be earned at the end of a specified restricted period, generally three years, beginning on the date of grant. In some cases, the right to receive the shares is subject to specific performance goals established at the time the grant is made. The Company assumes that forfeitures will be minimal, and recognizes forfeitures as they occur, which results in a reduction in compensation expense. As the payout of the RSUs includes dividend equivalents, no separate dividend yield assumption is required in calculating the fair value of the RSUs. The following table provides the compensation expense and income tax benefit for RSUs:

	Years ended December 31,		
	2017	2016	2015
Stock-based compensation within operations and maintenance expense	$ 1,183	$ 1,061	$ 1,076
Income tax benefit	489	438	444

The following table summarizes nonvested RSU transactions for the year ended December 31, 2017:

	Number of Stock Units	Weighted Average Fair Value
Nonvested stock units at beginning of period	109,273	$ 28.48
Granted	41,293	30.37
Stock units vested but not paid	(1,467)	31.47
Stock units vested and issued	(26,914)	26.45
Forfeited	(5,398)	31.03
Nonvested stock units at end of period	116,787	29.46

The following table summarizes the value of RSUs:

	Years ended December 31,		
	2017	2016	2015
Weighted average fair value of RSUs granted	$ 30.37	$ 32.08	$ 26.00
Intrinsic value of vested RSUs	896	805	2,327
Fair value of vested RSUs	751	605	1,904

As of December 31, 2017, $1,401 of unrecognized compensation costs related to RSUs is expected to be recognized over a weighted average period of approximately 1.7 years. The aggregate intrinsic value of RSUs as of December 31, 2017 was $4,582. The aggregate intrinsic value of RSUs is based on the number of nonvested stock units and the market value of the Company's common stock as of the period end date.

AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

Stock Options – A stock option represents the option to purchase a number of shares of common stock of the Company as specified in the stock option grant agreement at the exercise price per share as determined by the closing market price of our common stock on the grant date. Stock options are exercisable in installments of 33% annually, starting one year from the grant date and expire ten years from the grant date. The vesting of stock options granted in 2017 are subject to the achievement of the following performance goal: the Company achieves at least an adjusted return on equity equal to 150 basis points below the return on equity granted by the Pennsylvania Public Utility Commission during the Company's Pennsylvania subsidiary's last rate proceeding. The adjusted return on equity equals net income, excluding net income or loss from acquisitions which have not yet been incorporated into a rate application as of the last year end, divided by equity which excludes equity applicable to acquisitions which are not yet incorporated in a rate application during the award period.

The fair value of each stock option is amortized into compensation expense using the graded vesting method, which results in the recognition of compensation costs over the requisite service period for each separately vesting tranche of the stock options as though the stock options were, in substance, multiple stock option grants. The following table provides compensation expense and income tax benefit for stock options:

	Years ended December 31,		
	2017	2016	2015
Stock-based compensation within operations and maintenance expenses	$ 245	$ -	$ -
Income tax benefit	208	260	193

There were no stock options granted during the years ended December 31, 2016, and 2015.

Options under the plans were issued at the closing market price of the stock on the day of the grant.
The fair value of options was estimated at the grant date using the Black-Scholes option-pricing model, which relies on assumptions that require management's judgment. The following table provides the assumptions used in the pricing model for grants and the resulting grant date fair value of stock options granted in the period reported:

	Year ended December 31,
	2017
Expected term (years)	5.45
Risk-free interest rate	2.01%
Expected volatility	17.7%
Dividend yield	2.51%
Grant date fair value per option	$ 4.07

The Company assumes that forfeitures will be minimal, and recognizes forfeitures as they occur, which results in a reduction in compensation expense.

(In thousands of dollars, except per share amounts)

The following table summarizes stock option transactions for the year ended December 31, 2017:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Life (years)	Aggregate Intrinsic Value
Outstanding, beginning of year	427,335	$ 15.55		
Granted	120,127	30.47		
Forfeited	(5,191)	30.47		
Expired / Cancelled	(2,812)	14.26		
Exercised	(174,527)	16.46		
Outstanding at end of year	364,932	$ 19.83	3.7	$ 7,081
Exercisable at end of year	249,996	$ 14.93	1.2	$ 6,074

The intrinsic value of stock options is the amount by which the market price of the stock on a given date, such as at the end of the period or on the day of exercise, exceeded the closing market price of stock on the date of grant. The following table summarizes the intrinsic value of stock options exercised:

	Years ended December 31,		
	2017	2016	2015
Intrinsic value of options exercised	$ 2,767	$ 2,945	$ 4,154

The following table summarizes information about the options outstanding and options exercisable as of December 31, 2017:

	Options Outstanding			Options Exercisable	
	Shares	Weighted Average Remaining Life (years)	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Range of prices:					
$13.00 - 14.99	89,770	2.1	$ 13.72	89,770	$ 13.72
$15.00 - 15.99	101,167	1.2	15.30	101,167	15.30
$16.00 - 16.99	59,059	0.2	16.15	59,059	16.15
$17.00 - 30.99	114,936	9.1	30.47	-	-
	364,932	3.7	19.83	249,996	14.93

As of December 31, 2017, there was $223 of total unrecognized compensation costs related to nonvested stock options granted under the plans. The cost is expected to be recognized over a weighted average period of approximately 1.5 years.

Restricted Stock – Restricted stock awards provide the grantee with the rights of a shareholder, including the right to receive dividends and to vote such shares, but not the right to sell or otherwise transfer the shares during the restriction period. Restricted stock awards result in compensation expense which is equal to the fair market value of the stock on the date of the grant and is amortized ratably over the restriction period. The Company expects forfeitures of restricted stock to be de minimis.

(In thousands of dollars, except per share amounts)

The following table summarizes the value of restricted stock awards:

	Years ended December 31,		
	2017	2016	2015
Intrinsic value of restricted stock awards vested	$ -	$ -	$ 860
Fair value of restricted stock awards vested	-	-	553

As of December 31, 2017, there were no unrecognized compensation costs related to nonvested restricted stock as restricted stock was fully amortized in 2014. Additionally, there was no restricted stock granted during the years ended December 31, 2017, 2016, and 2015.

Stock Awards – The following table provides compensation costs for stock-based compensation related to stock awards:

	Years ended December 31,		
	2017	2016	2015
Stock-based compensation within operations and maintenance expense	$ 563	$ 506	$ 365
Income tax benefit	233	210	151

The following table summarizes the value of stock awards:

	Years ended December 31,		
	2017	2016	2015
Intrinsic and fair value of stock awards vested	$ 563	$ 506	$ 365
Weighted average fair value of stock awards granted	34.42	31.87	26.44

The following table summarizes stock award transactions for year ended December 31, 2017:

	Number of Stock Awards	Weighted Average Fair Value
Nonvested stock awards at beginning of period	-	$ -
Granted	16,345	34.42
Vested	(16,345)	34.42
Nonvested stock awards at end of period	-	-

Note 15 – ***Pension Plans and Other Post-retirement Benefits***

The Company maintains a qualified, defined benefit pension plan that covers its full-time employees who were hired prior to April 1, 2003. Retirement benefits under the plan are generally based on the employee's total years of service and compensation during the last five years of employment. The Company's policy is to fund the plan annually at a level which is deductible for income tax purposes and which provides assets sufficient to meet its pension obligations over time. To offset some limitations imposed by the Internal Revenue Code with respect to payments under qualified plans, the Company has a non-qualified Supplemental Pension Benefit Plan for Salaried Employees in order to prevent some employees from being penalized by these limitations, and to provide certain retirement benefits based on employee's years of service and compensation. The Company also had non-qualified Supplemental Executive Retirement Plans, which were terminated in 2016, for some current and retired employees. The net pension costs and obligations of the qualified and non-qualified plans are included in the tables which follow. Employees hired after April 1, 2003 may participate in a defined contribution plan that provides a Company matching contribution on amounts contributed by participants and an annual profit-sharing contribution based upon a percentage of the eligible participants' compensation.

Effective July 1, 2015, the Company added a permanent lump sum option to the form of benefit payments offered to participants of the qualified defined benefit pension plan upon retirement or termination. The plan paid $8,858 and $9,990 to participants who elected this option during 2017 and 2016.

In addition to providing pension benefits, the Company offers post-retirement benefits other than pensions to employees hired before April 1, 2003 and retiring with a minimum level of service. These benefits include continuation of medical and prescription drug benefits, or a cash contribution toward such benefits, for eligible retirees and life insurance benefits for eligible retirees. The Company funds these benefits through various trust accounts. The benefits of retired officers and other eligible retirees are paid by the Company and not from plan assets due to limitations imposed by the Internal Revenue Code.

In 2016, the Company recognized a settlement loss of $2,895, which results from lump sum payments from the non-qualified plans exceeding the threshold of service and interest cost for the period. A settlement loss is the recognition of unrecognized pension benefit costs that would have been incurred in subsequent periods. The Company recorded this settlement loss as a regulatory asset, as it is probable of recovery in future rates, which will be amortized into pension benefit costs.

(In thousands of dollars, except per share amounts)

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid in the years indicated:

	Pension Benefits	Other Post-retirement Benefits
Years:		
2018	$ 20,516	$ 2,249
2019	20,462	2,553
2020	21,580	2,777
2021	20,674	2,957
2022	21,538	3,177
2023-2027	106,397	18,764

The changes in the benefit obligation and fair value of plan assets, the funded status of the plans and the assumptions used in the measurement of the company's benefit obligation are as follows:

	Pension Benefits		Other Post-retirement Benefits	
	2017	2016	2017	2016
Change in benefit obligation:				
Benefit obligation at January 1,	$ 308,172	$ 306,539	$ 69,312	$ 65,137
Service cost	3,174	3,179	1,020	1,014
Interest cost	12,434	13,038	2,947	2,927
Actuarial loss	18,516	15,321	4,047	1,400
Plan participants' contributions	-	-	124	170
Benefits paid	(21,317)	(21,861)	(1,490)	(1,336)
Settlements	-	(7,742)	-	-
Special termination benefits	-	(302)	-	-
Benefit obligation at December 31,	320,979	308,172	75,960	69,312
Change in plan assets:				
Fair value of plan assets at January 1,	242,360	238,605	46,085	43,704
Actual return on plan assets	33,278	17,375	5,188	2,149
Employer contributions	16,032	16,285	500	1,360
Benefits paid	(21,317)	(21,861)	(1,323)	(1,128)
Settlements	-	(7,742)	-	-
Special termination benefits	-	(302)	-	-
Asset transfer	-	-	(2,700)	-
Fair value of plan assets at December 31,	270,353	242,360	47,750	46,085
Funded status of plan:				
Net liability recognized at December 31,	$ 50,626	$ 65,812	$ 28,210	$ 23,227

(In thousands of dollars, except per share amounts)

The following table provides the net liability recognized on the consolidated balance sheets at December 31,:

	Pension Benefits		Other Post-retirement Benefits	
	2017	2016	2017	2016
Current liability	$ 396	$ 613	$ -	$ -
Noncurrent liability	50,230	65,199	28,210	23,227
Net liability recognized	$ 50,626	$ 65,812	$ 28,210	$ 23,227

At December 31, 2017 and 2016, the Company's pension plans had benefit obligations in excess of its plan assets. The following tables provide the projected benefit obligation, the accumulated benefit obligation and fair market value of the plan assets as of December 31,:

	Projected Benefit Obligation Exceeds the Fair Value of Plan Assets	
	2017	2016
Projected benefit obligation	$ 320,979	$ 308,172
Fair value of plan assets	270,353	242,360

	Accumulated Benefit Obligation Exceeds the Fair Value of Plan Assets	
	2017	2016
Accumulated benefit obligation	$ 301,473	$ 291,889
Fair value of plan assets	270,353	242,360

The following table provides the components of net periodic benefit costs for the years ended December 31,:

	Pension Benefits			Other Post-retirement Benefits		
	2017	2016	2015	2017	2016	2015
Service cost	$ 3,174	$ 3,179	$ 3,349	$ 1,020	$ 1,014	$ 1,224
Interest cost	12,434	13,038	12,955	2,947	2,927	2,802
Expected return on plan assets	(17,077)	(16,910)	(18,702)	(2,589)	(2,647)	(2,923)
Amortization of prior service cost (credit)	579	578	174	(509)	(549)	(687)
Amortization of actuarial loss	8,003	7,153	5,993	1,165	926	1,282
Settlement loss	-	2,895	-	-	-	-
Special termination benefits	-	302	-	-	-	-
Net periodic benefit cost	$ 7,113	$ 10,235	$ 3,769	$ 2,034	$ 1,671	$ 1,698

The Company records the underfunded status of its pension and other post-retirement benefit plans on its consolidated balance sheets and records a regulatory asset for these costs that would otherwise be charged to stockholders' equity, as the Company anticipates recoverability of the costs through customer rates to be probable. The Company's pension and other post-retirement benefit plans were underfunded at December 31, 2017 and 2016. Changes in the plans' funded status will affect the assets and liabilities recorded on the balance sheet. Due to the Company's regulatory treatment, the recognition of the funded status is recorded as a regulatory asset pursuant to the FASB's accounting guidance for regulated operations.

(In thousands of dollars, except per share amounts)

The following table provides the amounts recognized in regulatory assets that have not been recognized as components of net periodic benefit cost as of December 31,:

	Pension Benefits		Other Post-retirement Benefits	
	2017	2016	2017	2016
Net actuarial loss	$ 86,750	$ 92,436	$ 15,724	$ 15,441
Prior service cost (credit)	3,262	3,841	(1,869)	(2,378)
Total recognized in regulatory assets	$ 90,012	$ 96,277	$ 13,855	$ 13,063

The following table provides the estimated net actuarial loss and prior service cost for the Company's pension plans that will be amortized from regulatory asset into net periodic benefit cost for the year ending December 31, 2018:

	Pension Benefits	Other Post-retirement Benefits
Net actuarial loss	$ 7,291	$ 1,182
Prior service cost (credit)	527	(509)

Accounting for pensions and other post-retirement benefits requires an extensive use of assumptions about the discount rate, expected return on plan assets, the rate of future compensation increases received by the Company's employees, mortality, turnover and medical costs. Each assumption is reviewed annually with assistance from the Company's actuarial consultant who provides guidance in establishing the assumptions. The assumptions are selected to represent the average expected experience over time and may differ in any one year from actual experience due to changes in capital markets and the overall economy. These differences will impact the amount of pension and other post-retirement benefit expense that the Company recognizes.

The significant assumptions related to the Company's benefit obligations are as follows:

	Pension Benefits		Other Post-retirement Benefits	
	2017	2016	2017	2016
Weighted Average Assumptions Used to Determine Benefit Obligations as of December 31,				
Discount rate	3.66%	4.13%	3.73%	4.25%
Rate of compensation increase	3.0-4.0%	3.0-4.0%	n/a	n/a
Assumed Health Care Cost Trend Rates Used to Determine Benefit Obligations as of December 31,				
Health care cost trend rate	n/a	n/a	7.0%	6.6%
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	n/a	n/a	5.0%	5.0%
Year that the rate reaches the ultimate trend rate	n/a	n/a	2022	2020

n/a – Assumption is not applicable.

(In thousands of dollars, except per share amounts)

The significant assumptions related to the Company's net periodic benefit costs are as follows:

	Pension Benefits			Other Post-retirement Benefits		
	2017	2016	2015	2017	2016	2015
Weighted Average Assumptions Used to Determine Net Periodic Benefit Costs for Years Ended December 31,						
Discount rate	4.13%	4.48%	4.20%	4.25%	4.60%	4.17%
Expected return on plan assets	7.00%	7.25%	7.50%	4.67-7.00%	4.83-7.25%	5.00-7.50%
Rate of compensation increase	3.0-4.0%	3.0-4.0%	3.0-4.0%	n/a	n/a	n/a
Assumed Health Care Cost Trend Rates Used to Determine Net Periodic Benefit Costs for Years Ended December 31,						
Health care cost trend rate	n/a	n/a	n/a	6.6%	7.0%	7.0%
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	n/a	n/a	n/a	5.0%	5.0%	5.0%
Year that the rate reaches the ultimate trend rate	n/a	n/a	n/a	2021	2021	2019

n/a – Assumption is not applicable.

Assumed health-care trend rates have a significant effect on the expense and liabilities for other post-retirement benefit plans. The health care trend rate is based on historical rates and expected market conditions. A one-percentage point change in the assumed health-care cost trend rates would have the following effects:

	1-Percentage-Point Increase	1-Percentage-Point Decrease
Effect on the health-care component of the accrued other post-retirement benefit obligation	$ 4,797	$ (4,369)
Effect on aggregate service and interest cost components of net periodic post-retirement health-care benefit cost	$ 277	$ (244)

The Company's discount rate assumption, which is utilized to calculate the present value of the projected benefit payments of our post-retirement benefits, was determined by selecting a hypothetical portfolio of high quality corporate bonds appropriate to match the projected benefit payments of the plans. The selected bond portfolio was derived from a universe of Aa-graded corporate bonds, all of which were noncallable (or callable with make-whole provisions), and have at least $50,000 in outstanding value. The discount rate was then developed as the rate that equates the market value of the bonds purchased to the discounted value of the plan's benefit payments. The Company's pension expense and liability (benefit obligations) increases as the discount rate is reduced.

The Company's expected return on plan assets is determined by evaluating the asset class return expectations with its advisors as well as actual, long-term, historical results of our asset returns. The Company's market related value of plan assets is equal to the fair value of the plan's assets as of the last day of its fiscal year, and is a determinant for the expected return on plan assets which is a component of post-retirement benefits expense. The Company's pension expense increases as the expected return on plan assets decreases. For 2017, the Company used a 7.00% expected return on plan assets assumption which will decrease to 6.75% for 2018. The Company believes its actual long-term asset allocation on average will approximate the targeted allocation. The Company's investment strategy is to earn a reasonable rate of return while maintaining risk at acceptable levels. Risk is managed through fixed income investments to manage interest rate exposures that impact the valuation of liabilities and through the diversification of investments across and within various asset categories. Investment returns are compared to a total plan benchmark constructed by applying the plan's asset allocation target weightings to passive index returns representative of the respective asset classes in which the plan invests. The Retirement and Employee Benefits Committee meets quarterly to review plan investments and management monitors investment performance quarterly through a performance report prepared by an external consulting firm.

(In thousands of dollars, except per share amounts)

The Company's pension plan asset allocation and the target allocation by asset class are as follows:

	Target Allocation	Percentage of Plan Assets at December 31, 2017
Return seeking assets	50 to 70%	64%
Liability hedging assets	30 to 50%	36%
Total	100%	100%

	Target Allocation	Percentage of Plan Assets at December 31, 2016
Domestic equities	25 to 75%	65%
International equities	0 to 10%	6%
Fixed income	25 to 50%	19%
Alternative investments	0 to 5%	2%
Cash and cash equivalents	0 to 20%	8%
Total	100%	100%

The fair value of the Company's pension plans' assets at December 31, 2017 by asset class are as follows:

	Level 1	Level 2	Level 3	Assets measured at NAV (a)	Total
Common stock	$ 26,902	$ -	$ -	$ -	$ 26,902
Return seeking assets:					
Global equities	-	-	-	66,281	66,281
Real estate securities	-	-	-	14,110	14,110
Hedge / diversifying strategies	-	-	-	38,143	38,143
Credit	-	-	-	28,395	28,395
Liability hedging assets	-	-	-	91,872	91,872
Cash and cash equivalents	4,650	-	-	-	4,650
Total pension assets	$ 31,552	$ -	$ -	$ 238,801	$ 270,353

(a) Assets that are measured at fair value using the NAV per share practical expedient have not been classified in the fair value hierarchy.

AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

The fair value of the Company's pension plans' assets at December 31, 2016 by asset class are as follows:

	Level 1	Level 2	Level 3	Total
Domestic equities:				
Common stocks	$ 152,740	$ -	$ -	$ 152,740
Mutual funds	3,668	-	-	3,668
International equities	13,813	-	-	13,813
Fixed income:				
U.S. Treasury and government agency bonds	-	11,170	-	11,170
Corporate and foreign bonds	-	24,385	-	24,385
Mutual funds	9,752		-	9,752
Alternative investments:				
Real estate	2,613	-	-	2,613
Commodity funds	1,279	-	-	1,279
Cash and cash equivalents	348	22,592	-	22,940
Total pension assets	$ 184,213	$ 58,147	$ -	$ 242,360

Equity securities include our common stock in the amounts of $16,471 or 6.1% and $20,632 or 8.5% of total pension plans' assets as of December 31, 2017 and 2016, respectively.

The asset allocation for the Company's other post-retirement benefit plans and the target allocation by asset class are as follows:

	Target Allocation	Percentage of Plan Assets at December 31, 2017
Return seeking assets	50 to 70%	62%
Liability hedging assets	30 to 50%	38%
Total	100%	100%

	Target Allocation	Percentage of Plan Assets at December 31, 2016
Domestic equities	25 to 75%	52%
International equities	0 to 10%	3%
Fixed income	25 to 50%	25%
Alternative investments	0 to 5%	0%
Cash and cash equivalents	0 to 20%	20%
Total	100%	100%

(In thousands of dollars, except per share amounts)

The fair value of the Company's other post-retirement benefit plans' assets at December 31, 2017 by asset class are as follows:

	Level 1	Level 2	Level 3	Assets measured at NAV (a)	Total
Return seeking assets:					
Global equities	$ 9,477	$ -	$ -	$ 15,158	$ 24,635
Real estate securities	1,731	-	-	3,211	4,942
Liability hedging assets	5,265	-	-	8,961	14,226
Cash and cash equivalents	3,947	-	-	-	3,947
Total other post-retirement assets	$ 20,420	$ -	$ -	$ 27,330	$ 47,750

(a) Assets that are measured at fair value using the NAV per share practical expedient have not been classified in the fair value hierarchy.

The fair value of the Company's other post-retirement benefit plans' assets at December 31, 2016 by asset class are as follows:

	Level 1	Level 2	Level 3	Total
Domestic equities:				
Common stocks	$ 10,667	$ -	$ -	$ 10,667
Mutual funds	13,464	-	-	13,464
International equities	1,242	-	-	1,242
Fixed income:				
U.S. Treasury and government agency bonds	-	4,968	-	4,968
Corporate and foreign bonds	-	6,347	-	6,347
Alternative investments	172	-	-	172
Cash and cash equivalents	-	9,225	-	9,225
Total other post-retirement assets	$ 25,545	$ 20,540	$ -	$ 46,085

Valuation Techniques Used to Determine Fair Value

- *Common Stocks* - Investments in common stocks are valued using unadjusted quoted prices obtained from active markets.
- *Return Seeking Assets* – Investments in return seeking assets consists of the following:
    - Global equities, which consist of common and preferred shares of stock, traded on U.S. or foreign exchanges that are valued using unadjusted quoted prices obtained from active markets, or commingled fund vehicles, consisting of such securities valued using NAV, which are not classified within the fair value hierarchy.
    - Real estate securities, which consist of securities, traded on U.S. or foreign exchanges that are valued using unadjusted quoted prices obtained from active markets, or for real estate commingle fund vehicles that are not publicly quoted, the fund administrators value the funds using the NAV per fund share, derived from the quoted prices in active markets of the underlying securities and are not classified within the fair value hierarchy.

- Hedge / diversifying strategies, which consist of a multi-manager fund vehicle having underlying exposures that collectively seek to provide low correlation of return to equity and fixed income markets, thereby offering diversification. As a multi-manager fund investment, NAV is derived from underlying manager NAVs, which are derived from the quoted prices in active markets of the underlying securities and are not classified within the fair value hierarchy.
- Credit, which consist of certain opportunistic, return-oriented credits which primarily include below investment grade bonds (i.e. high yield bonds), bank loans, and securitized debt. Credits are valued using the NAV per fund share, derived from either quoted prices in active markets of the underlying securities, or less active markets, or quotes of similar assets, and are not classified within the fair value hierarchy.

- *Liability Hedging Assets* – Investments in liability hedging assets consist of funds investing in high-quality fixed income (i.e. U.S. Treasury securities and government bonds), and for funds for which market quotations are readily available, are valued at the last reported closing price on the primary market or exchange on which they are traded. Funds for which market quotations are not readily available, are valued using the NAV per fund share, derived from the quoted prices in active markets of the underlying securities and are not classified within the fair value hierarchy.
- *Cash and Cash Equivalents* – Investments in cash and cash equivalents are comprised of both uninvested cash and money market funds. The uninvested cash is valued based on its carrying value, and the money market funds are valued utilizing the net asset value per unit based on the fair value of the underlying assets as determined by the fund's investment managers.
- *Mutual Funds* – Investments in mutual funds which consist of either equity or fixed income investments are valued using the net asset value per unit as obtained from quoted market prices from active markets.
- *International Equities* – Investments in international equities are valued using unadjusted quoted prices obtained from active markets.
- *Fixed Income* – Investments in fixed income that comprise U.S. Treasury and government agency bonds, and corporate and foreign bonds are valued utilizing pricing models that incorporate available trade, bid, and other market information to value the fixed income securities.
- *Alternative Investments* – Investments in alternative investments are comprised of either real estate funds, real estate investment trusts, or commodity funds, and are valued using unadjusted quoted prices obtained from active markets.

Funding requirements for qualified defined benefit pension plans are determined by government regulations and not by accounting pronouncements. In accordance with funding rules and the Company's funding policy, during 2018 our pension contribution is expected to be $12,484.

The Company has a 401(k) savings plan, which is a defined contribution plan and covers substantially all employees. The Company makes matching contributions that are based on a percentage of an employee's contribution, subject to specific limitations, as well as, non-discretionary contributions based on eligible hourly wages for certain union employees, discretionary year-end contributions based on an employee's eligible compensation, and employer profit sharing contributions. Participants may diversify their Company matching account balances into other investments offered under the 401(k) savings plan. The Company's contributions, which are recorded as compensation expense, were $5,374, $4,988, and $5,001, for the years ended December 31, 2017, 2016, and 2015, respectively.

Note 16 – *Water and Wastewater Rates*

On June 7, 2012, Aqua Pennsylvania reached a settlement agreement in its rate filing with the Pennsylvania Public Utility Commission, which in addition to a water rate increase, provided for a reduction in current income tax expense as a result of the recognition of qualifying income tax benefits upon Aqua Pennsylvania changing its tax accounting method to permit the expensing of qualifying utility asset improvement costs that historically have been capitalized and depreciated for book and tax purposes. In December 2012, Aqua Pennsylvania implemented this change which provides for the flow-through of income tax benefits that resulted in a substantial reduction in income tax expense and greater net income and cash flow. This change allowed Aqua Pennsylvania to suspend its water Distribution System Improvement Charges in 2013 and lengthen the amount of time until the next Aqua Pennsylvania rate case. Beginning on October 1, 2017, Aqua Pennsylvania initiated a water infrastructure rehabilitation surcharge for the capital invested since the last rate proceeding and expects to file a base rate case in 2018.

The Company's operating subsidiaries were allowed rate increases totaling $7,558 in 2017, $3,434 in 2016, and $3,347 in 2015, represented by five, six, and four rate decisions, respectively. Revenues from these increases realized in the year of grant were approximately $6,343, $1,788, and $2,887 in 2017, 2016, and 2015, respectively.

Six states in which the Company operates permit water utilities, and in five states wastewater utilities, to add a surcharge to their water or wastewater bills to offset the additional depreciation and capital costs related to infrastructure system replacement and rehabilitation projects completed and placed into service between base rate filings. Currently, Pennsylvania, Illinois, Ohio, Indiana, New Jersey, and North Carolina allow for the use of this surcharge. The surcharge for infrastructure system replacements and rehabilitations is typically adjusted periodically based on additional qualified capital expenditures completed or anticipated in a future period, is capped as a percentage of base rates, generally at 5% to 12.75%, and is reset to zero when new base rates that reflect the costs of those additions become effective or when a utility's earnings exceed a regulatory benchmark. The surcharge for infrastructure system replacements and rehabilitations provided revenues in 2017, 2016, and 2015 of $10,255, $7,379, and $3,261, respectively.

Note 17 – *Segment Information*

The Company has ten operating segments and one reportable segment. The Regulated segment, the Company's single reportable segment, is comprised of eight operating segments representing our water and wastewater regulated utility companies which are organized by the states where we provide water and wastewater services. These operating segments are aggregated into one reportable segment since each of these operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution or wastewater collection methods, and the nature of the regulatory environment.

Two operating segments are included within the Other category below. These segments are not quantitatively significant and are comprised of Aqua Infrastructure and Aqua Resources. In addition to these segments, Other is comprised of other business activities not included in the reportable segment, including corporate costs that have not been allocated to the Regulated segment and intersegment eliminations. Corporate costs include general and administrative expenses, and interest expense.

AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

The following table presents information about the Company's reportable segment:

	2017			2016		
	Regulated	Other and Eliminations	Consolidated	Regulated	Other and Eliminations	Consolidated
Operating revenues	$ 804,905	$ 4,620	$ 809,525	$ 800,107	$ 19,768	$ 819,875
Operations and maintenance expense	286,962	244	287,206	285,347	19,550	304,897
Depreciation	136,246	56	136,302	131,835	(848)	130,987
Amortization	240	182	422	2,076	(55)	2,021
Operating income (loss)	326,935	2,032	328,967	326,933	(1,348)	325,585
Interest expense, net	81,974	6,367	88,341	76,222	4,372	80,594
Allowance for funds used during construction	15,211	-	15,211	8,815	-	8,815
Equity earnings in joint venture	-	(331)	(331)	-	(976)	(976)
Income tax (benefit)	14,107	2,807	16,914	24,956	(3,978)	20,978
Net income (loss)	246,548	(6,810)	239,738	234,922	(740)	234,182
Capital expenditures	478,077	12	478,089	381,965	1,031	382,996
Total assets	6,236,109	96,354	6,332,463	6,066,477	92,514	6,158,991
Goodwill	37,389	4,841	42,230	37,367	4,841	42,208

	2015		
	Regulated	Other and Eliminations	Consolidated
Operating revenues	$ 779,613	$ 34,591	$ 814,204
Operations and maintenance expense	282,866	26,444	309,310
Depreciation	125,146	144	125,290
Amortization	3,364	83	3,447
Operating income	315,876	5,224	321,100
Interest expense, net	72,703	3,833	76,536
Allowance for funds used during construction	6,219	-	6,219
Equity loss in joint venture	-	35,177	35,177
Income tax (benefit)	26,379	(11,417)	14,962
Net Income (loss)	224,122	(22,332)	201,790
Capital expenditures	363,594	1,095	364,689
Total assets	5,645,780	72,093	5,717,873
Goodwill	27,246	6,620	33,866

Selected Quarterly Financial Data (Unaudited)

Aqua America, Inc. and Subsidiaries

(In thousands of dollars, except per share amounts)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2017					
Operating revenues	$ 187,787	$ 203,418	$ 215,008	$ 203,312	$ 809,525
Operations and maintenance expense	69,128	70,853	67,982	79,243	287,206
Operating income	69,896	84,612	97,486	76,973	328,967
Net income	49,072	60,968	76,225	53,473	239,738
Basic net income per common share	0.28	0.34	0.43	0.30	1.35
Diluted net income per common share	0.28	0.34	0.43	0.30	1.35
Dividend paid per common share	0.1913	0.1913	0.2047	0.2047	0.7920
Dividend declared per common share	0.1913	0.1913	0.2047	0.2047	0.7920
Price range of common stock:					
high	32.32	34.41	34.66	39.55	39.55
low	29.41	31.18	32.30	33.12	29.41
2016					
Operating revenues	$ 192,607	$ 203,876	$ 226,593	$ 196,799	$ 819,875
Operations and maintenance expense	73,541	73,994	79,812	77,550	304,897
Operating income	72,331	83,493	97,799	71,962	325,585
Net income	51,737	59,626	73,170	49,649	234,182
Basic net income per common share	0.29	0.34	0.41	0.28	1.32
Diluted net income per common share	0.29	0.33	0.41	0.28	1.32
Dividend paid per common share	0.178	0.178	0.1913	0.1913	0.7386
Dividend declared per common share	0.178	0.178	0.1913	0.1913	0.7386
Price range of common stock:					
high	32.44	35.66	35.83	31.29	35.83
low	28.35	30.31	29.53	28.03	28.03

High and low prices of the Company's common stock are as reported on the New York Stock Exchange.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

Item 9A. *Controls and Procedures*

(a) Evaluation of Disclosure Controls and Procedures – Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Annual Report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this Annual Report are effective to provide reasonable assurance that the information required to be disclosed by us in reports filed under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding disclosure. A controls system cannot provide absolute assurance, however, that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

(b) Management's Report on Internal Control Over Financial Reporting
Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. The Company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In assessing the effectiveness of internal control over financial reporting, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control-Integrated Framework* (2013). As a result of management's assessment and based on the criteria in the framework, management has concluded that, as of December 31, 2017, the Company's internal control over financial reporting was effective.

(c) Attestation Report of the Registered Public Accounting Firm – The effectiveness of our internal control over financial reporting as of December 31, 2017 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

(d) Changes in Internal Control Over Financial Reporting – No change in our internal control over financial reporting occurred during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. *Other Information*

None.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

The information appearing in the sections captioned *Information Regarding Nominees and Directors, Corporate Governance – Code of Ethics, – Board and Board Committees,* and *Section 16(a) Beneficial Ownership Reporting Compliance* of the definitive Proxy Statement relating to our 2018, annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K (the "Form 10-K), is incorporated by reference herein.

We make available free of charge within the Corporate Governance portion of the investor relations section of our web site, at www.aquaamerica.com, our Corporate Governance Guidelines, the Charters of each Committee of our Board of Directors, and our Code of Ethical Business Conduct (the "Code of Ethics"). Amendments to the Code of Ethics, and any grant of a waiver from a provision of the Code requiring disclosure under applicable rules of the SEC, will be disclosed on our web site. The reference to our web site is intended to be an inactive textual reference only, and the contents of such web site are not incorporated by reference herein and should not be considered part of this or any other report that we file with or furnish to the SEC.

Our Executive Officers

The following table and the notes thereto set forth information with respect to our executive officers, including their names, ages, positions with Aqua America and business experience during the last five years:

Name	Age	Position with Aqua America (1)
Christopher H. Franklin	52	Chairman (January 2018 to present); President and Chief Executive Officer (July 2015 to present); Executive Vice President and President and Chief Operating Officer, Regulated Operations (January 2012 to July 2015); Regional President – Midwest and Southern Operations and Senior Vice President, Corporate and Public Affairs (January 2010 to January 2012); Regional President, Aqua America – Southern Operations and Senior Vice President, Public Affairs and Customer Operations (February 2007 to January 2010); Vice President, Public Affairs and Customer Operations (May 2005 to February 2007); Vice President, Corporate and Public Affairs (February 1997 to May 2005); Manager Corporate and Public Affairs (December 1992 to February 1997)
David P. Smeltzer	59	Executive Vice President and Chief Financial Officer (January 2012 to present); Chief Financial Officer (February 2007 to January 2012); Senior Vice President - Finance and Chief Financial Officer (December 1999 to February 2007); Vice President - Finance and Chief Financial Officer (May 1999 to December 1999); Vice President - Rates and Regulatory Relations, Philadelphia Suburban Water Company (March 1991 to May 1999); Vice President - Controller of Philadelphia Suburban Water Company (March 1986 to March 1991)
Richard S. Fox	56	Chief Operating Officer (July 2015 to present); Regional President, Regulated Utilities (January 2012 to July 2015); President Aqua Utilities, Florida, Inc. (August 2011 to January 2012); Vice President, Customer Service (June 2002 to August 2011)
Christopher P. Luning	50	Senior Vice President, General Counsel, and Secretary (April 2012 to present); Vice President Corporate Development and Corporate Counsel (June 2008 to April 2012); Vice President and Deputy General Counsel (May 2005 to June 2008); Assistant General Counsel (March 2003 to May 2005)
William C. Ross	72	Senior Vice President, Engineering and Environmental Affairs (January 2012 to present); Vice President, Engineering and Environmental Affairs (February 2001 to January 2012); Senior Manager Planning and Engineering Philadelphia Suburban Water Company (February 1998 to February 2001)
Robert A. Rubin	55	Senior Vice President, Controller and Chief Accounting Officer (January 2012 to present); Vice President, Controller and Chief Accounting Officer (May 2005 to January 2012); Controller and Chief Accounting Officer (March 2004 to May 2005); Controller (March 1999 to March 2004); Assistant Controller (June 1994 to March 1999); Accounting Manager (June 1989 to June 1994)
Daniel J. Schuller	48	Executive Vice President, Strategy and Corporate Development (July 2015 to present); Investment Principal – J.P. Morgan Asset Management – Infrastructure Investments Group (2007 to 2015)

Prior to January 16, 2004, Aqua Pennsylvania was known as Philadelphia Suburban Water Company.

(1) In addition to the capacities indicated, the individuals named in the above table hold other offices or directorships with subsidiaries of the Company. Officers serve at the discretion of the Board of Directors.

Item 11. *Executive Compensation*

The information appearing in the sections captioned *Executive Compensation* and *Director Compensation* of the definitive Proxy Statement relating to our 2018 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, is incorporated by reference herein.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

Ownership of Common Stock - The information appearing in the section captioned Ownership of Common Stock of the Proxy Statement relating to our 2018 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, is incorporated by reference herein.

Securities Authorized for Issuance under Equity Compensation Plans - The following table provides information for our equity compensation plans as of December 31, 2017:

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	943,452 (1)	$19.83 (2)	3,720,624
Equity compensation plans not approved by security holders	-	-	-
Total	943,452	19.83	3,720,624

(1) Consists of 364,932 shares issuable upon exercise of outstanding options, 461,733 shares issuable upon conversion of outstanding performance share units, and 116,787 shares issuable upon conversion of outstanding restricted share units.

(2) Calculated based upon outstanding options of 364,932 shares of our common stock.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

The information appearing in the sections captioned *Corporate Governance – Director Independence* and *– Policies and Procedures For Approval of Related Person Transactions* of the definitive Proxy Statement relating to our 2018 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, is incorporated by reference herein.

Item 14. *Principal Accountant Fees and Services*

The information appearing in the section captioned *Proposal No. 2 – Services and Fees* of the definitive Proxy Statement relating to our 2018 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, is incorporated by reference herein.

PART IV

Item 15. *Exhibits and Financial Statement Schedules*

Financial Statements. The consolidated financial statements and supplementary data included in Part II, Item 8 are hereby incorporated by reference herein.

Financial Statement Schedules.

Schedule 1. – Condensed Parent Company Financial Statements. All other schedules are omitted because they are not applicable or not required, or because the required information is included in the consolidated financial statements or notes thereto.

Exhibits, Including Those Incorporated by Reference. A list of exhibits filed as part of this Form 10-K is set forth in the Exhibit Index hereto which is incorporated by reference herein. Where so indicated, exhibits which were previously filed are incorporated by reference. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated in the exhibit index.

Item 16. *Form 10-K Summary*

Registrants may voluntarily include a summary of information required by Form 10-K under this Item 16. The Company has elected not to include such summary information in this Annual Report.

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference to			
		Form	File No.	Exhibit(s)	Filing Date
3.1	Amended and Restated Articles of Incorporation of Aqua America, Inc., dated as of May 10, 2012	8-K	001-06659	3.1	May 11, 2012
3.2	Amended and Restated Bylaws of Aqua America, Inc. (as amended effective as of May 10, 2012)	8-K	001-06659	3.2	May 11, 2012
4.1.1	Indenture of Mortgage dated as of January 1, 1941 between Aqua Pennsylvania, Inc. (f/k/a Philadelphia Suburban Water Company) and The Bank of New York Mellon Trust Company, as successor trustee to First Pennsylvania Bank, N.A. (f/k/a The Pennsylvania Company for Insurance on Lives and Granting Annuities)	10-K	001-06659	4.1.1	February 26, 2016
4.1.2	Twenty-fourth Supplemental Indenture dated as of June 1, 1988	10-K	001-06659	4.1.2	February 26, 2016
4.1.3	Twenty-sixth Supplemental Indenture dated as of November 1, 1991	10-K	001-06659	4.1.3	February 26, 2016
4.1.4	Twenty-ninth Supplemental Indenture dated as of March 30, 1995	10-Q	001-06659	4.17	May 10, 1995
4.1.5	Thirty-third Supplemental Indenture, dated as of November 15, 1999	10-K	001-06659	4.27	March 29, 2000
4.1.6	Thirty-fifth Supplemental Indenture, dated as of January 1, 2002	10-K	001-06659	4.22	March 20, 2002
4.1.7	Forty-second Supplemental Indenture, dated as of December 1, 2007	10-K	001-06659	4.36	February 27, 2008
4.1.8	Forty-third Supplemental Indenture, dated as of December 1, 2008	10-K	001-06659	4.37	February 27, 2009
4.1.9	Forty-fourth Supplemental Indenture, dated as of July 1, 2009	10-Q	001-06659	4.38	August 6, 2009
4.1.10	Forty-fifth Supplemental Indenture, dated as of October 15, 2009	10-K	001-06659	4.39	February 26, 2010
4.1.11	Forty-sixth Supplemental Indenture, dated as of October 15, 2010	10-K	001-06659	4.35	February 25, 2011
4.1.12	Forty-seventh Supplemental Indenture, dated as of October 15, 2012	10-K	001-06659	4.24	February 28, 2013
4.1.13	Forty-eighth Supplemental Indenture, dated as of October 1, 2013	10-K	001-06659	4.1.17	March 3, 2014
4.1.14	Form of Supplemental Indenture during and after 2014	10-K	001-06659	4.1.15	February 26, 2016
4.1.14.1	Schedule of Outstanding Supplemental Indentures during and after 2014	^	^	^	^

4.2	Note Purchase Agreement, dated July 31, 2003, by and among the Aqua America, Inc. and the note purchasers thereto	10-Q	001-06659	4.27	November 13, 2003
4.3	Bond Purchase Agreement, dated December 12, 2007, by and among the Montgomery County Industrial Development Authority, Aqua Pennsylvania, Inc. and Sovereign Securities Corporation, LLC	10-K	001-06659	10.34	February 27, 2008
4.4	Bond Purchase Agreement, dated December 4, 2008, by and among the Pennsylvania Economic Development Financing Authority, Aqua Pennsylvania, Inc. and Sovereign Securities Corporation, LLC	10-K	001-06659	10.35	February 27, 2009
4.5	Bond Purchase Agreement, dated June 30, 2009, by and among the Pennsylvania Economic Development Financing Authority, Aqua Pennsylvania, Inc., Jeffries and Company, Inc., and Janney Montgomery Scott LLC	10-Q	001-06659	10.52	August 6, 2009
4.6	Bond Purchase Agreement , dated October 20, 2009, by and among the Pennsylvania Economic Development Financing Authority, Aqua Pennsylvania, Inc., Jeffries and Company, Inc., Janney Montgomery Scott LLC, and PNC Capital Markets LLC	10-K	001-06659	10.59	February 26, 2010
4.7	Bond Purchase Agreement, dated October 27, 2010, by and among the Pennsylvania Economic Development Financing Authority, Aqua Pennsylvania, Inc., Jeffries and Company, Inc., PNC Capital Markets LLC, and TD Securities (USA) LLC	10-K	001-06659	10.51	February 25, 2011
4.8	Bond Purchase Agreement , dated November 8, 2012, by and among Aqua Pennsylvania, Inc., Teachers Insurance and Annuity Association, John Hancock Life Insurance Company, John Hancock Life Insurance Company of New York, John Hancock Life & Health Insurance Company, The Lincoln National Life Insurance Company, Lincoln Life & Annuity Company of New York, New York Life Insurance Company, New York Life Insurance and Annuity Corporation, Minnesota Life Insurance Company, United Health Care Insurance Company, American Republic Insurance Company, Western Fraternal Life Association	10-K	001-06659	10.54	February 28, 2013

4.9	Bond Purchase Agreement, dated October 24, 2013, by and among Aqua Pennsylvania, Inc., John Hancock Life Insurance Company (U.S.A), John Hancock Life Insurance Company of New York, John Hancock Life & Health Insurance Company, The Lincoln National Life Insurance Company, Thrivent Financial for Lutherans, United Insurance Company of America, Equitable Life & Casualty Insurance Company, Catholic United Financial, and Great Western Insurance Company	10-K	001-06659	10.45	March 3, 2014
4.10	Bond Purchase Agreement, dated December 29, 2014, by and among Aqua Pennsylvania, Inc., Thrivent Financial for Lutherans, State Farm Life Insurance Company, John Hancock Life Insurance Company (U.S.A), Phoenix Life Insurance Company, PHL Variable Insurance Company, United of Omaha Life Insurance Company, Mutual of Omaha Insurance Company, and Companion Life Insurance Company	10-K	001-06659	10.58	February 27, 2015
4.11	Bond Purchase Agreement, dated December 3, 2015 by and among Aqua Pennsylvania, Inc., Thrivent Financial for Lutherans, State Farm Life Insurance Company, John Hancock Life Insurance Company (U.S.A), The Lincoln National Life Insurance Company, Teachers Insurance And Annuity Association Of America, CMFG Life Insurance Company, Genworth Life Insurance Company, Phoenix Life Insurance Company, PHL Variable Insurance Company, United Of Omaha Life Insurance Company, The State Life Insurance Company, Pioneer Mutual Life Insurance Company, MONY Life Insurance Company	10-K	001-06659	4.12	February 26, 2016
4.12	Note Purchase Agreement, dated November 3, 2016, by and among Aqua America Inc. and the note purchasers thereto	10-K	001-06659	4.13	February 24, 2017
4.13	Bond Purchase Agreement, dated December 15, 2016 by and among Aqua Pennsylvania, Inc., Teachers Insurance and Annuity Association of America, New York Life Insurance Company, New York Life Insurance and Annuity Corporation, John Hancock Life Insurance Company, American Equity Investment Life Insurance Company, Genworth Life and Annuity Insurance Company, Phoenix Life Insurance Company, PHL Variable Insurance Company, American United Life Insurance Company, The State Life Insurance Company, and Pioneer Mutual Life Insurance Company	10-K	001-06659	4.14	February 24, 2017
4.14	Bond Purchase Agreement, dated July 10, 2017 by and among Aqua Illinois, Inc., Teachers Insurance and Annuity Association of America	10-Q	001-06659	4.1	November 2, 2017

4.15	Bond Purchase Agreement, dated July 20, 2017 by and among Aqua Pennsylvania, Inc., New York Life Insurance Company, New York Life Insurance and Annuity Corporation, New York Life Insurance and Annuity Corporation Institutionally Owned Life Insurance Separate Account (BOLI 3), New York Life Insurance and Annuity Corporation Institutionally Owned Life Insurance Separate Account (BOLI 3-2)	10-Q	001-06659	4.2	November 2, 2017
10.1	Revolving Credit Agreement, dated as of March 23, 2012, between Aqua America, Inc. and PNC Bank, National Association, CoBank, ACB, and Huntington National Bank	10-Q	001-06659	10.60	May 7, 2012
10.1.1	First Amendment to Revolving Credit Agreement , dated as of January 31, 2013, between Aqua America, Inc. and PNC Bank, National Association, CoBank, ACB, and Huntington National Bank	10-Q	001-06659	10.53	November 6, 2014
10.1.2	Second Amendment to Revolving Credit Agreement, dated as of August 20, 2014, between Aqua America, Inc. and PNC Bank, National Association, CoBank, ACB, and Huntington National Bank	10-Q	001-06659	10.54	November 6, 2014
10.1.3	Third Amendment to Revolving Credit Agreement, dated as of February 24, 2016, between Aqua America, Inc. and PNC Bank, National Association, CoBank, ACB, Huntingdon National Bank, and Bank of America, N.A.	10-Q	001-06659	10.2.3	May 6, 2016
10.1.4	Amended and Restated Revolving Credit Agreement, dated as of November 17, 2016 between Aqua Pennsylvania and PNC Bank, National Association, TD Bank, N.A., Citizens Bank of Pennsylvania, and Huntington National Bank	10-K	001-06659	10.2.4	February 24, 2017
10.1.5	First Amendment to Revolving Credit Agreement, dated as of November 16, 2017 between Aqua Pennsylvania and PNC Bank, National Association, Citizens Bank of Pennsylvania, TD Bank, N.A., and Huntington National Bank	^	^	^	^
10.2	Aqua America, Inc. Deferred Compensation Plan Master Trust Agreement with PNC Bank, National Association, dated as of December 31, 1996*	10-K	001-06659	10.24	March 25, 1997
10.2.1	Amendment 2008-1 to the Aqua America, Inc. Deferred Compensation Plan Master Trust Agreement, dated as of December 15, 2008*	10-K	001-06659	10.50	February 27, 2009
10.3	Aqua America, Inc. 2009 Executive Deferral Plan (as amended and restated effective January 1, 2009)*	S-8	333-156047	4.1	December 10, 2008
10.4	Aqua America, Inc. Supplemental Pension Benefit Plan for Salaried Employees (as amended and restated effective January 1, 2011)*	10-K	001-06659	10.58	February 27, 2012
10.5	Aqua America. Inc. Dividend Reinvestment and Direct Stock Purchase Plan*	S-3ASR	333-219545	N/A	July 28, 2017

10.6	Aqua America, Inc. 2004 Equity Compensation Plan (as amended and restated as of January 1, 2009)*	10-K	001-06659	10.36	February 27, 2009
10.6.1	Form of Incentive Stock Option and Dividend Equivalent Grant Agreement*	10-K	001-06659	10.49	February 27, 2009
10.6.2	Form of Amendment to Incentive Stock Option and Dividend Equivalent Grant Agreements for executive officers *	10-K	001-06659	10.8.2	February 26, 2016
10.7	Aqua America, Inc. 2009 Omnibus Equity Compensation Plan (as amended effective February 22, 2017) *	10-K	001-06659	10.8	February 24, 2017
10.7.1	Form of Performance-Based Share Unit Grant for Chief Executive Officer*	10-K	001-06659	10.9.1	February 26, 2016
10.7.2	Performance-Based Share Unit Grant Terms and Conditions for Chief Executive Officer*	10-Q	001-06659	10.51(B)	May 8, 2014
10.7.3	Form of Performance-Based Share Unit Grant for all other executive officers*	10-Q	001-06659	10.36	May 6, 2015
10.7.4	Performance-Based Share Unit Grant Terms and Conditions for all other executive officers*	10-Q	001-06659	10.37	May 6, 2015
10.7.5	Form of Restricted Stock Unit Grant for Chief Executive Officer*	10-K	001-06659	10.9.5	February 26, 2016
10.7.6	Restricted Stock Unit Grant Terms and Conditions for Chief Executive Officer*	10-Q	001-06659	10.52(B)	May 8, 2014
10.7.7	Form of Restricted Stock Unit Grant for all other executive officers*	10-Q	001-06659	10.40	May 6, 2015
10.7.8	Restricted Stock Unit Grant Terms and Conditions for all other executive officers*	10-Q	001-06659	10.41	May 6, 2015
10.7.9	Performance-Based Share Unit Grant Terms and Conditions*	10-Q	001-06659	10.1	May 4, 2017
10.7.10	Restricted Stock Unit Grant Terms and Conditions for Chief Executive Officer*	10-Q	001-06659	10.2	May 4, 2017
10.7.11	Restricted Stock Unit Grant Terms and Conditions for all other executive officers*	10-Q	001-06659	10.3	May 4, 2017
10.7.12	Stock Option Grant Terms and Conditions*	10-Q	001-06659	10.4	May 4, 2017
10.8	Aqua America, Inc. 2012 Employee Stock Purchase Plan*	10-K	001-06659	10.10	February 26, 2016
10.9	Aqua America, Inc. and Subsidiaries Annual Cash Incentive Compensation Plan (adopted February 26, 2013)*	10-K	001-06659	10.56	February 28, 2013
10.10	Form of Change in Control Agreement between the Company and executive officers*	10-Q	001-06659	10.1	November 6, 2015
10.10.1	Schedule of Change in Control Agreement between the Company and executive officers*	10-K	001-06659	10.12.1	February 26, 2016
10.11	Change in Control Agreement, dated December 31, 2008, between Aqua America, Inc. and Christopher H. Franklin*	10-K	001-06659	10.46	February 27, 2009
10.12	Non-Employee Directors' Compensation for 2016*	10-K	001-06659	10.16	February 26, 2016
10.13	Employment Agreement, dated June 2, 2015, between Aqua America, Inc. and Christopher Franklin*	8-K	001-06659	10.1	June 3, 2015
10.14	Non-Employee Directors' Compensation effective January 1, 2018*	8-K	001-06659	10.1	December 15, 2017

21.1	Subsidiaries of Aqua America, Inc.	^	^	^	^
23.1	Consent of Independent Registered Public Accounting Firm – PricewaterhouseCoopers LLP	^	^	^	^
31.1	Certification of Chief Executive Officer, pursuant to Rule 13a-14(a) under the Securities and Exchange Act of 1934	^	^	^	^
31.2	Certification of Chief Financial Officer, pursuant to Rule 13a-14(a) under the Securities and Exchange Act of 1934	^	^	^	^
32.1	Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350	^^	^^	^^	^^
32.2	Certification of Chief Financial Officer, pursuant to 18 U.S.C. Section 1350	^^	^^	^^	^^
101.INS	XBRL Instance Document	^	^	^	^
101.SCH	XBRL Taxonomy Extension Schema Document	^	^	^	^
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	^	^	^	^
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	^	^	^	^
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	^	^	^	^
101.PRES	XBRL Taxonomy Extension Presentation Linkbase Document	^	^	^	^

In accordance with Item 601(b)(4)(iii)(A) of Regulation S-K, copies of specific instruments defining the rights of holders of long-term debt of the Company or its subsidiaries are not filed herewith. Pursuant to this regulation, we hereby agree to furnish a copy of any such instrument to the SEC upon request.

*Indicates management contract or compensatory plan or arrangement

^ Filed herewith

^^Furnished herewith

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AQUA AMERICA, INC.

/s/ Christopher H. Franklin
Christopher H. Franklin
Chairman, President and Chief Executive Officer

Date: February 28, 2018

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of the Registrant on February 28, 2018 in the capacities indicated below.

Signature	Title
/s/ Christopher H. Franklin Christopher H. Franklin	Chairman, President and Chief Executive Officer, Director (Principal Executive Officer)
/s/ David P. Smeltzer David P. Smeltzer	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ Robert A. Rubin Robert A. Rubin	Senior Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer)
/s/ Carolyn J. Burke Carolyn J. Burke	Director
/s/ Nicholas DeBenedictis Nicholas DeBenedictis	Chairman Emeritus and Director
/s/ Richard H. Glanton Richard H. Glanton	Director
/s/ William P. Hankowsky William P. Hankowsky	Director
/s/ Daniel J. Hilferty Daniel J. Hilferty	Director
/s/ Wendell F. Holland Wendell F. Holland	Director
/s/ Ellen T. Ruff Ellen T. Ruff	Director

Aqua America, Inc.

Schedule 1 – Condensed Parent Company Financial Statements

Condensed Balance Sheets

(In thousands of dollars)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Accounts receivable, net	$ 139	$ 441
Accounts receivable - affiliates	55,108	60,264
Prepayments and other current assets	3,578	3,782
Total current assets	58,825	64,487
Deferred charges and other assets, net	29,397	22,231
Notes receivable - affiliates	329,738	345,149
Deferred income tax asset	32,782	67,508
Investment in subsidiaries	2,213,102	2,029,395
Total assets	$ 2,663,844	$ 2,528,770
Liabilities and Equity		
Stockholders' equity	$ 1,957,621	$ 1,850,068
Long-term debt, excluding current portion, net of debt issuance costs	497,958	483,817
Current liabilities:		
Current portion of long-term debt	30,800	26,050
Accrued interest	3,267	3,469
Accounts payable - affiliates	34,537	23,582
Other accrued liabilities	9,329	10,707
Total current liabilities	77,933	63,808
Other liabilities	130,332	131,077
Total liabilities and equity	$ 2,663,844	$ 2,528,770

The accompanying condensed notes are an integral part of these condensed financial statements.

Aqua America, Inc.

Schedule I – Condensed Parent Company Financial Statements

Condensed Statements of Income and Comprehensive Income

(In thousands, except per share amounts)

	Years ended December 31,		
	2017	2016	2015
Other income	$ 1,629	$ 3,301	$ 3,034
Operating expense and other expenses	53	4,569	1,440
Operating income (loss)	1,576	(1,268)	1,594
Interest expense, net	5,210	2,901	1,833
Gain on sale of other asset	-	(87)	-
Loss before equity in earnings of subsidiaries and income taxes	(3,634)	(4,082)	(239)
Equity in earnings of subsidiaries	244,327	236,309	201,003
Income before income taxes	240,693	232,227	200,764
Provision for income taxes	955	(1,955)	(1,026)
Net income	$ 239,738	$ 234,182	$ 201,790
Comprehensive income	$ 239,929	$ 234,164	$ 201,689
Net income per common share:			
Basic	$ 1.35	$ 1.32	$ 1.14
Diluted	$ 1.35	$ 1.32	$ 1.14
Average common shares outstanding during the period:			
Basic	177,612	177,273	176,788
Diluted	178,175	177,846	177,517

The accompanying condensed notes are an integral part of these condensed financial statements.

Table of Contents

Aqua America, Inc.

Schedule 1 – Condensed Parent Company Financial Statements

Condensed Statements of Cash Flows

(In thousands of dollars)

	Years ended December 31,		
	2017	2016	2015
Net cash flows from operating activities	$ 98,821	$ 84,649	$ 152,916
Cash flows from investing activities:			
Acquisitions of utility systems and other, net	(220)	(3,713)	(26,722)
Net proceeds from the sale of utility systems and other assets	-	205	-
Decrease (increase) in investment of subsidiary	20,021	(26,470)	(27,596)
Other	1,811	204	(1,031)
Net cash flows from (used in) investing activities	21,612	(29,774)	(55,349)
Cash flows from financing activities:			
Proceeds from long-term debt	286,969	418,957	298,879
Repayments of long-term debt	(268,050)	(346,050)	(259,158)
Proceeds from issuing common stock	1,453	1,388	677
Proceeds from exercised stock options	2,873	4,260	7,540
Share-based compensation windfall tax benefits	-	1,332	1,843
Repurchase of common stock	(2,167)	(3,028)	(25,247)
Dividends paid on common stock	(140,660)	(130,923)	(121,248)
Other	(851)	(811)	(853)
Net cash flows used in financing activities	(120,433)	(54,875)	(97,567)
Net change in cash and cash equivalents	-	-	-
Cash and cash equivalents at beginning of year	-	-	-
Cash and cash equivalents at end of year	$ -	$ -	$ -

See Note 1 - *Basis of Presentation*

The accompanying condensed notes are an integral part of these condensed financial statements.

Aqua America, Inc.

Notes to Condensed Parent Company Financial Statements

(In thousands of dollars)

Note 1 – ***Basis of Presentation*** – The accompanying condensed financial statements of Aqua America, Inc. (the "Parent") should be read in conjunction with the consolidated financial statements and notes thereto of Aqua America, Inc. and subsidiaries (collectively, the "Registrant") included in Part II, Item 8 of the Form 10-K. The Parent's significant accounting policies are consistent with those of the Registrant.

The Parent borrows from third parties and provides funds to its subsidiaries, in support of their operations. Amounts owed to the Parent for borrowings under this facility are reflected as inter-company receivables on the condensed balance sheets. The interest rate charged to the subsidiaries is sufficient to cover the Parent's interest costs under its associated borrowings.

As of December 31, 2017 and 2016, the Parent had a current accounts receivable – affiliates balance of $55,108 and $60,264. As of December 31, 2017 and 2016, the Parent had a notes receivable – affiliates balance of $329,738 and $345,149. The changes in these balances represent non-cash adjustments that are recorded through the Parent's investment in subsidiaries.

In the ordinary course of business, the Parent indemnifies a third-party for surety bonds issued on behalf of subsidiary companies, guarantees the performance of one of its regulated utilities in a jurisdiction that requires such guarantees, and guarantees several projects associated with the treatment of water in a jurisdiction.

Note 2 – ***Dividends from subsidiaries*** – Dividends in the amount of $51,100, $45,750, and $74,866 were paid to the Parent by its wholly-owned subsidiaries during the years ended December 31, 2017, 2016, and 2015, respectively.

Note 3 – ***Long-term debt*** – the Parent has long-term debt under unsecured note purchase agreements with investors in addition to its $250,000 revolving credit agreement. Excluding amounts due under the revolving credit agreement, the debt maturities of the Parent's long-term debt are as follows:

Year		Debt Maturity
2018	$	30,800
2019		50,000
2020		28,200
2021		17,250
2022		17,250
Thereafter		325,800

Appendix I

Balance Sheet

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GL292 Date: 11/07/18          JOB SUBMISSION PARAMETERS
      Time: 13:33


User Name: AQUAAMERICA\mancinif
Job Name: GL292PSW
Step Nbr: 1


   Main

             Company:   15          AQUA PENNSYLVANIA INC. USD
      or  Company Group:

           Year Code:
             or
              Year: 2017
             Period: 12             Period 12

   Organization

         Accounting Units:

     Accounting Unit List:

             Level Group:

   Individual Reporting


             Company: X         Level One:          Level Two:
           Level Three:         Level Four:         Level Five:

   Report Options

                        Chart Depth:       All
                     Account Detail: S     Subaccount
             Suppress Zero Accounts: Y     Yes
                    Report Sequence: L     Level
                    Report Currency: B     Base
                        XBRL Tag: N   No
```

Balance Sheet

GL292 Date 11/07/18 Time 13:33 | Company 15 - AQUA PENNSYLVANIA INC. | USD | Page 1
Balance Sheet
For Period 12 Ending December 31, 2017 | Fiscal Year 2017

Consolidated | AQUA PENNSYLVANIA INC. | Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
ASSETS	Assets and Other Debits				
NET PLANT	Net Plant				
NETUTL PLANT	Net Utility Plant				
UTIL PLANT	Utility Plant				
PPE	PPE				
103000-0000	Property Held for Future Use	6,702,932.38	5,106,983.91	1,595,948.47	31.3
104000-0000	Utility Plant Purchased/Sold	5,692,339.84	1,196,372.32	4,495,967.52	375.8
106000-0000	PPE-Unclass Complete Construct	93,512,589.40	69,421,172.46	24,091,416.94	34.7
300000-0000	PPE-Utility Plant in Service	4,062,869,105.60	3,792,470,881.63	270,398,223.97	7.1
300001-0000	PPE-Dedicated Property Estimate	1,539,012.80	3,372,645.79	1,833,632.99-	54.4-
	Total PPE	4,170,315,980.02	3,871,568,056.11	298,747,923.91	7.7
UTIL PLT ACQ	UTIL PLT ACQ ADJ				
114000-0000	U Plant Acq Adj	17,153,046.03-	15,476,017.48-	1,677,028.55-	10.8
115000-0000	Accum Amort Util Plant Acq Adj	10,405,757.28	9,830,199.72	575,557.56	5.9
	Total UTIL PLT ACQ ADJ	6,747,288.75-	5,645,817.76-	1,101,470.99-	19.5
	Total Utility Plant	4,163,568,691.27	3,865,922,238.35	297,646,452.92	7.7
ACCUM DEPR	ACCUM DEPR				
108000-0000	AD-General	869,550,571.22-	806,196,224.19-	63,354,347.03-	7.9
110310-0000	AD-CAC MAINS & ACCESSORIES	8,312,634.45	8,250,339.87	62,294.58	.8
	Total ACCUM DEPR	861,237,936.77-	797,945,884.32-	63,292,052.45-	7.9
	Total Net Utility Plant	3,302,330,754.50	3,067,976,354.03	234,354,400.47	7.6
CWIP	CWIP				
105015-0000	CWIP-Contributed Property	37,464,800.06	22,884,828.69	14,579,971.37	63.7
105016-0000	CWIP-Advances	31,976,795.38	24,102,067.90	7,874,727.48	32.7
105020-0000	CWIP-Capital-Payroll-Rg	130,536,125.01	119,358,542.19	11,177,582.82	9.4
105029-0000	CWIP-Capital-Payroll-OT	29,916,951.21	27,052,327.77	2,864,623.44	10.6
105030-0000	CWIP-ACCOUNTS PAYABLE	2,322,305,397.69	2,079,968,339.12	242,337,058.57	11.7
105040-0000	CWIP-INVENTORY	261,557,435.01	238,801,003.42	22,756,431.59	9.5
105050-0000	CWIP-TRANSPORTATION	22,065,902.74	20,834,865.47	1,231,037.27	5.9
105060-0000	CWIP-GENERAL OVERHEAD	6,303,300.38-	8,754,669.05-	2,451,368.67	28.0-
105070-0000	CWIP-PAYROLL OVERHEAD	117,562,691.13	105,422,429.28	12,140,261.85	11.5
105080-0000	CWIP-AFUDC	11,869,425.20	11,869,425.20	0.00	
105081-0000	CWIP-AFUDC Debt	17,338,731.15	14,982,837.37	2,355,893.78	15.7
105085-0000	CWIP-AFUDC Equity	12,798,288.66	7,635,315.76	5,162,972.90	67.6
105090-0000	CWIP-CLOSING	2,857,838,432.88-	2,546,249,133.57-	311,589,299.31-	12.2
	Total CWIP	131,250,809.98	117,908,179.55	13,342,630.43	11.3
	Total Net Plant	3,433,581,564.48	3,185,884,533.58	247,697,030.90	7.8
OTHER PROP/I	Other Property and Investment				
OTHER PPE	OTHER PPE				
121000-0000	Nonutility Property	2,784,896.57	2,784,896.57	0.00	
122000-0000	Accum Depr/Amort-Nonutil Prop	544,694.59-	525,098.25-	19,596.34-	3.7
	Total OTHER PPE	2,240,201.98	2,259,798.32	19,596.34-	.9-
	Total Other Property and Inves	2,240,201.98	2,259,798.32	19,596.34-	.9-
CURRENT	Current and Accrued Assets				

Balance Sheet

Consolidated AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
CASH IN BANK	CASH IN BANK				
131201-0000	Cash-1ST CITIZENS-SUSQ	0.00	3.07-	3.07	100.0-
131202-0000	Cash-1ST NAT.TRUST-RC	0.00	110.71	110.71-	100.0-
131211-0000	Cash-FIDELITY S&L	99,725.74	86,770.11	12,955.63	14.9
131218-0000	Cash-NAT.CITY-SHENANGO	14,481.69	16,235.97	1,754.28-	10.8-
131230-0000	Cash-PNC	705,096.56	2,035,692.58	1,330,596.02-	65.4-
131254-0000	CASH-WAYNE PENNVEST ESCROW	398,361.05	396,945.66	1,415.39	.4
131261-0000	Cash-Citizens Bank-Money Market	6,901.49	0.00	6,901.49	
	Total CASH IN BANK	1,224,566.53	2,535,751.96	1,311,185.43-	51.7-
WORKING FUND	WORKING FUND				
134000-0000	Working Funds	2,553.45	2,553.45	0.00	
134010-0000	Working Funds-OFFICE FUNDS	13,850.00	13,850.00	0.00	
	Total WORKING FUND	16,403.45	16,403.45	0.00	
CUST A/R	CUST A/R				
141000-0000	Customer Accounts Receivable	35,848,487.00	35,234,056.72	614,430.28	1.7
141010-0000	Customer AR Non CIS	13,994.00-	0.00	13,994.00-	
	Total CUST A/R	35,834,493.00	35,234,056.72	600,436.28	1.7
OTHER AR	OTHER AR				
142000-0000	Other A/R	519,522.40	503,992.74	15,529.66	3.1
142080-0000	Other A/R-Contract Ops	33,523.96	72,259.10	38,735.14-	53.6-
172000-0000	Rents Receivable	400.00	350.00-	750.00	214.3-
	Total OTHER AR	553,446.36	575,901.84	22,455.48-	3.9-
RESERVE UN	RESERVE - UN				
143000-0000	RESERVE-UNCOLLECTABLE ACCTS	4,072,387.41-	3,869,999.46-	202,387.95-	5.2
	Total RESERVE - UN	4,072,387.41-	3,869,999.46-	202,387.95-	5.2
INTERCO	ALL INTERCOMPANY				
SYSTEMINT	ALL SYSTEM INTER&ZONE				
INTERCOMPANY	SYSTEM INTERCOMPANY				
911000-0000	Sys IntComp Acct Co 10 - Corp	4,127,367.66	4,701,597.19	574,229.53-	12.2-
911100-0000	Sys IntComp Acct Co 11 - Serv	4,226,632.82-	3,313,539.43-	913,093.39-	27.6
911400-0000	Sys IntComp Acct Co 14 - Aqua Reso	42,126.78	38,275.88	3,850.90	10.1
911800-0000	Sys IntComp Acct Co 18 - Cust Serv	493,779.36-	477,290.35-	16,489.01-	3.5
911900-0000	Sys IntComp Acct Co 19 - Aqua Infr	326.98	10.05	316.93	3153.5
912300-0000	Sys IntComp Acct Co 23 - OH	10,239.74	6,736.30	3,503.44	52.0
912400-0000	Sys IntComp Acct Co 24 - IL	59,702.98-	6,385.25	66,088.23-	1035.0-
912500-0000	Sys IntComp Acct Co 25 - NJ	21,632.46	52,390.72	30,758.26-	58.7-
913100-0000	Sys IntComp Acct Co 31 - TX	1,464.59	2,185.31	720.72-	33.0-
913200-0000	Sys IntComp Acct Co 32 - IN	4,869.93	86.32	4,783.61	5541.7
913400-0000	Sys IntComp Acct Co 34 - VA	3,490.09	8,722.98	5,232.89-	60.0-
913500-0000	Sys IntComp Acct Co 35 - NC	4,912.15	4,881.19	30.96	.6
	Total SYSTEM INTERCOMPANY	563,684.78-	1,030,441.41	1,594,126.19-	154.7-
INTRAZONE	SYSTEM ZONE				
921501-0000	IntraZone Acct Co 15 Zone 1	80,403,317.30-	66,897,728.75-	13,505,588.55-	20.2
921502-0000	IntraZone Acct Co 15 Zone 2	61,321,464.37	46,326,464.74	14,994,999.63	32.4
921503-0000	IntraZone Acct Co 15 Zone 3	558,491.68	564,551.65	6,059.97-	1.1-
921504-0000	IntraZone Acct Co 15 Zone 4	13,575,531.49	14,677,276.51	1,101,745.02-	7.5-

Balance Sheet

Consolidated AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
INTRAZONE	SYSTEM ZONE				
921506-0000	IntraZone Acct Co 15 Zone 6	2,560,856.77	2,562,038.05	1,181.28-	
921507-0000	IntraZone Acct Co 15 Zone 7	54.91-	54.91-	0.00	
921508-0000	IntraZone Acct Co 15 Zone 8	2,387,027.90	2,767,452.71	380,424.81-	13.7-
	Total SYSTEM ZONE	0.00	0.00	0.00	
	Total ALL SYSTEM INTER&ZONE	563,684.78-	1,030,441.41	1,594,126.19-	154.7-
	Total ALL INTERCOMPANY	563,684.78-	1,030,441.41	1,594,126.19-	154.7-
MATERIALS AN	MATERIALS AN				
151000-0000	Plant Material & Supplies	6,853,178.86	5,889,658.31	963,520.55	16.4
	Total MATERIALS AN	6,853,178.86	5,889,658.31	963,520.55	16.4
UNBILLED REV	UNBILLED REV				
173000-0000	Unbilled-Revenue	18,800,443.34	18,547,372.47	253,070.87	1.4
173010-0000	Unbilled Revenue Non CIS	652.10-	0.00	652.10-	
	Total UNBILLED REV	18,799,791.24	18,547,372.47	252,418.77	1.4
OTHER PREPAY	OTHER PREPAY				
162000-0000	Other Prepaids	78,742.61	598,418.07	519,675.46-	86.8-
162030-0000	OTHER PPD-EXCISE	0.00	200,167.80	200,167.80-	100.0-
162140-0000	OTHER PPD-PUC ASSESSMENT	882,213.51	916,573.96	34,360.45-	3.7-
162150-0000	OTHER PPD-SBA ASSESSMENT	25,907.01	16,463.54	9,443.47	57.4
162160-0000	OTHER PPD-CONS ADVOC ASSMT	140,036.01	139,937.48	98.53	.1
162170-0000	OTHER PPD-AWWA DUES	9,482.50	9,391.99	90.51	1.0
	Total OTHER PREPAY	1,136,381.64	1,880,952.84	744,571.20-	39.6-
	Total Current and Accrued Asse	59,782,188.89	61,840,539.54	2,058,350.65-	3.3-
NON CURRENT	Non-Current Assets				
UNAMR DB EXP	UMAMORT DEBT EXP				
181000-0000	Unamortized Debt Expense	120,318.68	124,383.23	4,064.55-	3.3-
	Total UMAMORT DEBT EXP	120,318.68	124,383.23	4,064.55-	3.3-
RATE CASE	RATE CASE				
186101-0000	Deferred Rate Case Exp-1	64,254.15	0.00	64,254.15	
	Total RATE CASE	64,254.15	0.00	64,254.15	
PRELIMINARY	PRELIMINARY				
183020-0000	PRELIM SURVEY-ACCTS PAY	211,341.08	211,341.08	0.00	
	Total PRELIMINARY	211,341.08	211,341.08	0.00	
REG ASSETS	REG ASSETS				
186325-0000	Reg Asset-EXC FUND/DEF-OPEB	165,421.00-	294,497.00-	129,076.00	43.8-
186330-0000	Reg Asset-TAXES(FAS 109)	557,696,235.20	807,160,494.02	249,464,258.82-	30.9-
186355-0000	Reg Asset-AFUDC Gross Up (WIP)	3,906,849.70	2,340,205.17	1,566,644.53	66.9
186366-0000	Reg Asset-AFUDC Gross Up (InSvc)	5,171,604.96	3,076,607.41	2,094,997.55	68.1
186367-0000	Reg Asset-AFUDC Gross Up (AD)	167,177.31-	75,918.68-	91,258.63-	120.2
186380-0000	Reg Asset-PENSION/SERP AML	31,159.00	37,487.00	6,328.00-	16.9-
186381-0000	Reg Asset-Vacation Balancing Account	304,430.99	280,311.31	24,119.68	8.6
186400-0000	Reg Asset-FAS143	5,367,497.41	4,985,862.62	381,634.79	7.7

Balance Sheet

Consolidated AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
	Total REG ASSETS	572,145,178.95	817,510,551.85	245,365,372.90-	30.0-
RWIP	RWIP				
184010-0000	RWIP-PAYROLL-Rg	7,653,734.14	7,301,072.49	352,661.65	4.8
184019-0000	RWIP-PAYROLL-Ot	1,593,091.96	1,412,632.12	180,459.84	12.8
184020-0000	RWIP-ACCOUNTS PAYABLE	25,945,302.40	24,137,819.08	1,807,483.32	7.5
184030-0000	RWIP-INVENTORY	270,507.66	175,167.56	95,340.10	54.4
184040-0000	RWIP-TRANSPORTATION	619.49-	632.47-	12.98	2.1-
184050-0000	RWIP-GENERAL OVERHEAD	1,330,394.98	1,260,330.26	70,064.72	5.6
184060-0000	RWIP-PAYROLL OVERHEAD	7,096,769.67	6,676,742.09	420,027.58	6.3
184070-0000	RWIP-CASH SALVAGE	1,863,138.30-	1,371,372.25-	491,766.05-	35.9
184099-0000	RWIP-CLOSING	40,509,761.52-	38,684,959.45-	1,824,802.07-	4.7
	Total RWIP	1,516,281.50	906,799.43	609,482.07	67.2
OTH DEF DBTS	OTHER DEFER DBTS				
186210-0000	Other Deferred DB-SUSP-AMORTIZ	523,244.12	518,712.91	4,531.21	.9
186270-0000	Other Deferred DB-SERVICE LINE	33,592.92	39,433.95	5,841.03-	14.8-
	Total OTHER DEFER DBTS	556,837.04	558,146.86	1,309.82-	.2-
GOODWILL	GOODWILL				
116000-0000	Good Will-Water	9,792,191.74	9,792,191.74	0.00	
	Total GOODWILL	9,792,191.74	9,792,191.74	0.00	
	Total Non-Current Assets	584,406,403.14	829,103,414.19	244,697,011.05-	29.5-
	Total Assets and Other Debits	4,080,010,358.49	4,079,088,285.63	922,072.86	
LIABS/EQUITY	Liabilities and Equity Capital				
TOT CAPITAL	Total Capitalization				
COM STOCK EQ	Equity Capital				
COMMON STOCK	COMMON STOCK				
201000-0000	Common Capital Stock	110,000.00-	110,000.00-	0.00	
	Total COMMON STOCK	110,000.00-	110,000.00-	0.00	
CAPITAL SURP	CAPITAL SURP				
211000-0000	Other Paid-In Capital	96,691,956.77-	116,489,242.69-	19,797,285.92	17.0-
211002-0000	Other Paid-In Cap-PSU	4,389,837.72-	3,731,392.44-	658,445.28-	17.6
211003-0000	Other Paid-In Cap-RSU	446,677.14-	377,296.44-	69,380.70-	18.4
211500-0000	Other Paid-In Cap-Stock Option Expe	8,436,539.92-	8,406,567.62-	29,972.30-	.4
211501-0000	Other Paid-In Cap - Tax on Stock Ba	1,644,203.90-	1,644,203.90-	0.00	
211600-0000	Other Paid-In Cap-Restricted Stock	449,399.37-	449,399.37-	0.00	
	Total CAPITAL SURP	112,058,614.82-	131,098,102.46-	19,039,487.64	14.5-
RE	Retained Earnings				
RE PY	RE PY				
215000-0000	Unapproriated Retained Earning	1,281,014,888.52-	1,138,077,092.97-	142,937,795.55-	12.6
	Total RE PY	1,281,014,888.52-	1,138,077,092.97-	142,937,795.55-	12.6
RE CY	RE CY				
215100-0000	Undistrib Retained Earnings	177,508,727.04-	172,937,795.55-	4,570,931.49-	2.6
215101-0000	Undistributed RE (Manual)	8,277,018.86	6,437,052.74	1,839,966.12	28.6

Balance Sheet

Consolidated AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
	Total RE CY	169,231,708.18-	166,500,742.81-	2,730,965.37-	1.6
DIVIDEND COM	DIVIDENDS COMMON				
215300-0000	Dividend Appropriation Common	50,000,000.00	30,000,000.00	20,000,000.00	66.7
	Total DIVIDENDS COMMON	50,000,000.00	30,000,000.00	20,000,000.00	66.7
EARN IN SUBS	EARNINGS IN SUBS				
215200-0000	EARNINGS OF SUBSIDIARIES	15,757,525.60-	13,917,559.48-	1,839,966.12-	13.2
	Total EARNINGS IN SUBS	15,757,525.60-	13,917,559.48-	1,839,966.12-	13.2
REACQ CAPSTK	REACQ CAP STOCK				
216000-0000	Reacquired Capital Stock	1,000.00	1,000.00	0.00	
	Total REACQ CAP STOCK	1,000.00	1,000.00	0.00	
	Total Retained Earnings	1,416,003,122.30-	1,288,494,395.26-	127,508,727.04-	9.9
	Total Equity Capital	1,528,171,737.12-	1,419,702,497.72-	108,469,239.40-	7.6
LT DEBT	Long-Term Debt				
LTD	LTD				
221010-0000	Long-Term Debt-FMB	1,215,857,001.98-	1,029,257,001.98-	186,600,000.00-	18.1
224020-0000	Long-Term Debt-PENNVEST	44,732,461.10-	50,570,929.39-	5,838,468.29	11.5-
251000-0000	Unamortized Bond Premium	1,934,075.00-	1,986,607.00-	52,532.00	2.6-
	Total LTD	1,262,523,538.08-	1,081,814,538.37-	180,708,999.71-	16.7
DEBT IS COST	Unamortized debt issue cost				
225020-0000	Unamortized debt issue costs - exte	13,496,253.18	13,860,091.93	363,838.75-	2.6-
	Total Unamortized debt issue c	13,496,253.18	13,860,091.93	363,838.75-	2.6-
	Total Long-Term Debt	1,249,027,284.90-	1,067,954,446.44-	181,072,838.46-	17.0
ST DEBT	Short-Term Debt				
LOANS PAYBLE	LOANS PAYABLE				
232101-0000	Loans Payable-REVOLVR-CUR PRTN	3,649,997.88-	5,545,213.23-	1,895,215.35	34.2-
	Total LOANS PAYABLE	3,649,997.88-	5,545,213.23-	1,895,215.35	34.2-
	Total Short-Term Debt	3,649,997.88-	5,545,213.23-	1,895,215.35	34.2-
	Total Total Capitalization	2,780,849,019.90-	2,493,202,157.39-	287,646,862.51-	11.5
TOT LIAB	Total Liabilities				
CURENT LIAB	Current and Accrued Liabilit				
CURRENT PORT	CURRENT PORT				
232510-0000	Current Portion Ltd-FMB	68,400,000.00-	116,362,180.00-	47,962,180.00	41.2-
232520-0000	Current Portion Ltd-PENNVEST	5,838,467.44-	5,683,256.03-	155,211.41-	2.7
	Total CURRENT PORT	74,238,467.44-	122,045,436.03-	47,806,968.59	39.2-
AP	AP				
231000-0000	A/P	8,924,084.59-	9,085,722.03-	161,637.44	1.8-
231001-0000	A/P-Accrued Trade	694,386.16-	511,941.16-	182,445.00-	35.6
231002-0000	A/P-Accrued Purchased Water	339,066.31-	978,170.13-	639,103.82	65.3-
231003-0000	A/P-Accrued Electric	1,062,061.40-	1,124,526.00-	62,464.60	5.6-
231005-0000	A/P-Use Tax Payable	267.86-	118.30-	149.56-	126.4
231006-0000	A/P-Refunds to Customers	1,828.78-	74.90-	1,753.88-	2341.6

Balance Sheet

Consolidated AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
AP	AP				
231200-0000	A/P-Contractors Retainage	3,428,426.40-	3,172,371.52-	256,054.88-	8.1
231300-0000	A/P-Received, Not Invoiced	13,306,287.96-	8,427,390.05-	4,878,897.91-	57.9
231399-0000	A/P-Received, Not Inv-2003 Bal	1,673,982.37	886,859.41	787,122.96	88.8
231510-0000	A/P-Invoice Tolerance	0.00	.02	.02-	100.0-
	Total AP	26,082,427.09-	22,413,454.66-	3,668,972.43-	16.4
TAX ACC FED	TAXES ACC FED				
236124-0000	Accrued Tax-Fed-Other	48,595,340.80	72,644,548.48	24,049,207.68-	33.1-
	Total TAXES ACC FED	48,595,340.80	72,644,548.48	24,049,207.68-	33.1-
TAX ACC STE	TAXES ACC STATE				
236127-0000	Accrued Tax-ST-CN Income	304,320.11-	493,764.68-	189,444.57	38.4-
	Total TAXES ACC STATE	304,320.11-	493,764.68-	189,444.57	38.4-
TAX ACC OTHR	TAXES ACC OTHER				
236111-0000	Accrued Tax-Oth-PROPERTY	621,788.77-	738,012.27-	116,223.50	15.7-
236113-0000	Accrued Tax-Oth-CAPITAL STOCK	0.00	2,229.00	2,229.00-	100.0-
236201-0000	Accrued Tax-Oth-EMPLOYER FICA	20,287.04-	63,725.13-	43,438.09	68.2-
	Total TAXES ACC OTHER	642,075.81-	799,508.40-	157,432.59	19.7-
INTEREST ACC	INTEREST ACC				
237110-0000	Accrued Int LTD-FMB	14,623,115.43-	12,926,394.09-	1,696,721.34-	13.1
237120-0000	Accrued Int LTD-PENNVEST	107,746.62-	119,452.12-	11,705.50	9.8-
237250-0000	Accrued Int-Other-STD	3,198.34-	6,771.75-	3,573.41	52.8-
	Total INTEREST ACC	14,734,060.39-	13,052,617.96-	1,681,442.43-	12.9
OTHR CURLIAB	OTHER CUR LIAB				
241001-0000	Accrued Liab-OTHER	249,410.93-	279,421.16-	30,010.23	10.7-
241004-0000	Accrued Liab-ANTENNA LEASES	683,742.59-	750,447.37-	66,704.78	8.9-
241006-0000	Accrued Liab-AUDIT FEES	329,530.86-	306,841.93-	22,688.93-	7.4
241008-0000	Accrued Liab-PAVING MAINS	63,384.68-	107,157.79-	43,773.11	40.8-
241011-0000	Accrued Liab-UNCLAIMED CHECKS	127,064.36-	116,480.19-	10,584.17-	9.1
243030-0000	ACCRUED BONUS	1,003,000.00-	960,000.00-	43,000.00-	4.5
243130-0000	ACCRUED SALARIES AND WAGES	254,042.54-	636,662.06-	382,619.52	60.1-
243137-0000	Accrued Vacation	304,430.99-	280,311.31-	24,119.68-	8.6
243140-0000	PAYROLL CLEARING	634,792.68-	0.00	634,792.68-	
261003-0000	Accrued Insur Liab-UNINSURED	0.00	125,000.00-	125,000.00	100.0-
263002-0000	NQ Pension Reserve - Current	0.00	37,701.12-	37,701.12	100.0-
263103-0000	EMPLOYEE PROFIT SHARING	575,982.03-	441,838.45-	134,143.58-	30.4
	Total OTHER CUR LIAB	4,225,381.66-	4,041,861.38-	183,520.28-	4.5
	Total Current and Accrued Liab	71,631,391.70-	90,202,094.63-	18,570,702.93	20.6-
DEF NC LIAB	Deferred and Non-Current and				
ADV FOR CNST	ADV FOR CONST				
252051-0000	Adv Cust-NON CASH BUILDER OR DEVELO	126,000.00-	126,000.00-	0.00	
252052-0000	Adv Cust-NON CASH DEVELOPER DEDICAT	51,090,391.03-	48,070,975.22-	3,019,415.81-	6.3
252055-0000	Adv Cust-CASH BUILDER OR DEVELOPER	1,086,059.02-	981,884.02-	104,175.00-	10.6
252102-0000	Adv Cust-CASH OTHER	440,028.48-	534,338.48-	94,310.00	17.6-
252121-0000	Adv Cust-NON CASH TAX ON CAC	3,746.48-	26,190.29-	22,443.81	85.7-
252199-0000	Adv Cust-Non Cash Dedicated Propert	1,539,012.80-	3,372,645.79-	1,833,632.99	54.4-

Balance Sheet

Consolidated | AQUA PENNSYLVANIA INC. | Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
	Total ADV FOR CONST	54,285,237.81-	53,112,033.80-	1,173,204.01-	2.2
REG LIAB	REG LIAB				
253115-0000	Reg Liab-Pension/OPEB	63,652,424.11-	59,881,898.11-	3,770,526.00-	6.3
253116-0000	Reg Liab-FAS 109	323,448,950.00-	152,663,387.00-	170,785,563.00-	111.9
	Total REG LIAB	387,101,374.11-	212,545,285.11-	174,556,089.00-	82.1
LT DEF FIT	LT DEF FIT				
282020-0000	Deferred FIT Depreciation	421,872,036.31-	824,582,994.27-	402,710,957.96	48.8-
283050-0000	Federal Deferred Tax-Other	2,024,004.75-	21,431,712.75-	19,407,708.00	90.6-
	Total LT DEF FIT	423,896,041.06-	846,014,707.02-	422,118,665.96	49.9-
LT DEF SIT	LT DEF SIT				
282030-0000	State Deferred Tax-Depr	294,396,146.00-	311,496,462.00-	17,100,316.00	5.5-
283060-0000	State Deferred Tax-Other	49,534,355.41	42,602,365.41	6,931,990.00	16.3
	Total LT DEF SIT	244,861,790.59-	268,894,096.59-	24,032,306.00	8.9-
UNAMORT ITC	UNAMORT ITC				
255101-0000	Deferred Taxes - Unamortized ITC (F	4,628,083.95-	4,881,496.95-	253,413.00	5.2-
	Total UNAMORT ITC	4,628,083.95-	4,881,496.95-	253,413.00	5.2-
CIAC	CIAC				
271020-0000	CIAC-TAX DEPOSIT FULL GROSS UP	1,530,814.72-	1,530,814.72-	0.00	
271030-0000	CIAC-RESIDNT FIRE TAX DEP FULL	77,042.53-	77,042.53-	0.00	
271070-0000	CIAC-CASH TAX ON CIAC	3,168,525.55-	2,962,860.94-	205,664.61-	6.9
271301-0000	CIAC-NON CASH TRANSFERS FROM CAC	115,082,531.87-	111,794,895.95-	3,287,635.92-	2.9
271302-0000	CIAC-NON CASH REFUNDABLE DEVELOPER	25,966,094.70-	11,986,123.33-	13,979,971.37-	116.6
271304-0000	CIAC-CASH NON REFUNDABLE TAP FEE	20,957.88-	20,957.88-	0.00	
271305-0000	CIAC-CASH THIRD PARTY DAMAGE TO INF	6,336.18-	6,336.18-	0.00	
271307-0000	CIAC-CASH CUSTOMER DEPOSITS FOR COM	4,601,679.90-	4,262,209.40-	339,470.50-	8.0
271308-0000	CIAC-CASH NON REFUNDABLE BUILDER OR	32,476,984.42-	30,723,617.79-	1,753,366.63-	5.7
	Total CIAC	182,930,967.75-	163,364,858.72-	19,566,109.03-	12.0
OTHR NC LIAB	OTHER NCUR LIAB				
253200-0000	OPEB Reserve - Non Current	7,374,933.46-	5,695,430.97-	1,679,502.49-	29.5
253250-0000	Pension Reserve - Non Current	55,472,521.14	48,501,995.14	6,970,526.00	14.4
253350-0000	NQ Pension Reserve - Non Current	118,824.12	147,342.47-	266,166.59	180.6-
253420-0000	Uncertain Tax Position Reserve-Fede	12,919,315.00-	21,317,365.00-	8,398,050.00	39.4-
253421-0000	Uncertain Tax Position Reserve-Stat	693,239.00-	614,973.00-	78,266.00-	12.7
	Total OTHER NCUR LIAB	34,603,857.80	20,726,883.70	13,876,974.10	67.0
	Total Deferred and Non-Current	1,263,099,637.47-	1,528,085,594.49-	264,985,957.02	17.3-
CIAC ACC AMR	CIAC ACC AMORT				
272000-0000	Accum Amort of CIAC	35,569,690.58	32,401,560.88	3,168,129.70	9.8
	Total CIAC ACC AMORT	35,569,690.58	32,401,560.88	3,168,129.70	9.8
	Total Total Liabilities	1,299,161,338.59-	1,585,886,128.24-	286,724,789.65	18.1-
	Total Liabilities and Equity C	4,080,010,358.49-	4,079,088,285.63-	922,072.86-	

VIS15-PAY AQUA PENNSYLVANIA INC.
11/07/18 Variance Income Statement
13:34 December 31, 2017
** Consolidated Level Range **
*Co

	YEAR TO DATE			VARIANCE CURRENT ACTUAL vs BUDGET		VARIANCE CURRENT ACTUAL vs PRIOR YEAR	
	ACTUAL 2017	BUDGET 2017	ACTUAL 2016	AMOUNT	PERCENT	AMOUNT	PERCENT
REVENUE							
Utility Revenue-Water	401,001,447.69	405,749,610.00	406,200,475.29	(4,748,162.31)	(1.17)%	(5,199,027.60)	(1.28)%
Utility Revenue-Waste Water	13,180,830.26	14,037,279.00	12,114,547.94	(856,448.74)	(6.10)%	1,066,282.32	8.80 %
Non-Utility Revenue	5,412,075.11	5,124,484.00	5,388,101.19	287,591.11	5.61 %	23,973.92	0.45 %
TOTAL REVENUE	419,594,353.06	424,911,373.00	423,703,124.42	(5,317,019.94)	(1.25)%	(4,108,771.36)	(0.97)%
OPERATIONS AND MAINTENANCE							
Labor	32,142,781.89	32,908,045.00	32,348,489.62	765,263.11	2.33 %	205,707.73	0.64 %
Employee Benefits	19,941,792.81	11,346,487.00	22,718,321.65	(8,595,305.81)	(75.75)	2,776,528.84	12.22
Purchased Water	7,126,426.67	8,022,381.00	12,122,443.48	895,954.33	11.17	4,996,016.81	41.21
Purchased WW Treatement	630,049.84	638,200.00	575,688.50	8,150.16	1.28	(54,361.34)	(9.44)
Sludge	1,090,250.38	1,252,689.00	1,039,066.25	162,438.62	12.97	(51,184.13)	(4.93)
Power	11,730,459.64	12,871,269.00	11,499,004.25	1,140,809.36	8.86	(231,455.39)	(2.01)
Chemicals	5,324,747.38	5,315,484.00	5,145,444.57	(9,263.38)	(0.17)	(179,302.81)	(3.49)
Management Fees - Corp	21,833,758.65	22,135,204.00	21,266,729.24	301,445.35	1.36	(567,029.41)	(2.67)
Management Fees - Region							
Management Fees - States	495.00	2,125.00	495.00	1,630.00	76.71		
Cust Operations-ACO alloc	5,172,594.07	5,775,894.00	5,408,327.46	603,299.93	10.45	235,733.39	4.36
Cust Operations-Direct	3,479,395.63	3,888,492.00	3,643,745.62	409,096.37	10.52	164,349.99	4.51
Cust Operations-Non ACO							
Outside Services - Engineering	204,866.69	197,504.00	178,634.39	(7,362.69)	(3.73)	(26,232.30)	(14.69)
Outside Services - Accounting	693,257.62	693,864.00	654,896.04	606.38	0.09	(38,361.58)	(5.86)
Outside Services - Legal	499,360.08	467,256.00	229,017.64	(32,104.08)	(6.87)	(270,342.44)	(118.04)
Outside Services - Labtest	518,588.20	719,039.00	488,443.59	200,450.80	27.88	(30,144.61)	(6.17)
Outside Services - IT	166,371.70	235,888.00	216,178.32	69,516.30	29.47	49,806.62	23.04
Outside Services - Operations	1,763,318.94	2,142,099.00	1,729,473.15	378,780.06	17.68	(33,845.79)	(1.96)
Outside Services - Maintenance	7,566,860.67	4,651,567.00	4,354,511.25	(2,915,293.67)	(62.67)	(3,212,349.42)	(73.77)
Outside Services - Other	2,478,030.62	2,490,793.00	2,364,236.79	12,762.38	0.51	(113,793.83)	(4.81)
Leases	791,148.75	793,890.00	763,640.97	2,741.25	0.35	(27,507.78)	(3.60)
Supplies	2,064,499.43	2,355,552.00	2,464,935.35	291,052.57	12.36	400,435.92	16.25
Transportation	1,126,375.73	1,301,937.00	885,165.59	175,561.27	13.49	(241,210.14)	(27.25)
Insurance	5,030,357.14	4,942,644.00	4,885,260.39	(87,713.14)	(1.78)	(145,096.75)	(2.97)
Bad Debt Expense	2,022,748.09	1,985,456.00	2,295,335.87	(37,292.09)	(1.88)	272,587.78	11.88
Other Expense	2,830,374.19	3,563,671.00	3,071,446.51	733,296.81	20.58 %	241,072.32	7.85 %
Capital OH Credit	(12,560,263.01)	(9,839,352.00)	(11,994,809.83)	2,720,911.01	(27.65)%	565,453.18	(4.71)%
Other Non-Util Oper Exp	4,220,848.63	2,096,616.00	1,799,496.22	(2,124,232.63)	(101.32)	(2,421,352.41)	(134.56)
Total Operations & Maintenance	127,889,495.43	122,954,694.00	130,153,617.88	(4,934,801.43)	(4.01)%	2,264,122.45	1.74 %
Amortization	(440,491.30)	(287,808.00)	(260,502.44)	152,683.30	(53.05)%	179,988.86	(69.09)%
Depreciation	82,684,464.15	82,500,061.00	77,919,214.91	(184,403.15)	(0.22)%	(4,765,249.24)	(6.12)%
Taxes Other	10,945,577.25	11,038,501.00	10,814,849.23	92,923.75	0.84 %	(130,728.02)	(1.21)%
Federal Taxes	(14,315,757.46)	(16,288,619.00)	(7,219,649.00)	(1,972,861.54)	12.11	7,096,108.46	(98.29)
State Taxes	(8,337,612.96)	(7,369,724.00)	(4,412,642.00)	967,888.96	(13.13)	3,924,970.96	(88.95)
Operating Income	221,168,677.95	232,364,268.00	216,708,235.84	(11,195,590.05)	(4.82)%	4,460,442.11	2.06 %
Gain on Sale of Assets	(366,110.50)	(150,000.00)	(246,342.33)	216,110.50	(144.07)%	119,768.17	(48.62)%
OTH NET PERIODIC BENEFIT COSTS							
Equity earnings in JV							
Minority Interest of Subs							
AFUDC	(11,188,365.88)	(6,771,782.00)	(6,741,625.63)	4,416,583.88	(65.22)	4,446,740.25	(65.96)

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AQUA PENNSYLVANIA INC.
Variance Income Statement
December 31, 2017

	YEAR TO DATE ACTUAL 2017	YEAR TO DATE BUDGET 2017	YEAR TO DATE ACTUAL 2016	VARIANCE CURRENT ACTUAL vs BUDGET AMOUNT	VARIANCE CURRENT ACTUAL vs BUDGET PERCENT	VARIANCE CURRENT ACTUAL vs PRIOR YEAR AMOUNT	VARIANCE CURRENT ACTUAL vs PRIOR YEAR PERCENT
Income Before Debt Interest	232,723,154.33	239,286,050.00	223,696,203.80	(6,562,895.67)	(2.74)%	9,026,950.53	4.04 %
Debt Interest-Associated COS							
Debt Interest-Short Term Debt	442,496.26	200,004.00	360,522.61	(242,492.26)	(121.24)	(81,973.65)	(22.74)
Debt Interest-Long Term Debt	54,060,723.20	56,841,331.00	49,655,232.52	2,780,607.80	4.89	(4,405,490.68)	(8.87)
Debt Interest-Customer Deposit							
Interest Income	(8,653.76)	(360.00)	(1,342.15)	8,293.76	(2,303.82)	7,311.61	(544.77)
Other Interest Expense			720.00			720.00	100.00
Amort-Debt Issuance Costs	719,861.59	761,508.00	743,275.27	41,646.41	5.47	23,413.68	3.15
Debt Expense	55,214,427.29	57,802,483.00	50,758,408.25	2,588,055.71	4.48 %	(4,456,019.04)	(8.78)%
Dividends							
Net Income	177,508,727.04	181,483,567.00	172,937,795.55	(3,974,839.96)	(2.19)%	4,570,931.49	2.64 %
Preferred Dividends							
Net Income Avail for Common	177,508,727.04	181,483,567.00	172,937,795.55	(3,974,839.96)	(2.19)%	4,570,931.49	2.64 %

Appendix J

PEOPLES NATURAL GAS COMPANY LLC

BALANCE SHEETS
AS OF DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	2016
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 1,727	$ 1,011
Accounts receivable:		
Customers	150,327	113,234
Other	5,707	4,692
Affiliates	1,981	3,029
Inventories:		
Materials and supplies	3,092	3,092
Gas stored	23,137	17,840
Regulatory assets	7,233	16,264
Deferred income taxes	6,994	3,349
Other	10,232	10,644
Total current assets	210,431	173,156
INVESTMENTS	3,733	3,147
PROPERTY, PLANT AND EQUIPMENT:		
Property, plant and equipment	2,452,415	2,304,059
Accumulated depreciation and amortization	(849,435)	(821,831)
Total property, plant and equipment—net	1,602,980	1,482,227
DEFERRED CHARGES AND OTHER ASSETS:		
Goodwill	284,895	284,895
Intangible assets—net	61,287	64,460
Regulatory assets	146,571	146,329
Other	2,124	1,835
Total deferred charges and other assets	494,877	497,519
TOTAL	$ 2,312,021	$ 2,156,049

(Continued)

PEOPLES NATURAL GAS COMPANY LLC

BALANCE SHEETS
AS OF DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

LIABILITIES AND MEMBER'S EQUITY	**2017**	**2016**
CURRENT LIABILITIES:		
Accounts payable—trade & affiliates	$ 84,390	$ 99,346
Notes payable to affiliates	71,219	66,076
Current portion of long-term debt	-	144,746
Accrued interest, payroll and taxes	38,503	36,647
Capital lease obligation	-	18,951
Regulatory liabilities	1,728	1,442
Other	19,538	16,013
Total current liabilities	215,378	383,222
LONG-TERM DEBT	865,780	638,902
DEFERRED CREDITS AND OTHER LIABILITIES:		
Deferred income taxes	138,251	197,862
Asset retirement obligations	36,669	36,413
Pension and other postretirement benefit liabilities	27,313	26,477
Regulatory liabilities	96,540	-
Other	14,120	16,059
Total deferred credits and other liabilities	312,893	276,810
Total liabilities	1,394,052	1,298,934
MEMBER'S EQUITY	917,970	857,115
TOTAL	$ 2,312,021	$ 2,156,049

PEOPLES NATURAL GAS COMPANY LLC

UNAUDITED STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	**2016**
OPERATING REVENUE	$675,849	$588,329
OPERATING EXPENSES:		
Purchased gas	272,144	193,907
Other operations and maintenance	162,662	162,020
Depreciation and amortization	64,986	61,334
Other taxes	9,026	8,998
Total operating expenses	508,818	426,258
INCOME FROM OPERATIONS	167,031	162,071
OTHER EXPENSE—Net	3,875	3,713
INTEREST CHARGES	32,552	37,104
INCOME BEFORE INCOME TAXES	130,604	121,254
PROVISION FOR INCOME TAXES	56,949	49,053
NET INCOME	$ 73,655	$ 72,201

Appendix K

PEOPLES GAS COMPANY LLC

BALANCE SHEETS
AS OF DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	2016
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 4,471	$ 1,849
Accounts receivable:		
Customers	18,646	14,684
Other	189	227
Affiliates	749	830
Inventories:		
Materials and supplies	576	572
Gas stored	7,500	6,802
Regulatory assets	3,830	5,468
Deferred income taxes	1,186	1,127
Other	1,410	4,308
Total current assets	38,557	35,867
PROPERTY, PLANT AND EQUIPMENT:		
Property, plant and equipment	336,558	314,891
Accumulated depreciation and amortization	(112,111)	(108,248)
Total property, plant and equipment—net	224,447	206,643
DEFERRED CHARGES AND OTHER ASSETS:		
Goodwill	3,103	3,103
Intangible assets—net	12,276	12,760
Regulatory assets	24,873	22,341
Other	46	46
Total deferred charges and other assets	40,298	38,250
TOTAL	$ 303,302	$ 280,760

(Continued)

PEOPLES GAS COMPANY LLC

BALANCE SHEETS
AS OF DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	**2016**
LIABILITIES AND MEMBER'S EQUITY		
CURRENT LIABILITIES:		
Accounts payable—trade & affiliates	$ 8,558	$ 10,783
Notes payable to affiliates	70,561	-
Current portion of long-term debt	4,091	4,091
Accrued interest, payroll and taxes	2,937	3,445
Other	1,783	2,827
Total current liabilities	87,929	21,146
LONG-TERM DEBT	62,647	121,378
DEFERRED CREDITS AND OTHER LIABILITIES:		
Deferred income taxes	14,532	20,051
Asset retirement obligations	1,978	2,019
Pension and other postretirement benefit liabilities	11,944	12,297
Regulatory liabilities	13,144	-
Other	522	1,055
Total deferred credits and other liabilities	42,121	35,423
Total liabilities	192,696	177,947
MEMBER'S EQUITY	110,606	102,813
TOTAL	$ 303,302	$ 280,760

PEOPLES GAS COMPANY LLC

STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	2016
OPERATING REVENUE	$ 91,255	$ 78,733
OPERATING EXPENSES:		
Purchased gas	29,028	19,787
Other operations and maintenance	24,202	24,439
Depreciation and amortization	9,472	8,867
Other taxes	1,229	1,214
Total operating expenses	63,930	54,307
INCOME FROM OPERATIONS	27,324	24,426
OTHER EXPENSE—Net	51	167
INTEREST CHARGES	4,829	4,604
INCOME BEFORE INCOME TAXES	22,444	19,655
PROVISION FOR INCOME TAXES	9,951	7,649
NET INCOME	$ 12,493	$ 12,006

VERIFICATION

I, Morgan K. O'Brien, being the President and Chief Executive Officer of Peoples Natural Gas Company LLC and PNG Companies LLC, hereby state that the facts set forth in the foregoing Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC, and Peoples Gas Company LLC, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Morgan K. O'Brien

Morgan K. O'Brien

Dated: November 13, 2018

VERIFICATION

I, Christopher P. Luning, being the Senior Vice President, General Counsel and Secretary, of Aqua America, Inc., hereby state that the facts set forth in the foregoing Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC, and Peoples Gas Company LLC, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Christopher P. Luning

Dated: November 13, 2018

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. A-2018-3006061
A-2018-3006062
A-2018-3006063

Aqua Pennsylvania, Inc.

Peoples Natural Gas Company, LLC

Peoples Natural Gas Company LLC – Equitable Division

Peoples Gas Company, LLC

Statement No. 1

Prepared Direct Testimony of Christopher H. Franklin

Topics Addressed:	**Overview of Direct Testimony** **Overview of the Proposed Transaction** **Fitness of Aqua America, Inc.** **Post-Transaction Books of Account** **Post-Transaction Plans and Commitments** **Community Presence**

Dated: December 6, 2018

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Q. Please state your name and business address.

A. My name is Christopher H. Franklin. My business address is 762 West Lancaster Avenue Bryn Mawr, PA 19010.

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

A. I am Chairman, Chief Executive Officer and President of Aqua America, Inc. ("Aqua America").

Q. What are your primary duties and responsibilities as Chairman, CEO and President of Aqua America?

A. My overarching responsibility is to lead an organization that provides safe and reliable water and wastewater service to our customers. This includes making sure our operating subsidiaries are well managed, run efficiently, and provide best in class customer service. Our focus is on improving the infrastructure in the communities we serve in a prudent manner and working constructively with key stakeholders, including regulatory agencies, customers, employees and shareholders.

Q. What is your educational and professional background?

A. I graduated from West Chester University with a Bachelor of Science degree, and later obtained my Masters in Business Administration from Villanova University. I joined Aqua America in December 1992 and have held a number of roles progressing in responsibility. These include executive roles in public affairs, customer operations, regional president of the company's southern and mid-western operations where I managed eight states, and chief operating officer of regulated operations. In 2015, I became president and chief executive officer of Aqua America. Before joining Aqua America, I worked at PECO Energy Company (an Exelon Company) where I was responsible for the economic development initiatives in the Philadelphia region.

Q. Have you previously testified before the Pennsylvania Public Utility Commission ("Commission")?

A. Yes. I provided rebuttal testimony before the Pennsylvania Public Utility Commission in Aqua Pennsylvania, Inc.'s ("Aqua PA") 2005 base rate case at Docket No. R-00051030. I have also submitted direct testimony with Aqua America's applications before the Kentucky Public Service Commission and West Virginia Public Service Commission related to regulatory approvals of Aqua America's acquisition of LDC Funding LLC (the "Proposed Transaction") at Case No. 2018-00369 and Case No. 18-1475-G-PC, respectively.

Q. Please provide a summary of your direct testimony.

A. In my testimony, I will:

- Identify the Joint Applicants' witnesses;[1]
- Outline the Proposed Transaction, under which Aqua America will acquire Peoples Natural Gas Company LLC ("Peoples Natural Gas"), which includes the Peoples Division and the Equitable Division, and Peoples Gas Company ("Peoples Gas")

[1] The Joint Applicants include Aqua America, Peoples Natural Gas Company LLC, Peoples Natural Gas Company LLC - Equitable Division and Peoples Gas Company LLC.

(collectively, the "Peoples Companies") and other affiliated entities;

- Describe Aqua America's strategic vision in undertaking the Proposed Transaction;
- Explain other prior large acquisitions and integrations of other water utilities, to support Aqua America's fitness to undertake the Proposed Transaction;
- Describe Aqua America's history as a Pennsylvania based company, and its long-term commitment to operate utilities in Pennsylvania;
- Describe generally the successful efforts by Aqua America's subsidiaries, Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc., to accelerate infrastructure replacement through the use of the Distribution System Improvement Charge ("DSIC") mechanism;
- Explain Aqua America's plans to maintain separate headquarters for gas and water/wastewater operations following closing on the Proposed Transaction;
- Explain Aqua America's commitments to maintain current employees and the Pittsburgh-based leadership of the Peoples Companies;
- Describe Aqua America's current and future plans with respect to call center operations; and
- Describe Aqua America's and Aqua Pennsylvania's presence in the communities that they serve.

Q. Please identify the Joint Applicants' other witnesses and describe their testimony.

A. In addition to myself, the Joint Applicants present the following witnesses:

- Daniel J. Schuller, Executive Vice President and Chief Financial Officer of Aqua America, will present Joint Applicants St. No. 2. Mr. Schuller will describe the financial fitness of Aqua America, the financing of the Proposed Transaction, Aqua America's access to capital, the post-transaction books of account, and certain benefits of the Proposed Transaction;

- Morgan O'Brien, President and Chief Executive Officer of Peoples Natural Gas and PNG, will present Joint Applicants St. No. 3. Mr. O'Brien will provide an overview of the Peoples Companies, describe the Peoples Companies' current and post-transaction management, describe the Peoples Companies' LTIIP and UFG mitigation plan, describe the Peoples Companies' community presence, explain the effect of the Proposed Transaction on natural gas competition, and describe the Peoples' Companies SAP platform;
- Richard S. Fox, Executive Vice President and Chief Operating Officer, Regulated Operations of Aqua America, will present Joint Applicants St. No. 4. Mr. Fox will describe Aqua America's technical fitness, its safety culture and commitment, and opportunities for shared operations if the transaction is approved; and
- James C. Barbato, Vice President, Corporate Engineering of Aqua America will present Joint Applicants St. No. 5. Mr. Barbato will explain Aqua PA's experience with water and wastewater pipe, the alignment of Aqua America's and the Peoples Companies' commitments to safety and proactive infrastructure replacement, and certain post-transaction commitments.

Q. Please describe the Proposed Transaction.

A. Presently, the Peoples Companies are wholly-owned subsidiaries of PNG Companies, LLC ("PNG"). PNG is a wholly-owned subsidiary of LDC Holdings LLC ("Holdings"), which in turn is a wholly-owned subsidiary of LDC Funding LLC ("Funding"). Funding is a wholly-owned subsidiary of LDC Parent LLC ("Parent"). Parent is indirectly owned by SteelRiver Infrastructure Investment Fund North America ("SRIFNA") and an affiliated fund, which are managed by SteelRiver Infrastructure Associates LLC and its affiliated investment management entities (collectively "SteelRiver"). Peoples' witness Mr. Morgan O'Brien provides further detail concerning the current corporate structure of Parent and its subsidiaries.

The terms of the Proposed Transaction are presented in Highly Confidential Appendix A to Joint Applicants Exhibit DJS-1, which is a copy of the Purchase Agreement between Aqua America and Parent ("Purchase Agreement"). The Purchase Agreement is separately submitted as HIGHLY CONFIDENTIAL Joint Applicants Exhibit DJS-2. Under the terms of the Purchase Agreement, Parent will sell, convey, transfer, assign and deliver to Aqua America all of the issued and outstanding membership interests in Funding. At the closing of the Proposed Transaction, Funding, its direct subsidiary (Holdings), and indirect subsidiary (PNG) and all its subsidiaries would become wholly-owned direct and indirect subsidiaries of Aqua America. Thus, the Peoples Companies would become indirect subsidiaries of Aqua America.

Q. Will any other entities be acquired by Aqua America as a result of the Proposed Transaction?

A. Yes. PNG also owns 100% of the interests in certain non-Commission jurisdictional natural gas utilities: Peoples Gas KY LLC ("Peoples KY"); Delta Natural Gas Company, Inc. ("Delta"); and Peoples Gas WV LLC ("Peoples WV"). Aqua America must obtain the approval of the Kentucky Public Service Commission to acquire Peoples KY and Delta, and must also obtain the approval of the West Virginia Public Service Commission to acquire Peoples WV.

In addition, Aqua America's acquisition of Funding would also result in the change in control of certain non-Commission jurisdictional entities currently operating within the Funding and PNG corporate chain. Specifically, the acquisition of Funding would include the acquisition of the following non-jurisdictional indirect subsidiaries of Funding and direct subsidiaries of PNG: PA Gas Marketing LLC; Peoples Service Company LLC; Peoples Homeworks LLC; Peoples Gathering LLC; Enpro, LLC; Delta Resources, LLC; and Delgasco, LLC. PA Gas Marketing LLC is an existing legal entity but has no function at this time. We anticipate that PA Gas Marketing LLC will be dissolved prior to closing on the Proposed Transaction. Peoples Service Company LLC provides various administrative management services to the Peoples Companies and their affiliates. Peoples Service Company has facilitated the provision of certain administrative services among the Peoples Companies. Peoples Service Company LLC will be reorganized from a first-tier subsidiary of Holdings to a first-tier subsidiary of PNG. Peoples Homeworks LLC provides heating and cooling protection and restoration programs for homeowners, as well as programs for furnaces and air conditioners. Peoples Gathering LLC provides natural gas gathering pipeline services in the Commonwealth. Enpro, LLC, Delta Resources, LLC, and Delgasco, LLC are former subsidiaries of Delta Natural Gas Company, Inc. in Kentucky and are currently engaged in the business of buying and selling gas and operating production properties.

Q. What is the current and proposed corporate structure of Aqua America?

A. The pre-acquisition corporate structure of Aqua America is shown on Appendix B to Joint Applicants Exhibit DJS-1. This shows the active first tier operating subsidiaries of Aqua America. The post-acquisition corporate structure of Aqua America is shown on Appendix G to Joint Applicants Exhibit DJS-1. As can be seen on that Appendix, Funding will become a first-tier operating subsidiary of Aqua America.

Q. What is the consideration to be paid by Aqua America to acquire Funding and its subsidiaries?

A. The consideration to be paid by Aqua America to acquire Funding and its subsidiaries is a base price of $4.275 billion, which includes a projected $1.3 billion of assumed debt, as adjusted pursuant to the terms of the Purchase Agreement. Further details regarding the assumed debt are provided by Mr. Schuller (Joint Applicants St. No. 2).

Q. Mr. Franklin, please describe Aqua America's strategic rationale for undertaking the Proposed Transaction.

A. The Proposed Transaction will create a leading multi-utility platform, providing services in ten states. This new infrastructure company will be one of the largest groups of regulated utilities in the country.

The acquisition of the Peoples Companies is a strategic fit, which aligns directly with Aqua America's core competencies of building and rehabilitating pipeline infrastructure. The acquisition also fits with Aqua America's strategic vision of investing in regulated operations. Excluding its service company, over 99% of Aqua America's revenues are derived from regulated operations. Similarly, over 98% of the revenues of the Peoples Companies and their affiliates being acquired in the Proposed Transaction are produced by regulated operations.

Q. Does Aqua America have successful experience in undertaking large, multi-state acquisitions?

A. Yes. Throughout its history, Aqua America has made major acquisitions of public utility companies and assets. For example, Philadelphia Suburban Corporation ("PSC"), the predecessor entity of Aqua America, acquired Consumers Water Company ("Consumers") for a total enterprise value of approximately $464 million in a deal that closed on March 11, 1999. The equity consideration consisted of approximately $289 million in PSC stock. At the time of the transaction, Consumers had approximately 230,000 customer connections throughout five states. The acquisition created the second largest water utility in the United States, adding significant scale and efficiency as it combined two of the best-run water utilities in the country. In addition, PSC acquired AquaSource, Inc. ("AquaSource") in a transaction that closed on July 31, 2003. PSC acquired AquaSource for a total enterprise value of approximately $205 million. The consideration consisted of 100% cash, financed with equity and debt raised by PSC. The deal expanded PSC's customer count by 20%, adding 130,000 new customers from 11 states. The acquisition allowed PSC (which later changed its name to Aqua America) to invest in and rehabilitate infrastructure across an increased geographic platform and further improve our nation's infrastructure.

Q. Does Aqua America have any additional experience in acquiring and integrating other utility operations?

A. Yes. Aqua America has added approximately $100 million of assets from three acquisitions in 2018 allowing the Company to serve an additional 12,400 customers. Aqua America expects to add another approximately $100 million in assets in 2019 from other binding commitments. Aqua America and its subsidiaries have worked cooperatively with state agencies over time and been willing to step in and take over or assist with troubled water and wastewater systems for the public good that typically need significant infrastructure upgrades. Examples of Aqua America's efforts to acquire or assist troubled water and wastewater systems in Pennsylvania include its acquisitions of the Sun Valley, Emlenton and Washington Park systems, and its assistance of the North Heidelberg system.

Q. How long has Aqua America owned public water systems in Pennsylvania?

A. Aqua America is a long-term investor in utility operations, focused on long-term ownership of utility assets. Aqua America has owned and operated water systems in Pennsylvania for over 130 years. Aqua America also has owned and operated water systems in other states since 1999 and has owned and operated wastewater systems since 1996. Aqua America's overwhelming focus has been on regulated utility operations, and currently less than 1% of Aqua America's revenues come from unregulated operations.

Q. Is there a benefit to Pennsylvania and to the customers served by the Peoples

Companies from an acquisition by Aqua America, a long-term owner of utility assets?

A. Yes. Aqua America has demonstrated its long-term commitments to its existing and acquired customers by investing in new and replacement facilities to improve service and maintaining these acquired assets and customers.

Aqua America is a publicly traded company and, therefore, has access to a broad range of capital in all markets. When this acquisition is finalized, significant, publicly-raised capital resources, obtained through Aqua America, will be readily available to support Peoples Natural Gas's and Peoples Gas's ongoing operations, including necessary and appropriate future changes and improvements.

In addition to infrastructure investment benefits, sharing of best practices is expected to improve efficiency in replacement of underground pipe for both gas and water/wastewater operations. It will also enhance shared core competencies such as building strong relationships with customers, credibility with regulators, and advanced operational efficiency. Over time, as shared information technology systems are integrated and utilized, Aqua will leverage the shared system and processes to create a more efficient and effective overhead structure than can be possible for each operation on a standalone basis. Further information regarding this can be found in Mr. Fox's testimony, Joint Applicants St. No. 4. These internal efficiencies translate to long-term cost savings and increased quality and service, which can directly benefit our customers.

Q. Please summarize the experience of Aqua America's subsidiaries in infrastructure replacement.

A. Aqua America's subsidiaries have replaced a substantial amount of infrastructure. Over the past 10 years, Aqua America water subsidiaries have invested approximately $3.5 billion in infrastructure improvements which includes replacement of approximately 1,600 miles of mains. In Pennsylvania alone over the past 10 years, Aqua PA has replaced more than 1,300 miles of pipe, and invested over $1.1 billion in pipeline replacement. Aqua PA is currently replacing 2.3% of its mains per year, consistent with its Commission-approved Long Term Infrastructure Improvement Plant ("LTIIP"). Aqua America and its subsidiaries intend to continue these levels of expenditures over the foreseeable future.

Q. Will this experience be useful in meeting the challenges of infrastructure replacement faced by the Peoples Companies?

A. Yes. It is Aqua America's plan to continue the current pace of infrastructure replacement at the Peoples Companies. As explained by Mr. Barbato in Joint Applicant St. No. 5, we will review the Peoples Companies current LTIIP in conjunction with the Peoples Companies' leadership team to determine whether such plan can be further accelerated. Further information regarding this can be found in Mr. Barbato's testimony, Joint Applicants St. No. 5.

Q. Please describe Aqua America's plans for headquarters locations for gas and water/wastewater operations following the acquisition.

A. The headquarters of Aqua America will remain in Bryn Mawr. The headquarters of Peoples will remain in Pittsburgh.**Q. Does Aqua America anticipate workforce**

reductions as a result of the Proposed Transaction?

A. No. The Proposed Transaction does not contemplate the elimination of employees or leadership either at the Peoples Companies/PNG or at Aqua America or its water/wastewater subsidiaries. Aqua America plans to maintain the existing expertise of the natural gas employees and management provided by the employees and Pittsburgh-based leadership of PNG and the Peoples Companies.

I specifically note that, unlike an acquisition situation where an existing gas company, potentially from outside Pennsylvania, would acquire the Peoples Companies, the Proposed Transaction through Aqua America ownership would not have an adverse impact on the employees of the Peoples Companies.

Q. Can you provide further details regarding the expected management team to be in place in Pittsburgh following the proposed acquisition?

A. The same highly-experienced teams already in place at PNG and the Peoples Companies will continue to lead the natural gas operations of the Peoples Companies after closing. The Proposed Transaction retains the existing employees and Pittsburgh-based leadership of the Peoples Companies responsible for the safe, reliable and efficient operation of these companies. This includes Morgan O'Brien and his leadership team. Maintaining the existing management and experience of the Peoples Companies will be valuable in addressing the challenges faced by natural gas distribution companies.

Q. Does Aqua America propose to undertake changes to the existing contracts of organized labor at the Peoples Companies?

A. No, Aqua America will honor the existing union contracts of the Peoples Companies.

Q. Does Aqua America propose any changes to the benefits received by employees of the Peoples Companies?

A. No, not at this time. While changes may take place in the future as with any plan, they would not be from the impact of this transaction.

Q. Please describe Aqua America's plans with respect to the separate call centers of the Peoples Companies and Aqua America.

A. Aqua America plans on maintaining separate call centers for the Peoples Companies and Aqua America. Assuming both companies ultimately migrate to the same billing and customer service systems, opportunities to look at efficiencies among the call centers would exist.

Q. Please describe Aqua America's community presence in Pennsylvania.

A. Aqua America has a substantial community presence throughout Pennsylvania. Aqua PA currently serves customers in 32 counties across Pennsylvania.

Aqua America's mission is to protect and provide Earth's most essential resource. Aqua America, and in particular Aqua PA, is committed to the communities it serves, its customers, and the environment. As noted in the Application, giving back to the communities in which Aqua America's subsidiaries operate is part of the Aqua America culture. For instance, Aqua America's subsidiaries, including Aqua PA, participate in various volunteer opportunities throughout the year including watershed revitalization tree plantings, stream clean-ups, Habitat for Humanity, and the American Red Cross, with specific focus on making an impact in the communities within its operating subsidiaries' service territories. Recently, Aqua concluded its annual United Way fundraising campaign and raised almost $200,000 for the organization.

Additionally, environmental initiatives serve as a focal point for Aqua America, through support of river and watershed associations and volunteer opportunities such as tree planting and stream clean ups. For example, Aqua helps to administer and partially funds the Schuylkill River Restoration Fund, which implements water quality improvement projects in the Schuylkill Watershed. Supporting nonprofit organizations through volunteer activities furthers the mission of Aqua America's corporate giving and volunteer program.

Q. How will Aqua America's and its subsidiaries' community presence in Pennsylvania be augmented by the acquisition of the Peoples Companies?

A. Aqua America's presence will increase with the acquisition of the Peoples Companies, which currently serve customers in 18 counties in western Pennsylvania. As explained in the direct testimony of Morgan O'Brien, Joint Applicants St. No. 3, one of the Peoples Companies' core values is their commitment to the communities they serve. Aligning these companies' commitments to the communities they serve will provide synergy within our respective community outreach efforts.

Q. Does this conclude your direct testimony?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of the proceeding. Thank you.

Joint Applicants Exhibit
DJS-1

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

JOINT APPLICATION OF AQUA AMERICA, INC., AQUA PENNSYLVANIA, INC., AQUA PENNSYLVANIA WASTEWATER, INC., PEOPLES NATURAL GAS COMPANY LLC AND PEOPLES GAS COMPANY LLC FOR ALL OF THE AUTHORITY AND THE NECESSARY CERTIFICATES OF PUBLIC CONVENIENCE TO APPROVE A CHANGE IN CONTROL OF PEOPLES NATURAL GAS COMPANY LLC, AND PEOPLES GAS COMPANY LLC BY WAY OF THE PURCHASE OF ALL OF LDC FUNDING LLC'S MEMBERSHIP INTERESTS BY AQUA AMERICA, INC.	:	Docket Nos. A-2018-__________ A-2018-__________ A-2018-__________ A-2018-__________

JOINT APPLICATION OF AQUA AMERICA, INC., AQUA PENNSYLVANIA, INC., AQUA PENNSYLVANIA WASTEWATER, INC., PEOPLES NATURAL GAS COMPANY LLC AND PEOPLES GAS COMPANY LLC

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

I. INTRODUCTION

1. By this Application, Aqua America, Inc. ("Aqua America") and its subsidiaries, Aqua Pennsylvania, Inc. ("Aqua PA"), Aqua Pennsylvania Wastewater, Inc. ("Aqua PA Wastewater"), Peoples Natural Gas Company LLC ("Peoples Natural Gas") and Peoples Gas Company LLC ("Peoples Gas") (hereinafter, collectively the "Applicants") hereby request all necessary approvals from the Pennsylvania Public Utility Commission ("Commission") pursuant to Sections 1102(a)(3) and 2210(a)(1) of the Pennsylvania Public Utility Code ("Code"), 66 Pa. C.S. §§ 1102(a)(3) and 2210(a)(1), authorizing the change in control of Peoples Natural Gas and

Peoples Gas (collectively the "Peoples Companies") to Aqua America by way of the purchase of all of the membership interests of LDC Funding LLC ("Funding")[1] by Aqua America. The Applicants further seek all other approvals or certificates of public convenience that are appropriate, customary, or necessary under the Code to carry out the transaction contemplated in this Application in a lawful manner.

2. The complete names and addresses of the Applicants are as follows:

Aqua America, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010

Aqua Pennsylvania, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010

Aqua Pennsylvania Wastewater, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010

Peoples Natural Gas Company LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212

Peoples Gas Company LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212

3. The attorneys for the Applicants are:

Attorneys for Aqua America, Inc. and its subsidiaries, Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc.

Michael W. Gang (ID # 25670)
Michael W. Hassell (ID # 34851)
Garrett P. Lent (ID # 321566)
Post & Schell, P.C.
17 North Second Street
12th Floor

[1] As explained in Section II of this Application, Peoples Natural Gas and Peoples Gas are wholly-owned subsidiaries of PNG Companies LLC ("PNG"). PNG is in turn a wholly-owned subsidiary of LDC Holdings LLC ("Holdings"), which is the wholly-owned subsidiary of Funding.

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375 North Shore Drive, Suite 600
Pittsburgh, PA 15212
Phone: 412-208-6527
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The Applicants' attorneys are authorized to receive all notices and communications regarding this Application.

4. Through this Application, the Applicants seek Commission approval of a transaction that will create one of the largest publicly-traded water utilities and natural gas

distribution companies in the United States. The transaction will also result in the strategic alignment of the Applicants' infrastructure-replacement philosophies, which will focus on improving Pennsylvania's aging essential service infrastructure, under the same, publicly-traded corporate umbrella. To accomplish this alignment, the owners of the Peoples Companies and Aqua America will engage in a single transaction that transfers the control of Funding, and thereby the Peoples Companies, to Aqua America. Importantly, while this transfer of control will result in new corporate ownership for the Peoples Companies, the employees of the Peoples Companies will be retained and, as a result, the existing, day-to-day operational expertise of the Peoples Companies will be unaffected. As further explained in this Application, the proposed transaction will result in numerous affirmative benefits, including but not limited to benefits from placing the Peoples Companies under public ownership, benefits from substantial infrastructure experience, benefits from retaining jobs in Pennsylvania, long-term efficiencies in information technology, and other benefits.

5. The contemplated transaction will be effectuated pursuant to a Purchase Agreement (the "Agreement"). The Agreement includes Buyer Disclosure Schedules 1.1(e), 4.4, 4.5(a) and 4.5(b) and Seller Disclosure Schedules 1.1 through 5.5(b). The Agreement and associated buyer and seller disclosure schedules contain highly sensitive commercial information that requires **HIGHLY CONFIDENTIAL** treatment and, therefore, are being filed under seal alongside this Application in a separate sealed envelope as "**HIGHLY CONFIDENTIAL Appendix A.**" The contemplated transaction is hereinafter referred to as the "Proposed Transaction."

6. The Application is organized as follows:

- Section II provides a description of the Applicants and the other entities involved in the Proposed Transaction.

- Section III provides an overview of the Proposed Transaction.
- Section IV sets forth the legal standards required for Commission approval of the Proposed Transaction.
- Section V addresses the effect of the Proposed Transaction on customer rates.
- Section VI addresses the effect of the Proposed Transaction on retail gas competition.
- Section VII demonstrates that Aqua America has the requisite technical, legal and financial fitness to assume control of the Peoples Companies through the Proposed Transaction.
- Section VIII demonstrates that the Proposed Transaction will promote the public interest by producing significant affirmative benefits for customers and Pennsylvania.
- Section IX sets forth the other regulatory approvals required.
- Section X sets forth additional supporting data filed alongside this Application.
- Section XI sets forth the conclusion and requested approvals.

7. The Applicants submit, as explained in more detail below, that all criteria necessary for approval of the Proposed Transaction under the Code have been met, and that the Proposed Transaction will benefit the Applicants' customers, employees and communities served. Therefore, the Applicants request that the Application be approved without condition to or modification of the Proposed Transaction.

II. THE PARTIES AND RELATED ENTITIES

A. APPLICANTS

1. Aqua America, Inc.

8. Aqua America is a water and wastewater utility holding company that currently provides service through its operating subsidiaries in Pennsylvania, Ohio, North Carolina,

Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America's subsidiaries provide drinking water and wastewater treatment infrastructure and services, and have substantial experience providing public utility service via pipes and pipelines. As explained below, Aqua Pennsylvania, Inc. ("Aqua PA") is a wholly-owned subsidiary of Aqua America and Aqua Pennsylvania Wastewater, Inc. ("Aqua PA Wastewater") is a wholly-owned subsidiary of Aqua PA.

9. Attached as **"Appendix B"** hereto is a chart showing the present ownership structure of the Aqua America-related entities.

10. Upon closing of the Proposed Transaction, it is anticipated that all of the membership interests of Funding (described in Section II.C. below) will be purchased by Aqua America. As further described in Section III below, Funding will become a wholly-owned subsidiary of Aqua America.

2. Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc.

11. Aqua PA is a corporation duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua PA is a wholly-owned subsidiary of Aqua America. Aqua PA Wastewater is a corporation duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua PA Wastewater is a wholly-owned subsidiary of Aqua PA.[2] Aqua PA and Aqua PA Wastewater are applicants for purposes of the Proposed Transaction because they are the public utility affiliates of the acquiring entity, Aqua America.

12. Aqua PA is a "public utility" as defined under Section 102 of the Code, 66 Pa. C.S. § 102. Aqua PA furnishes water service to approximately 435,000 water customer accounts and wastewater service, through Aqua PA Wastewater, to approximately 24,000 wastewater customer accounts (representing a population of approximately 1.4 million people) throughout Pennsylvania.

[2] Unless otherwise specified herein, references to Aqua PA also include Aqua PA Wastewater.

13. Aqua PA's existing service territory, including the service territory of Aqua PA Wastewater, includes all or portions of the following Pennsylvania counties: Adams, Berks, Bradford, Bucks, Carbon, Chester, Clarion, Clearfield, Columbia, Crawford, Cumberland, Delaware, Forest, Juniata, Lackawanna, Lawrence, Lehigh, Luzerne, Mckean, Mercer, Montgomery, Monroe, Northampton, Northumberland, Pike, Schuylkill, Snyder, Susquehanna, Venango, Warren, Wayne and Wyoming. A map of Aqua PA's existing service territory, including the service territory of Aqua PA Wastewater, is attached hereto as "**Appendix C.**"

14. All of the annual reports, tariffs, certificates, applications, and other documents filed with the Commission by Aqua PA and Aqua PA Wastewater are made a part hereof by reference. Aqua PA and Aqua PA Wastewater have paid all special and general assessments made against them pursuant to Section 510 of the Code, 66 Pa. C.S. § 510. Aqua PA and Aqua PA Wastewater will remain responsible for the payment of any and all lawful special and general assessments related to their respective facilities that the Commission may make against them, pursuant to Section 510 of the Code, 66 Pa. C.S. § 510.

3. Peoples Natural Gas Company LLC

15. Peoples Natural Gas is a limited liability company formed under the laws of the Commonwealth of Pennsylvania for the purpose of providing natural gas transmission, distribution, and supplier of last resort services subject to the Commission's regulatory jurisdiction. Peoples Natural Gas is a wholly-owned subsidiary of PNG Companies LLC ("PNG"), indirectly owned by SteelRiver Infrastructure Fund North America LP ("SRIFNA") and an affiliated fund, which are managed by SteelRiver Infrastructure Associates LLC and its affiliated investment management entities (collectively "SteelRiver").[3]

[3] On February 1, 2010, PNG closed on its purchase of all of the issued and outstanding shares of capital stock of Peoples Natural Gas, which acquisition was approved by the Commission. *Joint Application for Approval of the*

16. Peoples Natural Gas is a "public utility" and a "natural gas distribution company" as those terms are defined in Sections 102 and 2202 of the Code, 66 Pa. C.S. §§ 102, 2202. Peoples Natural Gas, including its Equitable Division,[4] provides natural gas services to approximately 622,000 customers in all or portions of the following Pennsylvania counties: Allegheny, Armstrong, Beaver, Blair, Butler, Cambria, Clarion, Fayette, Greene, Indiana, Jefferson, Lawrence, Mercer, Somerset, Venango, Washington and Westmoreland. The existing areas served by Peoples Natural Gas, including its Equitable Division, are shown on the map attached as "**Appendix D**."

17. All of the annual reports, tariffs, certificates, applications, and other documents filed with the Commission by Peoples Natural Gas, including its Equitable Division, are made a part hereof by reference. Peoples Natural Gas, including its Equitable Division, has paid all special and general assessments made against it pursuant to Section 510 of the Code, 66 Pa. C.S. § 510. Peoples Natural Gas will remain responsible for the payment of any and all lawful special and general assessments related to Peoples Natural Gas' facilities, including the facilities of its Equitable Division, that the Commission may make against it, pursuant to Section 510 of the Code, 66 Pa. C.S. § 510.

Transfer of the Issued and Outstanding Shares of Capital Stock of the Peoples Natural Gas Company, Docket No. A-2008-2063737 (November 19, 2009).

[4] On November 14, 2013, the Commission approved a series of transactions involving, among other things, the merger of Equitable Gas Company, LLC with Peoples Natural Gas and the operation of Equitable Gas Company, LLC as an operating division of Peoples Natural Gas. *Joint Application of Peoples Natural Gas Company LLC, Peoples TWP LLC, and Equitable Gas Company, LLC for All of the Authority and the Necessary Certificates of Public Convenience (1) to Transfer All of the Issued and Outstanding Limited Liability Company Membership Interest of Equitable Gas Company, LLC to PNG Companies LLC, (2) to Merge Equitable Gas Company, LLC with Peoples Natural Gas Company LLC, (3) to Transfer Certain Storage and Transmission Assets of Peoples Natural Gas Company LLC to Affiliates of EQT Corporation, (4) to Transfer Certain Assets between Equitable Gas Company, LLC and Affiliates of EQT Corporation, (5) for Approval of Certain Ownership Changes Associated with the Transaction, (6) for Approval of Certain Associated Gas Capacity and Supply Agreements, and (7) for Approval of Certain Changes in the Tariff of Peoples Natural Gas Company LLC*, Docket Nos. A-2013-2353647, A-2013-2353649, A-2013-2353651 (Order entered Nov. 14, 2013).

4. Peoples Gas Company LLC

18. Peoples Gas, formerly Peoples TWP LLC, is a limited liability company formed under the laws of the Commonwealth of Pennsylvania for the purpose of providing natural gas transmission, distribution, and supplier of last resort services subject to the Commission's regulatory jurisdiction. Peoples Gas is a wholly-owned subsidiary of PNG.[5]

19. Peoples Gas is a "public utility" and a "natural gas distribution company" as those terms are defined in Code Sections 102 and 2202, 66 Pa. C.S. §§ 102, 2202. Peoples Gas provides natural gas services to approximately 61,000 customers throughout its service territory, which includes all or portions of the following Pennsylvania counties: Allegheny, Armstrong, Beaver, Butler, Cambria, Clarion, Clearfield, Indiana, Jefferson, and Westmoreland. The existing areas served by Peoples Gas are shown on the map attached as **"Appendix E."**

20. All of the annual reports, tariffs, certificates, applications, and other documents filed with the Commission by Peoples Gas are made a part hereof by reference. Peoples Gas has paid all special and general assessments made against it pursuant to Section 510 of the Code, 66 Pa. C.S. § 510. Peoples Gas will remain responsible for the payment of any and all lawful special and general assessments related to Peoples Gas's facilities that the Commission may make against it, pursuant to Section 510 of the Code, 66 Pa. C.S. § 510.

B. PEOPLES COMPANIES RELATED ENTITIES

21. SteelRiver manages infrastructure investments throughout North America.

[5] On May 24, 2011, LDC Holdings II LLC, an indirect subsidiary of SRIFNA, closed on its purchase of all of the issued and outstanding shares of capital stock of T.W. Phillips Gas and Oil Company (predecessor of Peoples Gas), which acquisition was approved by the Commission. *Joint Application of T.W. Phillips Gas and Oil Company, TWP INC., and LDC Holdings II LLC for approval of a change of control of T.W. Phillips Gas and Oil Company from TWP INC. to LDC Holdings II LLC, an indirect subsidiary of SteelRiver Infrastructure Fund North America LP*, Docket No. A-2010-2210326 (Order entered May 23, 2011). The Commission subsequently approved the internal-reorganization and transfer of Peoples Gas from LDC Holdings II LLC to PNG. *Application for All of the Authority and Any Necessary Certificates of Public Convenience to Transfer All of the Membership Interests In Peoples Gas Company, LLC from LDC Holdings II, LLC to PNG Companies, LLC*, Docket No. A-2017-2624578 (Order entered Nov. 8, 2017).

22. Funding is a Delaware limited liability company and a wholly-owned direct subsidiary of LDC Parent LLC ("Parent"), which is indirectly owned by SRIFNA and an affiliated fund managed by SteelRiver. Funding directly owns a 100% interest in Holdings, which in turn owns a 100% interest in PNG.

23. PNG is a limited liability company organized, validly existing, and in good standing under the laws of Delaware. PNG directly owns a 100% interest the Peoples Companies. PNG also directly owns other non-jurisdictional entities, as explained in greater detail below.

24. Attached as "**Appendix F**" hereto is a chart showing the present ownership structure of the SRIFNA-related entities.

25. As noted above and explained in Section III.B. below, Aqua America would, upon closing of the Proposed Transaction, purchase 100% of the interests in Funding. As such, Funding and its direct and indirect subsidiaries, Holdings and PNG, would no longer be owned by SteelRiver's privately traded and managed funds; rather, Funding and its subsidiaries would be 100% indirectly owned and controlled by Aqua America, a publicly traded company.

III. <u>DESCRIPTION OF THE PROPOSED TRANSACTION</u>

A. THE ACQUISITION

26. Under the terms of the Purchase Agreement, Parent will sell, convey, transfer, assign and deliver to Aqua America all of the issued and outstanding membership interests in Funding. Funding currently owns all of the authorized, issued, and outstanding limited liability interests in Holdings, which in turn owns all of the authorized, issued, and outstanding limited liability members in PNG. PNG is the sole owner of the authorized, issued, and outstanding

limited liability interests of the Peoples Companies, as well as other non-jurisdictional natural gas utilities and service providers.

27. At the closing of the Proposed Transaction, Funding, its direct subsidiary (Holdings), and indirect subsidiary (PNG) would become wholly-owned direct and indirect subsidiaries of Aqua America. Thus, the Peoples Companies would become indirect subsidiaries of Aqua America.

28. Among other things, the Applicants are seeking Commission approval of the change in control of Peoples Natural Gas and Peoples Gas that would occur as a result of Aqua America's acquisition of Funding, pursuant to Section 1102(a)(3) of the Code. 66 Pa. C.S. § 1102(a)(3).

B. OWNERSHIP CHANGES ASSOCIATED WITH THE PROPOSED TRANSACTION

29. As explained above, after the close of the Proposed Transaction Aqua America would indirectly own and control 100% of Funding. No new intermediate corporate entity would be created between Aqua America and Funding.

30. Currently, the Peoples Companies are wholly-owned subsidiaries of PNG, PNG is the wholly-owned subsidiary of Holdings, and Holdings is the wholly-owned subsidiary of Funding. Therefore, Funding is the indirect parent of the Peoples Companies.

31. Currently, Funding is a wholly-owned subsidiary of Parent, which holds 100% of the membership interests in Funding. Immediately after the transfer by Parent, Aqua America would wholly own and hold 100% of the membership interests in Funding and become the indirect parent of the Peoples Companies. The post-closing structure of Aqua America is shown in "**Appendix G.**" In accordance with the structure set forth in "**Appendix G,**" the Applicants would continue to provide their respective services in their existing service territories.

32. Importantly, the Proposed Transaction would not result in any change of ownership associated with Aqua PA. As explained above, after the close of the Proposed Transaction, Funding would become a direct subsidiary of Aqua America and, therefore, a sister company to Aqua PA. As such, Aqua PA would remain a wholly-owned subsidiary of Aqua America.

33. The Applicants herein are seeking Commission approval of the ownership changes described above to Peoples Natural Gas and Peoples Gas, pursuant to Section 1102(a)(3) of the Code. 66 Pa. C.S. § 1102(a)(3).

C. NON JURISDICTIONAL OWNERSHIP CHANGES ASSOCIATED WITH THE PROPOSED TRANSACTION

34. As explained above, the Proposed Transaction would result in Aqua America becoming the indirect parent of PNG.

35. Along with the Peoples Companies, PNG owns 100% of the interests in certain non-Commission jurisdictional natural gas utilities: Peoples Gas KY LLC ("Peoples KY"); Delta Natural Gas Company, Inc. ("Delta"); and Peoples Gas WV LLC ("Peoples WV"). As explained in Section IX below, Aqua America would obtain the approval of the Kentucky Public Service Commission to acquire Peoples KY and Delta, and would also obtain the approval of the West Virginia Public Service Commission to acquire Peoples WV.

36. In addition, Aqua America's acquisition of Funding would also result in the change in control of certain non-Commission jurisdictional entities currently operating within the Funding and PNG corporate chain. Specifically, the acquisition of Funding would include the acquisition of the following non-jurisdictional indirect subsidiaries of Funding and direct subsidiaries of PNG: PA Gas Marketing LLC; Peoples Service Company LLC; Peoples Homeworks LLC; Peoples Gathering LLC; Enpro, LLC; Delta Resources, LLC; and Delgasco,

LLC. PA Gas Marketing LLC is an existing legal entity but has no function at this time.[6] Peoples Service Company LLC provides various administrative management services to the Peoples Companies and their affiliates and receives services from the Peoples Companies. Peoples Homeworks LLC provides heating and cooling protection and restoration programs for homeowners, as well as programs for furnaces and air conditioners. Peoples Gathering LLC provides natural gas gathering pipeline services in the Commonwealth. Enpro, LLC, Delta Resources, LLC, and Delgasco, LLC are former subsidiaries of Delta Natural Gas Company, Inc. in Kentucky and are currently engaged in the business of buying and selling gas and operating production properties.

37. The Applicants are not seeking Commission approval associated with Aqua America's acquisition of the aforementioned non-jurisdictional entities.

D. FINANCING THE PROPOSED TRANSACTION

38. The consideration to acquire Funding from Parent is a base price of $4.275 billion, which includes a projected $1.3 billion of assumed debt, as adjusted pursuant to the terms of the Agreement.

39. Aqua America would finance the consideration through a combination of equity capital and third party debt financing. Aqua America has secured a fully committed bridge facility to fund the transaction. However, it is Aqua America's intent to raise permanent debt and equity capital for the long term utilizing multiple options. The financing would be structured to maintain strong investment grade credit ratings. Aqua America anticipates issuing approximately $2.2 to $2.9 billion of common equity and equity linked securities. In addition,

[6] The Applicants anticipate that PA Gas Marketing LLC will be dissolved prior to closing on the Proposed Transaction.

Aqua America anticipates approximately $0.4 to $0.9 billion of incremental Aqua America debt issued to fund the remainder of the transaction.

40. After the close of the Proposed Transaction, PNG's externally-financed secured debt would remain outstanding. In addition, intercompany debt owed by the Peoples Companies to PNG would remain for its term.

41. PNG will maintain credit ratings with two credit rating agencies as long as it has outstanding notes.

42. Going forward, new debt would be raised either at the Aqua America or subsidiary level, as appropriate, based on market conditions. Aqua America would review private and public placement debt to achieve the best rates for ratepayers over the long term. The Applicants remain committed to securing financing sufficient to ensure that they continue to provide safe and reliable service to customers.

43. Aqua America would maintain its capital structure for its water companies, and appropriate capital structures for the acquired natural gas companies.

IV. <u>LEGAL STANDARDS FOR COMMISSION APPROVAL</u>

A. STANDARD FOR REQUIRED SECTION 1102(a)(3) APPROVALS

44. Section 1102(a)(3) of the Code, 66 Pa. C.S. § 1102(a)(3), provides, in pertinent part, that the Commission's prior approval, evidenced by a certificate of public convenience, is required:

> For any public utility or an affiliated interest of a public utility . . . to acquire from, or to transfer to, any person or corporation . . . by any method or device whatsoever, including the sale or transfer of stock and including a consolidation, merger, sale or lease, the title to, or the possession or use of, any tangible or intangible property used or useful in the public service.

45. To provide direction for future applicants, the Commission issued a Statement of Policy on October 22, 1994, to establish clear standards regarding the circumstances under which a transfer of voting interest constitutes a change in *de facto* control of the utility, which provides, in pertinent part, as follows:

> (1) A transaction or series of transactions resulting in a new controlling interest is jurisdictional when the transaction or transactions result in a different entity becoming the beneficial holder of the largest voting interest in the utility or parent, regardless of the tier. A transaction or series of transactions resulting in the elimination of a controlling interest is jurisdictional when the transaction or transactions result in the dissipation of the largest voting interest in the utility or parent, regardless of the tier.
>
> (2) For purposes of this section, a controlling interest is an interest, held by a person or group acting in concert, which enables the beneficial holders to control at least 20% of the voting interest in the utility or its parent, regardless of the remoteness of the transaction. In determining whether a controlling interest is present, voting power arising from a contingent right shall be disregarded.

52 Pa. Code § 69.901. Thus, Commission approval is required for any transaction that creates or eliminates a controlling interest and results in a different entity becoming the largest voting interest in a public utility company. The determination of the interests involved in a transaction considers all tiers of interest in the utility or parent of the utility and, thus, both direct and indirect ownership interests in a utility are considered under the Commission's Policy Statement.

46. Presently, 100% of the interests in Peoples Natural Gas and Peoples Gas are directly held by PNG and, therefore, are indirectly held by Funding. Under the terms of the Agreement, all of the issued and outstanding limited liability company membership interests of Funding would be transferred to Aqua America. As a result of the proposed transfer of Funding, Aqua America would indirectly own all of the Peoples Companies' tangible and intangible public service property.

47. Further, pursuant to the Commission's Policy Statement, there would be a direct *de facto* change of control as a result of the proposed transfer of Funding because Aqua America would become the beneficial holder of all the voting interests in the Peoples Companies.

48. Accordingly, each of Peoples Natural Gas and Peoples Gas must obtain a certificate of public convenience under Section 1102(a)(3) of the Code for Parent to transfer its ownership of Peoples Natural Gas and Peoples Gas to Aqua America. The Applicants also seek a certificate of public convenience under Section 1102(a)(3) of the Code to effectuate the Proposed Transaction because Aqua America, the parent of Aqua PA and Aqua PA Wastewater, would indirectly acquire 100% of the interests in Peoples Natural Gas and Peoples Gas.

49. Section 1103 of the Code sets forth the procedure to obtain certificates of public convenience. Under Sections 1102 and 1103, the Applicants must demonstrate that the party to whom the assets and service obligations are being transferred is technically, legally and financially fit. *Seaboard Tank Lines*, 502 A.2d 762, 764 (Pa. Cmwlth. 1985); *Warminster Township Mun. Auth. v. Pa. Pub. Util. Comm'n*, 138 A.2d 240, 243 (Pa. Super. 1958).

50. However, unlike a new utility seeking Commission certification for the first time, Aqua America is presumed to be technically, legally and financially fit to assume control of the Peoples Companies by virtue of its long-standing existence and ownership of jurisdictional public utility service providers, *e.g.*, Aqua PA. *South Hills Movers, Inc. v. Pa. Pub. Util. Comm'n*, 601 A.2d 1308 (Pa. Cmwlth. 1992); *Re Blue Bird Coach Lines, Inc.*, 72 PA PUC 262, 285-286 (1990); *Re V.I.P. Travel Services, Inc.*, 56 PA PUC 625, 631 (1982). Significantly, the Commission has previously applied this presumption where the acquiring public utility provided service of a different nature than that of the public utility it acquired. *See In re: Application of Pennsylvania Power & Light Company, PFG Gas, Inc., and North Penn Gas Company*, Docket

Nos. A-120650F0006, A-122050F0003, 1998 Pa. PUC LEXIS 23, at *36-37 (Initial Decision dated May 1, 1998), *adopted by*, Opinion and Order, Docket Nos. A-120650F0006, A-122050F0003, 1998 Pa. PUC LEXIS 33, *28 (Order dated July 24, 1998). Aqua America's technical, legal and financial fitness are described in Section VII of the Application.

51. The Commission may issue a certificate of public convenience upon a finding that "the granting of such certificate is necessary or proper for the service, accommodation, convenience, or safety of the public." 66 Pa. C.S. § 1103(a). This standard requires the Commission to find that the Proposed Transaction will "affirmatively promote the service, accommodation, convenience, or safety of the public in some substantial way." *City of York v. Pa. Pub. Util. Comm'n*, 449 Pa. 136, 151, 295 A.2d 825, 828 (1972). The "substantial public interest" standard is satisfied by a simple preponderance of the evidence of benefits, and such burden can be met by showing a likelihood or probability of public benefits that need not be quantified or guaranteed. *Popowsky v. Pa. Pub. Util. Comm'n*, 594 Pa. 583, 611, 937 A.2d 1040, 1057 (2007). Further, the substantial public benefit test does not require that every customer receive a benefit from the Proposed Transaction. *Popowsky*, at 617-18, 937 A.2d at 1061.

52. The substantial affirmative benefits of the Proposed Transaction are described in Section VIII of this Application.

B. STANDARD FOR REQUIRED SECTION 2210(a) APPROVALS

53. Section 2210(a) of the Code provides as follows:

> (a) General rule. --In the exercise of authority the commission otherwise may have to approve mergers or consolidations involving natural gas distribution companies or natural gas suppliers or the acquisition or disposition of assets or securities of natural gas distribution companies or natural gas suppliers, the commission shall consider:
>
> > (1) Whether the proposed merger, consolidation, acquisition or disposition is likely to result in

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> anticompetitive or discriminatory conduct, including the unlawful exercise of market power, which will prevent retail gas customers from obtaining the benefits of a properly functioning and effectively competitive retail natural gas market.
>
> (2) The effect of the proposed merger, consolidation, acquisition or disposition on the employees of the natural gas distribution company and on any authorized collective bargaining agent representing those employees.

66 Pa. C.S. § 2210(a).

54. The Proposed Transaction is subject to the provisions of Section 2210 because it involves the acquisition of the property and securities of the Peoples Companies by Aqua America.

55. Under Section 2210(a)(1) of the Code, the Commission is required to consider whether a proposed acquisition of a natural gas distribution company is likely to result in anticompetitive or discriminatory conduct. 66 Pa. C.S. § 2210(a). Additionally, the Commission is required to consider the impact that a proposed acquisition of a natural gas distribution company may have on the employees of the natural gas distribution company. 66 Pa. C.S. § 2210(a)(2).

56. The requirements of Section 2210(a) are addressed in Section VI of this Application.

C. BURDEN OF PROOF

57. Section 332(a) of the Code provides that the party seeking a rule or order from the Commission has the burden of proof in that proceeding. 66 Pa. C.S. § 332(a). It is axiomatic that "[a] litigant's burden of proof before administrative tribunals as well as before most civil proceedings is satisfied by establishing a preponderance of evidence which is substantial and legally credible." *Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm'n*, 578 A.2d 600, 602 (Pa.

Cmwlth. 1990). The preponderance of evidence standard requires proof by a greater weight of the evidence. *Cmwlth. v. Williams*, 732 A.2d 1167 (Pa. 1999). Consequently, as the parties seeking relief, the Applicants bear the burden of proving that the Proposed Transaction satisfies the requirements of Sections 1102, 1103, and 2210.

58. Additionally, any finding of fact necessary to support an adjudication of the Commission must be based upon substantial evidence. *Met-Ed Indus. Users Group v. Pa. Pub. Util. Comm'n*, 960 A.2d 189, 193 n.2 (Pa. Cmwlth. 2008) (citing 2 Pa. C.S. § 704). Substantial evidence is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. *Borough of E. McKeesport v. Special/Temporary Civil Serv. Comm'n*, 942 A.2d 274, 281 (Pa. Cmwlth. 2008). The "presence of conflicting evidence in the record does not mean that substantial evidence is lacking." *Allied Mechanical and Elec., Inc. v. Pa. Prevailing Wage Appeals Bd.*, 923 A.2d 1220, 1228 (Pa. Cmwlth. 2007) (citation omitted).

V. EFFECT OF THE PROPOSED TRANSACTION ON RATES

59. The Proposed Transaction would not have an immediate effect on rates. At closing of the Proposed Transaction, the water and wastewater tariffs of Aqua PA and the natural gas tariffs of Peoples Natural Gas and Peoples Gas would remain in full force and effect. Because the Applicants' base rates would remain in effect, as they may be amended from time to time in accordance with the law, the Proposed Transaction would not have an adverse effect on the Applicants' base rates.

60. The Proposed Transaction is not expected to have any adverse impact on the cost of equity for ratemaking purposes. The Peoples Companies would have access to equity capital raised by Aqua America in the public marketplace, as explained further in Section VIII.

61. Finally, the Applicants note that no claim to recover the transaction costs and/or acquisition premium associated with the Proposed Transaction would be made in future base rate cases.

VI. EFFECT OF THE PROPOSED TRANSACTION ON COMPETITION AND EMPLOYEES

62. As noted above, under Section 2210(a)(1) of the Code, the Commission is required to consider whether a proposed acquisition of the securities of a natural gas distribution company is likely to result in anticompetitive or discriminatory conduct. 66 Pa. C.S. § 2210(a).

63. The Proposed Transaction would not result in anti-competitive or discriminatory conduct in the retail market for natural gas in Pennsylvania, nor would it have any adverse effect on the retail natural gas market in Pennsylvania. The Proposed Transaction would not result in any changes to the gas operations or customer choice programs of Peoples Natural Gas and Peoples Gas. All rates, terms and conditions that have an impact on retail competition in the Peoples Companies' respective service territories would remain unaffected by the Proposed Transaction.

64. In addition, under Section 2210(a)(2) of the Code, the Commission is also required to consider the impact that a proposed acquisition of a natural gas distribution company may have on the employees of the natural gas distribution company. 66 Pa. C.S. § 2210(a)(2).

65. Unlike an acquisition situation where an existing gas company, potentially from outside Pennsylvania, would acquire the Peoples Companies, the Proposed Transaction through Aqua America ownership would not have an adverse impact on the employees of the Peoples Companies. Under the Proposed Transaction, the Peoples Companies would maintain current employees and Pittsburgh-based leadership. The Proposed Transaction does not contemplate the elimination of employees or leadership; rather, it would maintain the existing expertise in the

field of natural gas operations and management provided by the existing employees and Pittsburgh-based leadership of PNG, Peoples Natural Gas and Peoples Gas.

66. Moreover, the combined, larger entity would provide employees with enhanced opportunities for career development, as explained in greater detail in Section VIII below.

67. Furthermore, after the acquisition, the Peoples Companies would continue to honor the requirements of all union collective bargaining agreements, and treat all union employees in accordance with the National Labor Relations Act and other legal requirements. The Peoples Companies would also maintain their outstanding pension fund balances.

VII. TECHNICAL, LEGAL AND FINANCIAL FITNESS

A. AQUA AMERICA IS TECHNICALLY FIT TO OWN AND CONTROL THE PEOPLES COMPANIES

68. Aqua America is the second largest investor-owned water utility in the country and is a financially strong, owner and manager of pipe-based utility assets in the United States. Aqua America owns and operates 1,486 water systems across its eight-state footprint, producing more than 82 billion gallons of quality drinking water in 2017. The average capital budget for Aqua America's subsidiaries is approximately $500 million per year throughout its eight state service territories. Its sources of drinking water include three different types of water sources serving 2.3 million people.

69. In addition, Aqua America, Peoples Natural Gas and Peoples Gas utilize surcharge mechanisms to manage their capital investments. Seven states in which Aqua America operates water utilities and five states in which Aqua America operates wastewater utilities permit Aqua America's subsidiaries to add a surcharge to their respective bills to offset the additional depreciation and capital costs associated with capital expenditures related to replacing and rehabilitating infrastructure systems, with a focus on distribution pipe. Similarly, both

Peoples Natural Gas and Peoples Gas utilize surcharge mechanisms to manage their capital investments within Pennsylvania.

70. Moreover, Aqua America has significant experience owning and managing public utility infrastructure in Pennsylvania. Its wholly-owned subsidiaries, Aqua PA and Aqua PA Wastewater, provide water and wastewater services to over 435,000 water customer accounts and 24,000 wastewater customer accounts (representing a population of approximately 1.4 million people). In providing water and wastewater service to Pennsylvania customers, Aqua PA has significant expertise in owning and operating pipeline public utility assets in conformance with the Code and the Commission's regulations and orders.

71. Aqua PA's investment in the state's water and wastewater infrastructure continues to benefit customers and the environment alike. When Aqua PA first began to accelerate pipeline replacement in 1996, Aqua PA's pipes were on a 900-year replacement cycle. Today, that has been significantly reduced to a 90-year replacement cycle. The benefits of Aqua PA's main replacement program have been most dramatic in its southeastern division, which is the largest division with 4,600 miles of main that serve approximately one million people. Main breaks in the southeastern division have been reduced by 70% to an all-time low of eight breaks per 100 miles of pipe, per year, and customer complaints have fallen by 59%. Non-revenue water also continues to trend downward, reducing expenses for power and treatment chemicals.

72. Importantly, Aqua America also has significant experience implementing and managing Commission-approved Long Term Infrastructure Improvement Plans ("LTIIPs") involving the replacement of aging pipeline infrastructure throughout the Commonwealth of Pennsylvania. Aqua PA currently maintains separate LTIIPs for its water and wastewater assets, and regularly meets its LTIIP goals. Over the past 10 years, Aqua PA has replaced more than

1,300 miles of pipe, and invested over $1.1 billion in pipeline replacement. Aqua PA is currently replacing 2.3% of its mains per year, consistent with its Commission-approved LTIIP.

73. An additional, important key factor in demonstrating technical fitness is the fact that the same highly-experienced teams already in place at PNG and the Peoples Companies would continue to lead the natural gas operations of the Peoples Companies after closing. The Proposed Transaction retains the existing employees and Pittsburgh-based leadership of the Peoples Companies responsible for the safe, reliable and efficient operation of these companies. This includes Morgan O'Brien and his leadership team. As a result, Aqua America would have access to the intellectual capital and expertise in natural gas operations and management of the Peoples Companies' existing teams. Maintaining the existing management and experience of the Peoples Companies will be a valuable tool in addressing the challenges faced by natural gas distribution companies.

74. For these reasons, Aqua America, together with the Peoples Companies' current management and employees, have the managerial and utility experience necessary to effectuate the change of control contemplated by the Proposed Transaction and operate Peoples Natural Gas and Peoples Gas in the public interest.

B. AQUA AMERICA IS LEGALLY FIT TO OWN AND CONTROL THE PEOPLES COMPANIES

75. Aqua America is also legally fit to own and operate Peoples Natural Gas and Peoples Gas. Aqua America and its subsidiaries are in compliance with all federal and state laws, and have never been prosecuted, indicted or investigated for criminal activity in the United States or any other country.

76. In order to reinforce its culture of compliance, Aqua America has also engaged numerous outside law firms to handle various specialized matters, including on-going

compliance with the Public Utility Code and this Commission's regulations, rules and orders. Additionally, Aqua America has access to an internal team of legal counsel and regulatory experts responsible for ensuring compliance with all applicable laws. Similarly. the Peoples Companies also have an internal team of legal counsel and regulatory experts, who would be retained following the acquisition.

77. For these reasons, Aqua America is legally fit to own and operate Peoples Natural Gas and Peoples Gas.

C. AQUA AMERICA IS FINANCIALLY FIT TO OWN AND CONTROL THE PEOPLES COMPANIES

78. Aqua America is a publicly traded company that has substantial experience in raising both debt and equity capital in the public marketplace for approximately 130 years. Throughout its history, Aqua America has made major acquisitions of public utility companies and assets. For example, Philadelphia Suburban Corporation ("PSC"), the predecessor entity of Aqua America, acquired Consumers Water Company ("Consumers") for a total enterprise value of approximately $464 million in a deal that closed on March 11, 1999. The equity consideration consisted of approximately $289 million in PSC stock. At the time of the transaction, Consumers had approximately 230,000 connections throughout five states. The acquisition, when closed, created the second largest water utility in the United States, adding significant scale and efficiency as it combined two of the best-run water utilities in the country. In addition, PSC acquired AquaSource, Inc. ("AquaSource") in a transaction that closed on July 31, 2003. PSC acquired AquaSource for a total enterprise value of approximately $205 million. The consideration consisted of 100% cash, financed with equity and debt raised by PSC. The deal expanded PSC's customer count by 20%, adding 130,000 new customers from 11 states. The acquisition allowed PSC (which later changed its name to Aqua America) to invest in and

rehabilitate infrastructure across an increased geographic platform and further improve our nation's infrastructure.

79. Aqua America also has substantial experience with post-acquisition integration planning and execution. More recently, Aqua America has added approximately $100 million of rate base from three municipal acquisitions in 2018 and expects to add another approximately $100 million in 2019 from other binding commitments. Aqua America and its subsidiaries have worked cooperatively with state agencies over time and been willing to step in and take over or assist with troubled water and wastewater systems for the public good that typically need significant infrastructure upgrades. Examples of Aqua America's efforts to acquire or assist troubled water and wastewater systems in Pennsylvania include its acquisitions of the Sun Valley, Emlenton and Washington Park systems, and its assistance of the North Heidelberg system. These acquisitions demonstrate Aqua America's ability: (1) to acquire companies and assets and finance the growing capital needs associated with owning and operating public utility companies and assets; and (2) to finance and meet the growing capital needs associated with owning and operating public utility companies and assets.

80. Furthermore, Aqua American's ownership and operation of Aqua PA demonstrates a substantial commitment to invest significant, publicly-raised capital resources to further improve customer service, customer satisfaction, and pipeline infrastructure, while maintaining reasonable and competitive rates. Through these capital investments, Aqua PA has satisfied, and in many cases exceeded, its prior commitments regarding the replacement of aging water and wastewater pipeline infrastructure and has successfully completed the acquisition of numerous troubled municipally-owned water and wastewater systems. In addition, Aqua PA

regularly completes successful base water and wastewater rate proceedings before the Commission.

81. Aqua America is a publicly traded company and, therefore, has access to a broad range of capital in all markets. Similar to Aqua PA, significant, publicly-raised capital resources, obtained through Aqua America, will be readily available to support Peoples Natural Gas's and Peoples Gas's ongoing operations, including necessary and appropriate future changes and improvements.

82. In addition, Aqua America would be able to meet the increased capital requirements of Peoples Natural Gas and Peoples Gas in Pennsylvania, and the capital requirements of the other PNG subsidiaries in other states. In order to finance the Proposed Transaction, Aqua America would secure a combination of equity capital and third party debt financing. *See* Section III.D, *supra*. Furthermore, after the close of the Proposed Transaction, Aqua America would continue securing financing sufficient to ensure that Aqua PA and the Peoples Companies continue to provide safe and reliable service to customers. *See* Section III.D., *supra*.

83. Finally, Aqua America would be able to raise and secure an additional $300-400 million annually to support Peoples Natural Gas's and Peoples Gas's commitments for the replacement of aging pipeline infrastructure. As evidenced by Aqua America's history of raising capital for its $500 million annual capital program, Aqua America would be able to secure financing to support the Peoples Companies' infrastructure replacement program.

VIII. THE PROPOSED TRANSACTION WILL BENEFIT CUSTOMERS AND THE COMMUNITIES SERVED

A. THE PEOPLES COMPANIES WILL BE PUBLICLY OWNED

84. The Peoples Companies have prospered under SteelRiver ownership. In addition, both SteelRiver and SRIFNA made substantial commitments in prior acquisition proceedings to address the concerns raised by equity fund ownership of public utilities in response to the ten-factor test set forth in *Application of Penn Estates Utilities, Inc.*, Docket Nos. A-210072F0003, et al., 2006 Pa. PUC LEXIS 88, 252 P.U.R.4th 131 (Order dated Oct. 2, 2006).

85. Notwithstanding, the transfer to a publicly-traded corporation would provide important benefits.

86. One benefit from public ownership would be expanded access to equity capital. Aqua America raises equity capital through public stock issuances. As a result, the Peoples Companies, through Aqua America, would have access to equity capital that can be raised in all markets.

87. As explained in Section VII, above, Aqua America has been and is anticipated to be able to obtain the equity capital needed to finance substantial infrastructure investment.

88. As a subsidiary of Aqua America, the Peoples Companies are expected to be able to raise the substantial amount of debt needed for infrastructure replacement at a cost equal to, or lower than, the current cost incurred by the Peoples Companies, at comparable tenors.

89. Following acquisition by Aqua America, corporate governance of the Peoples Companies would be transparent. As a publicly traded company, Aqua America is subject to numerous reporting requirements that provide information to shareholders, government agencies including the Commission, and the public. Among the various reporting requirements that would apply to corporate governance of the Peoples Companies following the acquisition would

be the Sarbanes-Oxley Act of 2002. Aqua America is currently subject to the provisions of Sarbanes-Oxley. Further, Aqua America is subject to all reporting requirements of the New York Stock Exchange and the United States Securities and Exchange Commission, including requirements to submit executive compensation to its shareholders, hold annual voting on all of its directors, hold all employees accountable pursuant to a comprehensive and published Code of Ethics, provide oversight and governance pursuant to published Corporate Governance Guidelines, and provide a detailed report on its operations and maintenance expenses, revenues, and other financial reporting.

90. Aqua America is also a long-term investor in utility operations, focused on long-term ownership of utility assets. Aqua has owned and operated water systems in Pennsylvania for over 130 years. Aqua has owned and operated water systems in other states since 1999, and has owned and operated wastewater systems since 1996. Aqua America's overwhelming focus has been on regulated utility operations, and currently less than 1% of Aqua America's revenues come from unregulated operations.

91. Aqua America would bring substantial transparency as to capital structure. As explained above, acquisition debt would be raised publicly, and current plans are to raise debt to support the capital programs at either holding company or operating company levels through either public or private markets. Separate capital structures would be maintained for gas and water/wastewater operations for the foreseeable future, to appropriately reflect the separate business risks of these utility operations.

92. Aqua America would also provide full transparency with respect to its corporate structure. As a publicly held corporation, Aqua America's subsidiary ownership and

organization will be completely transparent, including the ownership of subsidiaries that are not in the chain of ownership of Aqua PA or the Peoples Companies.

93. Finally, as a publicly held corporation, Aqua America's creditworthiness is and would be a matter of public knowledge.

B. AQUA AMERICA'S AND THE PEOPLES COMPANIES' COMBINED INFRASTRUCTURE EXPERIENCE WILL BENEFIT BOTH GAS AND WATER/WASTEWATER OPERATIONS.

94. Aqua America's water and wastewater subsidiaries and the Peoples Companies both have substantial experience in infrastructure replacement. This experience will be beneficial to customers and the public in a combined company in the future.

95. Aqua America's subsidiaries have replaced a substantial amount of infrastructure. Over the past 10 years, Aqua America water subsidiaries have invested approximately $3.5 billion in infrastructure improvements which includes replacement of approximately 1,600 miles of mains. Aqua America's subsidiaries would continue these levels of expenditures over the foreseeable future.

96. The Peoples Companies have substantially increased their expenditures on infrastructure replacement. Under their current Commission-approved Combined Distribution LTIIP, the Peoples Companies will replace approximately 650 miles of main, and remove the "at risk" pipe from approximately 71,000 customers over the next five years.[7] Over the five-year term of their Combined Distribution LTIIP, the Peoples Companies will spend approximately $880 million on infrastructure replacement. Aqua America commits to continue the Combined Distribution LTIIP following the acquisition as approved by the Commission. In addition, Aqua America commits to reviewing the current Combined Distribution LTIIP and considering a more aggressive program to benefit the Peoples Companies' customers.

[7] The Peoples Companies will be replacing both company-owned and customer-owned at-risk services.

97. Sharing of best practices in infrastructure replacement is anticipated to further improve efficiency in replacement of underground pipe for both gas and water/wastewater operations. Some of the ways in which best practices may improve efficiency in pipeline replacement include contracting, tracking of pipe in need of replacement and experience in replacing pipe in urban areas.

98. The Peoples Companies have submitted their annual Section 1307(f) filing regarding the Peoples Companies' annual adjustment and reconciliation of their natural gas costs through the ratemaking process. Under the terms and conditions of the Commission-approved partial settlement of the Peoples Companies' 2018 Section 1307(f) proceedings, the Peoples Companies agreed to Unaccounted for Gas ("UFG") targets and the Combined UFG Mitigation Plan related to their gathering systems for the upcoming three-year period. Aqua America commits to support continuation of the Combined UFG Mitigation Plan following the acquisition.

C. EMPLOYMENT BENEFITS

99. The acquisition of the Peoples Companies by Aqua America would maintain jobs in Pennsylvania, and provide expanded job opportunities for both gas and water/wastewater employees.

100. The sale of the Peoples Companies to a public company based in Pennsylvania would retain Pennsylvania jobs. Aqua America intends to maintain separate headquarters for its gas (Pittsburgh) and water/wastewater (Bryn Mawr) operations.

101. Aqua America will honor the existing union contracts and pension plans of the Peoples Companies.

102. Aqua America will not alter its water and wastewater employee levels as a result of the acquisition and will continue to execute the infrastructure replacement plans of its water and wastewater subsidiaries, as disclosed in its LTIIPs filed with the Commission.

103. The combination of ownership of the gas and water/wastewater operations also will provide additional advancement opportunities for employees. Aqua America intends to allow employees from the Peoples Companies to bid on job openings at Aqua America and the Aqua water/wastewater operations, and vice versa.

D. LONG-TERM EFFICIENCIES FROM THE ACQUISITION

104. Both Aqua America and the Peoples Companies share complementary core competencies. These include expertise in pipeline replacement, strong relationships with customers, credibility with regulators and advanced operational efficiency. All of these would create long-term value for stakeholders.

105. To the extent shared information technology ("IT") systems can be utilized and create efficiencies, Aqua America would seek to implement these efficiencies over time. A shared IT system will likely be developed in the next several years following the Proposed Transaction, which will benefit both gas and water operations.

106. The Peoples Companies installed a new SAP Technology Platform, following acquisition by SRIFNA. Aqua America does not currently utilize a standardized technology platform and would certainly benefit from transitioning onto a new SAP Technology Platform in the future for its water and wastewater operations.

107. If both the gas and water/wastewater operations operate from the same platform, Aqua America would be able to develop a large, multi-utility service company. At that time, Aqua America can leverage a larger platform to create a more efficient and effective overhead structure than can be possible for each operation on a standalone basis. This may benefit areas

such as finance, human resources, regulatory, IT and supply chain. A single IT platform also may improve the efficiency of customer services.

108. Economies of scale with a larger customer base of both gas and water will allow for greater investment in technology solutions that will enhance customer service tools as well as technology tools for enhanced management of similar activities, including the design and engineering of pipe replacement programs, mapping of pipelines, and other improvements and work efficiency tools that might not be economical on a standalone basis.

E. COMMUNITY PRESENCE

109. Aqua America has a substantial community presence throughout Pennsylvania. Aqua PA currently serves customers in 32 counties across Pennsylvania. This community presence will increase with the acquisition of the Peoples Companies, which currently serve customers in 18 counties in western Pennsylvania.

110. Aqua America's mission is to protect and provide Earth's most essential resource. Aqua America, and in particular Aqua PA, is committed to the communities it serves, its customers, and the environment. Giving back to the communities in which Aqua America's subsidiaries operate is part of the Aqua America culture. For instance, Aqua America's subsidiaries, including Aqua PA, participate in various volunteer opportunities throughout the year including food banks, bike-a-thons, Habitat for Humanity, and the American Red Cross, with specific focus on making an impact in the communities within its operating subsidiaries' service territories. Additionally, environmental initiatives serve as a focal point for the Aqua America, through support of river and watershed associations and volunteer opportunities such as tree planting and stream clean ups. Supporting nonprofit organizations through volunteer activities furthers the mission of Aqua America's corporate giving and volunteer program.

111. Community commitment is one of the Peoples Companies' core values and the Peoples Companies have an active community presence in western Pennsylvania. The Peoples Companies make financial commitments to community and charitable organizations throughout their service territories – to both large organizations and small. Among the organizations that the Peoples Companies support are the Salvation Army, United Way, Leukemia/Lymphoma Society, Dollar Energy Fund, March of Dimes, and Greater Pittsburgh Literacy Council. The Peoples Companies also have a very active Volunteer Activities Committee and offer ongoing volunteer events such as collecting and packaging food in partnership with local food banks, cleaning the rivers with Paddle without Pollution, mentoring youths through Big Brothers Big Sisters or providing winter outerwear for children with the Salvation Army's Project Bundle Up.

112. Aqua America would maintain the community presence of the Peoples Companies following consummation of the acquisition, including retaining gas operations headquarters in Pittsburgh.

F. AFFILIATE RELATIONSHIPS

113. Aqua America has very limited non-utility operations. Excluding its service company, less than 1% of revenues and 0.2% of assets are from non-utility operations.

114. The assets to be acquired through the Proposed Transaction also would be overwhelmingly utility assets. There are no current plans to expand the scope of non-utility operations.

115. After closing, the current plan will be to evaluate specific functions that more appropriately belong in a shared services company.

116. Aqua America commits to updating and filing the necessary affiliated transaction agreements at the appropriate time.

IX. OTHER REGULATORY AND SHAREHOLDER APPROVALS

117. Aqua America plans to complete the Proposed Transaction as soon as possible, after all regulatory approvals have been obtained. The Applicants respectfully request approval of the Application on or before the May 23, 2019 public meeting date.

118. In addition to approval from this Commission, the Proposed Transaction also requires approval from the Kentucky Public Service Commission and the West Virginia Public Service Commission for the change in control of the natural gas utilities operating in those states.

119. The Proposed Transaction is also subject to federal clearances under the Hart-Scott-Rodino Antitrust Improvements Act. No approvals from the Federal Energy Regulatory Commission are required to effectuate the Proposed Transaction.

120. Shareholder approvals are not required to effectuate the Proposed Transaction.

121. Finally, to the extent that any affiliated interest agreement approvals by the Commission are required by the Proposed Transaction, the Applicants will submit the relevant affiliated interest agreements for Commission review and approval after the close of the Proposed Transaction.

X. ADDITIONAL SUPPORTING DATA

122. The following appendices, containing additional information in support of this Application, are attached hereto:

- Appendix A – The Agreement and Associated Buyer and Seller Disclosures **[HIGHLY CONFIDENTIAL – FILED UNDER SEAL]**
- Appendix B – Chart of Present Ownership Structure of Aqua Entities
- Appendix C – Map of Existing Aqua PA Water and Wastewater Service Territories
- Appendix D – Map of Existing Peoples Natural Gas Service Territory

- Appendix E – Map of Existing Peoples Gas Service Territory
- Appendix F – Chart of Present Ownership Structure of SRIFNA Entities
- Appendix G – *Pro Forma* Post-Acquisition Corporate Organization Chart of Aqua Entities
- Appendix H – Form 10-K of Aqua America as of December 31, 2017.
- Appendix I – Income Statement and Balance Sheet of Aqua PA as of December 31, 2017.
- Appendix J – Income Statement and Balance Sheet of Peoples Natural Gas as of December 31, 2017.
- Appendix K – Income Statement and Balance Sheet of Peoples Gas as of December 31, 2017.

123. The Applicants also intend to file the following pieces of Direct Testimony, and incorporate these statements as a part of this Application by reference:

- <u>Joint Applicants' Statement No. 1</u> – Direct Testimony of Christopher H. Franklin, Chairman, Chief Executive Officer and President of Aqua America
- <u>Joint Applicants' Statement No. 2</u> – Direct Testimony of Dan Schuller, Executive Vice President and Chief Financial Officer of Aqua America
- <u>Joint Applicants' Statement No. 3</u> – Direct Testimony of Morgan O'Brien, President and Chief Executive Officer of Peoples Natural Gas and PNG
- <u>Joint Applicants' Statement No. 4</u> – Direct Testimony of Rick Fox, Executive Vice President and Chief Operating Office, Regulated Operations of Aqua America
- <u>Joint Applicants' Statement No. 5</u> – Direct Testimony of Jim Barbato, Vice President, Corporate Engineering of Aqua America

124. Finally, all annual reports, tariffs, certificates of public convenience, applications, securities certificates, and similar documents previously filed by the Applicants are made a part hereof by reference.

XI. CONCLUSION

WHEREFORE, for all the foregoing reasons, the Applicants respectfully request that the Pennsylvania Public Utility Commission approve and issue the necessary certificates of public convenience to:

(1) Transfer the control of Peoples Natural Gas Company LLC and Peoples Gas Company LLC to Aqua America, Inc., by way of the purchase of LDC Funding LLC by Aqua America, Inc.; and

(2) Grant any other approvals or certificates appropriate, customary, or necessary under the Public Utility Code to carry out the transactions contemplated in this Application in a lawful manner.

Respectfully submitted,

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jnase@cozen.com

Date: November 13, 2018

Counsel for Peoples Natural Gas Company LLC and Peoples Gas Company LLC

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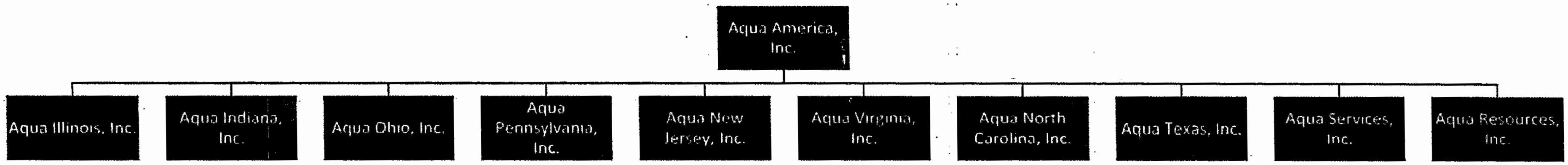
HIGHLY CONFIDENTIAL Appendix A

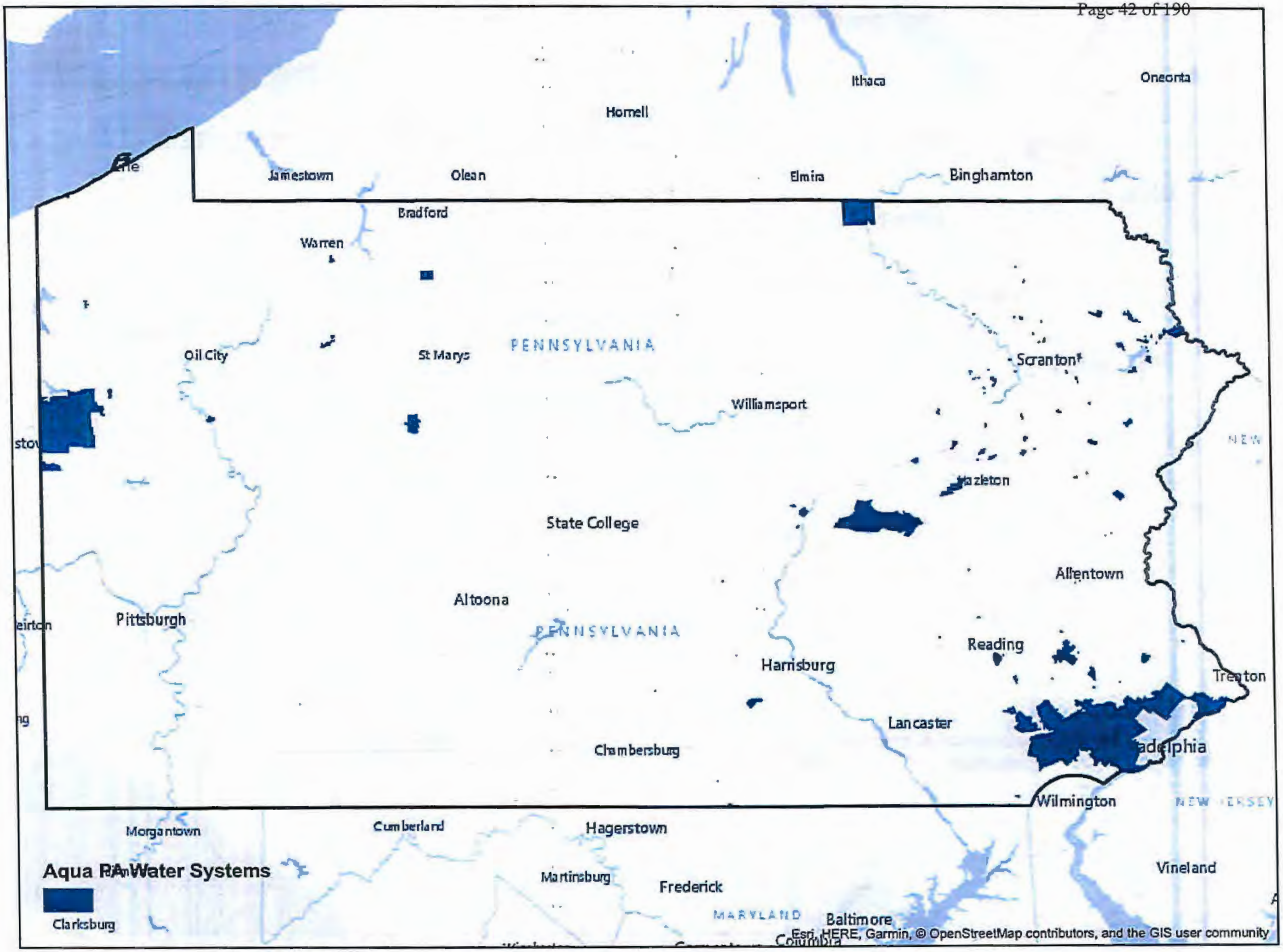
No Public Version Available

Appendix B

Aqua America Corporate Structure



*The above corporate structure shows the active first tier operating subsidiaries of Aqua America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Olean
Elmira
Binghamton
Bradford
Warren
Oil City
St Marys
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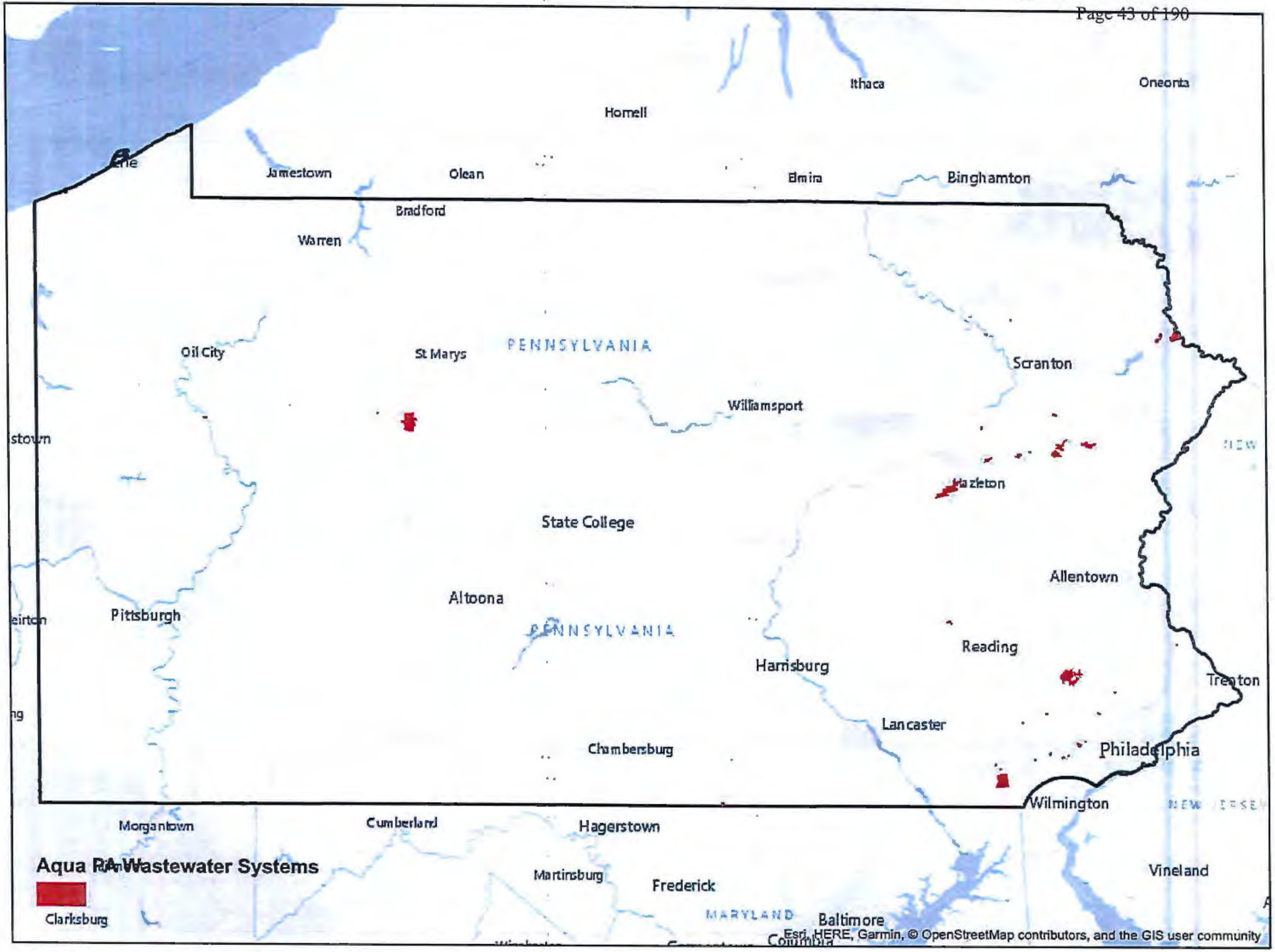
Scranton
Williamsport
Hazleton
State College
Allentown
Altoona
Pittsburgh
PENNSYLVANIA
Reading
Harrisburg
Trenton
Lancaster
Chambersburg
Wilmington
NEW JERSEY
Morgantown
Cumberland
Hagerstown
Aqua PA Water Systems
Martinsburg
Frederick
Vineland
MARYLAND
Baltimore
Clarksburg
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community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St Marys
Scranton
Williamsport
Hazleton
State College
Allentown
Pittsburgh
Altoona
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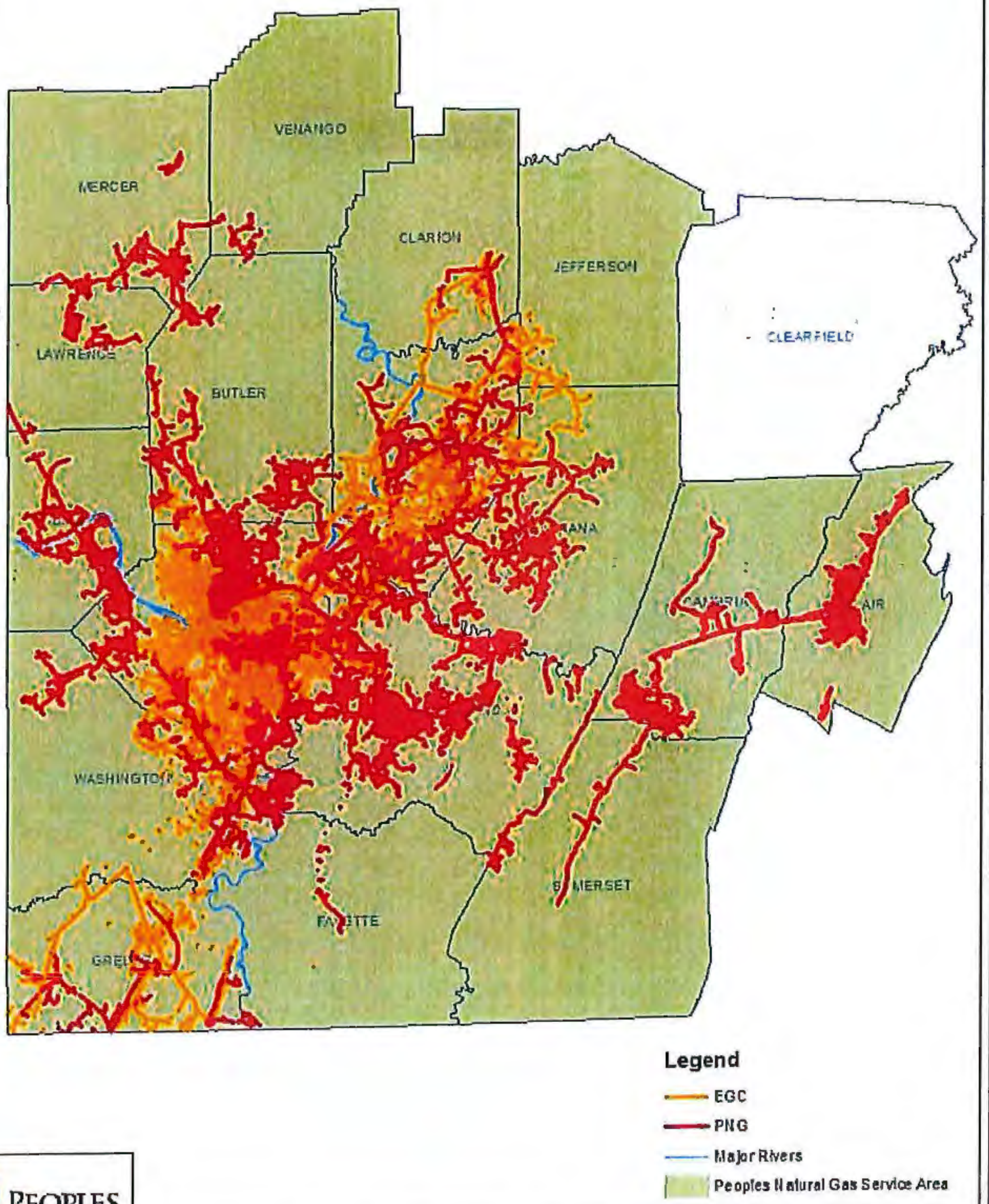
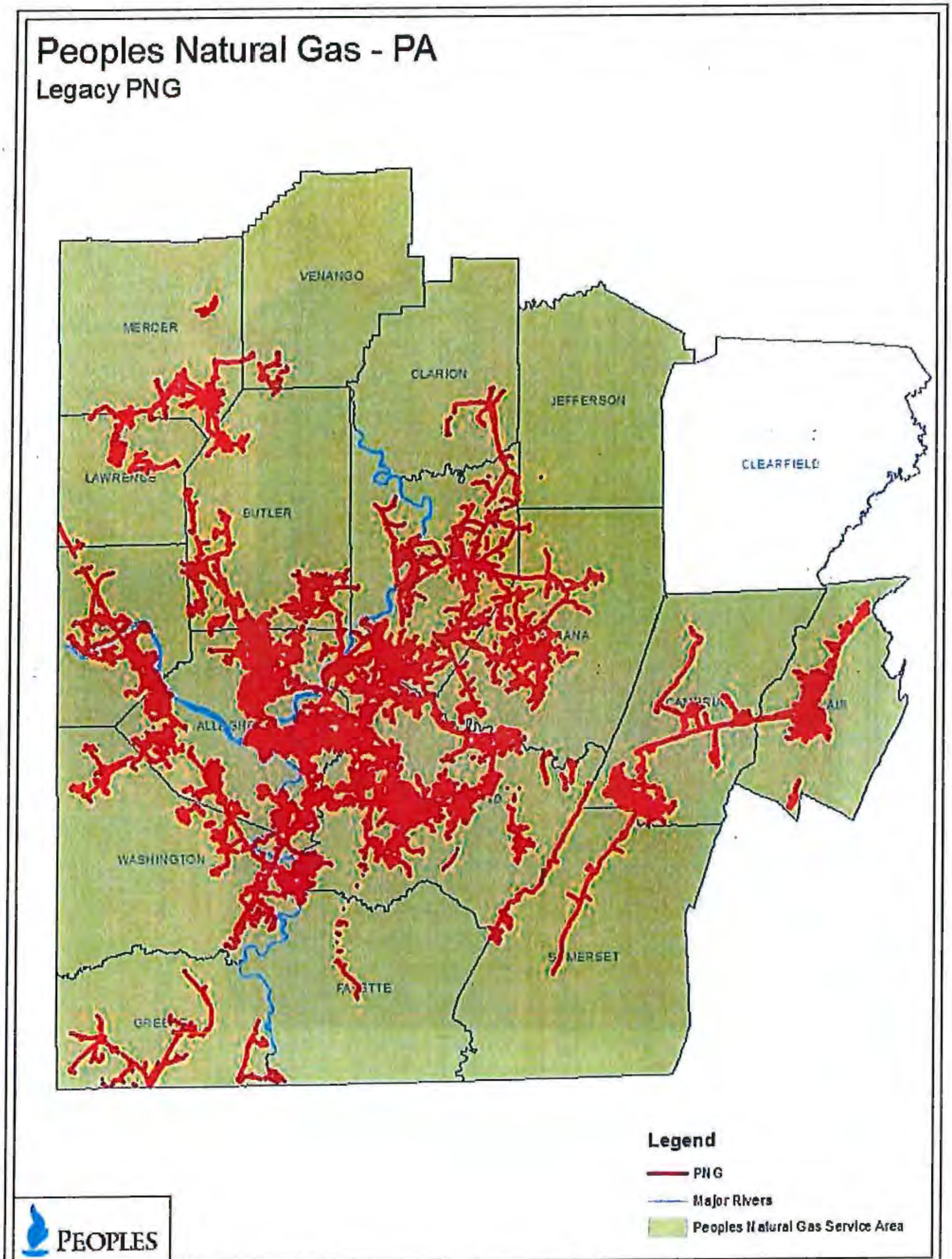
Reading
Harrisburg
Trenton
Lancaster
Chambersburg
Philadelphia
Wilmington
Morgantown
Cumberland
Hagerstown
Aqua PA Wastewater Systems
Martinsburg
Frederick
Vineland
Clarksburg
MARYLAND
Baltimore
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Appendix D

Peoples Natural Gas - PA

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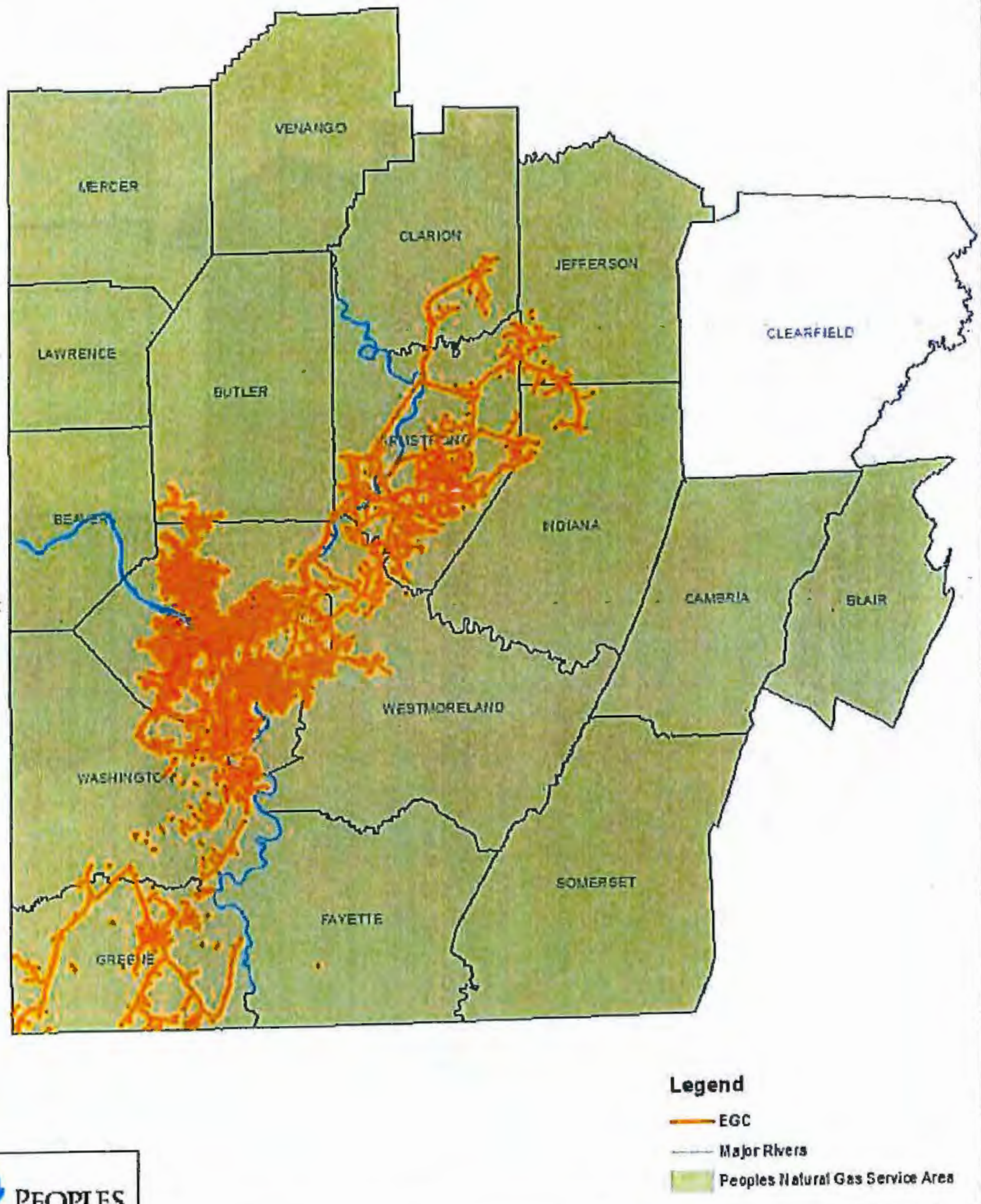
Legacy PNG
VENANGO
MERCER
CLARION
JEFFERSON
CLEARFIELD
LAWRENCE
BUTLER
WASHINGTON
MERSET
GREE
Legend
PNG
Major Rivers
Peoples Natural Gas Service Area
PEOPLES

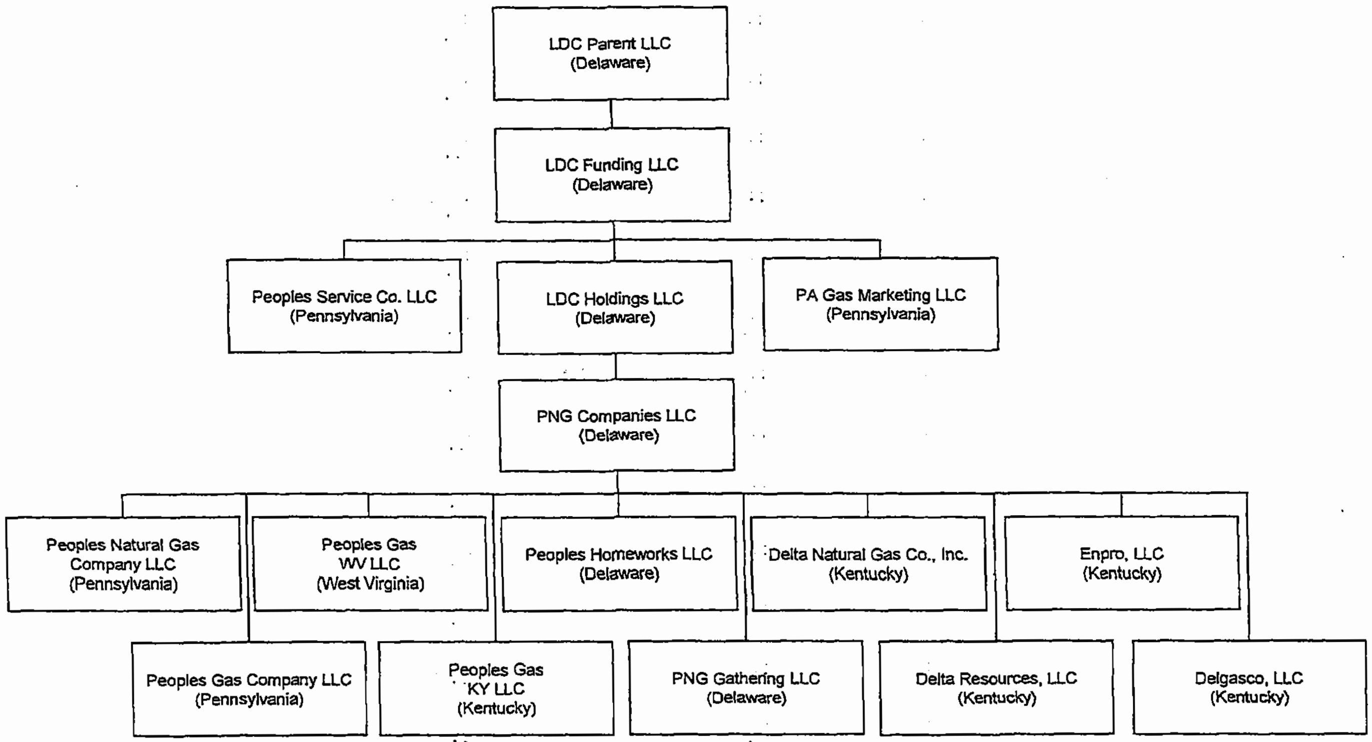
Peoples Natural Gas - PA
Legacy Equitable Division



PEOPLES

Appendix E

Appendix F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(Delaware)
Peoples Service Co. LLC
(Pennsylvania)
LDC Holdings LLC
(Delaware)
PA Gas Marketing LLC
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PNG Companies LLC
(Delaware)
Peoples Natural Gas
Company LLC
(Pennsylvania)
Peoples Gas
WV LLC
(West Virginia)
Peoples Homeworks LLC
(Delaware)
Delta Natural Gas Co., Inc.
(Kentucky)
Enpro, LLC
(Kentucky)
Peoples Gas Company LLC
(Pennsylvania)
Peoples Gas
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PNG Gathering LLC
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Delta Resources, LLC
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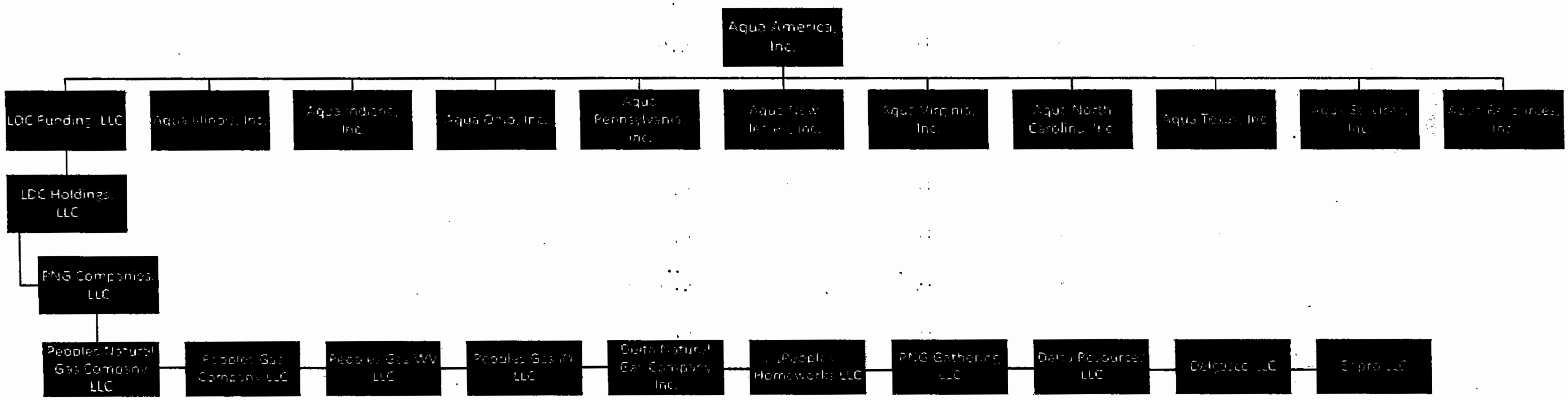
Delgasco, LLC
(Kentucky)

Appendix G

Post-Transaction Corporate Structure



*The above corporate structure shows the active first tier operating subsidiaries of AA

Appendix H

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)
☑ ANNUAL REPORT PURSUANT TO SECTION 13 or 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2017

Or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _________ to _________

Commission File number 1-6659

AQUA AMERICA, INC.
(Exact name of registrant as specified in its charter)

Pennsylvania
(State or other jurisdiction of incorporation or organization)

23-1702594
(I.R.S. Employer Identification No.)

762 W Lancaster Avenue, Bryn Mawr, Pennsylvania
(Address of principal executive offices)

19010-3489
(Zip Code)

(610) 527-8000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common stock, par value $.50 per share	New York Stock Exchange, Inc.

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
☑ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
☐ Yes ☑ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☑ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
☑ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "small reporting company," and "emerging growth company" in Rule 12(b)-2 of the Exchange Act.:
Large accelerated filer ☑
Accelerated filer ☐
Non-accelerated filer ☐ (do not check if smaller reporting company)
Small reporting company ☐
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☑No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2017: $5,901,277,615

The number of shares outstanding of the registrant's common stock as of February 13, 2018: 177,750,505

DOCUMENTS INCORPORATED BY REFERENCE

(1) Portions of the definitive Proxy Statement, relating to the 2018 annual meeting of shareholders of registrant, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, have been incorporated by reference into Part III of this Form 10-K

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Part I

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 10-K (the "Annual Report") are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 that are made based upon, among other things, our current assumptions, expectations, plans, and beliefs concerning future events and their potential effect on us. These forward-looking statements involve risks, uncertainties and other factors, many of which are outside our control that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. In some cases you can identify forward-looking statements where statements are preceded by, followed by or include the words "believes," "expects," "anticipates," "plans," "future," "potential," "probably," "predictions," "intends," "will," "continue," "in the event" or the negative of such terms or similar expressions. Forward-looking statements in this Annual Report include, but are not limited to, statements regarding:

- recovery of capital expenditures and expenses in rates;
- projected capital expenditures and related funding requirements;
- our capability to pursue timely rate increase requests;
- the availability and cost of capital financing;
- developments, trends and consolidation in the water and wastewater utility and infrastructure industries;
- dividend payment projections;
- opportunities for future acquisitions, both within and outside the water and wastewater industry, the success of pending acquisitions and the impact of future acquisitions;
- the capacity of our water supplies, water facilities and wastewater facilities;
- the impact of federal and/or state tax policies, including changes in tax laws and policies as a result of the recently enacted Tax Cuts and Jobs Act, and the regulatory treatment of the effects of those policies;
- the impact of geographic diversity on our exposure to unusual weather;
- the impact of conservation awareness of customers and more efficient plumbing fixtures and appliances on water usage per customer;
- our authority to carry on our business without unduly burdensome restrictions;
- the continuation of investments in strategic ventures;
- our ability to obtain fair market value for condemned assets;
- the impact of fines and penalties;
- the impact of changes in and compliance with governmental laws, regulations and policies, including those dealing with taxation, the environment, health and water quality, and public utility regulation;
- the impact of decisions of governmental and regulatory bodies, including decisions to raise or lower rates;
- the development of new services and technologies by us or our competitors;
- the availability of qualified personnel;
- the condition of our assets;
- the impact of legal proceedings;
- general economic conditions;
- acquisition-related costs and synergies;
- the sale of water and wastewater divisions; and
- the amount of income tax deductions for qualifying utility asset improvements and the Internal Revenue Service's ultimate acceptance of the deduction methodology.

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Because forward-looking statements involve risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements, including but not limited to:

- changes in general economic, business, credit and financial market conditions;
- changes in governmental laws, regulations and policies, including those dealing with taxation, the environment, health and water quality, and public utility regulation;
- the profitability of future acquisitions;
- changes to the rules or our assumptions underlying our determination of what qualifies for an income tax deduction for qualifying utility asset improvements;
- the decisions of governmental and regulatory bodies, including decisions on rate increase requests;
- our ability to file rate cases on a timely basis to minimize regulatory lag;
- abnormal weather conditions, including those that result in water use restrictions;
- changes in, or unanticipated, capital requirements;
- changes in our credit rating or the market price of our common stock;
- changes in valuation of strategic ventures;
- our ability to integrate businesses, technologies or services which we may acquire;
- our ability to manage the expansion of our business;
- our ability to treat and supply water or collect and treat wastewater;
- the extent to which we are able to develop and market new and improved services;
- the effect of the loss of major customers;
- our ability to retain the services of key personnel and to hire qualified personnel as we expand;
- labor disputes;
- increasing difficulties in obtaining insurance and increased cost of insurance;
- cost overruns relating to improvements to, or the expansion of, our operations;
- increases in the costs of goods and services;
- civil disturbance or terroristic threats or acts;
- the continuous and reliable operation of our information technology systems, including the impact of cyber security attacks or other cyber-related events;
- changes in accounting pronouncements;
- litigation and claims; and
- changes in environmental conditions, including the effects of climate change.

Given these risks and uncertainties, you should not place undue reliance on any forward-looking statements. You should read this Annual Report completely and with the understanding that our actual future results, performance and achievements may be materially different from what we expect. These forward-looking statements represent assumptions, expectations, plans, and beliefs only as of the date of this Annual Report. Except for our ongoing obligations to disclose certain information under the federal securities laws, we are not obligated, and assume no obligation, to update these forward-looking statements, even though our situation may change in the future. For further information or other factors which could affect our financial results and such forward-looking statements, see *Risk Factors*. We qualify all of our forward-looking statements by these cautionary statements.

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PART I

Item 1. *Business*

The Company

Aqua America, Inc. (referred to as "Aqua America", the "Company", "we", "us", or "our"), a Pennsylvania corporation, is the holding company for regulated utilities providing water or wastewater services to an estimated three million people in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, and Virginia. Our largest operating subsidiary is Aqua Pennsylvania, Inc., which accounted for approximately 52% of our operating revenues and approximately 74% of our net income for 2017. As of December 31, 2017, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of people we serve. Aqua Pennsylvania's service territory is located in the suburban areas in counties north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. Our other regulated utility subsidiaries provide similar services in seven other states. In addition, the Company's market-based activities are conducted through Aqua Infrastructure, LLC and Aqua Resources Inc. Aqua Infrastructure provides non-utility raw water supply services for firms in the natural gas drilling industry. Aqua Resources provides water and wastewater service through two operating and maintenance contracts with municipal authorities close to our utility companies' service territory; and offers, through a third party, water and wastewater line repair service and protection solutions to households. In 2017, we completed the sale of business units that are reported within Aqua Resources, which installed and tested devices that prevent the contamination of potable water and repaired water and wastewater systems, and repaired and performed maintenance on water and wastewater systems. Additionally, during 2016, we completed the sale of business units within Aqua Resources, which provided liquid waste hauling and disposal services and inspection, and cleaning and repair of storm and sanitary wastewater lines.

Aqua America, which prior to its name change in 2004 was known as Philadelphia Suburban Corporation, was formed in 1968 as a holding company for its primary subsidiary, Aqua Pennsylvania, formerly known as Philadelphia Suburban Water Company. In the early 1990s, we embarked on a growth through acquisition strategy focused on water and wastewater operations. Our most significant transactions to date have been the merger with Consumers Water Company in 1999, the acquisition of the regulated water and wastewater operations of AquaSource, Inc. in 2003, the acquisition of Heater Utilities, Inc. in 2004, and the acquisition of American Water Works Company, Inc.'s regulated water and wastewater operations in Ohio in 2012. Since the early 1990s, our business strategy has been primarily directed toward the regulated water and wastewater utility industry, where we have more than quadrupled the number of regulated customers we serve, and have extended our regulated operations from southeastern Pennsylvania to include our current regulated utility operations throughout Pennsylvania and in seven other states. During 2010 through 2013, we sold our utility operations in six states, pursuant to a portfolio rationalization strategy to focus our operations in areas where we have critical mass and economic growth potential. Currently, the Company seeks to acquire businesses in the U.S. regulated sector, which includes water and wastewater utilities and other regulated utilities, and to pursue growth ventures in market-based activities, such as infrastructure opportunities that are supplementary and complementary to our regulated businesses.

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The following table reports our operating revenues, by principal state, for the Regulated segment and Other and eliminations for the year ended December 31, 2017:

		Operating Revenues (000's)	Operating Revenues (%)
Pennsylvania	$	419,594	51.9%
Ohio		106,254	13.1%
Texas		72,312	8.9%
Illinois		64,129	7.9%
North Carolina		54,991	6.8%
Other states (1)		87,625	10.8%
Regulated segment total		804,905	99.4%
Other and eliminations		4,620	0.6%
Consolidated	$	809,525	100.0%

(1) Includes our operating subsidiaries in the following states: New Jersey, Indiana, and Virginia.

Information concerning revenues, net income, identifiable assets and related financial information for the Regulated segment and Other and eliminations for 2017, 2016, and 2015 is set forth in *Management's Discussion and Analysis of Financial Condition and Results of Operations* and in Note 17 – *Segment Information* in the *Notes to Consolidated Financial Statements* which is contained in Item 8 of this Annual Report.

The following table summarizes our operating revenues, by utility customer class, for the Regulated segment and Other and eliminations for the year ended December 31, 2017:

		Operating Revenues (000's)	Operating Revenues (%)
Residential water	$	483,865	59.8%
Commercial water		130,373	16.1%
Fire protection		30,619	3.8%
Industrial water		27,880	3.4%
Other water		34,705	4.3%
Total water		707,442	87.4%
Wastewater		87,560	10.8%
Other utility		9,903	1.2%
Regulated segment total		804,905	99.4%
Other and eliminations		4,620	0.6%
Consolidated	$	809,525	100.0%

Our utility customer base is diversified among residential water, commercial water, fire protection, industrial water, other water, wastewater customers, and other utility customers (consisting of operating contracts that are closely associated with the utility operations). Residential water and wastewater customers make up the largest component of our utility customer base, with these customers representing approximately 70% of our water and wastewater revenues for 2017, 2016, and 2015, respectively. Substantially all of our water customers are metered, which allows us to measure and bill for our customers' water consumption. Water consumption per customer is affected by local weather conditions during the year, especially during late spring, summer, and early fall. In general, during these seasons, an extended period of dry weather increases consumption, while above average rainfall decreases consumption. Also, an increase in the average temperature generally causes an increase in water consumption. On occasion, abnormally dry weather in our service areas can result in governmental authorities declaring drought warnings and imposing water use restrictions in the affected areas, which

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could reduce water consumption. See "Business – *Water Utility Supplies, and Facilities and Wastewater Utility Facilities*" for a discussion of water use restrictions that may impact water consumption during abnormally dry weather. The geographic diversity of our utility customer base reduces the effect of our exposure to extreme or unusual weather conditions in any one area of our service territory. Water usage is also affected by changing consumption patterns by our customers, resulting from such causes as increased water conservation and the installation of water saving devices and appliances that can result in decreased water usage. It is estimated that in the event we experience a 0.50% decrease in residential water consumption it would result in a decrease in annual residential water revenue of approximately $2,400,000, and would likely be partially offset by a reduction in incremental water production expenses such as chemicals and power.

Our growth in revenues over the past five years is primarily a result of increases in water and wastewater rates and customer growth. See *Economic Regulation* for a discussion of water and wastewater rates. The increase in our utility customer base has been due to customers added through acquisitions, partnerships with developers, and organic growth (excluding dispositions) as shown below:

Year	Utility Customer Growth Rate
2017	1.1%
2016	1.6%
2015	1.9%
2014	1.3%
2013	1.3%

In 2017, our customer count increased by 10,584 customers, primarily due to utility systems that we acquired and organic growth. Overall, for the five-year period of 2013 through 2017, our utility customer base, adjusted to exclude customers associated with utility system dispositions, increased at an annual compound rate of 1.4%. During the five-year period ended December 31, 2017, our utility customer base including customers associated with utility system acquisitions and dispositions increased from 968,357 at January 1, 2013 to 982,849 at December 31, 2017. This five-year period includes the impact of the condemnation of our Fort Wayne, IN system in 2014, which resulted in the loss of approximately 13,000 connections.

Acquisitions and Other Growth Ventures

We believe that acquisitions will continue to be an important source of customer growth for us. We intend to continue to pursue acquisitions of government-owned and regulated water and wastewater systems that provide services in areas near our existing service territories or in new service areas. We engage in continuing activities with respect to potential acquisitions, including calling on prospective sellers, performing analyses of and due diligence on acquisition candidates, making preliminary acquisition proposals, and negotiating the terms of potential acquisitions. Further, we are also seeking other potential business opportunities, including but not limited to, partnering with public and regulated utilities to invest in infrastructure projects, growing our market-based activities by acquiring businesses that provide water and wastewater or other utility-related services, and investing in infrastructure projects.

According to the U.S. Environmental Protection Agency ("EPA"), approximately 85% of the U.S. population obtains its water from community water systems, and 15% of the U.S. population obtains its water from private wells. With approximately 53,000 community water systems in the U.S. (82% of which serve less than 3,300 customers), the water industry is the most fragmented of the major utility industries (telephone, natural gas, electric, water and wastewater). The majority of these community water systems are government-owned, and the balance of the systems are regulated utilities. The nation's water systems range in size from large government-owned systems, such as the New York City water system which serves approximately 8.5 million people, to small systems, where a few customers share a common well. In the states where we operate regulated utilities, we believe there are approximately 14,500 community water systems of widely-varying size, with the majority of the population being served by government-owned water systems.

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Although not as fragmented as the water industry, the wastewater industry in the U.S. also presents opportunities for consolidation. According to the EPA's most recent survey of wastewater treatment facilities (which includes both government-owned facilities and regulated utility systems) in 2012, there are approximately 15,000 such facilities in the nation serving approximately 76% of the U.S. population. The remaining population represents individual homeowners with their own treatment facilities; for example, community on-lot disposal systems and septic tank systems. A majority of wastewater facilities are government-owned rather than regulated utilities. The EPA's survey also indicated that there are approximately 4,000 wastewater facilities in operation in the states where we operate regulated utilities.

Because of the fragmented nature of the water and wastewater utility industries, we believe there are many potential water and wastewater system acquisition candidates throughout the U.S. We believe the factors driving consolidation of these systems are:

- the benefits of economies of scale;
- the increasing cost and complexity of environmental regulations;
- the need for substantial capital investment;
- the need for technological and managerial expertise;
- the desire to improve water quality and service;
- limited access to cost-effective financing;
- the monetizing of public assets to support, in some cases, the declining financial condition of municipalities; and
- the use of system sale proceeds by a municipality to accomplish other public purposes.

We are actively exploring opportunities to expand our utility operations through acquisitions or other growth ventures. During the five-year period ended December 31, 2017, we expanded our utility operations by completing 70 acquisitions or other growth ventures.

Water Utility Supplies and Facilities and Wastewater Utility Facilities

Our water utility operations obtain their water supplies from surface water sources, underground aquifers, and water purchased from other water suppliers. Our water supplies are primarily self-supplied and processed at twenty-one surface water treatment plants located in four states, and numerous well stations located in all of the states in which we conduct business. Approximately 7% of our water supplies are provided through water purchased from other water suppliers. It is our policy to obtain and maintain the permits necessary to obtain the water we distribute.

We believe that the capacities of our sources of supply, and our water treatment, pumping and distribution facilities, are generally sufficient to meet the present requirements of our customers under normal conditions. We plan system improvements and additions to capacity in response to normal replacement and renewal needs, changing regulatory standards, changing patterns of consumption, and increased demand from customer growth. The various state utility commissions have generally recognized the operating and capital costs associated with these improvements in setting water and wastewater rates.

On occasion, drought warnings and water use restrictions are issued by governmental authorities for portions of our service territories in response to extended periods of dry weather conditions. The timing and duration of the warnings and restrictions can have an impact on our water revenues and net income. In general, water consumption in the summer months is more affected by drought warnings and restrictions because discretionary and recreational use of water is at its highest during the summer months. At other times of the year, warnings and restrictions generally have less of an effect on water consumption. Currently, portions of our northern and central Texas service areas have conservation water restrictions. Drought warnings and watches result in the public being asked to voluntarily reduce water consumption.

We believe that our wastewater treatment facilities are generally adequate to meet the present requirements of our customers under normal conditions. Additionally, we own several wastewater collection systems that convey the wastewater to a municipally-owned facility for treatment. Changes in regulatory requirements can be reflected in revised permit limits and conditions when permits are renewed, typically on a five-year cycle, or when treatment capacity is expanded. Capital improvements are planned and budgeted to meet normal replacement and renewal needs, anticipated changes in regulations, needs for increased capacity related to projected growth, and to reduce inflow and infiltration to collection systems. The various state utility commissions have generally recognized the operating and capital costs associated with these improvements in setting wastewater rates for current and new customers. It is our policy to obtain and maintain the permits necessary for the treatment of the wastewater that we return to the environment.

Economic Regulation

Most of our water and wastewater utility operations are subject to regulation by their respective state utility commissions, which have broad administrative power and authority to regulate billing rates, determine franchise areas and conditions of service, approve acquisitions and authorize the issuance of securities. The utility commissions also establish uniform systems of accounts and approve the terms of contracts with affiliates and customers, business combinations with other utility systems, and loans and other financings. The policies of the utility commissions often differ from state to state, and may change over time. A small number of our operations are subject to rate regulation by county or city governments. The profitability of our utility operations is influenced to a great extent by the timeliness and adequacy of rate allowances we are granted by the respective utility commissions or authorities in the various states in which we operate.

Rate Case Management Capability – We maintain a rate case management capability, the objective of which is to provide that the tariffs of our utility operations reflect, to the extent practicable, the timely recovery of increases in costs of operations, capital expenditures, interest expense, taxes, energy, materials, and compliance with environmental regulations. We file rate increase requests to recover and earn a fair return on the infrastructure investments that we make in improving or replacing our facilities and to recover expense increases. In the states in which we operate, we are primarily subject to economic regulation by the following state utility commissions:

State	Utility Commission
Pennsylvania	Pennsylvania Public Utility Commission
Ohio	Public Utilities Commission of Ohio
Texas	Public Utility Commission of Texas
Illinois	Illinois Commerce Commission
North Carolina	North Carolina Utilities Commission
New Jersey	New Jersey Board of Public Utilities
Indiana	Indiana Utility Regulatory Commission
Virginia	Virginia State Corporation Commission.

Our water and wastewater operations are comprised of 53 rate divisions, each of which requires a separate rate filing for the evaluation of the cost of service, including the recovery of investments, in connection with the establishment of rates for that rate division. When feasible and beneficial to our utility customers, we will seek approval from the applicable state regulatory commission to consolidate rate divisions to achieve a more even distribution of costs over a larger customer base. All of the states in which we operate permit us to file a revenue requirement for some form of consolidated rates for all, or some of the rate divisions in that state.

In Virginia, we may seek authorization to bill our utility customers in accordance with a rate filing that is pending before the respective regulatory commission. As of December 31, 2017, we have no billings under interim rate arrangements for rate case filings in progress. Furthermore, some utility commissions authorize the use of expense deferrals and amortization in order to provide for an impact on our operating income by an amount that approximates the requested amount in a rate request. In these states, the additional revenue billed and collected prior to the final regulatory commission ruling is subject to refund to customers based on the outcome of the ruling. The revenue recognized and the expenses deferred by us reflect an estimate as to the final outcome of the ruling. If the request is denied completely or in part, we could be required to refund to customers some or all of the revenue billed to date and write-off some or all of the deferred expenses.

Revenue Surcharges – Six states in which we operate water utilities, and five states in which we operate wastewater utilities, permit us to add a surcharge to their respective bills to offset the additional depreciation and capital costs associated with capital expenditures related to replacing and rehabilitating infrastructure systems. Without this surcharge, a water and wastewater utility absorbs all of the depreciation and capital costs of these projects between base rate increases. The gap between the time that a capital project is completed and the recovery of its costs in rates is known as regulatory lag. This surcharge is intended to substantially reduce regulatory lag, which often acted as a disincentive to water and wastewater utilities to rehabilitate their infrastructure. In addition, our subsidiaries in some states use a surcharge or credit on their bills to reflect changes in costs, such as changes in state tax rates, other taxes and purchased water costs, until such time as the new cost levels are incorporated into base rates.

Currently, New Jersey allows for an infrastructure rehabilitation surcharge for water utilities, while Pennsylvania, Illinois, Ohio, Indiana, and North Carolina allow for the use of an infrastructure rehabilitation surcharge for both water and wastewater utility systems. The infrastructure rehabilitation surcharge typically adjusts periodically based on additional qualified capital expenditures completed or anticipated in a future period, and is capped at a percentage of base rates, generally at 5% to 12.75%, and is reset to zero when new base rates that reflect the costs of those additions become effective or when a utility's earnings exceed a regulatory benchmark. This surcharge provided revenues of $10,255,284 in 2017, $7,379,000 in 2016, and $3,261,000 in 2015.

Income Tax Accounting Change – In December 2012, Aqua Pennsylvania adopted an income tax accounting change, implemented on Aqua America's 2012 federal income tax return, which was filed in September 2013. This accounting change allows a tax deduction for qualifying utility asset improvements that were formerly capitalized for tax purposes, and was implemented in response to a June 2012 rate order issued by the Pennsylvania Public Utility Commission. The Pennsylvania rate order requires use of the flow-through method of income tax benefits which results in a reduction in current income tax expense as a result of the recognition of income tax benefits resulting from the accounting change. This tax accounting change and its treatment under the Pennsylvania rate order provided sufficient income tax benefits to permit the suspension of the Pennsylvania infrastructure rehabilitation surcharge from January 1, 2013 to September 30, 2017. Beginning on October 1, 2017, Aqua Pennsylvania initiated a water infrastructure rehabilitation surcharge for the capital invested since the last rate proceeding and expects to file a base rate case in 2018.

Fair Market Value Legislation – In April 2016, Pennsylvania enacted legislation allowing the public utility commission to utilize fair market value to set ratemaking rate base instead of the depreciated original cost of water or wastewater assets for certain qualifying municipal acquisitions. The legislation includes a process for engaging two independent utility valuation experts to perform appraisals that are filed with the public utility commission and then averaged and compared to the purchase price. The ratemaking rate base is the lower of the average of the appraisals or the purchase price and is subject to regulatory approval. Illinois, Indiana, and New Jersey also have legislation that allows the use of fair market value under varying rules and circumstances. We believe that this legislation will encourage consolidation in the water and wastewater industry providing municipalities with an option for exiting the business if they are dealing with their aging, deteriorating water and wastewater assets, do not have the expertise or technical capabilities to continue to comply with ever increasing environmental regulations or simply want to focus on other community priorities.

Competition

In general, we believe that Aqua America and its subsidiaries have valid authority, free from unduly burdensome restrictions, to enable us to carry on our business as presently conducted in the franchised or contracted areas we now serve. The rights to provide water or wastewater service to a particular franchised service territory are generally non-exclusive, although the applicable utility commissions usually allow only one regulated utility to provide service to a given area. In some instances, another water utility provides service to a separate area within the same political subdivision served by one of our subsidiaries. Therefore, as a regulated utility, there is little or no competition for the daily water and wastewater service we provide to our customers. Water and wastewater utilities may compete for the acquisition of other water and wastewater utilities or for acquiring new customers in new service territories. Competition for these acquisitions generally comes from nearby utilities, either other regulated utilities or municipal-owned, and sometimes from strategic or financial purchasers seeking to enter or expand in the water and wastewater industry. We compete for new service territories and the acquisition of other utilities on the following bases:

- economic value;
- economies of scale;
- our ability to provide quality water and wastewater service;
- our existing infrastructure network;
- our ability to perform infrastructure improvements;

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- our ability to comply with environmental, health, and safety regulations;
- our technical, regulatory, and operational expertise;
- our ability to access capital markets; and
- our cost of capital.

The addition of new service territories and the acquisition of other utilities by regulated utilities such as us are generally subject to review and approval by the applicable state utility commissions.

In a very few number of instances, in one of our southern states, where there are municipally-owned water or wastewater systems near our operating divisions, the municipally-owned system may either have water distribution or wastewater collection mains that are located adjacent to our division's mains or may construct new mains that parallel our mains. In these rare circumstances, the municipally-owned system may attempt to voluntarily offer service to customers who are connected to our mains, resulting in our mains becoming surplus or underutilized without compensation.

In the states where our subsidiaries operate, it is possible that portions of our subsidiaries' operations could be acquired by municipal governments by one or more of the following methods:

- eminent domain;
- the right of purchase given or reserved by a municipality or political subdivision when the original franchise was granted; and
- the right of purchase given or reserved under the law of the state in which the subsidiary was incorporated or from which it received its permit.

The price to be paid upon such an acquisition by the municipal government is usually determined in accordance with applicable law under eminent domain. In other instances, the price may be negotiated, fixed by appraisers selected by the parties or computed in accordance with a formula prescribed in the law of the state or in the particular franchise or charter. We believe that our operating subsidiaries will be entitled to fair market value for any assets that are condemned, and we believe the fair market value will be in excess of the book value for such assets.

Despite maintaining a program to monitor condemnation interests and activities that may affect us over time, one of our primary strategies continues to be to acquire additional water and wastewater systems, to maintain our existing systems where there is a business or a strategic benefit, and to actively oppose unilateral efforts by municipal governments to acquire any of our operations, particularly for less than the fair market value of our operations or where the municipal government seeks to acquire more than it is entitled to under the applicable law or agreement. On occasion, we may voluntarily agree to sell systems or portions of systems in order to help focus our efforts in areas where we have more critical mass and economies of scale or for other strategic reasons.

Environmental, Health and Safety Regulation

Provision of water and wastewater services is subject to regulation under the federal Safe Drinking Water Act, the Clean Water Act, and related state laws, and under federal and state regulations issued under these laws. These laws and regulations establish criteria and standards for drinking water and for wastewater discharges. In addition, we are subject to federal and state laws and other regulations relating to solid waste disposal, dam safety and other aspects of our operations. Capital expenditures and operating costs required as a result of water quality standards and environmental requirements have been traditionally recognized by state utility commissions as appropriate for inclusion in establishing rates.

From time to time, Aqua America has acquired, and may acquire, systems that have environmental compliance issues. Environmental compliance issues also arise in the course of normal operations or as a result of regulatory changes. Aqua America attempts to align capital budgeting and expenditures to address these issues in due course. We believe that the capital expenditures required to address outstanding environmental compliance issues have been budgeted in our capital program and represent approximately $63,237,000, or approximately 3.0% of our expected total capital expenditures over the next five years. We are parties to agreements with regulatory agencies in Pennsylvania, Texas, North Carolina, and Indiana under which we have committed to make improvements for environmental compliance. These agreements are

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intended to provide the regulators with assurance that problems covered by these agreements will be addressed, and the agreements generally provide protection from fines, penalties and other actions while corrective measures are being implemented. We are actively working directly with state environmental officials in Pennsylvania, Texas, and North Carolina to implement or amend regulatory agreements as necessary.

Safe Drinking Water Act - The Safe Drinking Water Act establishes criteria and procedures for the EPA to develop national quality standards for drinking water. Regulations issued pursuant to the Safe Drinking Water Act set standards regarding the amount of microbial and chemical contaminants and radionuclides in drinking water. Current requirements under the Safe Drinking Water Act are not expected to have a material impact on our business, financial condition, or results of operations as we have made and are making investments to meet existing water quality standards. We may, in the future, be required to change our method of treating drinking water at some sources of supply and make additional capital investments if additional regulations become effective.

Clean Water Act - The Clean Water Act regulates discharges from drinking water and wastewater treatment facilities into lakes, rivers, streams, and groundwater. It is our policy to obtain and maintain all required permits and approvals for the discharges from our water and wastewater facilities, and to comply with all conditions of those permits and other regulatory requirements. A program is in place to monitor facilities for compliance with permitting, monitoring and reporting for wastewater discharges. From time to time, discharge violations may occur which may result in fines. These fines and penalties, if any, are not expected to have a material impact on our business, financial condition, or results of operations. We are also parties to agreements with regulatory agencies in several states where we operate while improvements are being made to address wastewater discharge issues.

Solid Waste Disposal - The handling and disposal of waste generated from water and wastewater treatment facilities is governed by federal and state laws and regulations. A program is in place to monitor our facilities for compliance with regulatory requirements, and we are not aware of any significant environmental remediation costs necessary from our handling and disposal of waste material from our water and wastewater operations.

Dam Safety - Our subsidiaries own thirty dams, of which fifteen are classified as high hazard dams that are subject to the requirements of the federal and state regulations related to dam safety, which undergo regular inspections and an annual engineering inspection. After a thorough review and inspection of our dams by professional outside engineering firms, we believe that all fifteen dams are structurally sound and well-maintained, except as described below. These inspections provide recommendations for ongoing rehabilitation which we include in our capital improvement program.

We performed studies of our dams that identified three dams in Pennsylvania and two dams in Ohio requiring capital improvements. These capital improvements result from the adoption by state regulatory agencies of revised formulas for calculating the magnitude of a possible maximum flood event. The most significant capital improvement remaining to be performed in our dam improvement program is on one dam in Pennsylvania at a total estimated cost of $13,300,000. Design for this dam commenced in 2013 and construction is expected to be completed in 2021.

A recent dam inspection in Illinois found cracks on two control gate mechanisms, and as a result, temporary gates were installed to eliminate reliance on the cracked control gates. An inspection of the other control gates was conducted in the fourth quarter of 2017, and it was determined that certain of the dam's control gates could be replaced. Although we are unable to estimate the amount of this planned capital expenditure at this time, the amount may be significant, and we believe such capital investments will be recoverable in ratemaking.

One of our Ohio dams needing capital improvements is no longer used for water supply, and may be sold to a third party. Should that sale not be consummated, we will need to breech the dam or rehabilitate portions of the dam at a cost of up to approximately $2,600,000.

Lead and Copper Rule – The events in Flint, Michigan, which commenced in 2014, and other communities have brought attention to the issue of lead in drinking water from home plumbing. Lead in drinking water can come from lead that leaches from service lines, home plumbing solder, and fixtures or faucets. Since the Lead and Copper Rule in 1992, we have been working to prevent lead leaching from home plumbing sources by reducing water corrosivity and adding chemicals that can prevent leaching of lead in pipes and homes. We also focus on identifying and removing lead service lines and encouraging customers to replace the customer-owned portion of the service line if it is lead as they are

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identified during our main replacement program or during other maintenance activities. We are currently developing a lead service line inventory. We support the recommendations of The Lead Service Line Replacement Collaborative, a collaborative of leading water industry organizations that has recommended full replacement of lead service lines as a "best practice" to reduce lead in drinking water, but we only have control over the company-owned portion of each service line. In cases where we are replacing a company-owned lead service line, our standard approach is to replace the company-owned portion and advise and encourage the customer to replace the customer-owned portion of the service line, all the way to the customer's home. We also advise customers of the potential health impacts of lead in drinking water, and conduct lead testing at homes following replacement of a lead service line. We do not plan on replacing customer-owned lead service lines at locations where our portion of the service line does not contain lead, but if we become aware of such situations we will notify the customer. It is anticipated that the EPA will propose updated regulations for the Lead and Copper Rule in 2018.

Partnership for Safe Water Program – Aqua America is a proud participant in the American Water Works Association's (AWWA) Partnership for Safe Water Program. This voluntary program is a commitment to excellence within the drinking water community above and beyond EPA's stringent treatment goals. All of our active surface water treatment plants (within Pennsylvania, Ohio, Illinois, and Virginia) maintain good standing in the program which includes many awards of achievement. The honors include the "Director's Award" (achieved at 5 systems) which recognizes plants that have: 1) completed a comprehensive self-assessment report, 2) created an action plan for continuous improvement, and 3) provided several evaluations of performance demonstrating operational excellence. Several of our systems have met these criteria annually and have received 5, 10, 15, and 20 year subscriber awards. Furthermore, our Roaring Creek Pennsylvania treatment plant has received the Phase IV Excellence Award, the highest honor achieved in the Partnership Program.

Safety Standards - Our facilities and operations may be subject to inspections by representatives of the Occupational Safety and Health Administration from time to time. We maintain safety policies and procedures to comply with the Occupational Safety and Health Administration's rules and regulations, but violations may occur from time to time, which may result in fines and penalties, which are not expected to have a material impact on our business, financial condition, or results of operations. We endeavor to correct such violations promptly when they come to our attention.

Security

We maintain security measures at our facilities, and collaborate with federal, state and local authorities and industry trade associations regarding information on possible threats and security measures for water and wastewater utility operations. The costs incurred are expected to be recoverable in water and wastewater rates and are not expected to have a material impact on our business, financial condition, or results of operations.

We also maintain cyber security protection measures with respect to our information technology, including our customer data, and, in some cases, the monitoring and operation of our treatment, storage and pumping facilities.

Employee Relations

As of December 31, 2017, we employed a total of 1,530 full-time employees. Our subsidiaries are parties to 15 labor agreements with labor unions covering 527 employees. The labor agreements expire at various times between March 2018 and October 2022.

Available Information

We file annual, quarterly, current reports, proxy statements, and other information with the Securities and Exchange Commission ("SEC"). You may read and copy any document we file with the SEC at the SEC's public reference room at 100 F Street, NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. You may also obtain our SEC filings from the SEC's web site at www.sec.gov.

Our internet web site address is www.aquaamerica.com. We make available free of charge through our web site's *Investor Relations* page all of our filings with the SEC, including our annual report on Form 10-K, quarterly reports on

Form 10-Q, current reports on Form 8-K, and other information. These reports and information are available as soon as reasonably practicable after such material is electronically filed with the SEC.

In addition, you may request a copy of the foregoing filings, at no cost by writing or telephoning us at the following address or telephone number:

Investor Relations Department
Aqua America, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489
Telephone: 610-527-8000

Our Board of Directors has various committees including an audit committee, an executive compensation committee, a corporate governance committee, and a risk mitigation and investment policy committee. Each of these committees has a formal charter. We also have Corporate Governance Guidelines and a Code of Ethical Business Conduct. Copies of these charters, guidelines, and codes can be obtained free of charge from our *Investor Relations* page on our web site, www.aquaamerica.com. In the event we change or waive any portion of the Code of Ethical Business Conduct that applies to any of our directors, executive officers, or senior financial officers, we will post that information on our web site.

The references to our web site and the SEC's web site are intended to be inactive textual references only, and the contents of those web sites are not incorporated by reference herein and should not be considered part of this or any other report that we file with or furnish to the SEC.

Item 1A. *Risk Factors*

In addition to the other information included in this Annual Report, the following factors should be considered in evaluating our business and future prospects. Any of the following risks, either alone or taken together, could materially harm our business, financial condition, and results of operations. If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, our business, financial condition, and results of operations could be materially harmed.

Contamination of our water supply, including water provided to our customers, may result in disruption in our services, additional costs and litigation which could harm our business, financial condition, and results of operations.

Our water supplies, including water provided to our customers, are subject to possible contamination, including from:

- naturally occurring compounds or man-made substances;
- chemicals and other hazardous materials;
- lead and other materials;
- pharmaceuticals and personal care products; and
- possible deliberate or terrorist attacks.

Depending on the nature of the water contamination, we may have to interrupt the use of that water supply until we are able to substitute, where feasible, the flow of water from an uncontaminated water source, including if practicable, the purchase of water from other suppliers, or continue the water supply under restrictions on use for drinking or broader restrictions against all use except for basic sanitation and essential fire protection. We may incur significant costs, including, but not limited to, costs for water quality testing and monitoring, treatment of the contaminated source through modification of our current treatment facilities or development of new treatment methods, or the purchase of alternative water supplies. In addition, the costs we could incur to decontaminate a water source or our water distribution system and dispose of waste could also be significant. The costs resulting from the contamination may not be recoverable in rates we charge our customer, or may not be recoverable in a timely manner. If we are unable to adequately treat the contaminated water supply or substitute a water supply from an uncontaminated water source in a timely or cost-effective manner, there may be an adverse effect on our business, financial condition, and results of operations. We could also be subject to:

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- claims for consequences arising out of human exposure to contamination and/or hazardous substances in our water supplies, including toxic torts;
- claims for other environmental damage;
- claims for customers' business interruption as a result of an interruption in water service;
- claims for breach of contract;
- criminal enforcement actions; or
- other claims.

The events in Flint, Michigan, which commenced in 2014, and other communities have brought attention to the issue of lead in drinking water from home plumbing. Lead in drinking water can come from lead that leaches from service lines, home plumbing solder, and fixtures or faucets. We have been working to prevent lead leaching from home plumbing sources by reducing water corrosivity and adding chemicals that can prevent leaching of lead in pipes and homes. We also focus on identifying and removing lead service lines and encouraging customers to replace the customer-owned portion of the service line if it is lead as they are identified during our main replacement program or during other maintenance activities. We support the recommendations of The Lead Service Line Replacement Collaborative, a collaborative of leading water industry organizations that has recommended full replacement of lead service lines as a "best practice" to reduce lead in drinking water, but we only have control over the company-owned portion of each service line. In cases where we are replacing a company-owned lead service line, our standard approach is to replace the company-owned portion and advise and encourage the customer to replace the customer-owned portion of the service line, all the way to the customer's home. We also advise customers of the potential health impacts of lead in drinking water, and conduct lead testing at homes following replacement of a lead service line. We do not plan on replacing customer-owned lead service lines at locations where our portion of the service line does not contain lead, but if we become aware of such situations we will notify the customer. We anticipate that the EPA will propose updated regulations for the 1992 Lead and Copper Rule in 2018. Any such regulatory changes could have an impact on our business.

We may incur costs to defend our position and/or incur reputational damage even if we are not liable for consequences arising out of human exposure to contamination and/or hazardous substances in our water supplies or other environmental damage. Our insurance policies may not be sufficient to cover the costs of these claims, and losses incurred may make it difficult for us to secure insurance in the future at acceptable rates. Such claims or actions could harm our business, financial condition, and results of operations.

The rates we charge our customers are subject to regulation. If we are unable to obtain government approval of our requests for rate increases or if approved rate increases are untimely or inadequate to recover and earn a return on our capital investments, to recover expenses or taxes, or to take into account changes in water usage, our profitability may suffer.

The rates we charge our customers are subject to approval by utility commissions in the states in which we operate. We file rate increase requests, from time to time, to recover our investments in utility plant and expenses. Our ability to maintain and meet our financial objectives is dependent upon the recovery of, and return on, our capital investments and expenses through the rates we charge our customers. Once a rate increase petition is filed with a utility commission, the ensuing administrative and hearing process may be lengthy and costly, and our costs may not always be fully recoverable. The timing of our rate increase requests are therefore partially dependent upon the estimated cost of the administrative process in relation to the investments and expenses that we hope to recover through the rate increase. In addition, the amount or frequency of rate increases may be decreased or lengthened as a result of many factors including changes in regulatory oversight in the states in which we operate water and wastewater utilities and income tax laws, including regulations regarding tax-basis depreciation as it applies to our capital expenditures or qualifying utility asset improvements. We can provide no assurances that any future rate increase request will be approved by the appropriate utility commission; and, if approved, we cannot guarantee that these rate increases will be granted in a timely or sufficient manner.

In Virginia, we may seek authorization to bill our utility customers in accordance with a rate filing that is pending before the respective regulatory commission. Furthermore, some utility commissions authorize the use of expense deferrals and amortization in order to provide for an impact on our operating income by an amount that approximates the requested

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amount in a rate request. The additional revenue billed and collected prior to the final ruling is subject to refund to customers based on the outcome of the ruling. The revenue recognized and the expenses deferred by us reflect an estimate as to the final outcome of the ruling. If the request is denied completely or in part, we could be required to refund to customers some or all of the revenue billed to date, and write-off some or all of the deferred expenses.

Our business requires significant capital expenditures that are partially dependent on our ability to secure appropriate funding. Disruptions in the capital markets may limit our access to capital. If we are unable to obtain sufficient capital, or if the cost of borrowing increases, it may harm our business, financial condition, results of operations, and our ability to pay dividends.

Our business is capital intensive. In addition to the capital required to fund customer growth through our acquisition strategy, on an annual basis, we spend significant sums for additions to or replacement of property, plant and equipment. We obtain funds for our capital expenditures from operations, contributions and advances by developers and others, debt issuances, and equity issuances. We have paid dividends consecutively for 73 years and our Board of Directors recognizes the value that our common shareholders place on both our historical payment record and on our future dividend payments. Our ability to maintain and meet our financial objectives is dependent upon the availability of adequate capital, and we may not be able to access the capital markets on favorable terms or at all. If in the future, our credit facilities are not renewed or our short-term borrowings are called for repayment, we would need to seek alternative financing sources; however, there can be no assurance that these alternative financing sources would be available on terms acceptable to us. In the event we are unable to obtain sufficient capital, we may need to take steps to conserve cash by reducing our capital expenditures or dividend payments and our ability to pursue acquisitions may be limited. The reduction in capital expenditures may result in reduced potential earnings growth, affect our ability to meet environmental laws and regulations, and limit our ability to improve or expand our utility systems to the level we believe appropriate. There is no guarantee that we will be able to obtain sufficient capital in the future on reasonable terms and conditions for expansion, construction and maintenance. In addition, delays in completing major capital projects could delay the recovery of the capital expenditures associated with such projects through rates. If the cost of borrowing increases, we might not be able to recover increases in our cost of capital through rates. The inability to recover higher borrowing costs through rates, or the regulatory lag associated with the time that it takes to begin recovery, may harm our business, financial condition, and results of operations.

Our inability to comply with debt covenants under our credit facilities could result in prepayment obligations.

We are obligated to comply with debt covenants under some of our loan and debt agreements. Failure to comply with covenants under our credit facilities could result in an event of default, which if not cured or waived, could result in us being required to repay or finance these borrowings before their due date, limit future borrowings, cause us to default on other obligations, and increase borrowing costs. If we are forced to repay or refinance (on less favorable terms) these borrowings, our business, financial condition, and results of operations could be harmed by reduced access to capital and increased costs and rates.

One of the important elements of our growth strategy is the acquisition of water and wastewater utility systems. Any future acquisitions we decide to undertake may involve risks. Further, competition for acquisition opportunities from other regulated utilities, governmental entities, and strategic and financial buyers may hinder our ability to grow our business.

One important element of our growth strategy is the acquisition and integration of water and wastewater utility systems in order to broaden our service areas. We will not be able to acquire other businesses if we cannot identify suitable acquisition opportunities or reach mutually agreeable terms with acquisition candidates. It is our intent, when practical, to integrate any businesses we acquire with our existing operations. The negotiation of potential acquisitions as well as the integration of acquired businesses could require us to incur significant costs and cause diversion of our management's time and resources. Future acquisitions by us could result in:

- dilutive issuances of our equity securities;
- incurrence of debt, contingent liabilities, and environmental liabilities;
- unanticipated capital expenditures;

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- failure to maintain effective internal control over financial reporting;
- recording goodwill and other intangible assets for which we may never realize their full value and may result in an asset impairment that may negatively affect our results of operations;
- fluctuations in quarterly results;
- other acquisition related expenses; and
- exposure to unknown or unexpected risks and liabilities.

Some or all of these items could harm our business and our ability to finance our business and to comply with regulatory requirements. The businesses we acquire in the future may not achieve sales and profitability that would justify our investment, and any difficulties we encounter in the integration process, including in the integration of processes necessary for internal control and financial reporting, could interfere with our operations, reduce our operating margins and harm our internal controls.

Some states in which we operate allow the respective public utility commissions to use fair market value to set ratemaking rate base instead of the traditional depreciated original cost of water or wastewater assets for certain qualifying municipal acquisitions. Depending on the state, there are varying rules and circumstances in which fair value is determined. One state's regulations allows ratemaking rate base to equal the lower of the average of the appraisals or the purchase price, and is subject to regulatory approval. There may be situations where we may pay more than the ultimate fair value of the utility assets as set by the regulatory commission, despite the fair value legislation suggesting its full recovery. In these situations, goodwill may be recognized to the extent there is an excess purchase price over the fair value of net tangible and identifiable intangible assets acquired through acquisition. Our financial condition and results of operations can be harmed by an inability to earn a return on, and recover our purchase price as a component of rate base.

We compete with governmental entities, other regulated utilities, and strategic and financial buyers, for acquisition opportunities. As consolidation becomes more prevalent in the utility industry and competition for acquisitions increases, the prices for suitable acquisition candidates may increase to unacceptable levels and limit our ability to grow through acquisitions. In addition, our competitors may impede our growth by purchasing utilities near our existing operations, thereby preventing us from acquiring them. Governmental entities or environmental / social activist groups have challenged, and may in the future challenge our efforts to acquire new service territories, particularly from municipalities or municipal authorities. Higher purchase prices and resulting rates may limit our ability to invest additional capital for system maintenance and upgrades in an optimal manner. Our growth could be hindered if we are not able to compete effectively for new companies and/or service territories with other companies or strategic and financial buyers that have lower costs of operations or capital, or that submit more attractive bids. Any of these risks may harm our business, financial condition, and results of operations.

Our facilities could be the target of a possible terrorist or other deliberate attack which could harm our business, financial condition and results of operations.

In addition to the potential contamination of our water supply as described in a separate risk factor herein, we maintain security measures at our facilities and have heightened employee and public safety official awareness of potential threats to our water systems. We have and will continue to bear increases in costs for security precautions to protect our facilities, operations, and supplies, most of which have been recoverable under state regulatory policies. While the costs of increases in security, including capital expenditures, may be significant, we expect these costs to continue to be recoverable in water and wastewater rates. Despite our security measures, we may not be in a position to control the outcome of terrorist events, or other attacks on our water systems, should they occur. Such an event could harm our business, financial condition, and results of operations.

The failure of, or the requirement to repair, upgrade or dismantle any of our dams or reservoirs may harm our business, financial condition, and results of operations.

Several of our water systems include impounding dams and reservoirs of various sizes. Although we believe our dam review program, which includes regular inspections and other engineering studies, will ensure our dams are structurally sound and well-maintained, the failure of a dam could result in significant downstream damage and could result in claims for property damage or for injuries or fatalities. We periodically inspect our dams and purchase liability insurance to

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cover such risks, but depending on the nature of the downstream damage and cause of the failure, the policy limits of insurance coverage may not be sufficient, and losses incurred may make it difficult for us to secure insurance in the future at acceptable rates. A dam failure could also result in damage to, or disruption of, our water treatment and pumping facilities that are often located downstream from our dams and reservoirs. Significant damage to these facilities, or a significant decline in the storage of the raw water impoundment, could affect our ability to provide water to our customers until the facilities and a sufficient raw water impoundment can be restored. The estimated costs to maintain our dams are included in our capital budget projections and, although such costs to date have been recoverable in rates, there can be no assurance that rate increases will be granted in a timely or sufficient manner to recover such costs in the future, if at all.

Any failure of our water and wastewater treatment plants, network of water and wastewater pipes, or water reservoirs could result in damages that may harm our business, financial condition, and results of operations.

Our operating subsidiaries treat water and wastewater, distribute water and collect wastewater through an extensive network of pipes, and store water in reservoirs. A failure of a major treatment plant, pipe, or reservoir could result in claims for injuries or property damage. The failure of a major treatment plant, pipe, or reservoir may also result in the need to shut down some facilities or parts of our network in order to conduct repairs. Such failures and shutdowns may limit our ability to supply water in sufficient quality and quantities to our customers or collect and treat wastewater in accordance with standards prescribed by governmental regulators, including state utility commissions, and may harm our business, financial condition, and results of operations. Any business interruption or other losses might not be covered by insurance policies or be recoverable in rates, and such losses may make it difficult for us to secure insurance in the future at acceptable rates.

We are increasingly dependent on the continuous and reliable operation of our information technology systems, and a disruption of these systems, resulting from cyber security attacks or other cyber-related events, could harm our business.

We rely on our information technology systems in connection with the operation of our business, especially with respect to customer service and billing, accounting and, in some cases, the monitoring and operation of our treatment, storage and pumping facilities. In addition, we rely on our systems to track our utility assets and to manage maintenance and construction projects, materials and supplies, and our human resource functions. A loss of these systems, or major problems with the operation of these systems, could harm our business, financial condition, and results of operations. Our information technology systems may be vulnerable to damage or interruption from the following types of cyber security attacks or other cyber-related events:

- power loss, computer systems failures, and internet, telecommunications or data network failures;
- operator negligence or improper operation by, or supervision of, employees;
- physical and electronic loss of data;
- computer viruses, cyber security attacks, intentional security breaches, hacking, denial of service actions, misappropriation of data and similar events;
- difficulties in the implementation of upgrades or modification to our information technology systems; and
- hurricanes, fires, floods, earthquakes and other natural disasters.

Although we do not believe that our systems are at a materially greater risk of cyber security attacks than other similar organizations, our information technology systems may be vulnerable to damage or interruption from the types of cyber security attacks or other events listed above or other similar actions, and such incidents may go undetected for a period of time. Such cyber security attacks or other events may result in:

- the loss or compromise of customer, financial, employee, or operational data;
- disruption of billing, collections or normal field service activities;
- disruption of electronic monitoring and control of operational systems; and
- delays in financial reporting and other normal management functions.

Possible impacts associated with a cyber security attack or other events may include: remediation costs related to lost, stolen, or compromised data; repairs to data processing systems; increased cyber security protection costs; adverse effects

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on our compliance with regulatory and environmental laws and regulation, including standards for drinking water; litigation; and reputational damage. We maintain insurance to help defray costs associated with cyber security attacks or other events, but we cannot provide assurance that such insurance will provide coverage for any particular type of incident or event or that such insurance will be adequate, and losses incurred may make it difficult for us to secure insurance in the future at acceptable rates.

Our business is impacted by weather conditions and is subject to seasonal fluctuations, which could harm demand for our water service and our revenues and earnings.

Demand for our water during the warmer months is generally greater than during cooler months due primarily to additional requirements for water in connection with irrigation systems, swimming pools, cooling systems, and other outside water use. Throughout the year, and particularly during typically warmer months, demand will vary with temperature, rainfall levels and rainfall frequency. In the event that temperatures during the typically warmer months are cooler than normal, if there is more rainfall than normal, or rainfall is more frequent than normal, the demand for our water may decrease and harm our business, financial condition, and results of operations.

Decreased residential customer water consumption as a result of water conservation efforts may harm demand for our water service and may reduce our revenues and earnings.

There has been a general decline in water usage per residential customer as a result of an increase in conservation awareness, and the impact of an increased use of more efficient plumbing fixtures and appliances. These gradual, long-term changes are normally taken into account by the utility commissions in setting rates, whereas short-term changes in water usage, if significant, may not be fully reflected in the rates we charge. We are dependent upon the revenue generated from rates charged to our residential customers for the volume of water used. If we are unable to obtain future rate increases to offset decreased residential customer water consumption to cover our investments, expenses, and return for which we initially sought the rate increase, our business, financial condition, and results of operations may be harmed.

Drought conditions and government imposed water use restrictions may impact our ability to serve our current and future customers, and may impact our customers' use of our water, which may harm our business, financial condition, and results of operations.

We depend on an adequate water supply to meet the present and future demands of our customers. Drought conditions could interfere with our sources of water supply and could harm our ability to supply water in sufficient quantities to our existing and future customers. An interruption in our water supply could harm our business, financial condition, and results of operations. Moreover, governmental restrictions on water usage during drought conditions may result in a decreased demand for our water, even if our water supplies are sufficient to serve our customers during these drought conditions, which may harm our business, financial condition, and results of operations.

We employ a portfolio rationalization strategy to focus our operations in areas where we have critical mass and economic growth potential and to divest operations where limited customer growth opportunities exist or where we are unable to achieve favorable operating results or a return on equity that we consider acceptable. Dispositions we decide to undertake may involve risks which could harm our business, operating results, and financial condition.

In the event we determine a division, utility system or business should be sold, we may be unable to reach terms that are agreeable to us or find a suitable buyer. If the business is part of our regulated operations, we may face additional challenges in obtaining regulatory approval for the disposition, and the regulatory approval obtained may include restrictive conditions. We may be required to continue to hold or assume residual liabilities with respect to the business sold. The negotiation of potential dispositions as well as the efforts to divest the acquired business could require us to incur significant costs and cause diversion of our management's time and resources. Any of these risks may harm our business, financial condition, and results of operations.

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Our operations are geographically concentrated in Pennsylvania, which make us susceptible to risks affecting Pennsylvania.

Although we operate water and wastewater facilities in a number of states, our operations are concentrated in Pennsylvania. As a result, our financial results are largely subject to political, water supply, labor, utility cost and regulatory risks, economic conditions, natural disasters and other risks affecting Pennsylvania.

General economic conditions may affect our financial condition and results of operations.

A general economic downturn may lead to a number of impacts on our business and may affect our financial condition and results of operations. Such impacts may include:

- a reduction in discretionary and recreational water use by our residential water customers, particularly during the summer months when such discretionary usage is normally at its highest;
- a decline in usage by industrial and commercial customers as a result of decreased business activity;
- an increased incidence of customers' inability to pay or delays in paying their utility bills, or an increase in customer bankruptcies, which may lead to higher bad debt expense and reduced cash flow;
- a lower natural customer growth rate due to a decline in new housing starts; and
- a decline in the number of active customers due to housing vacancies.

General economic turmoil may also lead to an investment market downturn, which may result in our pension and other post-retirement plans' asset market values suffering a decline and significant volatility. A decline in our plans' asset market values could increase our required cash contributions to the plans and expense in subsequent years.

Our water and wastewater systems may be subject to condemnations or other methods of taking by governmental entities.

In the states where our subsidiaries operate, it is possible that portions of our subsidiaries' operations could be acquired by municipal governments by one or more of the following methods:

- eminent domain;
- the right of purchase given or reserved by a municipality or political subdivision when the original franchise was granted; and
- the right of purchase given or reserved under the law of the state in which the subsidiary was incorporated or from which it received its permit.

The price to be paid upon such an acquisition by the municipal government is usually determined in accordance with applicable law under eminent domain. In other instances, the price may be negotiated, fixed by appraisers selected by the parties or computed in accordance with a formula prescribed in the law of the state or in the particular franchise or charter. We believe that our operating subsidiaries will be entitled to receive fair market value for any assets that are condemned. However, there is no assurance that the fair market value received for assets condemned will be in excess of book value.

In a very few number of instances, in one of our southern states where there are municipally-owned water or wastewater systems near our operating divisions, the municipally-owned system may either have water distribution or wastewater collection mains that are located adjacent to our division's mains or may construct new mains that parallel our mains. In these circumstances, on occasion, the municipally-owned system may attempt to offer service to customers who are connected to our mains, resulting in our mains becoming surplus or underutilized without compensation.

The final determination of our income tax liability may be materially different from our income tax provision.

Significant judgment is required in determining our provision for income taxes. Our calculation of the provision for income taxes is subject to our interpretation of applicable business tax laws in the jurisdictions in which we file. In addition, our income tax returns are subject to periodic examination by the Internal Revenue Service and other taxing authorities. In December 2012, Aqua Pennsylvania changed its tax method of accounting to permit the expensing of

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qualifying utility asset improvement costs that were previously being capitalized and depreciated for tax purposes. Subsequently, the Company's Ohio and North Carolina regulated subsidiaries similarly changed their tax method of accounting. Our determination of what qualifies as a capital cost versus a tax deduction for utility asset improvements is subject to subsequent adjustment and may impact the income tax benefits that have been recognized.

On December 22, 2017, President Trump signed into law legislation referred to as 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 makes significant changes to the Internal Revenue Code of 1986, as amended (the "Code"), and the taxation of business entities, and includes specific provisions related to regulated public utilities. Changes in the Code from the TCJA had a material impact on our financial statements in 2017. Significant changes that impact the Company in the TCJA include a reduction in the corporate federal income tax rate from 35% to 21%, and a limitation on the utilization of Net Operating Losses ("NOLs") arising after December 31, 2017 to 80% of taxable income with an indefinite carryforward. In addition, specific provisions related to regulated public utilities in the TCJA generally allow for the continued deductibility of interest expense, the elimination of full expensing for tax purposes of certain property acquired after September 27, 2017, and the continuation of certain rate normalization requirements for accelerated depreciation benefits. Since the tax effects of changes in tax law must be recognized in the period in which TCJA was enacted, our deferred income tax assets and liabilities have been remeasured in the period of enactment. This generally results in amounts previously collected from utility customers for these deferred taxes to be refundable to such customers, generally through reductions in future rates. In certain states there is not yet complete guidance as to how to account for the TCJA. With respect to these states, we will account for the changes in income tax balances by making a reasonable estimate. The estimate may differ from the actual tax amount determined once the state regulators provide specific guidance. To the extent such estimates are adjusted or prove to be incorrect, there could be an impact on the Company's financial statements.

Although we believe our income tax estimates, including any tax reserves for uncertain tax positions or valuation allowances on deferred tax assets are appropriate, there is no assurance that the final determination of our income tax liability will not be materially different; either higher or lower, from what is reflected in our income tax provision. In the event we are assessed additional income taxes, our business, financial condition, and results of operations could be harmed.

Federal and state environmental laws and regulations impose substantial compliance requirements on our operations. Our operating costs could be significantly increased in order to comply with new or stricter regulatory standards imposed by federal and state environmental agencies.

Our water and wastewater services are governed by various federal and state environmental protection and health and safety laws and regulations, including the federal Safe Drinking Water Act, the Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act and similar state laws, and federal and state regulations issued under these laws by the EPA and state environmental regulatory agencies. These laws and regulations establish, among other things, criteria and standards for drinking water and for discharges into the waters of the U.S. as well as dam safety, air emissions, and residuals management. Pursuant to these laws, we are required to obtain various environmental permits from environmental regulatory agencies for our operations. We cannot assure you that we will be at all times in total compliance with these laws, regulations and permits. If we fail to comply with these laws, regulations or permits, we could be fined or otherwise sanctioned by regulators and such noncompliance could result in civil suits. Environmental laws and regulations are complex and change frequently. These laws, and the enforcement thereof, have tended to become more stringent over time. While we have budgeted for future capital and operating expenditures to comply with these laws and our permits, it is possible that new or stricter standards could be imposed that will require additional capital expenditures or raise our operating costs. Although these expenditures and costs may be recovered in the form of higher rates, there can be no assurance that the various state utility commissions that govern our business would approve rate increases to enable us to recover such expenditures and costs. In summary, we cannot assure you that our costs of complying with, current and future environmental and health and safety laws will not harm our business, financial condition, and results of operations.

Federal and state environmental laws, regulatory initiatives relating to hydraulic fracturing, changes in technology or hydraulic fracturing processes, and volatility in natural gas prices, could result in reduced demand for raw water utilized in hydraulic fracturing and harm our joint venture business, financial condition, or results of operations.

We have invested in a joint venture for the construction and operation of a private pipeline system to supply raw water to natural gas drilling operations for hydraulic fracturing. Hydraulic fracturing involves the injection under pressure of water, along with other materials such as sand, into rock formations to stimulate natural gas production. In general, the environmental community has taken an interest in monitoring and understanding the potential environmental impact of hydraulic fracturing. Although hydraulic fracturing is currently regulated, in the event the use of hydraulic fracturing is further limited through regulation, our investment in the raw water pipeline may be harmed in the event that demand for raw water is reduced.

Changes in technology or hydraulic fracturing processes may occur which allows drillers to reuse injected water on a limited basis, or apply treatment processes to allow further reuse of water for drilling. These changes may reduce demand for raw water.

Furthermore, natural gas prices have historically been volatile, and are likely to continue to be volatile. A decrease in demand for natural gas, due to price volatility, could result in reduced demand for raw water utilized in hydraulic fracturing. In the fourth quarter of 2015, the joint venture recognized an impairment charge on its long-lived assets, which reduced the carrying value of our investment in the joint venture. The impairment resulted from a marked decline in natural gas prices in 2015, a further reduction in the volume of water sales by the joint venture, which led to a lowered forecast on future sales volumes, as well as changes in the natural gas industry activities in the Marcellus Shale region and general market conditions. In the event hydraulic fracturing is limited, due to a further reduction in demand for natural gas or other factors affecting the industry, our investment in the raw water pipeline may be harmed should the demand for raw water be reduced.

Wastewater operations entail significant risks and may impose significant costs.

Wastewater collection and treatment and septage pumping and sludge hauling involve various unique risks. If collection or treatment systems fail or do not operate properly, or if there is a spill, untreated or partially treated wastewater could discharge onto property or into nearby streams and rivers, causing various damages and injuries, including environmental damage. These risks are most acute during periods of substantial rainfall or flooding, which are the main causes of wastewater overflow and system failure. Liabilities resulting from such damages and injuries could harm our business, financial condition, and results of operations.

Work stoppages and other labor relations matters could harm our operating results.

Approximately 34% of our workforce is unionized under 15 labor contracts with labor unions, which expire over several years. In light of rising costs for healthcare and retirement benefits, contract negotiations in the future may be difficult. We are subject to a risk of work stoppages and other labor actions as we negotiate with the unions to address these issues, which could harm our business, financial condition, and results of operations. We cannot assure you that issues with our labor forces will be resolved favorably to us in the future or that we will not experience work stoppages.

Significant or prolonged disruptions in the supply of important goods or services from third parties could harm our business, financial condition, and results of operations.

We are dependent on a continuing flow of important goods and services from suppliers for our water and wastewater businesses. A disruption or prolonged delays in obtaining important supplies or services, such as maintenance services, purchased water, chemicals, water pipe, valves, hydrants, electricity, or other materials, could harm our water or wastewater services and our ability to operate in compliance with all regulatory requirements, which could harm our business, financial condition, and results of operations. In some circumstances, we rely on third parties to provide important services (such as customer bill print and mail activities or utility service operations in some of our divisions) and a disruption in these services could harm our business, financial condition, and results of operations. Some possible reasons for a delay or disruption in the supply of important goods and services include:

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- our suppliers may not provide materials that meet our specifications in sufficient quantities;
- our suppliers may provide us with water that does not meet applicable quality standards or is contaminated;
- our suppliers may face production delays due to natural disasters, strikes, lock-outs, or other such actions;
- one or more suppliers could make strategic changes in the lines of products and services they offer; and
- some of our suppliers, such as small companies, may be more likely to experience financial and operational difficulties than larger, well-established companies, because of their limited financial and other resources.

As a result of any of these factors, we may be required to find alternative suppliers for the materials and services on which we rely. Accordingly, we may experience delays in obtaining appropriate materials and services on a timely basis and in sufficient quantities from such alternative suppliers at a reasonable price, which could interrupt services to our customers and harm our business, financial condition, and results of operations.

We depend significantly on the services of the members of our management team, and the departure of any of those persons could cause our operating results to suffer.

Our success depends significantly on the continued individual and collective contributions of our management team. The loss of the services of any member of our management team or the inability to hire and retain experienced management personnel could harm our business, financial condition, and results of operations.

Climate change laws and regulations have been passed and are being proposed that require compliance with greenhouse gas emissions standards, as well as other climate change initiatives, which could impact our business, financial condition or results of operations.

Climate change is receiving ever increasing attention worldwide. Many scientists, legislators, and others attribute global warming to increased levels of greenhouse gases ("GHG"), including carbon dioxide. Climate change laws and regulations enacted and proposed limit GHG emissions from covered entities, and require additional monitoring/reporting. At this time, the existing GHG laws and regulations are not expected to materially harm the Company's operations or capital expenditures. While the trend of increased regulation on climate change could change in light of the current federal administration's agenda, the uncertainty of future climate change regulatory requirements still remains. We cannot predict the potential impact of future laws and regulations on our business, financial condition, or results of operations. Although these future expenditures and costs for regulatory compliance may be recovered in the form of higher rates, there can be no assurance that the various state utility commissions that govern our business would approve rate increases to enable us to recover such expenditures and costs.

Some scientific experts are predicting a worsening of weather volatility in the future, possibly created by the climate change greenhouse gases. Changing severe weather patterns could require additional expenditures to reduce the risk associated with any increasing storm, flood and drought occurrences.

The issue of climate change is receiving ever increasing attention worldwide. Many climate change predictions, if true, present several potential challenges to water and wastewater utilities, such as: increased frequency and duration of droughts, increased precipitation and flooding, potential degradation of water quality, and changes in demand for services. We maintain an ongoing facility planning process, and this planning or the enactment of new standards may result in the need for additional capital expenditures or raise our operating costs. Because of the uncertainty of weather volatility related to climate change, we cannot predict its potential impact on our business, financial condition, or results of operations. Although any potential expenditures and costs may be recovered in the form of higher rates, there can be no assurance that the various state utility commissions that govern our business would approve rate increases to enable us to recover such expenditures and costs. We cannot assure you that our costs of complying with any climate change weather related measures will not harm our business, financial condition, or results of operations.

Item 1B *Unresolved Staff Comments*

None

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Item 2. *Properties*

Our properties consist of water transmission and distribution mains and wastewater collection pipelines, water and wastewater treatment plants, pumping facilities, wells, tanks, meters, pipes, dams, reservoirs, buildings, vehicles, land, easements, rights-of-way, and other facilities and equipment used for the operation of our systems, including the collection, treatment, storage, and distribution of water and the collection and treatment of wastewater. Substantially all of our treatment, storage, and distribution properties are owned by our subsidiaries, and a substantial portion of our property is subject to liens of mortgage or indentures. These liens secure bonds, notes and other evidences of long-term indebtedness of our subsidiaries. For some properties that we acquired through the exercise of the power of eminent domain and other properties we purchased, we hold title for water supply purposes only. We own, operate and maintain over 12,800 miles of transmission and distribution mains, 21 surface water treatment plants, many well treatment stations, and 187 wastewater treatment plants. A small portion of the properties are leased under long-term leases.

The following table indicates our net property, plant and equipment, in thousands of dollars, as of December 31, 2017 in the principal states where we operate:

	Net Property, Plant and Equipment		
Pennsylvania	$	3,433,582	63.6%
Ohio		457,238	8.5%
Illinois		395,136	7.3%
North Carolina		343,556	6.4%
Texas		299,872	5.6%
Other (1)		470,476	8.6%
Consolidated	$	5,399,860	100.0%

(1) Consists primarily of our operating subsidiaries in the following states: New Jersey, Indiana, and Virginia.

We believe that our properties are generally maintained in good condition and in accordance with current standards of good water and wastewater industry practice. We believe that our facilities are adequate and suitable for the conduct of our business and to meet customer requirements under normal circumstances.

Our corporate offices are leased from our subsidiary, Aqua Pennsylvania, and are located in Bryn Mawr, Pennsylvania.

Item 3. *Legal Proceedings*

There are various legal proceedings in which we are involved. Although the results of legal proceedings cannot be predicted with certainty, there are no pending legal proceedings to which we or any of our subsidiaries is a party or to which any of our properties is the subject that we believe are material or are expected to materially harm our business, operating results or financial condition.

Item 4. *Mine Safety Disclosures*

Not applicable.

PART II

Item 5. *Market for the Registrant's Common Stock, Related Stockholder Matters and Purchases of Equity Securities*

Our common stock is traded on the New York Stock Exchange under the ticker symbol WTR. As of February 13, 2018, there were approximately 23,683 holders of record of our common stock.

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The following table shows the high and low intraday sales prices for our common stock as reported on the New York Stock Exchange composite transactions reporting system and the cash dividends paid per share for the periods indicated:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2017					
Dividend paid per common share	$ 0.1913	$ 0.1913	$ 0.2047	$ 0.2047	$ 0.7920
Dividend declared per common share	0.1913	0.1913	0.2047	0.2047	0.7920
Price range of common stock:					
high	32.32	34.41	34.66	39.55	39.55
low	29.41	31.18	32.30	33.12	29.41
2016					
Dividend paid per common share	$ 0.178	$ 0.178	$ 0.1913	$ 0.1913	$ 0.7386
Dividend declared per common share	0.178	0.178	0.1913	0.1913	0.7386
Price range of common stock:					
high	32.44	35.66	35.83	31.29	35.83
low	28.35	30.31	29.53	28.03	28.03

We have paid dividends consecutively for 73 years. On August 1, 2017, our Board of Directors authorized an increase of 7.0% in the September 1, 2017 quarterly dividend over the dividend Aqua America paid in the previous quarter. As a result of this authorization, beginning with the dividend payment in September 2017, the annualized dividend rate increased to $0.8188 per share. This is the 27th dividend increase in the past 26 years and the 19th consecutive year that we have increased our dividend in excess of five percent. We presently intend to pay quarterly cash dividends in the future, on March 1, June 1, September 1, and December 1, subject to our earnings and financial condition, restrictions set forth in our debt instruments, regulatory requirements and such other factors as our Board of Directors may deem relevant. In 2017, our dividends paid represented 58.7% of net income.

Information with respect to restrictions set forth in our debt instruments is disclosed in Note 10 – *Long-term Debt and Loans Payable* in the *Notes to Consolidated Financial Statements* which is contained in Item 8 of this Annual Report.

The following table summarizes the Company's purchases of its common stock for the quarter ending December 31, 2017:

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plan or Programs
October 1-31, 2017	-	$ -	-	-
November 1-30, 2017	-	$ -	-	-
December 1-31, 2017	1,335	$ 37.80	-	-
Total	1,335	$ 37.80	-	-

(1) These amounts include 1,355 shares we acquired from our employees who elected to pay the exercise price of their stock options (and then hold shares of the stock), upon exercise, by delivering to us shares of our common stock in accordance with the terms of our equity compensation plan that was previously approved by our shareholders and disclosed in our proxy statements. This feature of our equity compensation plan is available to all employees who receive stock-based compensation under the plan. We purchased these shares at their fair market value, as determined by reference to the closing price of our common stock on the day prior to the option exercise.

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Item 6. *Selected Financial Data*

Summary of Selected Financial Data (Unaudited)
Aqua America, Inc. and Subsidiaries
(In thousands of dollars, except per share amounts)

Years ended December 31,	2017	2016	2015	2014	2013
PER COMMON SHARE:					
Income from continuing operations:					
[redacted]					
Diluted	1.35	1.32	1.14	1.20	1.15
Income from discontinued operations:					
[redacted]					
Diluted	-	-	-	0.11	0.10
Net income:					
[redacted]					
Diluted	1.35	1.32	1.14	1.31	1.25
[redacted]					
Return on Aqua America stockholders' equity	12.2%	12.7%	11.7%	14.1%	14.4%
[redacted]					
Market value at year end	39.23	30.04	29.80	26.70	23.59
INCOME STATEMENT HIGHLIGHTS:					
[redacted]					
Depreciation and amortization	136,724	133,008	128,737	126,535	123,985
[redacted]					
Income from continuing operations before income taxes (1)	256,652	255,160	216,752	239,103	224,104
[redacted]					
Income from continuing operations (1)	239,738	234,182	201,790	213,884	202,871
[redacted]					
Net income (1)	239,738	234,182	201,790	233,239	221,300
BALANCE SHEET HIGHLIGHTS:					
[redacted]					
Property, plant and equipment, net	5,399,860	5,001,615	4,688,925	4,401,990	4,138,568
[redacted]					
Long-term debt, including current portion, excluding debt issuance costs (3)	2,143,127	1,910,633	1,779,205	1,619,270	1,554,871
[redacted]					
ADDITIONAL INFORMATION:					
[redacted]					
Capital expenditures	478,089	382,996	364,689	328,605	307,908
[redacted]					
Dividends on common stock	140,660	130,923	121,248	112,106	102,889
[redacted]					
Number of shareholders of common stock	23,511	24,750	25,269	25,780	25,833
[redacted]					
Employees (full-time) (2)	1,530	1,551	1,617	1,617	1,542

(1) 2015 results includes Aqua America's share of a joint venture impairment charge of $21,433 ($32,975 pre-tax)
(2) Reflects continuing operations
(3) Debt issuance costs for the years ended December 31, 2017, 2016, 2015, 2014, and 2013 were $21,605, $22,357, $23,165, $23,509, and $24,387, respectively

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Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*

OVERVIEW

The following discussion and analysis of our financial condition and results of operations should be read together with our Consolidated Financial Statements and related Notes included in this Annual Report. This discussion contains forward-looking statements that are based on management's current expectations, estimates and projections about our business, operations and financial performance. All dollar amounts are in thousands of dollars, except per share amounts.

The Company
Aqua America, Inc., (referred to as "Aqua America", the "Company", "we", "us", or "our"), a Pennsylvania corporation, is the holding company for regulated utilities providing water or wastewater services to an estimated three million people in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, and Virginia. Our largest operating subsidiary is Aqua Pennsylvania, Inc., which accounted for approximately 52% of our operating revenues and approximately 74% of our net income for 2017. As of December 31, 2017, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of people we serve. Aqua Pennsylvania's service territory is located in the suburban areas in counties north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. Our other regulated utility subsidiaries provide similar services in seven other states. In addition, the Company's market-based activities are conducted through Aqua Infrastructure, LLC and Aqua Resources, Inc. Aqua Infrastructure provides non-utility raw water supply services for firms in the natural gas drilling industry. Aqua Resources provides water and wastewater service through two operating and maintenance contracts with municipal authorities close to our utility companies' service territory; and offers, through a third party, water and sewer line repair service and protection solutions to households. In 2017, we completed the sale of business units that are reported within the Company's market-based subsidiary, Aqua Resources, which installed and tested devices that prevent the contamination of potable water and repaired water and wastewater systems, and repaired and performed maintenance on water and wastewater systems. Additionally, during 2016 we completed the sale of business units within Aqua Resources, which were reported as assets held for sale in the Company's consolidated balance sheets, which provided liquid waste hauling and disposal services, and inspection, and cleaning and repair of storm and sanitary wastewater lines.

Industry Mission
The mission of the regulated water utility industry is to provide quality and reliable water service at reasonable rates to customers, while earning a fair return for shareholders. A number of challenges face the industry, including:

- strict environmental, health and safety standards;
- aging utility infrastructure and the need for substantial capital investment;
- economic regulation by state, and/or, in some cases, local government;
- declining consumption per customer as a result of conservation;
- lawsuits and the need for insurance; and
- the impact of weather and sporadic drought conditions on water sales demand.

Economic Regulation
Most of our water and wastewater utility operations are subject to regulation by their respective state utility commissions, which have broad administrative power and authority to regulate billing rates, determine franchise areas and conditions of service, approve acquisitions, and authorize the issuance of securities. The utility commissions also generally establish uniform systems of accounts and approve the terms of contracts with affiliates and customers, business combinations with other utility systems, and loans and other financings. The policies of the utility commissions often differ from state to state, and may change over time. A small number of our operations are subject to rate regulation by county or city government. Over time, the regulatory party in a particular state may change, as was the case for our Texas operations where, in 2014, economic regulation changed from the Texas Commission on Environmental Quality to the Public Utility Commission of Texas. The profitability of our utility operations is influenced to a great extent by the timeliness and adequacy of rate allowances in the various states in which we operate. One consideration we may undertake in evaluating which states to focus our growth and investment strategy is whether a state provides for consolidated rates, a surcharge for

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replacing and rehabilitating infrastructure and other systems, and other regulatory policies that promote infrastructure investment and efficiency in processing rate cases.

Rate Case Management Capability – We strive to achieve the industry's mission by effective planning, efficient investments, and productive use of our resources. We maintain a rate case management capability to pursue timely and adequate returns on the capital investments that we make in improving our distribution system, treatment plants, information technology systems, and other infrastructure. This capital investment creates assets that are used and useful in providing utility service, and is commonly referred to as rate base. Timely and adequate rate relief is important to our continued profitability and in providing a fair return to our shareholders; thus, providing access to capital markets to help fund these investments. Accordingly, the objective of our rate case management strategy is to provide that the rates of our utility operations reflect, to the extent practicable, the timely recovery of increases in costs of operations (primarily labor and employee benefits, electricity, chemicals, transportation, maintenance expenses, insurance and claims costs, and costs to comply with environmental regulations), capital, and taxes. In pursuing our rate case strategy, we consider the amount of net utility plant additions and replacements made since the previous rate decision, the changes in the cost of capital, changes in our capital structure, and changes in operating and other costs. Based on these assessments, our utility operations periodically file rate increase requests with their respective state utility commissions or local regulatory authorities. In general, as a regulated enterprise, our water and wastewater rates are established to provide full recovery of utility operating costs, taxes, interest on debt used to finance capital investments, and a return on equity used to finance capital investments. Our ability to recover our expenses in a timely manner and earn a return on equity employed in the business helps determine the profitability of the Company. As of December 31, 2017, the Company's rate base is estimated to be $4,125,000, which is comprised of:

- $2,874,000 filed with respective state utility commissions or local regulatory authorities; and
- $1,251,000 not yet filed with respective state utility commissions or local regulatory authorities.

Our water and wastewater operations are composed of 53 rate divisions, each of which requires a separate rate filing for the evaluation of the cost of service and recovery of investments in connection with the establishment of tariff rates for that rate division. When feasible and beneficial to our utility customers, we have sought approval from the applicable state utility commission to consolidate rate divisions to achieve a more even distribution of costs over a larger customer base. All of the eight states in which we operate currently permit us to file a revenue requirement using some form of consolidated rates for some or all of the rate divisions in that state.

Revenue Surcharges – Six states in which we operate water utilities, and five states in which we operate wastewater utilities, permit us to add a surcharge to their respective bills to offset the additional depreciation and capital costs associated with capital expenditures related to replacing and rehabilitating infrastructure systems. In all other states, water and wastewater utilities absorb all of the depreciation and capital costs of these projects between base rate increases without the benefit of additional revenues. The gap between the time that a capital project is completed and the recovery of its costs in rates is known as regulatory lag. This surcharge is intended to substantially reduce regulatory lag, which often acts as a disincentive to water and wastewater utilities to rehabilitate their infrastructure. In addition, some states permit our subsidiaries to use a surcharge or credit on their bills to reflect allowable changes in costs, such as changes in state tax rates, other taxes and purchased water costs, until such time as the new costs are fully incorporated in base rates.

Effects of Inflation – Recovery of the effects of inflation through higher water and wastewater rates is dependent upon receiving adequate and timely rate increases. However, rate increases are not retroactive and often lag increases in costs caused by inflation. On occasion, our regulated utility companies may enter into rate settlement agreements, which require us to wait for a period of time to file the next base rate increase request. These agreements may result in regulatory lag whereby inflationary increases in expenses may not yet be reflected in rates, or a gap may exist between when a capital project is completed and the start of its recovery in rates. Even during periods of moderate inflation, the effects of inflation can have a negative impact on our operating results.

Growth-Through-Acquisition Strategy

Part of our strategy to meet the industry challenges is to actively explore opportunities to expand our utility operations through acquisitions of water and wastewater utilities either in areas adjacent to our existing service areas or in new service areas, and to explore acquiring market-based businesses that are complementary to our regulated water and wastewater operations. To complement our growth strategy, we routinely evaluate the operating performance of our

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individual utility systems, and in instances where limited economic growth opportunities exist or where we are unable to achieve favorable operating results or a return on equity that we consider acceptable, we will seek to sell the utility system and reinvest the proceeds in other utility systems. Consistent with this strategy, we are focusing our acquisitions and resources in states where we have critical mass of operations in an effort to achieve economies of scale and increased efficiency. Our growth-through-acquisition strategy allows us to operate more efficiently by sharing operating expenses over more utility customers and provides new locations for future earnings growth through capital investment. Another element of our growth strategy is the consideration of opportunities to expand by acquiring other utilities, including those that may be in a new state if they provide promising economic growth opportunities and a return on equity that we consider acceptable. The ability to successfully execute this strategy and meet the industry challenges is largely due to our core competencies, financial position, and our qualified and trained workforce, which we strive to retain by treating employees fairly and providing our employees with development and growth opportunities.

During 2017, we completed four acquisitions, which along with the organic growth in our existing systems, represents 10,584 new customers. During 2016, we completed 19 acquisitions, which along with the organic growth in our existing systems, represents 15,282 new customers. During 2015, we completed 16 acquisitions, which along with the organic growth in our existing systems, represents 17,747 new customers.

We believe that utility acquisitions, organic growth, and a potential expansion of our market-based business will continue to be the primary sources of growth for us. With approximately 53,000 community water systems in the U.S., 82% of which serve less than 3,300 customers, the water industry is the most fragmented of the major utility industries (telephone, natural gas, electric, water, and wastewater). In the states where we operate regulated utilities, we believe there are approximately 14,500 community water systems of widely-varying size, with the majority of the population being served by government-owned water systems.

Although not as fragmented as the water industry, the wastewater industry in the U.S. also presents opportunities for consolidation. According to the U.S. Environmental Protection Agency's ("EPA") most recent survey of wastewater treatment facilities (which includes both government-owned facilities and regulated utility systems) in 2012, there are approximately 15,000 such facilities in the nation serving approximately 76% of the U.S. population. The remaining population represents individual homeowners with their own treatment facilities; for example, community on-lot disposal systems and septic tank systems. The vast majority of wastewater facilities are government-owned rather than regulated utilities. The EPA survey also indicated that there are approximately 4,000 wastewater facilities in operation in the states where we operate regulated utilities.

Because of the fragmented nature of the water and wastewater utility industries, we believe that there are many potential water and wastewater system acquisition candidates throughout the United States. We believe the factors driving the consolidation of these systems are:

- the benefits of economies of scale;
- the increasing cost and complexity of environmental regulations;
- the need for substantial capital investment;
- the need for technological and managerial expertise;
- the desire to improve water quality and service;
- limited access to cost-effective financing;
- the monetizing of public assets to support, in some cases, the declining financial condition of municipalities; and
- the use of system sale proceeds by a municipality to accomplish other public purposes.

We are actively exploring opportunities to expand our water and wastewater utility operations through regulated utility acquisitions or otherwise, including the management of publicly-owned facilities in a public-private partnership. We intend to continue to pursue acquisitions of government-owned and regulated water and wastewater utility systems that provide services in areas near our existing service territories or in new service areas. It is our intention to focus on growth opportunities in states where we have critical mass, which allows us to improve economies of scale through spreading our fixed costs over more customers – this cost efficiency should enable us to reduce the size of future rate increases. Currently, the Company seeks to acquire businesses in the U.S. regulated sector, which includes water and wastewater

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utilities and other regulated utilities, and to pursue growth ventures in market-based activities, by acquiring businesses that provide water and wastewater or other utility-related services, and investing in infrastructure projects.

Sendout

Sendout represents the quantity of treated water delivered to our distribution systems. We use sendout as an indicator of customer demand. Weather conditions tend to impact water consumption, particularly during the late spring, summer, and early fall when discretionary and recreational use of water is at its highest. Consequently, a higher proportion of annual operating revenues are realized in the second and third quarters. In general, during this period, an extended period of hot and dry weather increases water consumption, while above-average rainfall and cool weather decreases water consumption. Conservation efforts, construction codes that require the use of low-flow plumbing fixtures, as well as mandated water use restrictions in response to drought conditions can reduce water consumption. We believe an increase in conservation awareness by our customers, including the increased use of more efficient plumbing fixtures and appliances, may continue to result in a long-term structural trend of declining water usage per customer. These gradual long-term changes are normally taken into account by the utility commissions in setting rates, whereas significant short-term changes in water usage, resulting from drought warnings, water use restrictions, or extreme weather conditions, may not be fully reflected in the rates we charge between rate proceedings.

On occasion, drought warnings and water use restrictions are issued by governmental authorities for portions of our service territories in response to extended periods of dry weather conditions, regardless of our ability to meet unrestricted customer water demands. The timing and duration of the warnings and restrictions can have an impact on our water revenues and net income. In general, water consumption in the summer months is affected by drought warnings and restrictions to a higher degree because discretionary and recreational use of water is highest during the summer months, particularly in our northern service territories. At other times of the year, warnings and restrictions generally have less of an effect on water consumption. Currently, portions of our northern and central Texas service areas have conservation water restrictions. Drought warnings and watches result in the public being asked to voluntarily reduce water consumption.

The geographic diversity of our utility customer base reduces the effect of our exposure to extreme or unusual weather conditions in any one area of the country. During the year ended December 31, 2017, our operating revenues were derived principally from the following states: approximately 52% in Pennsylvania, 13% in Ohio, 9% in Texas, 8% in Illinois, and 7% in North Carolina.

Performance Measures Considered by Management

We consider the following financial measures (and the period to period changes in these financial measures) to be the fundamental basis by which we evaluate our operating results:

- earnings per share;
- operating revenues;
- income from continuing operations;
- earnings before interest, taxes, and depreciation ("EBITD");
- earnings before income taxes as compared to our operating budget;
- net income; and
- the dividend rate on common stock.

In addition, we consider other key measures in evaluating our utility business performance within our Regulated segment:

- our number of utility customers;
- the ratio of operations and maintenance expense compared to operating revenues (this percentage is termed "operating expense ratio");
- return on revenues (income from continuing operations divided by operating revenues);
- rate base growth;
- return on equity (net income divided by stockholders' equity); and
- the ratio of capital expenditures to depreciation expense.

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Furthermore, we review the measure of earnings before unusual items that are noncash and not directly related to our core business, such as the measure of adjusted earnings to remove the joint venture impairment charge, which was recognized in 2015. Refer to Note 1 – *Summary of Significant Accounting Policies – Investment in Joint Venture* in this Annual Report for information regarding the impairment charge. We review these measurements regularly and compare them to historical periods, to our operating budget as approved by our Board of Directors, and to other publicly-traded water utilities.

Our operating expense ratio is one measure that we use to evaluate our operating efficiency and management effectiveness of our regulated operations. Our operating expense ratio is affected by a number of factors, including the following:

- *Regulatory lag* – Our rate filings are designed to provide for the recovery of increases in costs of operations (primarily labor and employee benefits, electricity, chemicals, transportation, maintenance expenses, insurance and claim costs, and costs to comply with environmental regulations), capital, and taxes. The revenue portion of the operating expense ratio can be impacted by the timeliness of recovery of, and the return on capital investments. The operating expense ratio is further influenced by regulatory lag (increases in operations and maintenance expenses not yet recovered in rates or a gap between the time that a capital project is completed and the start of its cost recovery in rates). The operating expense ratio is also influenced by decreases in operating revenues without a commensurate decrease in operations and maintenance expense, such as changes in customer water consumption as impacted by adverse weather conditions, conservation trends, or as a result of utility rates incorporating the effects of income tax benefits derived from deducting qualifying utility asset improvements for tax purposes that are capitalized for book purposes in Aqua Pennsylvania and consequently forgoing operating revenue increases. During periods of inflation, our operations and maintenance expenses may increase, impacting the operating expense ratio, as a result of regulatory lag, since our rate cases may not be filed timely and are not retroactive.

- *Acquisitions* – In general, acquisitions of smaller undercapitalized utility systems in some areas may initially increase our operating expense ratio if the operating revenues generated by these operations are accompanied by a higher ratio of operations and maintenance expenses as compared to other operational areas of the company that are more densely populated and have integrated operations. In these cases, the acquired operations are characterized as having relatively higher operating costs to fixed capital costs, in contrast to the majority of our operations, which generally consist of larger, interconnected systems, with higher fixed capital costs (utility plant investment) and lower operating costs per customer. In addition, we operate market-based subsidiary companies, Aqua Resources and Aqua Infrastructure. The cost-structure of these market-based companies differs from our utility companies in that, although they may generate free cash flow, these companies have a higher ratio of operations and maintenance expenses to operating revenues and a lower capital investment and, consequently, a lower ratio of fixed capital costs versus operating revenues in contrast to our regulated operations. As a result, the operating expense ratio is not comparable between the businesses. These market-based subsidiary companies are not a component of our Regulated segment.

We continue to evaluate initiatives to help control operating costs and improve efficiencies.

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Consolidated Selected Financial and Operating Statistics

Our selected five-year consolidated financial and operating statistics follow:

Years ended December 31,	2017	2016	2015	2014	2013
Utility customers:					
Residential water	807,872	801,190	791,404	779,665	771,660
Commercial water	40,956	40,582	40,151	39,614	39,237
Industrial water	1,388	1,349	1,353	1,357	1,368
Other water	19,430	19,036	17,420	17,412	17,230
Wastewater	113,253	110,108	107,538	102,071	98,705
Total utility customers	982,849	972,265	957,866	940,119	928,200
Operating revenues:					
Residential water	$ 483,865	$ 484,901	$ 477,773	$ 460,013	$ 457,404
Commercial water	130,373	131,170	126,677	122,795	121,178
Industrial water	27,880	27,916	28,021	27,369	25,263
Other water	65,324	62,983	56,997	59,474	57,446
Wastewater	87,560	82,780	79,399	76,472	73,062
Other utility	9,903	10,357	10,746	9,934	10,174
Regulated segment total	804,905	800,107	779,613	756,057	744,527
Other and eliminations	4,620	19,768	34,591	23,846	17,366
Consolidated operating revenues	$ 809,525	$ 819,875	$ 814,204	$ 779,903	$ 761,893
Operations and maintenance expense	$ 287,206	$ 304,897	$ 309,310	$ 288,556	$ 283,561
Joint venture impairment charge (1)	$ -	$ -	$ 21,433	$ -	$ -
Income from continuing operations	$ 239,738	$ 234,182	$ 201,790	$ 213,884	$ 202,871
Net income	$ 239,738	$ 234,182	$ 201,790	$ 233,239	$ 221,300
Capital expenditures	$ 478,089	$ 382,996	$ 364,689	$ 328,605	$ 307,908
Operating Statistics					
Selected operating results as a percentage of operating revenues:					
Operations and maintenance	35.5%	37.2%	38.0%	37.0%	37.2%
Depreciation and amortization	16.9%	16.2%	15.8%	16.2%	16.3%
Taxes other than income taxes	7.0%	6.9%	6.8%	6.5%	6.9%
Interest expense, net	10.9%	9.8%	9.4%	9.8%	10.1%
Income from continuing operations	29.6%	28.6%	24.8%	27.4%	26.6%
Return on Aqua America stockholders' equity	12.2%	12.7%	11.7%	14.1%	14.4%
Ratio of capital expenditures to depreciation expense	3.5	2.9	2.9	2.7	2.6
Effective tax rate	6.6%	8.2%	6.9%	10.5%	9.5%

(1) Represents a $21,433 ($32,975 pre-tax) joint venture impairment charge. This amount represents our share of the impairment charge recognized by our joint venture that operates a private pipeline to supply raw water to firms with natural gas well drilling operations.

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RESULTS OF OPERATIONS

Our income from continuing operations has grown at an annual compound rate of approximately 5.7% and our net income has grown at an annual compound rate of approximately 4.1% during the five-year period ended December 31, 2017. During the past five years, operating revenues grew at a compound rate of 1.5% and operating expenses grew at a compound rate of 2.1%.

Operating Segments

We have identified ten operating segments and we have one reportable segment based on the following:

- Eight segments are composed of our water and wastewater regulated utility operations in the eight states where we provide these services. These operating segments are aggregated into one reportable segment since each of these operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution and/or wastewater collection methods, and the nature of the regulatory environment. Our single reportable segment is named the Regulated segment.

- Two segments are not quantitatively significant to be reportable and are composed of Aqua Resources and Aqua Infrastructure. These segments are included as a component of "Other," in addition to corporate costs that have not been allocated to the Regulated segment and intersegment eliminations. Corporate costs include general and administrative expenses, and interest expense.

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The following table provides the Regulated segment and consolidated information for the years ended December 31, 2017, 2016, and 2015:

	2017			2016		
	Regulated	Other and Eliminations	Consolidated	Regulated	Other and Eliminations	Consolidated
Operating revenues	$ 804,905	$ 4,620	$ 809,525	$ 800,107	$ 19,768	$ 819,875
Operations and maintenance expense	286,962	244	287,206	285,347	19,550	304,897
Taxes other than income taxes	54,524	2,104	56,628	53,916	2,469	56,385
Earnings (loss) before interest, taxes, depreciation and amortization	$ 463,419	$ 2,272	465,691	$ 460,844	$ (2,251)	458,593
Depreciation and amortization			136,724			133,008
Operating income			328,967			325,585
Other expense (income)						
Interest expense, net			88,341			80,594
Allowance for funds used during construction			(15,211)			(8,815)
Gain on sale of other assets			(484)			(378)
Equity income in joint venture			(341)			(976)
Provision for income taxes			16,914			20,978
Net income			$ 239,748			$ 234,182

	2015		
	Regulated	Other and Eliminations	Consolidated
Operating revenues	$ 779,713	$ 34,591	$ 814,304
Operations and maintenance expense	282,866	26,444	309,310
Taxes other than income taxes	52,461	2,696	55,157
Earnings before interest, taxes, depreciation and amortization	$ 444,386	$ 5,451	449,837
Depreciation and amortization			128,737
Operating income			321,100
Other expense (income)			
Interest expense, net			76,536
Allowance for funds used during construction			(6,219)
Gain on sale of other assets			(468)
Gain on extinguishment of debt			(678)
Equity loss in joint venture			35,177
Provision for income taxes			14,962
Net income			$ 201,790

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Consolidated Results

Operating Revenues – Operating revenues totaled $809,525 in 2017, $819,875 in 2016, and $814,204 in 2015. Our Regulated segment's revenues totaled $804,905 in 2017, $800,107 in 2016, and $779,613 in 2015. The growth in our Regulated segment's revenues over the past three years is a result of increases in our water and wastewater rates and our customer base. Rate increases implemented during the past three years have provided additional operating revenues of $6,143 in 2017, $4,319 in 2016, and $8,503 in 2015. Negatively impacting revenues in 2017 was a decrease in customer water consumption primarily due to unfavorable weather conditions during the year. The number of customers increased at an annual compound rate of 1.4% over the past three years due to acquisitions and organic growth, adjusted to exclude customers associated with utility system dispositions. Acquisitions in our Regulated segment have provided additional water and wastewater revenues of $1,695 in 2017, $8,201 in 2016, and $8,900, in 2015.

On June 7, 2012, Aqua Pennsylvania reached a settlement agreement in its last rate filing with the Pennsylvania Public Utility Commission, which in addition to a water rate increase, provided for a reduction in current income tax expense as a result of the recognition of qualifying income tax benefits upon Aqua Pennsylvania changing its tax accounting method to permit the expensing of qualifying utility asset improvement costs that historically had been capitalized and depreciated for book and tax purposes. In December 2012, Aqua Pennsylvania implemented this change which provides for the flow-through of income tax benefits that resulted in a substantial reduction in income tax expense and greater net income and cash flow. As a result, Aqua Pennsylvania was able to suspend its water Distribution System Improvement Charges from January 1, 2013 to September 30, 2017, when it resumed the use of a water Distribution System Improvement Charge on October 1, 2017. Aqua Pennsylvania was able to lengthen the amount of time until its next base rate case, which is expected to be filed in 2018. During 2017, 2016, and 2015, the income tax accounting change resulted in income tax benefits of $84,766, $78,530, and $72,944 that reduced the Company's current income tax expense and increased net income. The Company recognized a tax deduction on its 2012 Federal tax return of $380,000 for qualifying capital expenditures made prior to 2012. Based on the settlement agreement, beginning in 2013, the Company began to amortize $1/10^{th}$ of these expenditures, or $38,000 annually, which reduced income tax expense and increased the Company's net income by $16,734, which is included in the income tax benefits noted previously. In accordance with the settlement agreement, this amortization is expected to reduce income tax expense during periods when qualifying parameters are met.

Our operating subsidiaries received rate increases representing estimated annualized revenues of $7,558 in 2017 resulting from five base rate decisions, $3,434 in 2016 resulting from six rate decisions, and $3,347 in 2015 resulting from four rate decisions. Revenues from these increases realized in the year of grant were $6,343 in 2017, $1,788 in 2016, and $2,887 in 2015. As of December 31, 2017, our operating subsidiaries have filed two rate requests, which are being reviewed by the state utility commissions, proposing an aggregate increase of $13,888 in annual revenues. During 2018, we intend to file five additional rate requests proposing an aggregate of approximately $80,000 of increased annual revenues; the timing and extent to which our rate increase requests may be granted will vary by state. Our planned rate filings for 2018 are subject to the issuance of procedural orders directing how the Federal tax law changes are to be reflected in our utility customer rates.

Currently, Pennsylvania, Illinois, Ohio, Indiana, New Jersey, and North Carolina allow for the use of a surcharge for replacing and rehabilitating infrastructure systems. The rate increases under this surcharge typically adjust periodically based on additional qualified capital expenditures completed or anticipated in a future period. This surcharge is capped as a percentage of base rates, generally at 5% to 12.75% of base rates, and is reset to zero when new base rates that reflect the costs of those additions become effective or when a utility's earnings exceed a regulatory benchmark. These surcharges provided revenues of $10,255 in 2017, $7,379 in 2016, and $3,261 in 2015.

Our Regulated segment also includes operating revenues of $9,903 in 2017, $10,357 in 2016, and $10,746 in 2015 associated with contract operations that are integrated into the regulated utility business and operations. These amounts vary over time according to the level of activity associated with the utility contract operations.

In addition to the Regulated segment operating revenues, we recognized market-based revenues that are associated with Aqua Resources and Aqua Infrastructure of $4,798 in 2017, $20,091 in 2016, and $34,909 in 2015. The decrease in revenues in 2017 and 2016 is due to the disposition of business units within Aqua Resources.

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Operations and Maintenance Expenses – Operations and maintenance expenses totaled $287,206 in 2017, $304,897 in 2016, and $309,310 in 2015. Most elements of operating costs are subject to the effects of inflation and changes in the number of customers served. Several elements are subject to the effects of changes in water consumption, weather, and the degree of water treatment required due to variations in the quality of the raw water. The principal elements of operating costs are labor and employee benefits, electricity, chemicals, transportation, maintenance expenses, insurance and claims costs, and costs to comply with environmental regulations. Electricity and chemical expenses vary in relationship to water consumption, raw water quality, and price changes. Maintenance expenses are sensitive to extremely cold weather, which can cause water mains to rupture, resulting in additional costs to repair the affected main.

Operations and maintenance expenses decreased in 2017, as compared to 2016, by $17,691 or 5.8%, primarily due to:

- decreases in market-based activities expenses of $15,933 due to the disposition of business units within Aqua Resources;
- a decrease in water production costs of $6,301 primarily due to a reduction in purchased water expense of $4,794 due to replacing a purchased water supply with the Company's own water supply source;
- a decrease in the Company's self-insured employee medical benefit program expense of $4,838;
- offset by $4,102 for the timing of expenses incurred for the maintenance of our utility systems and the purchase of supplies, as well as other increases in operations and maintenance expenses.

Operations and maintenance expenses decreased in 2016 as compared to 2015 by $4,413 or 1.4%, primarily due to:

- decreases in market-based activities expenses of $10,393 due to the disposition of business units within Aqua Resources;
- a decrease in water production costs of $3,156;
- the effects of the recognition in 2015 of:
    - leadership transition expenses of $2,510,
    - the recording of a reserve of $1,862 for water rights held for future use, and
    - the recording of a legal contingency reserve of $1,580;
- the reversal of a reserve for a legal contingency of $1,580;
- offset by an increase in postretirement benefits of $5,554; and
- additional operating costs associated with acquisitions of $4,538, as well as other increases in operations and maintenance expenses.

Depreciation and Amortization Expenses – Depreciation expense was $136,302 in 2017, $130,987 in 2016, and $125,290 in 2015, and has increased principally as a result of the significant capital expenditures made to expand and improve our utility facilities, and our acquisitions of new utility systems.

Amortization expense was $422 in 2017, $2,021 in 2016, and $3,447 in 2015, and has decreased primarily due to the completion of the recovery of our costs associated with various rate filings. Expenses associated with filing rate cases are deferred and amortized over periods that generally range from one to three years.

Taxes Other than Income Taxes – Taxes other than income taxes totaled $56,628 in 2017, $56,385 in 2016, and $55,057 in 2015. The increase in 2017 was primarily due to an increase in gross receipts, excise and franchise taxes of $949, and an increase in taxes assessed resulting from the pumping of ground water in Texas of $486 due to higher water production volume and rates, offset by a $978 decrease in property taxes primarily due to a favorable ruling on a property tax appeal in Ohio. The increase in 2016 was primarily due to an increase of $578 for pumping fees in Texas due to higher water production, a rate increase, and the addition of two water systems, and an increase in gross receipts, excise and franchise taxes of $502.

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Interest Expense, net – Net interest expense was $88,341 in 2017, $80,594 in 2016, and $76,536 in 2015. Interest income of $202 in 2017, $217 in 2016, and $272 in 2015 was netted against interest expense. Net interest expense increased in 2017 due to an increase in average borrowings of $157,768 and an increase in short-term and long-term interest rates. Net interest expense increased in 2016 due to an increase in average short-term borrowings of $9,808 at higher short-term interest rates and an increase in average outstanding fixed rate long-term debt of $98,006 partially offset by a decline in long-term interest rates. Interest income decreased in 2017 due to lower investment rates. The weighted average cost of fixed rate long-term debt was 4.35% at December 31, 2017, 4.26% at December 31, 2016, and 4.57% at December 31, 2015. The weighted average cost of fixed and variable rate long-term debt was 4.29% at December 31, 2017, 4.23% at December 31, 2016, and 4.44% at December 31, 2015.

Allowance for Funds Used During Construction – The allowance for funds used during construction ("AFUDC") was $15,211 in 2017, $8,815 in 2016, and $6,219 in 2015, and varies as a result of changes in the average balance of utility plant construction work in progress, to which AFUDC is applied, changes in the AFUDC rate which is based predominantly on short-term interest rates, changes in the balance of short-debt, and changes in the amount of AFUDC related to equity. The increase in 2017 and 2016 is primarily due to an increase in the AFUDC rate as a result of an increase in the amount of AFUDC related to equity and in 2017 and 2016, and an increase in the average balance of utility plant construction work in progress, to which AFUDC is applied. The amount of AFUDC related to equity was $11,633 in 2017, $6,561 in 2016, and $4,621 in 2015.

Gain on Sale of Other Assets – Gain on sale of other assets totaled $484 in 2017, $378 in 2016, and $468 in 2015, and consists of the sales of property, plant and equipment and marketable securities.

Gain on Extinguishment of Debt – The gain on extinguishment of debt of $678 in 2015 results from the recognition of the unamortized issuance premium for the early redemption of $95,985 of tax-exempt bonds at 5.00% that were originally maturing between 2035 and 2038.

Equity (Earnings) Loss in Joint Venture – Equity (earnings) loss in joint venture totaled $(331) in 2017, $(976) in 2016, and $35,177 in 2015. The equity earnings in 2017 primarily resulted from the sale of raw water to firms in the natural gas drilling industry. The equity earnings in 2016 resulted from the recognition of a connection fee earned by the joint venture in 2016 for which our share was $1,831 and a reduction in depreciation expense resulting from the noncash impairment charge recognized by the joint venture on its long-lived assets in 2015. In 2015, a noncash impairment charge was recognized by the joint venture on its long-lived assets for which our share was $32,975. The impairment charge was recognized in 2015 as a result of a determination that the long-lived assets, primarily consisting of a pipeline and pump station, had become impaired due to a marked decline in natural gas prices in 2015, a distinguishable reduction in the volume of water sales by the joint venture which led to a lowered forecast in 2015 on future water sales volumes by the joint venture, as well as changes in the natural gas industry and market conditions. At the time of the impairment, these market conditions were largely associated with natural gas prices, which sharply declined in 2015 and this downturn no longer appeared to be temporary and instead was expected to be a long-term condition.

Income Taxes – Our effective income tax rate was 6.6% in 2017, 8.2% in 2016, and 6.9% in 2015. The effective income tax rate for 2017, 2016, and 2015 was affected by the 2012 income tax accounting change for qualifying utility asset improvements at Aqua Pennsylvania which resulted in a $84,766, $78,530, and $72,944 net reduction to the Company's 2017, 2016, and 2015 Federal and state income tax expense, respectively. As of December 31, 2017, the Company has an unrecognized tax benefit related to the Company's change in its tax accounting method for qualifying utility asset improvement costs, of which up to $24,243 of these tax benefits would further reduce the Company's effective income tax rate in the event the Company does sustain all, or a portion, of its tax position in the period this information is determined. Offsetting this reduction was the effect of the revaluation of our deferred income tax assets and liabilities, triggered by the TCJA, which resulted in the recognition of additional income tax expense of $3,141 to the extent revalued deferred income taxes are not believed to be recoverable in utility customer rates.

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Summary –

	Years ended December 31,					
	2017		2016		2015	
Operating income	$	328,967	$	325,585	$	321,400
Net income		239,738		234,182		201,790
Diluted net income per share		1.35		1.32		1.14

The changes in diluted net income per share in 2017 and 2016 over the previous years were due to the aforementioned changes.

Although we have experienced increased income in the recent past, continued adequate rate increases reflecting increased operating costs and new capital investments, are important to the future realization of improved profitability.

Fourth Quarter Results – The following table provides our fourth quarter results:

	Three Months Ended December 31,			
	2017		2016	
Operating revenues	$	203,312	$	196,799
Operations and maintenance		79,243		77,550
Depreciation		34,794		33,342
Amortization		64		654
Taxes other than income taxes		12,238		13,291
		126,339		124,837
Operating income		76,973		71,962
Other expense (income):				
Interest expense, net		23,217		20,458
Allowance for funds used during construction		(4,641)		(2,369)
(Gain) loss on sale of other assets		(162)		12
Equity loss in joint venture		71		167
Income before income taxes		58,488		53,694
Provision for income taxes		5,015		4,045
Net income	$	53,473	$	49,649

The increase in operating revenues of $6,513 was primarily due to an increase in water and wastewater rates and infrastructure rehabilitation surcharges of $4,247, an increase in customer water consumption, and additional revenues of $438 associated with a larger customer base due to utility acquisitions, offset by a decrease in market-based activities revenue of $2,323 due to dispositions.

The increase in operations and maintenance expense of $1,693 is due primarily to $3,490 associated with the timing of expenses incurred for the maintenance of our utility systems and the purchase of supplies, an increase in postretirement benefits expense of $1,249, offset by a decrease in market-based activities expenses of $2,952, and a decrease in water production costs of $1,842 due to replacing a purchased water supply with the Company's own water supply source.

Depreciation expense increased by $1,452 primarily due to the utility plant placed in service since December 31, 2016.

The decrease in other taxes of $1,053 is primarily due to a decrease in property taxes of $1,466 due to a favorable property tax appeal in Ohio, offset by an increase in capital stock taxes of $199 due to the effect of a reversal of a reserve from the prior year, and an increase in taxes assessed resulting from the pumping of ground water in Texas of $166 due to higher water production volume and rates.

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Interest expense increased by $2,759 due to an increase in the average outstanding debt balance.

AFUDC increased by $2,272 due to an increase in the average balance of utility plant construction work in progress, to which AFUDC is applied, and an increase in the AFUDC rate as a result of an increase in the amount of AFUDC related to equity.

The provision for income taxes increased by $970 primarily as a result of the revaluation of our deferred income tax assets and liabilities, triggered by the TCJA, which resulted in the recognition of additional income tax expense of $3,141 to the extent revalued deferred income taxes are not believed to be recoverable in utility customer rates, offset by the effect of additional tax deductions recognized in the fourth quarter of 2017 for certain qualifying infrastructure improvements for Aqua Pennsylvania.

LIQUIDITY AND CAPITAL RESOURCES

Consolidated Cash Flow and Capital Expenditures
Net operating cash flows from continuing operations, dividends paid on common stock, capital expenditures used in continuing operations, including allowances for funds used during construction, and expenditures for acquiring water and wastewater systems for our continuing operations for the five years ended December 31, 2017 were as follows:

	Net Operating Cash Flows	Dividends	Capital Expenditures	Acquisitions
2013	$ 365,803	$ 102,889	$ 307,908	$ 14,997
2014	364,888	112,106	328,605	14,616
2015	370,794	121,248	364,689	28,989
2016	396,163	130,923	382,996	9,423
2017	381,318	140,660	478,089	5,860
	$ 1,878,966	$ 607,826	$ 1,862,287	$ 73,885

Included in capital expenditures for the five-year period are: expenditures for the rehabilitation of existing water and wastewater systems, the expansion of our water and wastewater systems, modernization and replacement of existing treatment facilities, water meters, office facilities, information technology, vehicles, and equipment. During this five-year period, we received $31,657 of customer advances and contributions in aid of construction to finance new water mains and related facilities that are not included in the capital expenditures presented in the above table. In addition, during this period, we have made repayments of debt of $978,762, and have refunded $22,607 of customers' advances for construction. Dividends increased during the past five years as a result of annual increases in the dividends declared and paid and increases in the number of shares outstanding.

Our planned 2018 capital program, exclusive of the costs of new mains financed by advances and contributions in aid of construction, is estimated to be approximately $500,000 in infrastructure improvements for the communities we serve. The 2018 capital program is expected to include $213,200 for infrastructure rehabilitation surcharge qualified projects. On January 1, 2013, Aqua Pennsylvania reset its water infrastructure rehabilitation surcharge to zero resulting from the change in its tax method of accounting for qualifying utility asset improvements as described below. Although we were not eligible to use an infrastructure rehabilitation surcharge with our Aqua Pennsylvania water customers from January 1, 2013 to September 30, 2017, we were able to use the income tax savings derived from the qualifying utility asset improvements to maintain Aqua Pennsylvania's capital investment program. Our planned 2018 capital program in Pennsylvania is estimated to be approximately $337,000, a portion of which is expected to be eligible as a deduction for qualifying utility asset improvements for Federal income tax purposes. Our overall 2018 capital program, along with $113,769 of debt repayments and $160,973 of other contractual cash obligations, as reported in the section captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations – *Contractual Obligations*", has been, or is expected to be, financed through internally-generated funds, our revolving credit facilities, and the issuance of long-term debt.

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Future utility construction in the period 2019 through 2020, including recurring programs, such as the ongoing replacement or rehabilitation of water meters and water mains, water treatment plant upgrades, storage facility renovations, and additional transmission mains to meet customer demands, exclusive of the costs of new mains financed by advances and contributions in aid of construction, is estimated to require aggregate expenditures of approximately $875,000. We anticipate that approximately one-half of these expenditures will require external financing. We expect to refinance $189,025 of long-term debt during this period as they become due with new issues of long-term debt, internally-generated funds, and our revolving credit facilities. The estimates discussed above do not include any amounts for possible future acquisitions of water and wastewater systems or the financing necessary to support them.

Our primary sources of liquidity are cash flows from operations (including the allowed deferral of Federal income tax payments), borrowings under various short-term lines of credit and other credit facilities, and customer advances and contributions in aid of construction. Our cash flow from operations, or internally-generated funds, is impacted by the timing of rate relief, water consumption, and changes in Federal tax laws with respect to the reduction in the corporate income tax rate, and accelerated tax depreciation or deductions for utility construction projects. We fund our capital and typical acquisitions through internally-generated funds, supplemented by short-term lines of credit. Over time, we partially repay or pay-down our short-term lines of credit with long-term debt. The ability to finance our future construction programs, as well as our acquisition activities, depends on our ability to attract the necessary external financing and maintain internally-generated funds. Timely rate orders permitting compensatory rates of return on invested capital will be required by our operating subsidiaries to achieve an adequate level of earnings and cash flow to enable them to secure the capital they will need to operate and to maintain satisfactory debt coverage ratios.

On June 7, 2012, Aqua Pennsylvania reached a settlement agreement in its rate filing with the Pennsylvania Public Utility Commission, which in addition to a water rate increase, provided for a reduction in current income tax expense as a result of the recognition of qualifying income tax benefits upon Aqua Pennsylvania changing its tax accounting method to permit the expensing of qualifying utility asset improvement costs that have historically been capitalized and depreciated for book and tax purposes. In December 2012, Aqua Pennsylvania implemented this change, which resulted in a substantial reduction in income tax expense and greater net income and cash flow, and as a result allowed Aqua Pennsylvania to suspend its water Distribution System Improvement Charges from January 1, 2013 to September 30, 2017, and lengthen the amount of time until the next Aqua Pennsylvania rate case, which is expected to be filed in 2018. As a result of the Pennsylvania rate order, income tax benefits reduced the Company's current income tax expense and increased net income by $84,766 in 2017, $78,530 in 2016, and $72,944 in 2015. The Company recognized a tax deduction on its 2012 Federal tax return of $380,000 for qualifying capital expenditures made prior to 2012, and based on the settlement agreement, beginning in 2013, the Company began to amortize $1/10^{th}$ of these expenditures or $38,000 annually, which reduced income tax expense and increased the Company's net income by $16,734. In accordance with the settlement agreement, this amortization is expected to reduce income tax expense during periods when qualifying parameters are met.

Acquisitions
As part of the Company's growth-through-acquisition strategy, the Company has entered into purchase agreements to acquire the water or wastewater utility system assets of six municipalities for a total combined purchase price in cash of $150,700. The purchase price for these pending acquisitions is subject to certain adjustments at closing, and the pending acquisitions are subject to regulatory approvals, including the final determination of the fair value of the rate base acquired. Closings for these acquisitions are expected to occur by the end of 2018, which is subject to the timing of the regulatory approval process. These acquisitions are expected to add approximately 16,325 customers in two of the states in which the Company operates.

During the past five years, we have expended cash of $73,885 and issued 439,943 shares of common stock, valued at $12,845 at the time of acquisition, related to the acquisition of utility systems, both water and wastewater utilities, as well as investments in supplying raw water to the natural gas drilling industry.

In 2017, we completed four acquisitions of water and wastewater utility systems for $5,860 in cash in two of the states in which we operate, adding 1,003 customers.

In January 2016, we acquired the water and wastewater utility system assets of Superior Water Company, Inc., which provided public water service to 4,108 customers in portions of Berks, Chester, and Montgomery counties in

Pennsylvania. The total purchase price for the utility system was $16,750, which consisted of the issuance of 439,943 shares of the Company's common stock and $3,905 in cash. Additionally, during 2016, we completed 18 acquisitions of water and wastewater utility systems for $5,518 in cash in eight of the states in which we operate, adding 2,469 customers.

In April 2015, we acquired the water and wastewater utility system assets of North Maine Utilities, located in the Village of Glenview, Illinois serving 7,409 customers. The total purchase price consisted of $23,079 in cash. Additionally, during 2015, we completed 14 acquisitions of water and wastewater utility systems for $5,210 in cash in six of the states in which we operate, adding 3,170 customers.

During 2014, we completed 16 acquisitions of water and wastewater utility systems for $10,530 in cash in seven of the states in which we operate, adding 6,148 customers. Further, in 2014, we acquired two market-based businesses that specialized in inspecting, cleaning and repairing storm and sanitary sewer lines, as well as providing water distribution system services and training to waterworks operators. The total purchase price in aggregate was $4,810 and both these businesses were subsequently sold in November 2016 and January 2017.

During 2013, we completed 15 acquisitions of water and wastewater utility systems for $14,997 in cash in four of the states in which we operate, adding 5,991 customers.

We continue to pursue the acquisition of water and wastewater utility systems, and explore other utility acquisitions that may be in a new state. Our typical acquisitions are expected to be financed with short-term debt with subsequent repayment from the proceeds of long-term debt, retained earnings, or equity issuances.

Joint Venture
In September 2011, one of our subsidiaries entered into a joint venture with a firm that operates natural gas pipelines and processing plants for the construction and operation of a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale in north-central Pennsylvania (the "Joint Venture"). We own 49% of the Joint Venture. The 56 mile pipeline construction and permitted intake on the Susquehanna River cost $109,000. As of December 31, 2017, our capital contributions since inception totaled $53,643 in cash. This investment has been financed through the issuance of long-term debt. Our 49% investment in the Joint Venture is an unconsolidated affiliate and is accounted for under the equity method of accounting. Our initial investment is carried at cost. Subsequently, the carrying amount of our investment is adjusted to reflect capital contributions or distributions, our equity in earnings and losses since the commencement of the system's operations, and a decline in the fair value of our investment. In 2015, an impairment charge was recognized by the joint venture on its long-lived assets, of which the Company's share totaled $32,975 ($21,433 after-tax), representing our share of the noncash impairment charge as further described in Note 1 – *Summary of Significant Accounting Policies – Investment in Joint Venture* in this Annual Report.

Dispositions
We routinely review and evaluate areas of our business and operating divisions and, over time, may sell utility systems or portions of systems. In 2017, the Company sold two business units within Aqua Resources, which resulted in total proceeds of $867, and recognized a net loss of $324. In 2016, the Company sold two business units within Aqua Resources, which resulted in total proceeds of $4,459, and recognized a net loss of $543.

In December 2014, we completed the sale of our water utility system in southwest Allen County Indiana to the City of Fort Wayne, Indiana for $67,011, which is comprised of $50,100 in addition to $16,911 the city initially paid the Company towards its water and wastewater system assets in the northern part of Fort Wayne in 2008. We recognized a gain on sale of $29,210 ($17,611 after-tax) in the fourth quarter of 2014. In addition, as a result of this transaction, Aqua Indiana expanded its sewer customer base by accepting new wastewater flows from the City. Additionally, in March, 2014, we completed the sale of our wastewater treatment facility in Georgia.

In 2013, in accordance with our strategy to focus our resources on states where we have critical mass to improve our economies of scale and expect future economic growth, we sold water and wastewater systems in Florida, through five separate sales transactions. The Company received total net proceeds from these sales of $88,934, and recognized a gain on sale of $21,178 ($13,766 after-tax).

Additionally, in June 2013, the Company sold a water and wastewater utility system in Texas for net proceeds of $3,400. The sale resulted in the recognition of a gain on sale of these assets, net of expenses, of $1,025 ($615 after-tax).

Despite these transactions, one of our primary strategies continues to be to acquire additional utility systems, to maintain our existing systems where there is a strategic business benefit, and to actively oppose unilateral efforts by municipal governments to acquire any of our operations.

Sources of Capital
Since net operating cash flow plus advances and contributions in aid of construction have not been sufficient to fully fund cash requirements, we issued $1,670,223 of long-term debt and obtained other short-term borrowings during the past five years. At December 31, 2017, we have a $250,000 long-term revolving credit facility that expires in February 2021, of which $19,811 was designated for letter of credit usage, $170,189 was available for borrowing, and $60,000 of borrowings were outstanding at December 31, 2017. In addition, we have short-term lines of credit of $135,500, of which $131,850 was available as of December 31, 2017. These short-term lines of credit are subject to renewal on an annual basis. Although we believe we will be able to renew these facilities, there is no assurance that they will be renewed, or what the terms of any such renewal will be.

Our consolidated balance sheet historically has had a negative working capital position, whereby routinely our current liabilities exceed our current assets. Management believes that internally-generated funds along with existing credit facilities and the proceeds from the issuance of long-term debt will be adequate to provide sufficient working capital to maintain normal operations and to meet our financing requirements for at least the next twelve months.

Our loan and debt agreements require us to comply with certain financial covenants, which among other things, subject to specific exceptions, limit the Company's ratio of consolidated total indebtedness to consolidated total capitalization, and require a minimum level of earnings coverage over interest expense. During 2017, we were in compliance with our debt covenants under our credit facilities. Failure to comply with our debt covenants could result in an event of default, which could result in us being required to repay or refinance our borrowings before their due date, possibly limiting our future borrowings, and increasing our borrowing costs.

The Company has a universal shelf registration statement, which was filed with the SEC in February 2015, which allows for the potential future offer and sale by us, from time to time, in one or more public offerings, of an indeterminate amount of our common stock, preferred stock, debt securities, and other securities specified therein at indeterminate prices. The Company's Board of Directors has authorized the Company to issue up to $500,000 of our common stock, preferred stock, debt securities, and other securities specified therein under this universal shelf registration statement. The Company has not issued any securities to date under this universal shelf registration statement. This registration statement expires in February 2018, and we intend to file a new three-year universal shelf registration statement.

In addition, we have a shelf registration statement, which was filed with the SEC on February 27, 2015, to permit the offering from time to time of an aggregate of $500,000 of our common stock and shares of preferred stock in connection with acquisitions. During 2016, we issued 439,943 shares of common stock totaling $12,845 to acquire a water system. The balance remaining available for use under the acquisition shelf registration as of December 31, 2017 is $487,155.

We will determine the form and terms of any securities issued under the universal shelf registration statement and the acquisition shelf registration statement at the time of issuance.

We offer a Dividend Reinvestment and Direct Stock Purchase Plan (the "Plan") that provides a convenient and economical way to purchase shares of the Company. Under the direct stock purchase portion of the Plan, shares are issued throughout the year. The dividend reinvestment portion of the Plan offers a five percent discount on the purchase of shares of common stock with reinvested dividends. As of the December 2017 dividend payment, holders of 9.9% of the common shares outstanding participated in the dividend reinvestment portion of the Plan. The shares issued under the Plan are either original issue shares or shares purchased by the Company's transfer agent in the open-market. During the past five years, we have sold 551,788 original issue shares of common stock for net proceeds of $13,625 through the dividend reinvestment portion of the Plan, and we used the proceeds to invest in our operating subsidiaries, to repay short-term debt, and for general corporate purposes. In 2017, 2016, and 2015, 447,753, 484,645, and 535,439 shares of common stock were purchased under the dividend reinvestment portion of the Plan by the Company's transfer agent in the open-market for $15,168, $14,916, and $14,380, respectively.

The Company's Board of Directors has authorized us to repurchase our common stock, from time to time, in the open market or through privately negotiated transactions. In 2014, we repurchased 560,000 shares of our common stock in the open market for $13,280. In December 2014, the Company's Board of Directors authorized a share buyback program of up to 1,000,000 shares to minimize share dilution through timely and orderly share repurchases. In December 2015, the Company's Board of Directors added 400,000 shares to this program. In 2015, we repurchased 805,000 shares of our common stock in the open market for $20,502. In 2016, we did not repurchase any shares of our common stock in the open market under this program. This program expired on December 31, 2016.

Off-Balance Sheet Financing Arrangements
We do not engage in any off-balance sheet financing arrangements. We do not have any interest in entities referred to as variable interest entities, which includes special purpose entities and other structured finance entities.

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Contractual Obligations

The following table summarizes our contractual cash obligations as of December 31, 2017:

		Payments Due By Period			
	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Long-term debt	$ 2,143,127	$ 113,769	$ 189,025	$ 121,966	$ 1,718,367
Interest on fixed-rate, long-term debt (1)	1,366,407	77,497	148,277	131,248	1,009,385
Operating leases (2)	20,080	1,919	2,957	2,148	13,056
Unconditional purchase obligations (3)	31,510	4,853	8,989	8,024	9,644
Other purchase obligations (4)	63,064	63,064	-	-	-
Pension plan obligation (5)	12,484	12,484	-	-	-
Other obligations (6)	11,932	1,156	2,036	2,118	6,623
Total	$ 3,648,604	$ 274,742	$ 351,283	$ 265,504	$ 2,757,075

(1) Represents interest payable on fixed rate, long-term debt. Amounts reported may differ from actual due to future refinancing of debt.

(2) Represents operating leases that are noncancelable, before expiration, for the lease of motor vehicles, buildings, land and other equipment.

(3) Represents our commitment to purchase minimum quantities of water as stipulated in agreements with other water purveyors. We use purchased water to supplement our water supply, particularly during periods of peak customer demand. Our actual purchases may exceed the minimum required levels.

(4) Represents an approximation of the open purchase orders for goods and services purchased in the ordinary course of business.

(5) Represents contributions to be made to pension plan.

(6) Represents expenditures estimated to be required under legal and binding contractual obligations.

In addition to these obligations, we pay refunds on customers' advances for construction over a specific period of time based on operating revenues related to developer-installed water mains or as new customers are connected to and take service from such mains. After all refunds are paid, any remaining balance is transferred to contributions in aid of construction. The refund amounts are not included in the above table because the refund amounts and timing are dependent upon several variables, including new customer connections, customer consumption levels and future rate increases, which cannot be accurately estimated. Portions of these refund amounts are payable annually through 2027 and amounts not paid by the contract expiration dates become non-refundable.

In addition to the obligations disclosed in the contractual obligations table above, we have uncertain tax positions of $17,583. Although we believe our tax positions comply with applicable law, we have made judgments as to the sustainability of each uncertain tax position based on its technical merits. Due to the uncertainty of future cash outflows, if any, associated with our uncertain tax positions, we are unable to make a reasonable estimate of the timing or amounts that may be paid. See Note 7 – *Income Taxes* in this Annual Report for further information on our uncertain tax positions.

We will fund these contractual obligations with cash flows from operations and liquidity sources held by or available to us.

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The Company is routinely involved in legal matters, including both asserted and unasserted legal claims, during the ordinary course of business. See Note 9 – *Commitments and Contingencies* in this Annual Report for a discussion of the Company's legal matters. It is not always possible for management to make a meaningful estimate of the potential loss or range of loss associated with such litigation. Also, unanticipated changes in circumstances and/or revisions to the assessed probability of the outcomes of legal matters could result in expenses being incurred in future periods as well as an increase in actual cash required to resolve the legal matter.

Capitalization

The following table summarizes our capitalization during the past five years:

December 31,	2017	2016	2015	2014	2013
Long-term debt (1)	52.3%	50.8%	50.8%	49.4%	50.3%
Aqua America stockholders' equity	47.7%	49.2%	49.2%	50.6%	49.7%
	100.0%	100.0%	100.0%	100.0%	100.0%

(1) Includes current portion, as well as our borrowings under a variable rate revolving credit agreement of $60,000 at December 31, 2017, $25,000 at December 31, 2016, $60,000 at December 31, 2015, $72,000 at December 31, 2014, and $0 at December 31, 2013.

Over the past five years, the changes in the capitalization ratios primarily resulted from the issuance of debt to finance our acquisitions and capital program, growth in net income, the issuance of common stock, and the declaration of dividends.

INCOME TAX MATTERS

Tax Cuts and Jobs Act of 2017

On December 22, 2017, President Trump signed the TCJA into law. Substantially all of the provisions of the TCJA are effective for tax years beginning after December 31, 2017, except as noted below. The TCJA includes significant changes to the Code and the taxation of business entities, and includes specific provisions related to regulated public utilities. Significant changes include a reduction in the corporate federal income tax rate from 35% to 21%, and a limitation on the utilization of NOLs arising after December 31, 2017 to 80% of taxable income with an indefinite carryforward. The specific provisions related to regulated public utilities in the TCJA generally allow for the continued deductibility of interest expense, the elimination of full expensing for tax purposes of certain property acquired after September 27, 2017 and the continuation of certain rate normalization requirements for accelerated depreciation benefits. Our market-based companies still qualify for 100% deductibility of qualifying property acquired after September 27, 2017.

The Company's regulated operations accounting for income taxes are impacted by the FASB's accounting guidance for regulated operations. Reductions in accumulated deferred income tax balances due to the reduction in the corporate income tax rates to 21% under the provisions of the TCJA results in amounts previously collected from utility customers for these deferred taxes to be refundable to such customers, generally through reductions in future rates. The TCJA includes provisions that stipulate how these excess deferred taxes are to be passed back to customers for certain accelerated tax depreciation benefits. Potential refunds of other deferred taxes will be determined by our state regulators. Our state regulatory commissions have or are in the process of issuing procedural orders directing how the tax law changes are to be reflected in our utility customer rates. In addition, we have two rate cases currently in progress in two states in which TCJA is expected to be addressed in the new base rates. The December 31, 2017 consolidated balance sheet reflects the impact of the TCJA on our regulatory assets and liabilities, which reduced our regulatory assets by $357,262 and increased our regulatory liabilities by $303,320. These adjustments had no impact on our 2017 cash flows.

As of December 31, 2017, resulting from the TCJA enactment, our deferred income tax assets and liabilities were revalued based upon the new corporate income tax rate of 21%. The revaluation of our deferred income tax assets and liabilities resulted in the recognition of additional income tax expense of $3,141 to the extent revalued deferred income taxes are not believed to be recoverable in utility customer rates.

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CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our financial condition and results of operations are impacted by the methods, assumptions, and estimates used in the application of critical accounting policies. The following accounting policies are particularly important to our financial condition or results of operations, and require estimates or other judgments of matters of uncertainty. Changes in the estimates or other judgments included within these accounting policies could result in a significant change to the financial statements. We believe our most critical accounting policies include revenue recognition, the use of regulatory assets and liabilities, the valuation of our long-lived assets (which consist primarily of utility plant in service, regulatory assets, and goodwill) our accounting for post-retirement benefits, and our accounting for income taxes. We have discussed the selection and development of our critical accounting policies and estimates with the Audit Committee of the Board of Directors.

Revenue Recognition — Our utility revenues recognized in an accounting period include amounts billed to customers on a cycle basis and unbilled amounts based on estimated usage from the last billing to the end of the accounting period. The estimated usage is based on our judgment and assumptions; our actual results could differ from these estimates, which would result in operating revenues being adjusted in the period that the revision to our estimates is determined. In Virginia, we commence the billing of our utility customers, under new rates, upon authorization from the respective utility commission and before the final commission rate order is issued. The revenue recognized reflects an estimate based on our judgment of the final outcome of the commission's ruling. We monitor the applicable facts and circumstances regularly, and revise the estimate as required. The revenue billed and collected prior to the final ruling is subject to refund based on the commission's final ruling.

Regulatory Assets and Liabilities — We defer costs and credits on the balance sheet as regulatory assets and liabilities when it is probable that these costs and credits will be recognized in the rate-making process in a period different from when the costs and credits were incurred. These deferred amounts, both assets and liabilities, are then recognized in the income statement in the same period that they are reflected in our rates charged for water or wastewater service. In the event that our assessment as to the probability of the inclusion in the rate-making process is incorrect, the associated regulatory asset or liability would be adjusted to reflect the change in our assessment or change in regulatory approval.

Valuation of Long-Lived Assets, Goodwill and Intangible Assets — We review our long-lived assets for impairment, including utility plant in service and investment in joint venture. We also review regulatory assets for the continued application of the Financial Accounting Standards Board's ("FASB") accounting guidance for regulated operations. Our review determines whether there have been changes in circumstances or events, such as regulatory disallowances, or abandonments, that have occurred that require adjustments to the carrying value of these assets. Adjustments to the carrying value of these assets would be made in instances where their inclusion in the rate-making process is unlikely. For utility plant in service, we would recognize an impairment loss for any amount disallowed by the respective utility commission. For our equity method investment in joint venture, the Company evaluates whether it has experienced a decline in the value of its investment that is other than temporary in nature. We would recognize an impairment loss if the fair value of our investment is less than the carrying amount of the investment, and the decline in value is considered other than temporary. Additionally, the Company would recognize its share of an impairment loss if the joint venture determines that the carrying amount of the joint venture's assets exceeds the sum of the joint venture's undiscounted estimated cash flows.

Our long-lived assets, which consist primarily of utility plant in service, regulatory assets and investment in joint venture, are reviewed for impairment when changes in circumstances or events occur. These circumstances or events could include a decline in the market value or physical condition of a long-lived asset, an adverse change in the manner in which long-lived assets are used or planned to be used, a change in historical trends, operating cash flows associated with the long-lived assets, changes in macroeconomic conditions, industry and market conditions, or overall financial performance. When these circumstances or events occur, we determine whether it is more likely than not that the fair value of those assets is less than their carrying amount. If we determine that it is more likely than not (that is, the likelihood of more than 50 percent), we would recognize an impairment charge if it is determined that the carrying amount of an asset exceeds the sum of the undiscounted estimated cash flows. In this circumstance, we would recognize an impairment charge equal to the difference between the carrying amount and the fair value of the asset. Fair value is estimated to be the present value of future net cash flows associated with the asset, discounted using a discount rate commensurate with the risk and remaining life of the asset. This assessment requires significant management judgment and estimates that are based on budgets, general strategic business plans, historical trends and other data and relevant factors. These estimates include significant inherent uncertainties, since they involve forecasting future events. If changes in circumstances or events occur, or estimates and assumptions that were used in this review are changed, we may be required to record an impairment charge on our long-lived assets.

We have an investment in a joint venture, for which we own 49%, and use the equity method of accounting to account for this joint venture. The joint venture operates a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale in north central Pennsylvania. In the fourth quarter of 2015, the joint venture recognized an impairment charge on its long-lived assets, of which the Company's share totaled $32,975 ($21,433 after-tax), representing our share of the noncash impairment charge. Refer to Note 1 – *Summary of Significant Accounting Policies – Property, Plant and Equipment and Depreciation*, and *Investment in Joint Venture* in this Annual Report for additional information regarding the review of long-lived assets for impairment. See also *Consolidated Results – Equity (Earnings) Loss in Joint Venture* above in this Annual Report.

We test the goodwill attributable for each of our reporting units for impairment at least annually on July 31, or more often, if circumstances indicate a possible impairment may exist. When testing goodwill for impairment, we may assess qualitative factors, including macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, and entity specific events, for some or all of our reporting units to determine whether it's more likely than not that the fair value of a reporting unit is less than its carrying amount. Alternatively, based on our assessment of the qualitative factors previously noted, we may perform a quantitative goodwill impairment test by determining the fair value of a reporting unit based on a discounted cash flow analysis. If we perform a quantitative test and determine that the fair value of a reporting unit is less than its carrying amount, we would record an impairment loss for the amount by which a reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill. The assessment requires significant management judgment and estimates that are based on budgets, general strategic business plans, historical trends and other data and relevant factors. If changes in circumstances or events occur, or estimates and assumptions that were used in our impairment test change, we may be required to record an impairment charge for goodwill. Refer to Note 1 – *Summary of Significant Accounting Policies – Goodwill* in this Annual Report for information regarding the results of our annual impairment test.

Accounting for Post-Retirement Benefits — We maintain a qualified and a non-qualified defined benefit pension plan and plans that provide for post-retirement benefits other than pensions. Accounting for pension and other post-retirement benefits requires an extensive use of assumptions about the discount rate, expected return on plan assets, the rate of future compensation increases received by our employees, mortality, turnover and medical costs. Each assumption is reviewed annually with assistance from our actuarial consultant, who provides guidance in establishing the assumptions. The assumptions are selected to represent the average expected experience over time and may differ in any one year from actual experience due to changes in capital markets and the overall economy. These differences will impact the amount of pension and other post-retirement benefits expense that we recognize.

Our discount rate assumption, which is used to calculate the present value of the projected benefit payments of our post-retirement benefits, was determined by selecting a hypothetical portfolio of high quality corporate bonds appropriate to match the projected benefit payments of the plans. The selected bond portfolio was derived from a universe of Aa-graded corporate bonds, all of which were noncallable (or callable with make-whole provisions), and have at least $50,000 in outstanding value. The discount rate was then developed as the rate that equates the market value of the bonds purchased to the discounted value of the projected benefit payments of the plans. A decrease in the discount rate would increase our post-retirement benefits expense and benefit obligation. After reviewing the hypothetical portfolio of bonds, we selected a discount rate of 3.66% for our pension plan and 3.73% for our other post-retirement benefit plans as of December 31, 2017, which represent a 47 and 52 basis-point decrease as compared to the discount rates selected at December 31, 2016, respectively. Our post-retirement benefits expense under these plans is determined using the discount rate as of the beginning of the year, which was 4.13% for our pension plan and 4.25% for our other-postretirement benefit plans for 2017, and will be 3.66% for our pension plan and 3.73% for our other post-retirement benefit plans for 2018.

Our expected return on plan assets is determined by evaluating the asset class return expectations with our advisors as well as actual, long-term, historical results of our asset returns. The Company's market-related value of plan assets is equal to the fair value of the plans' assets as of the last day of its fiscal year, and is a determinant for the expected return on plan assets, which is a component of post-retirement benefits expense. The allocation of our plans' assets impacts our

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expected return on plan assets. In 2017, we changed the targeted allocation of the plans' assets to reflect 50% to 70% return seeking assets, and 30% to 50% liability hedging assets, which replaced the former targeted allocation of 25% to 75% domestic equities, 0% to 10% international equities, 25% to 50% fixed income, 0% to 5% alternative investments, and 0% to 20% cash and cash equivalents. Our post-retirement benefits expense increases as the expected return on plan assets decreases. We believe that our actual long-term asset allocations on average will approximate our targeted allocations. Our targeted allocations are driven by our investment strategy to earn a reasonable rate of return while maintaining risk at acceptable levels through the diversification of investments across and within various asset categories. For 2017, we used a 7.00% expected return on plan assets assumption which will decrease to 6.75% for 2018.

Funding requirements for qualified defined benefit pension plans are determined by government regulations and not by accounting pronouncements. In accordance with funding rules and our funding policy, during 2018 our pension contribution is expected to be $12,484. Future years' contributions will be subject to economic conditions, plan participant data and the funding rules in effect at such time as the funding calculations are performed, though we expect future changes in the amount of contributions and expense recognized to be generally included in customer rates.

Accounting for Income Taxes — We estimate the amount of income tax payable or refundable for the current year and the deferred income tax liabilities and assets that results from estimating temporary differences resulting from the treatment of specific items, such as depreciation, for tax and financial statement reporting. Generally, these differences result in the recognition of a deferred tax asset or liability on our consolidated balance sheet and require us to make judgments regarding the probability of the ultimate tax impact of the various transactions we enter into. Based on these judgments, we may record tax reserves or adjustments to valuation allowances on deferred tax assets to reflect the expected realization of future tax benefits. Actual income taxes could vary from these estimates and changes in these estimates can increase income tax expense in the period that these changes in estimates occur.

Our determination of what qualifies as a capital cost versus a tax deduction, for qualifying utility asset improvements, as it relates to our income tax accounting method change beginning in 2012, is subject to subsequent adjustment as well as IRS audits, changes in income tax laws, including regulations regarding tax-basis depreciation as it applies to our capital expenditures, or qualifying utility asset improvements, the expiration of a statute of limitations, or other unforeseen matters could impact the tax benefits that have already been recognized. We establish reserves for uncertain tax positions based upon management's judgment as to the sustainability of these positions. These accounting estimates related to the uncertain tax position reserve require judgments to be made as to the sustainability of each uncertain tax position based on its technical merits. We believe our tax positions comply with applicable law and that we have adequately recorded reserves as required. However, to the extent the final tax outcome of these matters is different than our estimates recorded, we would then need to adjust our tax reserves which could result in additional income tax expense or benefits in the period that this information is known.

IMPACT OF RECENT ACCOUNTING PRONOUNCEMENTS

We describe the impact of recent accounting pronouncements in Note 1 – *Summary of Significant Accounting Policies* in this Annual Report.

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Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

We are subject to market risks in the normal course of business, including changes in interest rates and equity prices. The exposure to changes in interest rates is a result of financings through the issuance of fixed rate long-term debt. Such exposure is typically related to financings between utility rate increases, since generally our rate increases include a revenue level to allow recovery of our current cost of capital. Interest rate risk is managed through the use of a combination of long-term debt, which is at fixed interest rates, and short-term debt, which is at floating interest rates. As of December 31, 2017, the debt maturities by period, in thousands of dollars, and the weighted average interest rate for long-term debt are as follows:

	2018	2019	2020	2021	2022	Thereafter	Total	Fair Value
Long-term debt:								
Fixed rate	$ 113,769	$ 144,622	$ 44,408	$ 36,811	$ 25,155	$ 1,718,367	$ 2,083,127	$ 2,202,785
Variable rate	-	-	-	60,000	-	-	60,000	60,000
Total	$ 113,769	$ 144,622	$ 44,408	$ 96,811	$ 25,155	$ 1,718,367	$ 2,143,127	$ 2,262,785
Weighted average interest rate*	4.36%	4.09%	5.06%	3.40%	4.95%	3.66%		

*Weighted average interest rate of 2021 long-term debt maturity is as follows: fixed rate debt of 4.36% and variable rate debt of 2.20%.

From time to time, we make investments in marketable equity securities. As a result, we are exposed to the risk of changes in equity prices for the "available-for-sale" marketable equity securities. As of December 31, 2017, we have assets of, in thousands of dollars, $21,776 that are classified as "available-for-sale" securities to fund our deferred compensation and non-qualified pension plan liabilities. The market risk of the deferred compensation plan assets are borne by the participants in the deferred compensation plan.

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Item 8. *Financial Statements and Supplementary Data*

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Aqua America, Inc.:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets and statements of capitalization of Aqua America Inc. and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of net income, of comprehensive income, of equity and of cash flows for each of the three years in the period ended December 31, 2017, including the related notes and schedule of condensed parent company financial statements for each of the three years in the period ended December 31, 2017 appearing under Item 15 (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Philadelphia, Pennsylvania

February 28, 2018

We have served as the Company's auditor since 2000.

AQUA AMERICA, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(In thousands of dollars, except per share amounts)

	December 31, 2017	December 31, 2016
Assets		
Property, plant and equipment, at cost	$ 7,003,993	$ 6,509,117
Less: accumulated depreciation	1,604,133	1,507,502
Net property, plant and equipment	5,399,860	5,001,615
Current assets:		
Cash and cash equivalents	3,209	3,763
Accounts receivable and unbilled revenues, net	98,596	97,394
Inventory, materials and supplies	13,880	12,961
Prepayments and other current assets	12,542	12,804
Assets held for sale	3,019	1,728
Total current assets	131,246	128,650
Regulatory assets	713,971	948,647
Deferred charges and other assets, net	38,485	40,845
Investment in joint venture	6,671	7,026
Goodwill	42,230	32,208
Total assets	$ 6,332,463	$ 6,158,991
Liabilities and Equity		
Aqua America stockholders' equity:		
Common stock at $.50 par value, authorized 300,000,000 shares, issued 180,700,251 and 180,311,345 in 2017 and 2016	$ 90,350	$ 90,155
Capital in excess of par value	807,135	797,513
Retained earnings	1,132,756	1,032,944
Treasury stock, at cost, 2,986,308 and 2,916,969 shares in 2017 and 2016	(73,280)	(71,113)
Accumulated other comprehensive income	660	569
Total stockholders' equity	1,957,621	1,850,068
Long-term debt, excluding current portion	2,029,358	1,759,962
Less: debt issuance costs	21,605	22,357
Long-term debt, excluding current portion, net of debt issuance costs	2,007,753	1,737,605
Commitments and contingencies (See Note 9)		
Current liabilities:		
Current portion of long-term debt	143,769	150,671
Loans payable	3,650	6,535
Accounts payable	59,165	47,256
Book overdraft	21,629	12,616
Accrued interest	21,329	18,367
Accrued taxes	23,764	25,607
Other accrued liabilities	11,182	40,484
Total current liabilities	284,488	301,536
Deferred credits and other liabilities:		
Deferred income taxes and investment tax credits	769,073	1,269,253
Customers' advances for construction	93,186	91,843
Regulatory liabilities	541,910	250,635
Other	107,341	115,583
Total deferred credits and other liabilities	1,511,510	1,727,314
Contributions in aid of construction	571,091	542,468
Total liabilities and equity	$ 6,332,463	$ 6,158,991

See accompanying notes to consolidated financial statements.

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AQUA AMERICA, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF NET INCOME
(In thousands of dollars)

	Years ended December 31,		
	2017	2016	2015
Operating revenues	$ 809,525	$ 819,875	$ 814,204
Operating expenses:			
Operations and maintenance	287,206	304,897	309,310
Depreciation	136,302	130,987	125,290
Amortization	422	2,021	3,447
Taxes other than income taxes	56,628	56,385	55,057
Total operating expenses	480,558	494,290	493,104
Operating income	328,967	325,585	321,100
Other expense (income):			
Interest expense, net	88,341	80,594	76,536
Allowance for funds used during construction	(15,211)	(8,815)	(6,219)
Gain on sale of other assets	(484)	(378)	(468)
Gain on extinguishment of debt	-		(678)
Equity (earnings) loss in joint venture	(331)	(976)	35,177
Income before income taxes	256,652	255,160	216,752
Provision for income taxes	16,914	20,978	14,962
Net income	$ 239,738	$ 234,182	$ 201,790
Net income per common share:			
Basic	$ 1.35	$ 1.32	$ 1.14
Diluted	$ 1.35	$ 1.32	$ 1.14
Average common shares outstanding during the period:			
Basic	177,612	177,273	176,788
Diluted	178,175	177,846	177,517
Cash dividends declared per common share	$ 0.7920	$ 0.7386	$ 0.6860

See accompanying notes to consolidated financial statements.

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AQUA AMERICA, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In thousands of dollars)

	Years ended December 31,		
	2017	2016	2015
Net income	$ 239,738	$ 234,182	$ 201,790
Other comprehensive income, net of tax:			
Unrealized holding gain (loss) on investments, net of tax expense (benefit) of $102, $21, and $(58) for the years ended December 31, 2017, 2016, and 2015, respectively	191	39	(101)
Reclassification of gain on sale of investment to net income, net of tax expense of $30 for the twelve months ended December 31, 2016 (1)	-	(57)	-
Comprehensive income	$ 239,929	$ 234,164	$ 201,689

See accompanying notes to consolidated financial statements.

(1) Amount of pre-tax gain of $87 reclassified from accumulated other comprehensive income to gain on sale of other assets on the consolidated statement of net income for the year ended December 31, 2016.

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AQUA AMERICA, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CAPITALIZATION

(In thousands of dollars, except per share amounts)

		December 31, 2017	December 31, 2016
Aqua America stockholders' equity:			
Common stock, $.50 par value		$ 90,360	$ 90,155
Capital in excess of par value		807,135	797,513
Retained earnings		1,132,506	1,032,844
Treasury stock, at cost		(73,280)	(71,113)
Accumulated other comprehensive income		860	669
Total stockholders' equity		1,957,621	1,850,068
Long-term debt of subsidiaries (substantially collateralized by utility plant):			
Interest Rate Range	Maturity Date Range		
0.00% to 0.99%	2023 to 2033	4,196	4,661
1.00% to 1.99%	2019 to 2035	12,914	15,539
2.00% to 2.99%	2019 to 2033	19,254	19,668
3.00% to 3.99%	2019 to 2056	475,232	381,944
4.00% to 4.99%	2020 to 2057	631,599	487,318
5.00% to 5.99%	2019 to 2043	205,578	213,078
6.00% to 6.99%	2018 to 2036	44,000	52,985
7.00% to 7.99%	2022 to 2027	32,335	33,066
8.00% to 8.99%	2021 to 2025	6,092	6,565
9.00% to 9.99%	2018 to 2026	25,700	26,400
10.00% to 10.99%	2018	6,000	6,000
		1,462,900	1,247,224
Notes payable to bank under revolving credit agreement, variable rate, due 2021		60,000	25,000
Unsecured notes payable:			
Bank notes at 1.975% and 2.48% due 2018 and 2019		100,000	100,000
Notes at 3.01% and 3.59% due 2027 and 2041		245,000	245,000
Notes ranging from 4.62% to 4.87%, due 2018 through 2024		122,800	133,600
Notes ranging from 5.20% to 5.95%, due 2018 through 2037		152,427	159,809
Total long-term debt		2,143,127	1,910,633
Current portion of long-term debt		113,769	150,671
Long-term debt, excluding current portion		2,029,358	1,759,962
Less: debt issuance costs		21,605	22,357
Long-term debt, excluding current portion, net of debt issuance costs		2,007,753	1,737,605
Total capitalization		$ 3,965,374	$ 3,587,673

See accompanying notes to consolidated financial statements.

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AQUA AMERICA, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY
(In thousands of dollars)

	Common stock	Capital in excess of par value	Retained earnings	Treasury stock	Accumulated Other Comprehensive Income	Noncontrolling Interest	Total
Balance at December 31, 2014	$ 89,296	$ 758,145	$ 849,952	$ (42,838)	$ 788	$ 40	$ 1,655,383
Net income	-	-	201,790	-	-	-	201,790
Other comprehensive loss, net of income tax benefit of $53	-	-	-	-	(101)	-	(101)
Dividends	-	-	(121,248)	-	-	-	(121,248)
Sale of stock (26,295 shares)	13	664	-	-	-	-	677
Repurchase of stock (981,585 shares)	-	-	-	(25,247)	-	-	(25,247)
Equity compensation plan (321,402 shares)	161	(161)	-	-	-	-	-
Exercise of stock options (424,709 shares)	212	7,328	-	-	-	-	7,540
Stock-based compensation	-	5,860	(433)	-	-	-	5,427
Employee stock plan tax benefits	-	2,602	-	-	-	-	2,602
Other	-	(853)	-	-	-	(40)	(893)
Balance at December 31, 2015	89,682	773,585	930,061	(68,085)	687	-	1,725,930
Net income	-	-	234,182	-	-	-	234,182
Other comprehensive loss, net of income tax benefit of $9	-	-	-	-	(18)	-	(18)
Dividends	-	-	(130,923)	-	-	-	(130,923)
Stock issued for acquisition (439,943 shares)	220	12,625	-	-	-	-	12,845
Sale of stock (47,478 shares)	24	1,364	-	-	-	-	1,388
Repurchase of stock (97,400 shares)	-	-	-	(3,028)	-	-	(3,028)
Equity compensation plan (231,502 shares)	115	(115)	-	-	-	-	-
Exercise of stock options (228,762 shares)	114	4,146	-	-	-	-	4,260
Stock-based compensation	-	5,390	(476)	-	-	-	4,914
Employee stock plan tax benefits	-	1,329	-	-	-	-	1,329
Other	-	(811)	-	-	-	-	(811)
Balance at December 31, 2016	90,155	797,513	1,032,844	(71,113)	669	-	1,850,068
Net income	-	-	239,738	-	-	-	239,738
Other comprehensive income, net of income tax of $102	-	-	-	-	191	-	191
Dividends	-	-	(140,660)	-	-	-	(140,660)
Sale of stock (45,121 shares)	23	1,430	-	-	-	-	1,453
Repurchase of stock (69,349 shares)	-	-	-	(2,167)	-	-	(2,167)
Equity compensation plan (169,258 shares)	85	(85)	-	-	-	-	-
Exercise of stock options (174,527 shares)	87	2,786	-	-	-	-	2,873
Stock-based compensation	-	6,342	(348)	-	-	-	5,994
Cumulative effect of change in accounting principle - windfall tax benefit	-	-	982	-	-	-	982
Other	-	(851)	-	-	-	-	(851)
Balance at December 31, 2017	$ 90,350	$ 807,135	$ 1,132,556	$ (73,280)	$ 860	$ -	$ 1,957,621

See accompanying notes to consolidated financial statements.

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AQUA AMERICA, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands of dollars)

	Years ended December 31,		
	2017	2016	2015
Cash flows from operating activities:			
[redacted]			
Adjustments to reconcile net income to net cash flows from operating activities:			
[redacted]			
Deferred income taxes	13,780	17,250	16,506
[redacted]			
Stock-based compensation	6,342	5,390	5,860
[redacted]			
Gain on sale of other assets	(484)	(378)	(468)
[redacted]			
Equity (earnings) loss in joint venture	(331)	(976)	35,177
[redacted]			
Net change in payables, accrued interest, accrued taxes and other accrued liabilities	(763)	4,756	(3,469)
[redacted]			
Other	3,250	11,649	4,278
[redacted]			
Cash flows from investing activities:			
[redacted]			
Acquisitions of utility systems and other, net	(5,860)	(9,423)	(28,989)
[redacted]			
Net proceeds from the sale of utility systems and other assets	1,342	7,746	648
[redacted]			
Net cash flows used in investing activities	(480,384)	(383,209)	(394,062)
Cash flows from financing activities:			
[redacted]			
Repayments of customers' advances	(6,536)	(3,763)	(3,977)
[redacted]			
Proceeds from long-term debt	591,024	503,586	560,544
[redacted]			
Change in cash overdraft position	9,012	(8,076)	(739)
[redacted]			
Proceeds from exercised stock options	2,873	4,260	7,540
[redacted]			
Repurchase of common stock	(2,167)	(3,028)	(25,247)
[redacted]			
Other	(851)	(1,186)	(853)
[redacted]			
Net increase (decrease) in cash and cash equivalents	441	534	(909)
[redacted]			
Cash and cash equivalents at end of year	$ 4,204	$ 3,763	$ 3,229
Cash paid during the year for:			
[redacted]			
Income taxes	3,177	2,739	6,902
Non-cash investing activities:			
[redacted]			
Non-cash customer advances for construction	39,220	26,234	27,992

See accompanying notes to consolidated financial statements.

See Note 2 – *Acquisitions,* Note 10 – *Long-term Debt and Loans Payable,* and Note 14 – *Employee Stock and Incentive Plan* for a description of non-cash activities.

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AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(In thousands of dollars, except per share amounts)

Note 1 – *Summary of Significant Accounting Policies*

Nature of Operations — Aqua America, Inc. ("Aqua America," the "Company," "we," "our", or "us") is the holding company for regulated utilities providing water or wastewater services concentrated in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, and Virginia. Our largest operating subsidiary is Aqua Pennsylvania, Inc., which accounted for approximately 52% of our operating revenues and approximately 74% of our net income for 2017. As of December 31, 2017, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of people we serve. Aqua Pennsylvania's service territory is located in the suburban areas north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. The Company's other regulated utility subsidiaries provide similar services in seven other states. In addition, the Company's market-based activities are conducted through Aqua Infrastructure LLC and Aqua Resources, Inc. Aqua Infrastructure provides non-utility raw water supply services for firms in the natural gas drilling industry. Aqua Resources provides water and wastewater services through two operating and maintenance contracts with municipal authorities close to our utility companies' service territory; and offers, through a third party, water and wastewater line repair service and protection solutions to households. In 2017, we completed the sale of business units that are reported within the Company's market-based subsidiary, Aqua Resources, which installed and tested devices that prevent the contamination of potable water and repaired water and wastewater systems, and repaired and performed maintenance on water and wastewater systems. Additionally, during 2016 we completed the sale of business units within Aqua Resources, which were reported as assets held for sale in the Company's consolidated balance sheets, which provided liquid waste hauling and disposal services, and inspection, and cleaning and repair of storm and sanitary wastewater lines.

The Company has identified ten operating segments and has one reportable segment named the Regulated segment. The reportable segment is comprised of eight operating segments for our water and wastewater regulated utility companies which are organized by the states where we provide these services. These operating segments are aggregated into one reportable segment since each of the Company's operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution or wastewater collection methods, and the nature of the regulatory environment. In addition, Aqua Resources and Aqua Infrastructure are not quantitatively significant to be reportable and are included as a component of "Other," in addition to corporate costs that have not been allocated to the Regulated segment and intersegment eliminations.

Regulation — Most of the operating companies that are regulated public utilities are subject to regulation by the utility commissions of the states in which they operate. The respective utility commissions have jurisdiction with respect to rates, service, accounting procedures, issuance of securities, acquisitions and other matters. Some of the operating companies that are regulated public utilities are subject to rate regulation by county or city government. Regulated public utilities follow the Financial Accounting Standards Board's ("FASB") accounting guidance for regulated operations, which provides for the recognition of regulatory assets and liabilities as allowed by regulators for costs or credits that are reflected in current rates or are considered probable of being included in future rates. The regulatory assets or liabilities are then relieved as the cost or credit is reflected in rates.

Use of Estimates in Preparation of Consolidated Financial Statements — The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

Basis of Presentation – The consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated. Certain prior period amounts have been reclassified to conform to the current period presentation in the consolidated statements of cash flows:

- pension and other postretirement benefit contributions; and
- as a result of the adoption in 2017 of the FASB's accounting guidance on the classification of certain cash receipts and cash payments, the presentation of debt extinguishment costs (refer to Note 1 – *Summary of Significant Accounting Policies, Recent Accounting Pronouncements).*

Additionally, certain prior period amounts have been reclassified to conform to the current period presentation:

- in the consolidated balance sheets for the presentation of book overdraft, and
- in Note 17 – *Segment Information* of total assets for Other and Eliminations for the reclassification of regulatory assets previously reflected within Other and Eliminations that are now presented with the Regulated segment.

Recognition of Revenues — Revenues in our Regulated segment principally include amounts billed to customers on a cycle basis and unbilled amounts based on estimated usage from the latest billing to the end of the accounting period. In addition, the Company's market-based subsidiary Aqua Resources recognizes revenues when services are performed and Aqua Infrastructure recognizes revenues when services are performed. The Company's market-based subsidiaries recognized revenues of $4,798 in 2017, $20,091 in 2016, and $34,909 in 2015.

Property, Plant and Equipment and Depreciation — Property, plant and equipment consist primarily of utility plant. The cost of additions includes contracted cost, direct labor and fringe benefits, materials, overheads, and for additions meeting certain criteria, allowance for funds used during construction. Water systems acquired are typically recorded at estimated original cost of utility plant when first devoted to utility service and the applicable depreciation is recorded to accumulated depreciation. The difference between the estimated original cost, less applicable accumulated depreciation, and the purchase price is recorded as goodwill, or as an acquisition adjustment within utility plant as permitted by the applicable regulatory jurisdiction. At December 31, 2017, utility plant includes a net credit acquisition adjustment of $24,550, which is generally being amortized from 2 to 59 years. Amortization of the acquisition adjustments totaled $2,774 in 2017, $2,223 in 2016, and $2,556 in 2015.

Utility expenditures for maintenance and repairs, including major maintenance projects and minor renewals and betterments, are charged to operating expenses when incurred in accordance with the system of accounts prescribed by the utility commissions of the states in which the company operates. The cost of new units of property and betterments are capitalized. Utility expenditures for water main cleaning and relining of pipes are deferred and recorded in net property, plant and equipment in accordance with the FASB's accounting guidance for regulated operations. As of December 31, 2017, $16,430 of these costs have been incurred since the last respective rate proceeding and the Company expects to recover these costs in future rates.

The cost of software upgrades and enhancements are capitalized if they result in added functionality, which enables the software to perform tasks it was previously incapable of performing. Information technology costs associated with major system installations, conversions and improvements, such as software training, data conversion and business process reengineering costs, are deferred as a regulatory asset if the Company expects to recover these costs in future rates. If these costs are not deferred, then these costs are charged to operating expenses when incurred. As of December 31, 2017, $34,775 of these costs have been deferred since the last respective rate proceeding as a regulatory asset, and the deferral is reported as a component of net property, plant and equipment.

When units of utility property are replaced, retired or abandoned, the recorded value thereof is credited to the asset account and such value, together with the net cost of removal, is charged to accumulated depreciation. To the extent the Company anticipates recovery of the cost of removal or other retirement costs through rates after the retirement costs are incurred, a regulatory asset is recorded as those costs are incurred. 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, which are not yet utilized, result in a regulatory liability being reported based on the amounts previously recovered through customer rates.

The straight-line remaining life method is used to compute depreciation on utility plant. Generally, the straight-line method is used with respect to transportation and mechanical equipment, office equipment and laboratory equipment.

Long-lived assets of the Company, which consist primarily of utility plant in service, regulatory assets, and investment in joint venture, are reviewed for impairment when changes in circumstances or events occur. These circumstances or events could include a disallowance of utility plant in service or regulatory assets by the respective utility commission, a decline in the market value or physical condition of a long-lived asset, an adverse change in the manner in which long-lived assets are used or planned to be used, a change in historical trends, operating cash flows associated with the long-lived assets, changes in macroeconomic conditions, industry and market conditions, or overall financial performance. When these circumstances or events occur, the Company determines whether it is more likely than not that the fair value of those assets is less than their carrying amount. If the Company determines that it is more likely than not (that is, the likelihood of more than 50 percent), the Company would recognize an impairment charge if it is determined that the carrying amount of an asset exceeds the sum of the undiscounted estimated cash flows. In this circumstance, the Company would recognize an impairment charge equal to the difference between the carrying amount and the fair value of the asset. Fair value is estimated to be the present value of future net cash flows associated with the asset, discounted using a discount rate commensurate with the risk and remaining life of the asset. There has been no change in circumstances or events that have occurred that require adjustments to the carrying values of the Company's long-lived assets, except for an impairment charge recognized by the joint venture on its long-lived assets in 2015.

Allowance for Funds Used During Construction — The allowance for funds used during construction ("AFUDC") represents the capitalized cost of funds used to finance the construction of utility plant. In general, AFUDC is applied to construction projects requiring more than one month to complete. No AFUDC is applied to projects funded by customer advances for construction, contributions in aid of construction, or applicable state-revolving fund loans. AFUDC includes the net cost of borrowed funds and a rate of return on other funds when used, and is recovered through water rates as the utility plant is depreciated. The amount of AFUDC related to equity funds in 2017 was $11,633, 2016 was $6,561, and 2015 was $4,621. No interest was capitalized by our market-based businesses.

Cash and Cash Equivalents — The Company considers all highly liquid investments with an original maturity of three months or less, which are not restricted for construction activity, to be cash equivalents.

The Company had a book overdraft, which represents transactions that have not cleared the bank accounts at the end of the period, for specific disbursement cash accounts of $21,629 and $12,616 at December 31, 2017 and 2016, respectively. The Company transfers cash on an as-needed basis to fund these items as they clear the bank in subsequent periods. The balance of the book overdraft is reported as book overdraft and the change in the book overdraft balance is reported as cash flows from financing activities, due to our ability to fund the overdraft with the Company's credit facility.

Funds Restricted for Construction Activity — The proceeds received from specific financings for construction and capital improvement of utility facilities are held in escrow until the designated expenditures are incurred. These amounts are reported as funds restricted for construction activity and are expected to be released over time as the capital projects are funded. As of December 31, 2017 and 2016, the Company did not have any funds restricted for construction activity.

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AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

Accounts Receivable — Accounts receivable are recorded at the invoiced amounts, which consists of billed and unbilled revenues. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in our existing accounts receivable, and is determined based on historical write-off experience and the aging of account balances. The Company reviews the allowance for doubtful accounts quarterly. Account balances are written off against the allowance when it is probable the receivable will not be recovered. When utility customers request extended payment terms, credit is extended based on regulatory guidelines, and collateral is not required.

Inventories, Materials and Supplies — Inventories are stated at cost. Cost is determined using the first-in, first-out method.

Regulatory Assets, Deferred Charges and Other Assets — Deferred charges and other assets consist primarily of assets held to compensate employees in the future who participate in the Company's deferred compensation plan and other costs. Other costs, for which the Company has received or expects to receive prospective rate recovery, are deferred as a regulatory asset and amortized over the period of rate recovery in accordance with the FASB's accounting guidance for regulated operations. See Note – 6 *Regulatory Assets and Liabilities* for further information regarding the Company's regulatory assets.

Marketable equity securities are carried on the balance sheet at fair market value, and changes in fair value are included in other comprehensive income.

Investment in Joint Venture – The Company uses the equity method of accounting to account for our 49% investment in a joint venture with a firm in the natural gas industry for the construction and operation of a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale in north-central Pennsylvania, which commenced operations in 2012. Our initial investment is carried at cost. Subsequently, the carrying amount of our investment is adjusted to reflect capital contributions or distributions, and our equity in earnings or losses since the commencement of the system's operations, as well as a decline in the fair value of our investment. Our share of equity earnings or losses in the joint venture is reported in the consolidated statements of net income as equity (earnings) losses in joint venture. During 2017 and 2016 we received distributions of $686 and $1,666, respectively. For our equity method investment in joint venture, the Company evaluates whether it has experienced a decline in the value of its investment that is other than temporary in nature. We would recognize an impairment loss if the fair value of our investment is less than the carrying amount of the investment, and the decline in value is considered other than temporary. Additionally, the Company would recognize its share of an impairment loss if the joint venture determines that the carrying amount of the joint venture's assets exceeds the sum of the joint venture's undiscounted estimated cash flows.

During 2015, the joint venture experienced the following events:

- a decline in natural gas prices, in 2015,
- a distinguishable reduction in the volume of water sales by the joint venture which led to a lowered forecast in 2015 on future water sales volumes by the joint venture, and
- changes in the natural gas industry and market conditions.

At the time, these market conditions were largely associated with natural gas prices, which sharply declined in 2015 and this downturn no longer appeared temporary and instead was expected to be a long-term condition. It was then determined that the carrying amount of the joint venture's long-lived assets exceeded the sum of the joint venture's undiscounted estimated cash flows, which resulted in the recognition of a noncash impairment charge of $32,975 ($21,433 after-tax) in 2015, representing the Company's share of the impairment charge. The impairment charge, on a pre-tax basis, is reported as equity loss in joint venture on the Company's consolidated statements of income. The amount of the impairment charge recognized by the joint venture is equal to the difference between the carrying value and the fair value of the long-lived assets. Fair value is estimated to be the present value of the future net cash flows associated with the assets, discounted using a rate commensurate with the risk and remaining life of the assets.

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AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

Goodwill — Goodwill represents the excess cost over the fair value of net tangible and identifiable intangible assets acquired through acquisitions. Goodwill is not amortized but is tested for impairment annually, or more often, if circumstances indicate a possible impairment may exist. When testing goodwill for impairment, we may assess qualitative factors, including macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, and entity specific events, for some or all of our reporting units to determine whether it's more likely than not that the fair value of a reporting unit is less than its carrying amount. Alternatively, based on our assessment of the qualitative factors previously noted, we may perform a quantitative goodwill impairment test by determining the fair value of a reporting unit based on a discounted cash flow analysis. If we perform a quantitative test and determine that the fair value of a reporting unit is less than its carrying amount, we would record an impairment loss for the amount by which a reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill. The Company tested the goodwill attributable for each of our reporting units for impairment as of July 31, 2017, and concluded that the estimated fair value of each reporting unit, which has goodwill recorded, exceeded the reporting unit's carrying amount, indicating that none of the Company's goodwill was impaired. The following table summarizes the changes in the Company's goodwill:

	Regulated Segment	Other	Consolidated
Balance at December 31, 2015	$ 27,246	$ 6,620	$ 33,866
Goodwill acquired during year	10,378	-	10,378
Reclassifications to utility plant acquisition adjustment	(98)		(98)
Disposition	(159)	(1,232)	(1,391)
Classified as assets held for sale		(547)	(547)
Balance at December 31, 2016	37,367	4,841	42,208
Goodwill acquired during year	72	-	72
Reclassifications to utility plant acquisition adjustment	(50)	-	(50)
Balance at December 31, 2017	$ 37,389	$ 4,841	$ 42,230

The reclassification of goodwill to utility plant acquisition adjustment results from a mechanism approved by the applicable utility commission. The mechanism provides for the transfer over time, and the recovery through customer rates, of goodwill associated with some acquisitions upon achieving specific objectives.

The goodwill allocated to a disposition or classified as assets held for sale results from the allocation of goodwill for market-based business units based on their relative fair value as compared to Aqua Resource's fair value.

Income Taxes — The Company accounts for some income and expense items in different time periods for financial and tax reporting purposes. Deferred income taxes are provided on specific temporary differences between the tax basis of the assets and liabilities, and the amounts at which they are carried in the consolidated financial statements. The income tax effect of temporary differences not currently recovered in rates is recorded as deferred taxes with an offsetting regulatory asset or liability. These deferred income taxes are based on the enacted tax rates expected to be in effect when such temporary differences are projected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amount more likely than not to be realized. Investment tax credits are deferred and amortized over the estimated useful lives of the related properties. Judgment is required in evaluating the Company's Federal and state tax positions. Despite management's belief that the Company's tax return positions are fully supportable, the Company establishes reserves when it believes that its tax positions are likely to be challenged and it may not fully prevail in these challenges. The Company's provision for income taxes includes interest, penalties and reserves for uncertain tax positions.

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(In thousands of dollars, except per share amounts)

In 2012, the Company changed its tax method of accounting for qualifying utility asset improvement costs in Aqua Pennsylvania effective with the tax year ended December 31, 2012 and for prior tax years. The tax accounting method was changed to permit the expensing of qualifying utility asset improvement costs that were previously being capitalized and depreciated for book and tax purposes. This change was implemented in response to a June 2012 rate order issued by the Pennsylvania Public Utility Commission to Aqua Pennsylvania, which provides for a reduction in current income tax expense as a result of the recognition of income tax benefits for qualifying utility asset improvements. This change results in a significant reduction in the effective income tax rate, a reduction in current income tax expense, and reduces the amount of taxes currently payable. For qualifying capital expenditures made prior to 2012, the resulting tax benefits have been deferred as of December 31, 2012 and, in accordance with the rate order, a ten year amortization of the income tax benefits, which reduces future income tax expense, commenced in 2013.

Customers' Advances for Construction and Contributions in Aid of Construction — Water mains, other utility property or, in some instances, cash advances to reimburse the Company for its costs to construct water mains or other utility property, are contributed to the Company by customers, real estate developers and builders in order to extend utility service to their properties. The value of these contributions is recorded as customers' advances for construction. Over time, the amount of non-cash contributed property will vary based on the timing of the contribution of the non-cash property and the volume of non-cash contributed property received in connection with development in our service territories. The Company makes refunds on these advances over a specific period of time based on operating revenues related to the property, or as new customers are connected to and take service from the applicable water main. After all refunds are made, any remaining balance is transferred to contributions in aid of construction. Contributions in aid of construction include direct non-refundable contributions and the portion of customers' advances for construction that become non-refundable.

Based on regulatory conventions in states where the Company operates, generally our subsidiaries depreciate contributed property and amortize contributions in aid of construction at the composite rate of the related property. Contributions in aid of construction and customers' advances for construction are deducted from the Company's rate base for rate-making purposes, and therefore, no return is earned on contributed property.

Stock-Based Compensation — The Company records compensation expense in the financial statements for stock-based awards based on the grant date fair value of those awards. Stock-based compensation expense includes an estimate for pre-vesting forfeitures and is recognized over the requisite service periods of the awards on either a straight-line basis, or the graded vesting method, which is generally commensurate with the vesting term.

Fair Value Measurements – The Company follows the FASB's accounting guidance for fair value measurements and disclosures, which defines fair value and establishes a framework for using fair value to measure assets and liabilities. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

- Level 1: unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access;
- Level 2: inputs other than Level 1 that are observable, either directly or indirectly, such as quoted market prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in non-active markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or
- Level 3: inputs that are unobservable and significant to the fair value measurement.

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The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs. Additionally, assets that are measured at fair value using the net asset value ("NAV") per share practical expedient are not classified in the fair value hierarchy. There have been no changes in the valuation techniques used to measure fair value or asset or liability transfers between the levels of the fair value hierarchy for the years ended December 31, 2017 and 2016.

Recent Accounting Pronouncements — In March 2017, the FASB issued updated accounting guidance on the presentation of net periodic pension and postretirement benefit cost (net benefit cost). Historically, net benefit cost is reported as an employee cost within operating income, net of amounts capitalized. The guidance requires the bifurcation of net benefit cost. The service cost component will be presented with other employee compensation costs in operating income and the other components of net benefit cost will be reported separately outside of operating income, and will not be eligible for capitalization. The guidance is effective for annual reporting periods beginning after December 15, 2017, and interim periods within that reporting period, and is to be applied retrospectively for the presentation of the service cost component and the other components of net benefit cost, and on a prospective basis for the capitalization of only the service cost component of net benefit cost. On January 1, 2018, the Company adopted the updated guidance, which did not have a material impact on its results of operations or financial position.

In January 2017, the FASB issued updated accounting guidance that eliminates step 2 of the current goodwill impairment test, which requires a hypothetical purchase price allocation to measure goodwill impairment. A goodwill impairment loss will instead be measured at the amount by which a reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill. The guidance will be effective for annual reporting periods beginning after December 15, 2019, and interim periods within that reporting period, with early adoption permitted for any impairment test performed on testing dates after January 1, 2017. The Company elected to early adopt the provisions of the updated guidance, for its annual impairment valuation performed in the third quarter of 2017, and the provisions of the updated guidance did not have an impact on its results of operations or financial position.

In August 2016, the FASB issued updated accounting guidance on the classification of certain cash receipts and cash payments in the statement of cash flows, which is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and early adoption is permitted. The Company has elected to early adopt the provisions of the updated guidance, which resulted in the reclassification of $375 debt extinguishment costs for 2016, from cash flows from operating to financing activities to conform to the new classification.

In March 2016, the FASB issued updated accounting guidance on simplifying the accounting for share-based payments, which includes several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The updated guidance was effective for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years, with early adoption available. On January 1, 2017, the Company adopted the updated guidance, prospectively, and recognized a previously unrecognized windfall tax benefit for stock-based compensation of $982, associated with the Company's 2012 Federal net operating loss, which was recorded as an adjustment to deferred income taxes and retained earnings (refer to the presentation of "cumulative effect of change in accounting principle – windfall tax benefit" on the Company's Consolidated Statement of Equity). Additionally, income tax benefits in excess of compensation costs or tax deficiencies for share-based compensation are now recorded to our income tax provision, instead of historically to stockholder's equity, which impacts our effective tax rate. Lastly, all tax-related cash flows resulting from share-based payments are reported prospectively as operating activities on the statement of cash flows, a change from the historical requirement to present tax benefits as an inflow from financing activities and an outflow from operating activities.

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In February 2016, the FASB issued updated accounting guidance on accounting for leases, which requires lessees to establish a right-of-use asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. For income statement purposes, leases will be classified as either operating or finance. Operating leases will result in straight-line expense while finance leases will result in a front-loaded expense pattern. The updated accounting guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, with early adoption available. The Company is evaluating the requirements of the updated guidance to determine the impact of adoption. Refer to Note 9 – *Commitments and Contingencies* for further information on the Company's leases.

In January 2016, the FASB issued updated accounting guidance on the recognition and measurement of financial assets and financial liabilities, which amends certain aspects of recognition, measurement, presentation, and disclosure of financial instruments, including the requirement to measure certain equity investments at fair value with changes in fair value recognized in net income. The updated guidance is effective for interim and annual periods beginning after December 31, 2017. On January 1, 2018, the Company adopted the updated guidance, which did not have a material impact on its results of operations or financial position.

In May 2014, the FASB issued updated accounting guidance on recognizing revenue from contracts with customers, which outlines a single comprehensive model that an entity will apply to determine the measurement of revenue and timing of recognition. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. The updated guidance also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to fulfill a contract. The updated guidance is effective for annual periods beginning after December 15, 2017, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the updated guidance in each prior reporting period, or (ii) a modified retrospective approach with the cumulative effect of initially adopting the updated guidance recognized through retained earnings at the date of adoption. In 2016, the Company performed an evaluation of the requirements of the updated guidance and believes that the impact of adoption will not result in a material change in the Company's measurement of revenue. In 2017, the American Institute of Certified Public Accountants ("AICPA") power and utility entities revenue recognition task force determined that contributions in aid of construction are not in the scope of the new standard, and submitted its recommendation to the AICPA's revenue recognition working group for approval. The Company implemented the updated guidance using the modified retrospective approach on January 1, 2018, which did not result in a change in the Company's measurement of revenue, and reached the following conclusions:

- The Company's tariff sale contracts, including those with lower credit quality customers, are generally deemed to be probable of collection, and thus the timing of revenue recognition will continue to be concurrent with the delivery of water and wastewater services, consistent with our current practice.
- Contributions in aid of construction are outside of the scope of the standard, and will continue to be accounted for as a noncurrent liability.

Note 2 – ***Acquisitions***

As part of the Company's growth-through-acquisition strategy, the Company has entered into purchase agreements to acquire the water or wastewater utility system assets of six municipalities for a total combined purchase price in cash of $150,700. The purchase price for these pending acquisitions is subject to certain adjustments at closing, and the pending acquisitions are subject to regulatory approvals, including the final determination of the fair value of the rate base acquired. Closings for these acquisitions are expected to occur by the end of 2018, which is subject to the timing of the regulatory approval process. These acquisitions are expected to add approximately 16,325 customers in two of the states in which the Company operates.

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AQUA AMERICA, INC. AND SUBSIDIARIES

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(In thousands of dollars, except per share amounts)

Pursuant to the Company's growth-through-acquisition strategy, the Company completed the following acquisitions:

In 2017, the Company completed four acquisitions of water and wastewater utility systems in two states adding 1,003 customers. The total purchase price of these utility systems consisted of $5,860 in cash, which resulted in $72 of goodwill being recorded. The operating revenues included in the consolidated financial statements of the Company during the period owned by the Company for the utility systems acquired in 2017 are $461. The pro forma effect of the businesses acquired is not material either individually or collectively to the Company's results of operations.

In January 2016, the Company acquired Superior Water Company, Inc., which provides public water service to 4,108 customers in portions of Berks, Chester, and Montgomery counties in Pennsylvania. The total purchase price for the utility system was $16,750, which consisted of the issuance of 439,943 shares of the Company's common stock and $3,905 in cash. The purchase price allocation for this acquisition consisted primarily of acquired property, plant and equipment of $25,167, contributions in aid of construction of $16,565, and goodwill of $8,622. Additionally, during 2016, the Company completed 18 acquisitions of water and wastewater utility systems in various states adding 2,469 customers. The total purchase price of these utility systems consisted of $5,518 in cash. The operating revenues included in the consolidated financial statements of the Company during the period owned by the Company for the utility systems acquired were $4,896 in 2017 and $3,809 in 2016. The pro forma effect of the businesses acquired is not material either individually or collectively to the Company's results of operations.

In April 2015, the Company acquired the water and wastewater utility system assets of North Maine Utilities, located in the Village of Glenview, Illinois serving approximately 7,400 customers. The total purchase price consisted of $23,079 in cash. The purchase price allocation for this acquisition consists primarily of acquired property, plant and equipment. Additionally, in 2015, the Company completed 14 acquisitions of water and wastewater utility systems in various states adding 3,170 customers. The total purchase price of these utility systems consisted of $5,210 in cash. The operating revenues included in the consolidated financial statements of the Company during the period owned by the Company for the utility systems acquired were $10,868 in 2017, $10,708 in 2016, and $6,662 in 2015. The pro forma effect of the businesses acquired is not material either individually or collectively to the Company's results of operations.

Note 3 –*Dispositions*

The following dispositions have not been presented as discontinued operations in the Company's consolidated financial statements as they do not qualify as discontinued operations, since their disposal does not represent a strategic shift that has a major effect on our operations or financial results. The gains or loss disclosed below are reported in the consolidated statements of net income as a component of operations and maintenance expense. These business units were reported within the Company's market-based subsidiary, Aqua Resources, and were included in "Other" in the Company's segment information.

Dispositions Completed in 2017 and 2016

In the second quarter of 2016, the Company decided to market for sale two business units that are reported within the Company's market-based subsidiary, Aqua Resources. One business unit installed and tested devices that prevent the contamination of potable water and repaired water and wastewater systems, for which the sale was completed in January 2017. The other business unit repaired and performed maintenance on water and wastewater systems, for which the sale was completed in June 2017. These business units were reported as assets held for sale in the Company's December 31, 2016 consolidated balance sheet included in this Annual Report. These transactions resulted in total proceeds of $867 and the recognition of a net loss of $324.

In the third quarter of 2016, the Company marketed for sale a business unit which inspects, cleans and repairs storm and sanitary wastewater lines. In November 2016, this business unit was sold for $1,059 in cash and resulted in a loss on sale of $1,081. Further, in December 2015, the Company decided to sell a business unit which provides liquid waste hauling

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Notes to Consolidated Financial Statements (continued)

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and disposal services. During the second quarter of 2016, this business unit was sold for $3,400 in cash and resulted in a gain on sale of $537.

Dispositions Reported as Assets Held for Sale at December 31, 2017

In the first quarter of 2017, the Company decided to market for sale a water system that serves approximately 265 customers. This water system is reported as assets held for sale in the Company's consolidated balance sheet.

Note 4 – *Property, Plant and Equipment*

	December 31, 2017	December 31, 2016	Approximate Range of Useful Lives	Weighted Average Useful Life
Utility plant and equipment:				
Mains and accessories	$ 3,134,900	$ 2,898,560	30 - 93 years	79 years
Services, hydrants, treatment plants and reservoirs	1,753,433	1,621,972	5 - 85 years	[illegible] years
Operations structures and water tanks	296,736	283,635	14 - 85 years	47 years
Miscellaneous pumping and purification equipment	768,962	733,074	[illegible] - 90 years	[illegible] years
Meters, data processing, transportation and operating equipment	768,655	733,837	4 - 63 years	25 years
Land and other non-depreciable assets	103,357	98,529		
Utility plant and equipment	6,826,043	6,369,607		
Utility construction work in progress	201,902	163,565		
Net utility plant acquisition adjustment	(24,550)	(25,683)	2 - 59 years	31 years
Non-utility plant and equipment	598	1,628	[illegible] - 75 years	1 year
Total property, plant and equipment	$ 7,003,993	$ 6,509,117		

Note 5 – *Accounts Receivable*

	December 31, 2017	December 31, 2016
Billed utility revenue	$ 65,695	$ 63,518
Unbilled revenue	35,042	34,635
Other	4,930	6,336
	105,667	104,489
Less allowance for doubtful accounts	7,071	7,095
Net accounts receivable	$ 98,596	$ 97,394

The Company's utility customers are located principally in the following states: 47% in Pennsylvania, 15% in Ohio, 10% in North Carolina, 8% in Texas, and 7% in Illinois. No single customer accounted for more than one percent of the Company's regulated operating revenues during the years ended December 31, 2017, 2016, and 2015. The following table summarizes the changes in the Company's allowance for doubtful accounts:

	2017	2016	2015
Balance at January 1,	$ 7,095	$ 5,873	$ 5,365
Amounts charged to expense	4,986	5,500	5,762
Accounts written off	(6,135)	(5,410)	(6,513)
Recoveries of accounts written off	1,125	1,132	1,259
Balance at December 31,	$ 7,071	$ 7,095	$ 5,873

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AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

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Note 6 – *Regulatory Assets and Liabilities*

The regulatory assets represent costs that are probable to be fully recovered from customers in future rates while regulatory liabilities represent amounts that are expected to be refunded to customers in future rates or amounts recovered from customers in advance of incurring the costs. Except for income taxes, regulatory assets and regulatory liabilities are excluded from the Company's rate base and do not earn a return. The components of regulatory assets and regulatory liabilities are as follows:

	December 31, 2017		December 31, 2016	
	Regulatory Assets	Regulatory Liabilities	Regulatory Assets	Regulatory Liabilities
Income taxes	$ 584,067	$ 438,750	$ 814,418	$ 157,266
Utility plant retirement costs	5,367	35,249	4,986	31,288
Postretirement benefits	112,532	65,964	119,519	59,882
Accrued vacation	2,198	-	1,984	-
Water tank painting	3,259	1,855	2,111	2,143
Fair value adjustment of long-term debt assumed in acquisition	2,901	-	3,268	-
Rate case filing expenses and other	3,647	92	2,361	56
	$ 713,971	$ 541,910	$ 948,647	$ 250,635

Items giving rise to deferred state income taxes, as well as a portion of deferred Federal income taxes related to specific differences between tax and book depreciation expense, are recognized in the rate setting process on a cash basis or as a reduction in current income tax expense and will be recovered as they reverse. Amounts include differences that arise between specific utility asset improvement costs capitalized for book and deducted as an expense for tax purposes. Additionally, the recording of AFUDC for equity funds results in the recognition of a regulatory asset for income taxes, which represents amounts due related to the revenue requirement.

A portion of the regulatory liability for income taxes is related to Aqua Pennsylvania's income tax accounting change for the tax benefits realized on the Company's 2012 tax return, which have not yet reduced current income tax expense due to the ten year amortization period which began in 2013. This amortization was stipulated in a June 2012 rate order issued to Aqua Pennsylvania and is subject to specific parameters being met each year. Beginning in 2013, the Company amortized $38,000, annually, of its deferred income tax benefits, which reduced current income tax expense and increased the Company's net income by $16,734.

On December 22, 2017, President Trump signed the TCJA into law, which reduced the Federal corporate income tax rate from 35% to 21%. Reductions in accumulated deferred income tax balances due to the reduction in the corporate income tax rate to 21% under the provisions of the TCJA will result in amounts previously collected from utility customers for these deferred taxes to be refundable to such customers, generally through reductions in future rates. The TCJA includes provisions that stipulate how these excess deferred taxes relating to certain accelerated tax depreciation benefits are to be passed back to customers. Potential refunds of other deferred taxes will be determined by our state regulators. The December 31, 2017 consolidated balance sheet reflects the impact of the TCJA on our regulatory assets and liabilities, and reduces our regulatory assets by $357,262 and increases our regulatory liabilities by $303,320. These adjustments had no impact on our 2017 cash flows.

The regulatory asset for utility plant retirement costs, including cost of removal, represents costs already incurred that are expected to be recovered in future rates over a five year recovery period. The regulatory liability for utility plant retirement costs represents amounts recovered through rates during the life of the associated asset and before the costs are incurred.

The regulatory asset for accrued vacation represents costs that would otherwise be charged to operations and maintenance expense for vacation that is earned by employees, which is recovered as a cost of service.

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The regulatory asset for post-retirement benefits, which includes pension and other post-retirement benefits, primarily reflects a regulatory asset that has been recorded for the costs that would otherwise be charged to stockholders' equity for the underfunded status of the Company's pension and other post-retirement benefit plans. The Company also has a regulatory asset related to post-retirement benefits costs that represent costs already incurred which are now being recovered in rates over 10 years. The regulatory liability for post-retirement benefits represents costs recovered in rates in excess of post-retirement benefits expense.

Expenses associated with water tank painting are deferred and amortized over a period of time as approved in the regulatory process. Water tank painting costs are generally being amortized over a period ranging from 1 to 15 years. The regulatory liability for water tank painting costs represents amounts recovered through rates and before the costs are incurred.

The Company recorded a fair value adjustment for fixed rate, long-term debt assumed in acquisitions that matures in various years ranging from 2022 to 2029. The regulatory asset or liability results from the rate setting process continuing to recognize the historical interest cost of the assumed debt.

The regulatory asset related to rate case filing expenses and other represents the costs associated with filing for rate increases that are deferred and amortized over periods that generally range from one to five years, and costs incurred by the Company for which it has received or expects to receive rate recovery.

The regulatory asset related to the costs incurred for information technology software projects and water main cleaning and relining projects are described in Note 1 – *Summary of Significant Accounting Policies – Property, Plant and Equipment and Depreciation.*

Note 7 – *Income Taxes*

The provision for income taxes consists of:

	Years Ended December 31,		
	2017	2016	2015
Current:			
Federal	$ 1,297	$ 2,046	$ 2,624
State	1,837	1,682	(4,168)
	3,134	3,728	(1,544)
Deferred:			
Federal	21,376	21,489	12,649
State	(7,596)	(4,239)	3,857
	13,780	17,250	16,506
Total tax expense	$ 16,914	$ 20,978	$ 14,962

The statutory Federal tax rate is 35% and for states with a corporate net income tax, the state corporate net income tax rates range from 3% to 9.99% for all years presented.

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The reasons for the differences between amounts computed by applying the statutory Federal corporate income tax rate to income before income tax expense are as follows:

	Years Ended December 31, 2017	2016	2015
Computed Federal tax expense at statutory rate	$ 89,828	$ 89,306	$ 75,863
Decrease in Federal tax expense related to an income tax accounting change for qualifying utility asset improvement costs	(69,325)	(62,831)	(59,488)
State income taxes, net of Federal tax benefit	(3,748)	(1,662)	(202)
Increase in tax expense for depreciation expense to be recovered in future rates	199	199	199
Stock-based compensation	(595)	(227)	(174)
Deduction for Aqua America common dividends paid under employee benefit plan	(455)	(455)	(456)
Amortization of deferred investment tax credits	(376)	(405)	(421)
Federal tax rate change	3,141	-	-
Other, net	(1,760)	(2,947)	(359)
Actual income tax expense	$ 16,914	$ 20,978	$ 14,962

In 2012, the Company changed its tax method of accounting for qualifying utility system repairs in Aqua Pennsylvania effective with the tax year ended December 31, 2012 and for prior tax years. The tax accounting method was changed to permit the expensing of qualifying utility asset improvement costs that were previously being capitalized and depreciated for book and tax purposes. This change was implemented in response to a June 2012 rate order issued by the Pennsylvania Public Utility Commission to Aqua Pennsylvania which provides for a reduction in current income tax expense as a result of the flow-through recognition of some income tax benefits due to the income tax accounting change. The Company recorded income tax benefits of $84,766, $78,530, and $72,944 during 2017, 2016, and 2015, respectively. The Company recognized a tax deduction on its 2012 Federal tax return of $380,000 for qualifying capital expenditures made prior to 2012, and based on the rate order, in 2013, the Company began to amortize 1/10th of these expenditures. In accordance with the rate order, the amortization is expected to reduce current income tax expense during periods when qualifying parameters are met. Beginning in 2013, the Company amortized the qualifying capital expenditures made prior to 2012 and recognized $38,000, annually, of deferred income tax benefits, which reduced current income tax expense and increased the Company's net income by $16,734. The Company's effective income tax rate for 2017, 2016, and 2015 was 6.6%, 8.2%, and 6.9%, respectively.

The Company establishes reserves for uncertain tax positions based upon management's judgment as to the sustainability of these positions. These accounting estimates related to the uncertain tax position reserve require judgments to be made as to the sustainability of each uncertain tax position based on its technical merits. The Company believes its tax positions comply with applicable law and that it has adequately recorded reserves as required. However, to the extent the final tax outcome of these matters is different than the estimates recorded, the Company would then adjust its tax reserves or unrecognized tax benefits in the period that this information becomes known. The Company has elected to recognize accrued interest and penalties related to uncertain tax positions as income tax expense.

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The following table provides the changes in the Company's unrecognized tax benefits:

	2017	2016
Balance at January 1,	$ 28,099	$ 28,016
Additions based on tax position related to the current year	705	83
Effect of Federal tax rate change	(11,221)	-
Balance at December 31,	$ 17,583	$ 28,099

The unrecognized tax benefits relate to the income tax accounting change, and the tax position is attributable to a temporary difference. The Company does not anticipate material changes to its unrecognized tax benefits within the next year. As a result of the regulatory treatment afforded by the income tax accounting change in Pennsylvania and despite this position being a temporary difference, as of December 31, 2017 and 2016, $24,243 and $20,674 and, respectively, of these tax benefits would have an impact on the Company's effective income tax rate in the event the Company does sustain all, or a portion, of its tax position.

The following table provides the components of net deferred tax liability:

	December 31, 2017	December 31, 2016
Deferred tax assets:		
Customers' advances for construction	$ 17,123	$ 21,738
Costs expensed for book not deducted for tax, principally accrued expenses	12,956	15,751
Utility plant acquisition adjustment basis differences	1,752	3,104
Post-retirement benefits	36,353	38,269
Tax loss and credit carryforwards	56,642	77,911
Other	2,348	2,137
	127,174	158,920
Less valuation allowance	11,623	9,486
	115,551	149,434
Deferred tax liabilities:		
Utility plant, principally due to depreciation and differences in the basis of fixed assets due to variation in tax and book accounting	795,537	1,104,032
Deferred taxes associated with the gross-up of revenues necessary to recover, in rates, the effect of temporary differences	46,143	269,773
Tax effect of regulatory asset for post-retirement benefits	36,353	38,269
Deferred investment tax credit	6,591	6,613
	884,624	1,418,687
Net deferred tax liability	$ 769,073	$ 1,269,253

At December 31, 2017, the Company has a cumulative Federal NOL of $63,302. The Company believes the Federal NOLs are more likely than not to be recovered and require no valuation allowance. The Company's Federal NOLs do not begin to expire until 2032.

In 2012 and 2011, as a result of the Company's Federal cumulative NOLs the Company ceased recognizing the windfall tax benefit associated with stock-based compensation, because the deduction did not reduce income taxes payable. As of December 31, 2015, the Company utilized all of the 2011 NOL and recognized a windfall tax benefit of $588. As a result

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of the adoption on January 1, 2017 of the FASB's updated accounting guidance on simplifying the accounting for share-based payments, the Company recognized a windfall tax benefit of $982 associated with the Company's 2012 Federal NOL, which was recorded as an adjustment to retained earnings.

At December 31, 2017, the Company has a cumulative state NOL of $627,258, a portion of which is offset by a valuation allowance because the Company does not believe these NOLs are more likely than not to be realized. The state NOLs do not begin to expire until 2023.

The Company has unrecognized tax positions that result in the associated tax benefit being unrecognized. The Company's Federal and state NOL carryforwards are reduced by an unrecognized tax position, on a gross basis, of $64,476 and $85,380, respectively, which results from the Company's adoption in 2013 of the FASB's accounting guidance on the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The amounts of the Company's Federal and state NOL carryforwards prior to being reduced by the unrecognized tax positions are $127,778 and $712,638, respectively. The Company records its unrecognized tax benefit as a reduction to its deferred income tax liability.

As of December 31, 2017, the Company's Federal income tax returns for all years through 2011 have been closed. Tax years 2012 through 2017 remain open to Federal examination. The statute remains open for the Company's state income tax returns for tax years 2014 through 2017 in the various states in which it conducts business.

On December 22, 2017, President Trump signed the TCJA into law. 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 Code and the taxation of business entities, and includes specific provisions related to regulated public utilities. Significant changes that impact the Company included in the TCJA are a reduction in the corporate federal income tax rate from 35% to 21%, effective January 1, 2018, and a limitation of the utilization of NOLs arising after December 31, 2017 to 80% of taxable income with an indefinite carryforward. The specific TCJA provisions related to our regulated entities generally allow for the continued deductibility of interest expense, the elimination of full expensing for tax purposes of certain property acquired after September 27, 2017 and the continuation of certain rate normalization requirements for accelerated depreciation benefits. Our market-based companies still qualify for 100% deductibility of qualifying property acquired after September 27, 2017.

Changes in the Code from the TCJA had a material impact on our financial statements in 2017. In accordance with the FASB's accounting guidance for income taxes, the tax effects of changes in tax laws must be recognized in the period in which the law is enacted, or December 22, 2017 for the TCJA. Additionally, deferred tax assets and liabilities are required 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 taxes were re-measured based upon the new tax rate. For our regulated entities, the change in deferred taxes is recorded as either an offset to a regulatory asset or liability and may be subject to refund to customers. In instances where the deferred tax balances are not in ratemaking, such as the Company's market-based operations, the change in deferred taxes is recorded as an adjustment to our deferred tax provision. To the extent the revalued deferred income tax assets and liabilities were outside of our regulated operations and are not believed to be recoverable in utility customer rates, the revalued amount of $3,141 was recognized as additional deferred income tax expense during the quarter ended December 31, 2017.

The staff of the SEC has recognized the complexity of reflecting the impacts of the TCJA, and on December 22, 2017 issued guidance, which clarifies accounting for income taxes 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 (the measurement period). The guidance 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 the FASB's accounting guidance, based on the provisions of the tax laws that were in effect immediately prior to the TCJA being enacted.

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The Company has completed or has made a reasonable estimate for the measurement and accounting of the effect of the TCJA which have been reflected in the December 31, 2017 financial statements. The accounting for these completed and provisional items, described below, increased the 2017 deferred income tax provision by $3,141 for the year ending December 31, 2017, and decreased the accumulated deferred income tax liability by $303,320 at December 31, 2017.

One of our states, Pennsylvania, has not yet issued an accounting or procedural order addressing how the TCJA changes are to be reflected in our utility customer rates. As of December 31, 2017, the Company has provisionally estimated that $175,108 of deferred income tax liabilities for our Pennsylvania subsidiary will be a regulatory liability. Additionally, two operating divisions in one of our states operate under locally-negotiated contractual rates with their respective counties, and it is expected that negotiations will results in a contract that will pass back the effects of the reduction in the corporate net income tax rate under the TCJA; however, these negotiations have not yet started. As of December 31, 2017, the Company has provisionally estimated that $9,419 of deferred income tax liabilities for these two divisions will be a regulatory liability. Overall, the Company has applied a reasonable interpretation of the impact of the TCJA and a reasonable estimate of the regulatory resolution. Further clarification of the TCJA and regulatory resolution may change the amounts estimated of the deferred income tax provision and the accumulated deferred income tax liability.

The Company's regulated operations accounting for income taxes are impacted by the FASB's accounting guidance for regulated operations. Reductions in accumulated deferred income tax balances due to the reduction in the Federal corporate income tax rates to 21% under the provisions of the TCJA will result in amounts previously collected from utility customers for these deferred taxes to be refundable to such customers, generally through reductions in future rates. The TCJA includes provisions that stipulate how these excess deferred taxes related to certain accelerated tax depreciation deduction benefits are to be passed back to customers. Potential refunds of other deferred taxes will be determined by our state regulators. Our state regulatory commissions have or are in the process of issuing procedural orders directing how the tax law changes are to be reflected in our utility customer rates. In addition, we have two rate cases currently in progress in two states in which the TCJA is expected to be addressed in the new base rates. The December 31, 2017 consolidated balance sheet reflects the impact of the TCJA on our regulatory assets and liabilities which reduced our regulatory assets by $357,262 and increased our regulatory liabilities by $303,320. These adjustments had no impact on our 2017 cash flows.

Note 8 – *Taxes Other than Income Taxes*

The following table provides the components of taxes other than income taxes:

	Years Ended December 31,		
	2017	2016	2015
Property	$ 25,810	$ 26,788	$ 26,545
Gross receipts, excise and franchise	13,458	12,510	11,847
Payroll	9,477	9,772	9,539
Regulatory assessments	2,552	2,630	2,689
Pumping fees	5,057	4,571	3,993
Other	274	114	444
Total taxes other than income taxes	$ 56,628	$ 56,385	$ 55,057

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Note 9 – *Commitments and Contingencies*

Commitments – The Company leases motor vehicles, buildings and other equipment under operating leases that are noncancelable. The future annual minimum lease payments due are as follows:

2018	2019	2020	2021	2022	Thereafter
$ 1,312	$ 1,010	$ 743	$ 585	$ 365	$ 250

The Company leases parcels of land on which treatment plants and other facilities are situated and adjacent parcels that are used for watershed protection. The operating leases are noncancelable, expire between 2019 and 2052, and contain renewal provisions. Some leases are subject to an adjustment every five years based on changes in the Consumer Price Index. Subject to the aforesaid adjustment, during each of the next five years, an average of $602 of annual lease payments for land is due, and the aggregate of the years remaining approximates $12,806.

The Company maintains agreements with other water purveyors for the purchase of water to supplement its water supply, particularly during periods of peak demand. The agreements stipulate purchases of minimum quantities of water to the year 2026. The estimated annual commitments related to such purchases through 2022 are expected to average $4,373 and the aggregate of the years remaining approximates $9,644.

The Company has entered into purchase obligations, in the ordinary course of business, that include agreements for water treatment processes at some of its wells in a small number of its divisions. The 20 year term agreement provides for the use of treatment equipment and media used in the treatment process and are subject to adjustment based on changes in the Consumer Price Index. The future contractual cash obligations related to these agreements are as follows:

2018	2019	2020	2021	2022	Thereafter
$ 1,157	$ 1,007	$ 1,028	$ 1,048	$ 1,069	$ 6,623

Rent expense under operating leases, purchased water expense, and water treatment expenses under these agreements were as follows:

	Years Ended December 31,		
	2017	2016	2015
Operating lease expense	$ 2,241	$ 2,776	$ 2,440
Purchased water under long-term agreements	8,558	13,955	13,718
Water treatment expense under contractual agreement	945	940	972

Contingencies – The Company is routinely involved in various disputes, claims, lawsuits and other regulatory and legal matters, including both asserted and unasserted legal claims, in the ordinary course of business. The status of each such matter, referred to herein as a loss contingency, is reviewed and assessed in accordance with applicable accounting rules regarding the nature of the matter, the likelihood that a loss will be incurred, and the amounts involved. As of December 31, 2017, the aggregate amount of $18,961 is accrued for loss contingencies and is reported in the Company's consolidated balance sheet as other accrued liabilities and other liabilities. These accruals represent management's best estimate of probable loss (as defined in the accounting guidance) for loss contingencies or the low end of a range of losses if no single probable loss can be estimated. For some loss contingencies, the Company is unable to estimate the amount of the probable loss or range of probable losses. While the final outcome of these loss contingencies cannot be predicted with certainty, and unfavorable outcomes could negatively impact the Company, at this time in the opinion of management, the final resolution of these matters are not expected to have a material adverse effect on the Company's financial position, results of operations or cash flows. Further, Aqua America has insurance coverage for a number of

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these loss contingencies, and as of December 31, 2017, estimates that approximately $7,131 of the amount accrued for these matters are probable of recovery through insurance, which amount is also reported in the Company's consolidated balance sheet as deferred charges and other assets, net.

Although the results of legal proceedings cannot be predicted with certainty, there are no pending legal proceedings to which the Company or any of its subsidiaries is a party or to which any of its properties is the subject that are material or are expected to have a material effect on the Company's financial position, results of operations or cash flows.

Additionally, the Company self-insures its employee medical benefit program, and maintains stop-loss coverage to limit the exposure arising from these claims. The Company's reserve for these claims totaled $1,451 and $1,770 at December 31, 2017 and 2016 and represents a reserve for unpaid claim costs, including an estimate for the cost of incurred but not reported claims.

Note 10 – *Long-term Debt and Loans Payable*

Long-term Debt – The consolidated statements of capitalization provide a summary of long-term debt as of December 31, 2017 and 2016. The supplemental indentures with respect to specific issues of the first mortgage bonds restrict the ability of Aqua Pennsylvania and other operating subsidiaries of the Company to declare dividends, in cash or property, or repurchase or otherwise acquire the stock of these companies. Loan agreements for Aqua Pennsylvania and other operating subsidiaries of the Company have restrictions on minimum net assets. As of December 31, 2017, restrictions on the net assets of the Company were $1,443,473 of the total $1,957,621 in net assets. Included in this amount were restrictions on Aqua Pennsylvania's net assets of $1,090,062 of their total net assets of $1,528,172. As of December 31, 2017, $1,396,003 of Aqua Pennsylvania's retained earnings of $1,416,003 and $142,700 of the retained earnings of $189,000 of other subsidiaries were free of these restrictions. Some supplemental indentures also prohibit Aqua Pennsylvania and some other subsidiaries of the Company from making loans to, or purchasing the stock of, the Company.

Sinking fund payments are required by the terms of specific issues of long-term debt. Excluding amounts due under the Company's revolving credit agreement, the future sinking fund payments and debt maturities of the Company's long-term debt are as follows:

Interest Rate Range	2018	2019	2020	2021	2022	Thereafter
0.00% to 0.99%	$ 464	$ 464	$ 463	$ 464	$ 466	$ 1,875
1.00% to 1.99%	51,327	1,222	1,158	910	888	7,409
2.00% to 2.99%	1,766	51,813	1,863	1,913	1,965	9,934
3.00% to 3.99%	2,807	2,758	2,555	2,594	2,541	706,977
4.00% to 4.99%	11,195	50,404	16,616	15,297	237	660,650
5.00% to 5.99%	20,595	36,126	18,120	8,402	17,979	256,783
6.00% to 6.99%	13,000	-	-	-	-	31,000
7.00% to 7.99%	484	569	615	666	358	29,643
8.00% to 8.99%	431	566	613	1,665	721	2,096
9.00% to 9.99%	5,700	700	2,400	4,900	-	12,000
10.00% to 10.99%	6,000	-	-	-	-	-
Total	$ 113,769	$ 144,622	$ 44,403	$ 36,811	$ 25,155	$ 1,718,367

In October 2017, Aqua Pennsylvania issued $75,000 of first mortgage bonds, of which $35,000 is due in 2054, $20,000 is due in 2055, and $20,000 is due in 2057 with interest rates of 4.06%, 4.07%, and 4.09%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

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In July 2017 Aqua Illinois issued $100,000 of first mortgage bonds consisting of the following:

Amount	Interest Rate	Maturity
$25,000	3.64%	2032
$6,000	3.89%	2037
$15,000	3.90%	2038
$10,000	4.18%	2047
$22,000	4.22%	2049
$22,000	4.24%	2050

The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

In July 2017, Aqua Pennsylvania issued $80,000 of first mortgage bonds, of which $40,000 is due in 2055 and $40,000 is due in 2057 with interest rates of 4.04% and 4.06%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

In January 2017, Aqua Pennsylvania issued $50,000 of first mortgage bonds, of which $10,000 is due in 2042 and $40,000 is due in 2044 with interest rates of 3.65% and 3.69%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

In December 2016, Aqua Pennsylvania issued $85,000 of first mortgage bonds, of which $25,000 is due in 2051 and $60,000 is due in 2056 with interest rates of 3.85% and 3.95%, respectively. In January 2017, Aqua Pennsylvania issued $50,000 of first mortgage bonds, of which $10,000 is due in 2042 and $40,000 is due in 2044 with interest rates of 3.65% and 3.69%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

In November 2016, the Company issued $125,000 of senior notes, of which $35,000 is due in 2031, $30,000 is due in 2034, $25,000 is due in 2035, $10,000 is due in 2038, and $25,000 is due in 2041 with interest rates of 3.01%, 3.19%, 3.25%, 3.41%, and 3.57%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

As of December 31, 2017 and 2016, the Company did not have any funds restricted for construction activity.

The weighted average cost of long-term debt at December 31, 2017 and 2016 was 4.29% and 4.23%, respectively. The weighted average cost of fixed rate long-term debt at December 31, 2017 and 2016 was 4.36% and 4.26%, respectively.

The Company has a five-year $250,000 unsecured revolving credit facility, with four banks that expires in February 2021. This facility includes a $15,000 sublimit for daily demand loans. Funds borrowed under this facility are classified as long-term debt and are used to provide working capital as well as support for letters of credit for insurance policies and other financing arrangements. As of December 31, 2017, the Company has the following sublimits and available capacity under the credit facility: $50,000 letter of credit sublimit, $30,189 of letters of credit available capacity, $0 borrowed under the swing-line commitment, and $60,000 of funds borrowed under the agreement. Interest under this facility is based at the Company's option, on the prime rate, an adjusted Euro-Rate, an adjusted federal funds rate or at rates offered by the banks. A facility fee is charged on the total commitment amount of the agreement. Under this facility the average cost of borrowings was 1.91% and 1.54%, and the average borrowing was $48,333 and $89,374, during 2017 and 2016, respectively.

The Company is obligated to comply with covenants under some of its loan and debt agreements. These covenants contain a number of restrictive financial covenants, which among other things limit, subject to specific exceptions, the Company's ratio of consolidated total indebtedness to consolidated total capitalization, and require a minimum level of earnings coverage over interest expense. During 2017, the Company was in compliance with its debt covenants under its

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loan and debt agreements. Failure to comply with the Company's debt covenants could result in an event of default, which could result in the Company being required to repay or finance its borrowings before their due date, possibly limiting the Company's future borrowings, and increasing its borrowing costs.

Loans Payable – In November 2017, Aqua Pennsylvania renewed its $100,000 364-day unsecured revolving credit facility with four banks. The funds borrowed under this agreement are classified as loans payable and used to provide working capital. As of December 31, 2017 and 2016, funds borrowed under the agreement were $3,650 and $5,545, respectively. Interest under this facility is based, at the borrower's option, on the prime rate, an adjusted federal funds rate, an adjusted London Interbank Offered Rate corresponding to the interest period selected, an adjusted Euro-Rate corresponding to the interest period selected or at rates offered by the banks. This agreement restricts short-term borrowings of Aqua Pennsylvania. A commitment fee of 0.05% is charged on the total commitment amount of Aqua Pennsylvania's revolving credit agreement. The average cost of borrowing under the facility was 1.78% and 1.18%, and the average borrowing was $21,913 and $29,760, during 2017 and 2016, respectively. The maximum amount outstanding at the end of any one month was $66,466 and $52,905 in 2017 and 2016, respectively.

At December 31, 2017 and 2016, the Company had other combined short-term lines of credit of $35,500. Funds borrowed under these lines are classified as loans payable and are used to provide working capital. As of December 31, 2017 and 2016, funds borrowed under the short-term lines of credit were $0 and $990, respectively. The average borrowing under the lines was $908 and $2,944 during 2017 and 2016, respectively. The maximum amount outstanding at the end of any one month was $990 in 2017 and $9,440 in 2016, respectively. Interest under the lines is based at the Company's option, depending on the line, on the prime rate, an adjusted Euro-Rate, an adjusted federal funds rate or at rates offered by the banks. The average cost of borrowings under all lines during 2017 and 2016 was 1.81% and 1.24%, respectively.

Interest Income and Expense– Interest income of $202, $217, and $272 was netted against interest expense on the consolidated statement of net income for the years ended December 31, 2017, 2016, and 2015, respectively. The total interest cost was $88,543, $80,811, and $76,808 in 2017, 2016, and 2015, including amounts capitalized for borrowed funds of $3,578, $2,220, and $1,598, respectively.

Note 11 – *Fair Value of Financial Instruments*

Financial instruments are recorded at carrying value in the financial statements and approximate fair value, with the exception of long-term debt, as of the dates presented. The fair value of these instruments is disclosed below in accordance with current accounting guidance related to financial instruments.

The fair value of cash and cash equivalents, which is comprised of uninvested cash, is determined based on level 1 methods and assumptions. As of December 31, 2017 and 2016, the carrying amounts of the Company's cash and cash equivalents were $4,204 and $3,763, which equates to their fair value. The fair value of "available-for-sale" securities to fund our deferred compensation and non-qualified pension plan liabilities, which represents mutual and money market funds, is determined based on quoted market prices from active markets utilizing level 1 methods and assumptions. As of December 31, 2017 and 2016, the carrying amount of these securities was $21,776 and $20,342. As of December 31, 2017 and 2016, the carrying amount of the Company's loans payable was $3,650 and $6,535, respectively, which equates to their estimated fair value.

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The carrying amounts and estimated fair values of the Company's long-term debt is as follows:

	December 31,	
	2017	2016
Carrying amount	$ 2,143,127	$ 1,910,633
Estimated fair value	2,262,785	2,018,933

The fair value of long-term debt has been determined by discounting the future cash flows using current market interest rates for similar financial instruments of the same duration utilizing level 2 methods and assumptions. The Company's customers' advances for construction have a carrying value of $93,186 and $91,843 at December 31, 2017 and 2016, respectively. Their relative fair values cannot be accurately estimated because future refund payments depend on several variables, including new customer connections, customer consumption levels and future rate increases. Portions of these non-interest bearing instruments are payable annually through 2027 and amounts not paid by the respective contract expiration dates become non-refundable. The fair value of these amounts would, however, be less than their carrying value due to the non-interest bearing feature.

Note 12 – *Stockholders' Equity*

At December 31, 2017, the Company had 300,000,000 shares of common stock authorized; par value $0.50. Shares outstanding and treasury shares held were as follows:

	December 31,		
	2017	2016	2015
Shares outstanding	177,713,943	177,394,376	176,544,091
Treasury shares	2,986,308	2,916,969	2,819,569

At December 31, 2017, the Company had 1,770,819 shares of authorized but unissued Series Preferred Stock, $1.00 par value.

The Company has a universal shelf registration statement with the SEC to allow for the potential future sale by the Company, from time to time, in one or more public offerings, of an indeterminate amount of our common stock, preferred stock, debt securities and other securities specified therein at indeterminate prices. This registration statement expires in February 2018, and we intend to file a new three-year universal shelf registration statement.

In 2015, the Company filed a registration statement with the SEC which permits the offering, from time to time, of an aggregate of $500,000 in shares of common stock and shares of preferred stock in connection with acquisitions. During 2016, 439,943 shares of common stock totaling $12,845 were issued by the Company to acquire a water utility system. The balance remaining available for use under the acquisition shelf registration as of December 31, 2017 is $487,155.

The form and terms of any securities issued under the universal shelf registration statement and the acquisition shelf registration statement will be determined at the time of issuance.

The Company has a Dividend Reinvestment and Direct Stock Purchase Plan ("Plan") that allows reinvested dividends to be used to purchase shares of common stock at a five percent discount from the current market value. Under the direct stock purchase program, shares are purchased by investors at a five percent discount from the market price. The shares issued under the Plan are either shares purchased by the Company's transfer agent in the open-market or original issue shares. In 2017, 2016, and 2015, 447,753 484,645, and 535,439 shares of the Company were purchased under the dividend reinvestment portion of the Plan by the Company's transfer agent in the open-market for $15,168, $14,916, and $14,380, respectively. During 2017 and 2016, under the dividend reinvestment portion of the Plan, 45,121 and 47,478

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original issue shares of common stock were sold, providing the Company with proceeds of $1,453 and $1,388, respectively.

In December 2014, the Company's Board of Directors authorized a share buyback program, commencing in 2015, of up to 1,000,000 shares to minimize share dilution through timely and orderly share repurchases. In December 2015, the Company's Board of Directors added 400,000 shares to this program. The specific timing, amount and other terms of repurchases depend on market conditions, regulatory requirements and other factors. In 2016, we did not repurchase any shares of our common stock in the open market. In 2015, we repurchased 805,000 shares of the Company's common stock in the open market for $20,502. In 2014, we repurchased 560,000 shares of our common stock in the open market for $13,280. This program expired on December 31, 2016.

The Company's accumulated other comprehensive income is reported in the stockholders' equity section of the consolidated balance sheets, the consolidated statements of equity, and the related components of other comprehensive income are reported in the consolidated statements of comprehensive income. The Company reports its unrealized gains or losses on investments as other comprehensive income and accumulated other comprehensive income. The Company recorded a regulatory asset for its underfunded status of its pension and other post-retirement benefit plans that would otherwise be charged to other comprehensive income, as it anticipates recovery of its costs through customer rates.

Note 13 – *Net Income per Common Share and Equity per Common Share*

Basic net income per share is based on the weighted average number of common shares outstanding. Diluted net income per share is based on the weighted average number of common shares outstanding and potentially dilutive shares. The dilutive effect of employee stock-based compensation is included in the computation of diluted net income per share. The dilutive effect of stock-based compensation is calculated by using the treasury stock method and expected proceeds upon exercise or issuance of the stock-based compensation. The following table summarizes the shares, in thousands, used in computing basic and diluted net income per share:

	Years ended December 31,		
	2017	2016	2015
Average common shares outstanding during the period for basic computation	177,612	177,273	176,788
Effect of dilutive securities:			
Employee stock-based compensation	563	573	729
Average common shares outstanding during the period for diluted computation	178,175	177,846	177,517

For the years ended December 31, 2017, 2016, and 2015, all of the Company's employee stock options were included in the calculation of diluted net income per share as the calculated cost to exercise the stock options was less than the average market price of the Company's common stock during these periods.

Equity per common share was $11.02 and $10.43 at December 31, 2017 and 2016, respectively. These amounts were computed by dividing Aqua America stockholders' equity by the number of shares of common stock outstanding at the end of each year.

Note 14 – *Employee Stock and Incentive Plan*

Under the Company's 2009 Omnibus Equity Compensation Plan, as amended as of February 27, 2014 (the "2009 Plan"), as approved by the Company's shareholders to replace the 2004 Equity Compensation Plan (the "2004 Plan"), stock options, stock units, stock awards, stock appreciation rights, dividend equivalents, and other stock-based awards may be granted to employees, non-employee directors, and consultants and advisors. No further grants may be made under the 2004 Plan. The 2009 Plan authorizes 6,250,000 shares for issuance under the plan. A maximum of 3,125,000 shares under the 2009 Plan may be issued pursuant to stock award, stock units and other stock-based awards, subject to adjustment as provided in the 2009 Plan. During any calendar year, no individual may be granted (i) stock options and

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stock appreciation rights under the 2009 Plan for more than 500,000 shares of common stock in the aggregate or (ii) stock awards, stock units or other stock-based awards under the 2009 Plan for more than 500,000 shares of Company stock in the aggregate, subject to adjustment as provided in the 2009 Plan. Awards to employees and consultants under the 2009 Plan are made by a committee of the Board of Directors, except that with respect to awards to the Chief Executive Officer, the committee recommends those awards for approval by the non-employee directors of the Board of Directors. In the case of awards to non-employee directors, the Board of Directors makes such awards. At December 31, 2017, 3,720,624 shares underlying stock-based compensation awards were still available for grant under the 2009 Plan.

The recording of compensation expense for share-based compensation has no impact on net cash flows and results in the reclassification on the consolidated cash flow statements of related tax benefits from cash flows from operating activities to cash flows from financing activities to the extent these tax benefits exceed the associated compensation cost.

Performance Share Units – During 2017, 2016, and 2015, the Company granted performance share units. A performance share unit ("PSU") represents the right to receive a share of the Company's common stock if specified performance goals are met over the three year performance period specified in the grant, subject to exceptions through the respective vesting periods, generally three years. Each grantee is granted a target award of PSUs, and may earn between 0% and 200% of the target amount depending on the Company's performance against the performance goals.

The performance goals of the 2017, 2016, and 2015 PSU grants consisted of the following metrics:

	Performance Grant of:		
	2017	2016	2015
Metric 1 – Company's total shareholder return ("TSR") compared to the TSR for a specific peer group of investor-owned water companies (a market-based condition)	26.47%	27.5%	30%
Metric 2 – Company's TSR compared to the TSR for the companies listed in the Standard and Poor's Midcap Utilities Index (a market-based condition)	26.47%	27.5%	30%
Metric 3 – Achievement of a targeted cumulative level of rate base growth as a result of acquisitions (a performance-based condition)	23.53%	-	-
Metric 4 – Achievement of targets for maintaining consolidated operations and maintenance expenses over the three year measurement period (a performance-based condition)	23.53%	-	-
Metric 5 – Achievement of a targeted cumulative level of rate base growth as a result of acquisitions (a performance-based condition)	-	25.0%	-
Metric 6 – Achievement of targets for maintaining consolidated operations and maintenance expenses over the three year measurement period (a performance-based condition)	-	20.0%	-
Metric 7 – Maintaining an average ratio of operations and maintenance expenses as a percentage of revenues at Aqua Pennsylvania compared to a target average ratio for the three year performance period (a performance-based condition)	-	-	20%
Metric 8 – Earning a cumulative total earnings before taxes for the Company's operations other than Aqua Pennsylvania for the three year performance period compared to a target (a performance-based condition)	-	-	20%

The following table provides the compensation expense and income tax benefit for PSUs:

	Years ended December 31,		
	2017	2016	2015
Stock-based compensation within operations and maintenance expense	$ 4,351	$ 3,823	$ 4,419
Income tax benefit	1,766	1,552	1,796

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The following table summarizes nonvested PSU transactions for the year ended December 31, 2017:

	Number of Share Units		Weighted Average Fair Value
Nonvested share units at beginning of period	476,896	$	27.96
Granted	125,202		30.79
Performance criteria adjustment	(33,502)		28.14
Forfeited	(22,664)		28.68
Share units vested in prior period and issued in current period	32,400		25.31
Share units issued	(125,999)		36.37
Nonvested share units at end of period	452,333		26.16

A portion of the fair value of PSUs was estimated at the grant date based on the probability of satisfying the market-based conditions associated with the PSUs using the Monte Carlo valuation method, which assesses the probabilities of various outcomes of market conditions. The other portion of the fair value of the PSUs associated with performance-based conditions was based on the fair market value of the Company's stock at the grant date, regardless of whether the market-based condition is satisfied. The fair value of each PSU grant is amortized into compensation expense on a straight-line basis over their respective vesting periods, generally 36 months. The accrual of compensation costs is based on an estimate of the final expected value of the award, and is adjusted as required for the portion based on the performance-based condition. The Company assumes that forfeitures will be minimal, and recognizes forfeitures as they occur, which results in a reduction in compensation expense. As the payout of the PSUs includes dividend equivalents, no separate dividend yield assumption is required in calculating the fair value of the PSUs. The recording of compensation expense for PSUs has no impact on net cash flows. The following table provides the assumptions used in the pricing model for the grant, the resulting grant date fair value of PSUs, and the intrinsic value and fair value of PSUs that vested during the year:

	Years ended December 31,					
		2017		2016		2015
Expected term (years)		3.0		3.0		3.0
Risk-free interest rate		1.49%		0.91%		1.03%
Expected volatility		17.9%		17.9%		16.9%
Weighted average fair value of PSUs granted	$	30.79	$	28.89	$	26.46
Intrinsic value of vested PSUs	$	3,926	$	5,912	$	7,964
Fair value of vested PSUs	$	3,207	$	5,104	$	6,416

As of December 31, 2017, $4,945 of unrecognized compensation costs related to PSUs is expected to be recognized over a weighted average period of approximately 1.7 years. The aggregate intrinsic value of PSUs as of December 31, 2017 was $18,114. The aggregate intrinsic value of PSUs is based on the number of nonvested share units and the market value of the Company's common stock as of the period end date.

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Restricted Stock Units – A restricted stock unit ("RSU") represents the right to receive a share of the Company's common stock and is valued based on the fair market value of the Company's stock on the date of grant. RSUs are eligible to be earned at the end of a specified restricted period, generally three years, beginning on the date of grant. In some cases, the right to receive the shares is subject to specific performance goals established at the time the grant is made. The Company assumes that forfeitures will be minimal, and recognizes forfeitures as they occur, which results in a reduction in compensation expense. As the payout of the RSUs includes dividend equivalents, no separate dividend yield assumption is required in calculating the fair value of the RSUs. The following table provides the compensation expense and income tax benefit for RSUs:

	Years ended December 31,		
	2017	2016	2015
Stock-based compensation within operations and maintenance expense	$ 1,183	$ 1,061	$ 1,076
Income tax benefit	489	438	444

The following table summarizes nonvested RSU transactions for the year ended December 31, 2017:

	Number of Stock Units	Weighted Average Fair Value
Nonvested stock units at beginning of period	109,273	$ 28.48
Granted	41,293	30.37
Stock units vested but not paid	(1,467)	31.47
Stock units vested and issued	(26,914)	26.45
Forfeited	(5,398)	31.03
Nonvested stock units at end of period	116,787	29.46

The following table summarizes the value of RSUs:

	Years ended December 31,		
	2017	2016	2015
Weighted average fair value of RSUs granted	$ 30.37	$ 32.08	$ 26.00
Intrinsic value of vested RSUs	896	805	2,327
Fair value of vested RSUs	751	605	1,904

As of December 31, 2017, $1,401 of unrecognized compensation costs related to RSUs is expected to be recognized over a weighted average period of approximately 1.7 years. The aggregate intrinsic value of RSUs as of December 31, 2017 was $4,582. The aggregate intrinsic value of RSUs is based on the number of nonvested stock units and the market value of the Company's common stock as of the period end date.

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Stock Options – A stock option represents the option to purchase a number of shares of common stock of the Company as specified in the stock option grant agreement at the exercise price per share as determined by the closing market price of our common stock on the grant date. Stock options are exercisable in installments of 33% annually, starting one year from the grant date and expire ten years from the grant date. The vesting of stock options granted in 2017 are subject to the achievement of the following performance goal: the Company achieves at least an adjusted return on equity equal to 150 basis points below the return on equity granted by the Pennsylvania Public Utility Commission during the Company's Pennsylvania subsidiary's last rate proceeding. The adjusted return on equity equals net income, excluding net income or loss from acquisitions which have not yet been incorporated into a rate application as of the last year end, divided by equity which excludes equity applicable to acquisitions which are not yet incorporated in a rate application during the award period.

The fair value of each stock option is amortized into compensation expense using the graded vesting method, which results in the recognition of compensation costs over the requisite service period for each separately vesting tranche of the stock options as though the stock options were, in substance, multiple stock option grants. The following table provides compensation expense and income tax benefit for stock options:

	Years ended December 31,		
	2017	2016	2015
Stock-based compensation within operations and maintenance expenses	$ 245	$ -	$ -
Income tax benefit	208	260	193

There were no stock options granted during the years ended December 31, 2016, and 2015.

Options under the plans were issued at the closing market price of the stock on the day of the grant.
The fair value of options was estimated at the grant date using the Black-Scholes option-pricing model, which relies on assumptions that require management's judgment. The following table provides the assumptions used in the pricing model for grants and the resulting grant date fair value of stock options granted in the period reported:

	Year ended December 31, 2017
Expected term (years)	5.45
Risk-free interest rate	2.01%
Expected volatility	17.7%
Dividend yield	2.51%
Grant date fair value per option	$ 4.07

The Company assumes that forfeitures will be minimal, and recognizes forfeitures as they occur, which results in a reduction in compensation expense.

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The following table summarizes stock option transactions for the year ended December 31, 2017:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Life (years)	Aggregate Intrinsic Value
Outstanding, beginning of year	427,335	$ 15.55		
Granted	120,127	30.47		
Forfeited	(5,191)	30.47		
Expired / Cancelled	(2,812)	14.26		
Exercised	(174,527)	16.46		
Outstanding at end of year	364,932	$ 19.83	3.7	$ 7,081
Exercisable at end of year	249,996	$ 14.93	1.2	$ 6,074

The intrinsic value of stock options is the amount by which the market price of the stock on a given date, such as at the end of the period or on the day of exercise, exceeded the closing market price of stock on the date of grant. The following table summarizes the intrinsic value of stock options exercised:

	Years ended December 31, 2017	2016	2015
Intrinsic value of options exercised	$ 2,767	$ 2,945	$ 4,154

The following table summarizes information about the options outstanding and options exercisable as of December 31, 2017:

	Options Outstanding			Options Exercisable	
	Shares	Weighted Average Remaining Life (years)	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Range of prices:					
$13.00 - 14.99	89,770	2.1	$ 13.72	89,770	$ 13.72
$15.00 - 15.99	101,167	1.2	15.30	101,167	15.30
$16.00 - 16.99	59,059	0.2	16.15	59,059	16.15
$17.00 - 30.99	114,936	9.1	30.47	-	-
	364,932	3.7	19.83	249,996	14.93

As of December 31, 2017, there was $223 of total unrecognized compensation costs related to nonvested stock options granted under the plans. The cost is expected to be recognized over a weighted average period of approximately 1.5 years.

Restricted Stock – Restricted stock awards provide the grantee with the rights of a shareholder, including the right to receive dividends and to vote such shares, but not the right to sell or otherwise transfer the shares during the restriction period. Restricted stock awards result in compensation expense which is equal to the fair market value of the stock on the date of the grant and is amortized ratably over the restriction period. The Company expects forfeitures of restricted stock to be de minimis.

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The following table summarizes the value of restricted stock awards:

	Years ended December 31, 2017	2016	2015
Intrinsic value of restricted stock awards vested	$ -	$ -	$ 860
Fair value of restricted stock awards vested	-	-	553

As of December 31, 2017, there were no unrecognized compensation costs related to nonvested restricted stock as restricted stock was fully amortized in 2014. Additionally, there was no restricted stock granted during the years ended December 31, 2017, 2016, and 2015.

Stock Awards – The following table provides compensation costs for stock-based compensation related to stock awards:

	Years ended December 31, 2017	2016	2015
Stock-based compensation within operations and maintenance expense	$ 563	$ 506	$ 365
Income tax benefit	233	210	151

The following table summarizes the value of stock awards:

	Years ended December 31, 2017	2016	2015
Intrinsic and fair value of stock awards vested	$ 563	$ 506	$ 365
Weighted average fair value of stock awards granted	34.42	31.87	26.44

The following table summarizes stock award transactions for year ended December 31, 2017:

	Number of Stock Awards	Weighted Average Fair Value
Nonvested stock awards at beginning of period	-	$ -
Granted	16,345	34.42
Vested	(16,345)	34.42
Nonvested stock awards at end of period	-	-

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Note 15 – ***Pension Plans and Other Post-retirement Benefits***

The Company maintains a qualified, defined benefit pension plan that covers its full-time employees who were hired prior to April 1, 2003. Retirement benefits under the plan are generally based on the employee's total years of service and compensation during the last five years of employment. The Company's policy is to fund the plan annually at a level which is deductible for income tax purposes and which provides assets sufficient to meet its pension obligations over time. To offset some limitations imposed by the Internal Revenue Code with respect to payments under qualified plans, the Company has a non-qualified Supplemental Pension Benefit Plan for Salaried Employees in order to prevent some employees from being penalized by these limitations, and to provide certain retirement benefits based on employee's years of service and compensation. The Company also had non-qualified Supplemental Executive Retirement Plans, which were terminated in 2016, for some current and retired employees. The net pension costs and obligations of the qualified and non-qualified plans are included in the tables which follow. Employees hired after April 1, 2003 may participate in a defined contribution plan that provides a Company matching contribution on amounts contributed by participants and an annual profit-sharing contribution based upon a percentage of the eligible participants' compensation.

Effective July 1, 2015, the Company added a permanent lump sum option to the form of benefit payments offered to participants of the qualified defined benefit pension plan upon retirement or termination. The plan paid $8,858 and $9,990 to participants who elected this option during 2017 and 2016.

In addition to providing pension benefits, the Company offers post-retirement benefits other than pensions to employees hired before April 1, 2003 and retiring with a minimum level of service. These benefits include continuation of medical and prescription drug benefits, or a cash contribution toward such benefits, for eligible retirees and life insurance benefits for eligible retirees. The Company funds these benefits through various trust accounts. The benefits of retired officers and other eligible retirees are paid by the Company and not from plan assets due to limitations imposed by the Internal Revenue Code.

In 2016, the Company recognized a settlement loss of $2,895, which results from lump sum payments from the non-qualified plans exceeding the threshold of service and interest cost for the period. A settlement loss is the recognition of unrecognized pension benefit costs that would have been incurred in subsequent periods. The Company recorded this settlement loss as a regulatory asset, as it is probable of recovery in future rates, which will be amortized into pension benefit costs.

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The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid in the years indicated:

	Pension Benefits	Other Post-retirement Benefits
Years:		
2018	$ 20,516	$ 2,249
2019	20,462	2,553
2020	21,580	2,777
2021	20,674	2,957
2022	21,538	3,177
2023-2027	106,397	18,764

The changes in the benefit obligation and fair value of plan assets, the funded status of the plans and the assumptions used in the measurement of the company's benefit obligation are as follows:

	Pension Benefits		Other Post-retirement Benefits	
	2017	2016	2017	2016
Change in benefit obligation:				
Benefit obligation at January 1,	$ 308,172	$ 306,539	$ 69,312	$ 65,137
Service cost	3,174	3,179	1,020	1,014
Interest cost	12,434	13,088	2,947	2,927
Actuarial loss	18,516	15,321	4,047	1,400
Plan participants' contributions	-	-	124	170
Benefits paid	(21,317)	(21,861)	(1,490)	(1,336)
Settlements	-	(7,742)	-	-
Special termination benefits	-	(302)	-	-
Benefit obligation at December 31,	320,979	308,172	75,960	69,312
Change in plan assets:				
Fair value of plan assets at January 1,	242,360	238,605	46,085	43,704
Actual return on plan assets	33,278	17,375	5,188	2,149
Employer contributions	16,032	16,285	500	1,360
Benefits paid	(21,317)	(21,861)	(1,323)	(1,128)
Settlements	-	(7,742)	-	-
Special termination benefits	-	(302)	-	-
Asset transfer	-	-	(2,700)	-
Fair value of plan assets at December 31,	270,353	242,360	47,750	46,085
Funded status of plan:				
Net liability recognized at December 31,	$ 50,626	$ 65,812	$ 28,210	$ 23,227

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The following table provides the net liability recognized on the consolidated balance sheets at December 31,:

	Pension Benefits				Other Post-retirement Benefits			
	2017		2016		2017		2016	
Current liability	$	396	$	613	$	-	$	-
Noncurrent liability		50,230		65,199		28,210		23,227
Net liability recognized	$	50,626	$	65,812	$	28,210	$	23,227

At December 31, 2017 and 2016, the Company's pension plans had benefit obligations in excess of its plan assets. The following tables provide the projected benefit obligation, the accumulated benefit obligation and fair market value of the plan assets as of December 31,:

	Projected Benefit Obligation Exceeds the Fair Value of Plan Assets			
	2017		2016	
Projected benefit obligation	$	320,979	$	308,172
Fair value of plan assets		270,353		242,360

	Accumulated Benefit Obligation Exceeds the Fair Value of Plan Assets			
	2017		2016	
Accumulated benefit obligation	$	301,473	$	291,889
Fair value of plan assets		270,353		242,360

The following table provides the components of net periodic benefit costs for the years ended December 31,:

	Pension Benefits						Other Post-retirement Benefits					
	2017		2016		2015		2017		2016		2015	
Service cost	$	3,174	$	3,179	$	3,349	$	1,020	$	1,014	$	1,224
Interest cost		12,434		13,038		12,955		2,947		2,927		2,802
Expected return on plan assets		(17,077)		(16,910)		(18,702)		(2,589)		(2,647)		(2,923)
Amortization of prior service cost (credit)		579		578		174		(509)		(549)		(687)
Amortization of actuarial loss		8,003		7,153		5,993		1,165		926		1,282
Settlement loss		-		2,895		-		-		-		-
Special termination benefits		-		302		-						
Net periodic benefit cost	$	7,113	$	10,235	$	3,769	$	2,034	$	1,671	$	1,698

The Company records the underfunded status of its pension and other post-retirement benefit plans on its consolidated balance sheets and records a regulatory asset for these costs that would otherwise be charged to stockholders' equity, as the Company anticipates recoverability of the costs through customer rates to be probable. The Company's pension and other post-retirement benefit plans were underfunded at December 31, 2017 and 2016. Changes in the plans' funded status will affect the assets and liabilities recorded on the balance sheet. Due to the Company's regulatory treatment, the recognition of the funded status is recorded as a regulatory asset pursuant to the FASB's accounting guidance for regulated operations.

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AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

The following table provides the amounts recognized in regulatory assets that have not been recognized as components of net periodic benefit cost as of December 31,:

	Pension Benefits		Other Post-retirement Benefits	
	2017	2016	2017	2016
Net actuarial loss	$ 86,750	$ 92,436	$ 15,724	$ 15,441
Prior service cost (credit)	3,262	3,841	(1,869)	(2,378)
Total recognized in regulatory assets	$ 90,012	$ 96,277	$ 13,855	$ 13,063

The following table provides the estimated net actuarial loss and prior service cost for the Company's pension plans that will be amortized from regulatory asset into net periodic benefit cost for the year ending December 31, 2018:

	Pension Benefits	Other Post-retirement Benefits
Net actuarial loss	$ 7,291	$ 1,182
Prior service cost (credit)	527	(509)

Accounting for pensions and other post-retirement benefits requires an extensive use of assumptions about the discount rate, expected return on plan assets, the rate of future compensation increases received by the Company's employees, mortality, turnover and medical costs. Each assumption is reviewed annually with assistance from the Company's actuarial consultant who provides guidance in establishing the assumptions. The assumptions are selected to represent the average expected experience over time and may differ in any one year from actual experience due to changes in capital markets and the overall economy. These differences will impact the amount of pension and other post-retirement benefit expense that the Company recognizes.

The significant assumptions related to the Company's benefit obligations are as follows:

	Pension Benefits		Other Post-retirement Benefits	
	2017	2016	2017	2016
Weighted Average Assumptions Used to Determine Benefit Obligations as of December 31,				
Discount rate	3.66%	4.16%	3.78%	4.25%
Rate of compensation increase	3.0-4.0%	3.0-4.0%	n/a	n/a
Assumed Health Care Cost Trend Rates Used to Determine Benefit Obligations as of December 31,				
Health care cost trend rate	n/a	n/a	7.0%	6.6%
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	n/a	n/a	5.0%	5.0%
Year that the rate reaches the ultimate trend rate	n/a	n/a	2022	2020

n/a – Assumption is not applicable.

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AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

The significant assumptions related to the Company's net periodic benefit costs are as follows:

	Pension Benefits			Other Post-retirement Benefits		
	2017	2016	2015	2017	2016	2015
Weighted Average Assumptions Used to Determine Net Periodic Benefit Costs for Years Ended December 31,						
Discount rate	4.13%	4.48%	4.20%	4.25%	4.60%	4.17%
Expected return on plan assets	7.00%	7.25%	7.50%	4.67-7.00%	4.83-7.25%	5.00-7.50%
Rate of compensation increase	3.0-4.0%	3.0-4.0%	3.0-4.0%	n/a	n/a	n/a
Assumed Health Care Cost Trend Rates Used to Determine Net Periodic Benefit Costs for Years Ended December 31,						
Health care cost trend rate	n/a	n/a	n/a	6.6%	7.0%	7.0%
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	n/a	n/a	n/a	5.0%	5.0%	5.0%
Year that the rate reaches the ultimate trend rate	n/a	n/a	n/a	2021	2021	2019

n/a – Assumption is not applicable.

Assumed health-care trend rates have a significant effect on the expense and liabilities for other post-retirement benefit plans. The health care trend rate is based on historical rates and expected market conditions. A one-percentage point change in the assumed health-care cost trend rates would have the following effects:

	1-Percentage-Point Increase	1-Percentage-Point Decrease
Effect on the health-care component of the accrued other post-retirement benefit obligation	$ 4,797	$ (4,369)
Effect on aggregate service and interest cost components of net periodic post-retirement health-care benefit cost	$ 277	$ (244)

The Company's discount rate assumption, which is utilized to calculate the present value of the projected benefit payments of our post-retirement benefits, was determined by selecting a hypothetical portfolio of high quality corporate bonds appropriate to match the projected benefit payments of the plans. The selected bond portfolio was derived from a universe of Aa-graded corporate bonds, all of which were noncallable (or callable with make-whole provisions), and have at least $50,000 in outstanding value. The discount rate was then developed as the rate that equates the market value of the bonds purchased to the discounted value of the plan's benefit payments. The Company's pension expense and liability (benefit obligations) increases as the discount rate is reduced.

The Company's expected return on plan assets is determined by evaluating the asset class return expectations with its advisors as well as actual, long-term, historical results of our asset returns. The Company's market related value of plan assets is equal to the fair value of the plan's assets as of the last day of its fiscal year, and is a determinant for the expected return on plan assets which is a component of post-retirement benefits expense. The Company's pension expense increases as the expected return on plan assets decreases. For 2017, the Company used a 7.00% expected return on plan assets assumption which will decrease to 6.75% for 2018. The Company believes its actual long-term asset allocation on average will approximate the targeted allocation. The Company's investment strategy is to earn a reasonable rate of return while maintaining risk at acceptable levels. Risk is managed through fixed income investments to manage interest rate exposures that impact the valuation of liabilities and through the diversification of investments across and within

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AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

various asset categories. Investment returns are compared to a total plan benchmark constructed by applying the plan's asset allocation target weightings to passive index returns representative of the respective asset classes in which the plan invests. The Retirement and Employee Benefits Committee meets quarterly to review plan investments and management monitors investment performance quarterly through a performance report prepared by an external consulting firm.

The Company's pension plan asset allocation and the target allocation by asset class are as follows:

	Target Allocation	Percentage of Plan Assets at December 31, 2017
Return seeking assets	50 to 70%	64%
Liability hedging assets	30 to 50%	36%
Total	100%	100%

	Target Allocation	Percentage of Plan Assets at December 31, 2016
Domestic equities	25 to 75%	65%
International equities	0 to 10%	6%
Fixed income	25 to 60%	19%
Alternative investments	0 to 5%	2%
Cash and cash equivalents	0 to 20%	8%
Total	100%	100%

The fair value of the Company's pension plans' assets at December 31, 2017 by asset class are as follows:

	Level 1	Level 2	Level 3	Assets measured at NAV (a)	Total
Common stock	$ 26,902	$ -	$ -	$ -	$ 26,902
Return seeking assets:					
Global equities	-	-	-	66,281	66,281
Real estate securities	-	-	-	14,110	14,110
Hedge / diversifying strategies	-	-	-	38,143	38,143
Credit	-	-	-	28,395	28,395
Liability hedging assets	-	-	-	91,872	91,872
Cash and cash equivalents	4,650	-	-	-	4,650
Total pension assets	$ 31,552	$ -	$ -	$ 238,801	$ 270,353

(a) Assets that are measured at fair value using the NAV per share practical expedient have not been classified in the fair value hierarchy.

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AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

The fair value of the Company's pension plans' assets at December 31, 2016 by asset class are as follows:

	Level 1	Level 2	Level 3	Total
Domestic equities:				
Common stocks	$ 152,740	$	$ -	$ 152,740
Mutual funds	3,668	-	-	3,668
International equities	13,813	-	-	13,813
Fixed income:				
U.S. Treasury and government agency bonds	-	11,170	-	11,170
Corporate and foreign bonds	-	24,385	-	24,385
Mutual funds	9,752		-	9,752
Alternative investments:				
Real estate	2,613	-	-	2,613
Commodity funds	1,279	-	-	1,279
Cash and cash equivalents	348	22,592	-	22,940
Total pension assets	$ 184,213	$ 58,147	$ -	$ 242,360

Equity securities include our common stock in the amounts of $16,471 or 6.1% and $20,632 or 8.5% of total pension plans' assets as of December 31, 2017 and 2016, respectively.

The asset allocation for the Company's other post-retirement benefit plans and the target allocation by asset class are as follows:

	Target Allocation	Percentage of Plan Assets at December 31, 2017
Return seeking assets	50 to 70%	62%
Liability hedging assets	30 to 50%	38%
Total	100%	100%

	Target Allocation	Percentage of Plan Assets at December 31, 2016
Domestic equities	25 to 75%	52%
International equities	0 to 10%	3%
Fixed income	25 to 60%	25%
Alternative investments	0 to 5%	0%
Cash and cash equivalents	0 to 20%	20%
Total	100%	100%

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AQUA AMERICA, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(In thousands of dollars, except per share amounts)

The fair value of the Company's other post-retirement benefit plans' assets at December 31, 2017 by asset class are as follows:

	Level 1	Level 2	Level 3	Assets measured at NAV (a)	Total
Return seeking assets					
Global equities	$ 9,477	$ -	$ -	$ 15,158	$ 24,635
Real estate securities	1,731	-	-	3,211	4,942
Liability hedging assets	5,265	-	-	8,961	14,226
Cash and cash equivalents	3,947	-	-		3,947
Total other post-retirement assets	$ 20,420	$ -	$ -	$ 27,330	$ 47,750

(a) Assets that are measured at fair value using the NAV per share practical expedient have not been classified in the fair value hierarchy.

The fair value of the Company's other post-retirement benefit plans' assets at December 31, 2016 by asset class are as follows:

	Level 1	Level 2	Level 3	Total
Domestic equities:				
Common stocks	$ 10,667	$ -	$ -	$ 10,667
Mutual funds	13,464	-	-	13,464
International equities	1,242	-	-	1,242
Fixed income:				
U.S. Treasury and government agency bonds	-	4,968	-	4,968
Corporate and foreign bonds	-	6,347	-	6,347
Alternative investments	172	-	-	172
Cash and cash equivalents	-	9,225	-	9,225
Total other post-retirement assets	$ 25,545	$ 20,540	$ -	$ 46,085

Valuation Techniques Used to Determine Fair Value

- *Common Stocks* - Investments in common stocks are valued using unadjusted quoted prices obtained from active markets.
- *Return Seeking Assets* – Investments in return seeking assets consists of the following:
  - o Global equities, which consist of common and preferred shares of stock, traded on U.S. or foreign exchanges that are valued using unadjusted quoted prices obtained from active markets, or commingled fund vehicles, consisting of such securities valued using NAV, which are not classified within the fair value hierarchy.
  - o Real estate securities, which consist of securities, traded on U.S. or foreign exchanges that are valued using unadjusted quoted prices obtained from active markets, or for real estate commingle fund vehicles that are not publicly quoted, the fund administrators value the funds using the NAV per fund share, derived from the quoted prices in active markets of the underlying securities and are not classified within the fair value hierarchy.

- Hedge / diversifying strategies, which consist of a multi-manager fund vehicle having underlying exposures that collectively seek to provide low correlation of return to equity and fixed income markets, thereby offering diversification. As a multi-manager fund investment, NAV is derived from underlying manager NAVs, which are derived from the quoted prices in active markets of the underlying securities and are not classified within the fair value hierarchy.
- Credit, which consist of certain opportunistic, return-oriented credits which primarily include below investment grade bonds (i.e. high yield bonds), bank loans, and securitized debt. Credits are valued using the NAV per fund share, derived from either quoted prices in active markets of the underlying securities, or less active markets, or quotes of similar assets, and are not classified within the fair value hierarchy.

- *Liability Hedging Assets* – Investments in liability hedging assets consist of funds investing in high-quality fixed income (i.e. U.S. Treasury securities and government bonds), and for funds for which market quotations are readily available, are valued at the last reported closing price on the primary market or exchange on which they are traded. Funds for which market quotations are not readily available, are valued using the NAV per fund share, derived from the quoted prices in active markets of the underlying securities and are not classified within the fair value hierarchy.
- *Cash and Cash Equivalents* – Investments in cash and cash equivalents are comprised of both uninvested cash and money market funds. The uninvested cash is valued based on its carrying value, and the money market funds are valued utilizing the net asset value per unit based on the fair value of the underlying assets as determined by the fund's investment managers.
- *Mutual Funds* – Investments in mutual funds which consist of either equity or fixed income investments are valued using the net asset value per unit as obtained from quoted market prices from active markets.
- *International Equities* – Investments in international equities are valued using unadjusted quoted prices obtained from active markets.
- *Fixed Income* – Investments in fixed income that comprise U.S. Treasury and government agency bonds, and corporate and foreign bonds are valued utilizing pricing models that incorporate available trade, bid, and other market information to value the fixed income securities.
- *Alternative Investments* – Investments in alternative investments are comprised of either real estate funds, real estate investment trusts, or commodity funds, and are valued using unadjusted quoted prices obtained from active markets.

Funding requirements for qualified defined benefit pension plans are determined by government regulations and not by accounting pronouncements. In accordance with funding rules and the Company's funding policy, during 2018 our pension contribution is expected to be $12,484.

The Company has a 401(k) savings plan, which is a defined contribution plan and covers substantially all employees. The Company makes matching contributions that are based on a percentage of an employee's contribution, subject to specific limitations, as well as, non-discretionary contributions based on eligible hourly wages for certain union employees, discretionary year-end contributions based on an employee's eligible compensation, and employer profit sharing contributions. Participants may diversify their Company matching account balances into other investments offered under the 401(k) savings plan. The Company's contributions, which are recorded as compensation expense, were $5,374, $4,988, and $5,001, for the years ended December 31, 2017, 2016, and 2015, respectively.

Note 16 – *Water and Wastewater Rates*

On June 7, 2012, Aqua Pennsylvania reached a settlement agreement in its rate filing with the Pennsylvania Public Utility Commission, which in addition to a water rate increase, provided for a reduction in current income tax expense as a result of the recognition of qualifying income tax benefits upon Aqua Pennsylvania changing its tax accounting method to permit the expensing of qualifying utility asset improvement costs that historically have been capitalized and depreciated for book and tax purposes. In December 2012, Aqua Pennsylvania implemented this change which provides for the flow-through of income tax benefits that resulted in a substantial reduction in income tax expense and greater net income and cash flow. This change allowed Aqua Pennsylvania to suspend its water Distribution System Improvement Charges in 2013 and lengthen the amount of time until the next Aqua Pennsylvania rate case. Beginning on October 1, 2017, Aqua Pennsylvania initiated a water infrastructure rehabilitation surcharge for the capital invested since the last rate proceeding and expects to file a base rate case in 2018.

The Company's operating subsidiaries were allowed rate increases totaling $7,558 in 2017, $3,434 in 2016, and $3,347 in 2015, represented by five, six, and four rate decisions, respectively. Revenues from these increases realized in the year of grant were approximately $6,343, $1,788, and $2,887 in 2017, 2016, and 2015, respectively.

Six states in which the Company operates permit water utilities, and in five states wastewater utilities, to add a surcharge to their water or wastewater bills to offset the additional depreciation and capital costs related to infrastructure system replacement and rehabilitation projects completed and placed into service between base rate filings. Currently, Pennsylvania, Illinois, Ohio, Indiana, New Jersey, and North Carolina allow for the use of this surcharge. The surcharge for infrastructure system replacements and rehabilitations is typically adjusted periodically based on additional qualified capital expenditures completed or anticipated in a future period, is capped as a percentage of base rates, generally at 5% to 12.75%, and is reset to zero when new base rates that reflect the costs of those additions become effective or when a utility's earnings exceed a regulatory benchmark. The surcharge for infrastructure system replacements and rehabilitations provided revenues in 2017, 2016, and 2015 of $10,255, $7,379, and $3,261, respectively.

Note 17 – *Segment Information*

The Company has ten operating segments and one reportable segment. The Regulated segment, the Company's single reportable segment, is comprised of eight operating segments representing our water and wastewater regulated utility companies which are organized by the states where we provide water and wastewater services. These operating segments are aggregated into one reportable segment since each of these operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution or wastewater collection methods, and the nature of the regulatory environment.

Two operating segments are included within the Other category below. These segments are not quantitatively significant and are comprised of Aqua Infrastructure and Aqua Resources. In addition to these segments, Other is comprised of other business activities not included in the reportable segment, including corporate costs that have not been allocated to the Regulated segment and intersegment eliminations. Corporate costs include general and administrative expenses, and interest expense.

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AQUA AMERICA, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The following table presents information about the Company's reportable segment:

	2017			2016		
	Regulated	Other and Eliminations	Consolidated	Regulated	Other and Eliminations	Consolidated
Operating revenues	$ 804,905	$ 4,620	$ 809,525	$ 800,107	$ 19,768	$ 819,875
Operations and maintenance expense	286,962	244	287,206	285,347	19,550	304,897
Depreciation	136,246	56	136,302	131,835	(848)	130,987
Amortization	240	182	422	2,076	(55)	2,021
Operating income (loss)	326,935	2,032	328,967	326,933	(1,348)	325,585
Interest expense, net	81,974	6,367	88,341	76,222	4,372	80,594
Allowance for funds used during construction	15,211	-	15,211	8,816	-	8,816
Equity earnings in joint venture	-	(331)	(331)	-	(976)	(976)
Income tax (benefit)	14,107	2,807	16,914	24,956	(3,978)	20,978
Net income (loss)	246,548	(6,810)	239,738	234,922	(740)	234,182
Capital expenditures	478,077	12	478,089	381,965	1,031	382,996
Total assets	6,236,109	96,354	6,332,463	6,066,477	92,514	6,158,991
Goodwill	37,389	4,841	42,230	37,367	4,841	42,208

	2015		
	Regulated	Other and Eliminations	Consolidated
Operating revenues	$ 779,613	$ 34,591	$ 814,204
Operations and maintenance expense	282,866	26,444	309,310
Depreciation	125,146	144	125,290
Amortization	3,364	83	3,447
Operating income	316,876	5,224	321,100
Interest expense, net	72,703	3,833	76,536
Allowance for funds used during construction	(6,219)	-	(6,219)
Equity loss in joint venture	-	35,177	35,177
Income tax (benefit)	26,379	(11,417)	14,962
Net Income (loss)	224,122	(22,332)	201,790
Capital expenditures	363,594	1,095	364,689
Total assets	5,645,780	72,093	5,717,873
Goodwill	27,246	6,620	33,866

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Selected Quarterly Financial Data (Unaudited)

Aqua America, Inc. and Subsidiaries

(In thousands of dollars, except per share amounts)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2017					
Operating revenues	$ 187,787	$ [illegible]	$ [illegible]	$ [illegible]	$ 809,525
Operations and maintenance expense	69,128	70,853	67,982	79,243	287,206
Operating income	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Net income	49,072	60,968	76,225	53,473	239,738
Basic net income per common share	0.28	0.34	0.43	0.30	1.35
Diluted net income per common share	0.28	0.34	0.43	0.30	1.35
Dividend paid per common share	0.1913	0.1913	0.2047	0.2047	0.7920
Dividend declared per common share	0.1913	0.1913	0.2047	0.2047	0.7920
Price range of common stock:					
high	32.32	34.41	34.66	39.55	39.55
low	29.41	[illegible]	32.30	[illegible]	29.41
2016					
Operating revenues	$ 192,607	$ 203,876	$ 226,592	$ 196,799	$ 819,875
Operations and maintenance expense	73,541	73,994	79,812	77,550	304,897
Operating income	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Net income	51,737	59,626	73,170	49,649	234,182
Basic net income per common share	0.29	[illegible]	[illegible]	0.28	1.32
Diluted net income per common share	0.29	0.33	0.41	0.28	1.32
Dividend paid per common share	0.178	0.178	0.1913	0.1913	0.7386
Dividend declared per common share	0.178	0.178	0.1913	0.1913	0.7386
Price range of common stock:					
high	[illegible]	35.66	35.83	[illegible]	35.83
low	28.35	30.31	29.53	28.03	28.03

High and low prices of the Company's common stock are as reported on the New York Stock Exchange.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

Item 9A. *Controls and Procedures*

(a) Evaluation of Disclosure Controls and Procedures – Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Annual Report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this Annual Report are effective to provide reasonable assurance that the information required to be disclosed by us in reports filed under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding disclosure. A controls system cannot provide absolute assurance, however, that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

(b) Management's Report on Internal Control Over Financial Reporting
Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. The Company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In assessing the effectiveness of internal control over financial reporting, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control-Integrated Framework* (2013). As a result of management's assessment and based on the criteria in the framework, management has concluded that, as of December 31, 2017, the Company's internal control over financial reporting was effective.

(c) Attestation Report of the Registered Public Accounting Firm – The effectiveness of our internal control over financial reporting as of December 31, 2017 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

(d) Changes in Internal Control Over Financial Reporting – No change in our internal control over financial reporting occurred during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. *Other Information*

None.

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PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

The information appearing in the sections captioned *Information Regarding Nominees and Directors, Corporate Governance – Code of Ethics, – Board and Board Committees*, and *Section 16(a) Beneficial Ownership Reporting Compliance* of the definitive Proxy Statement relating to our 2018, annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K (the "Form 10-K), is incorporated by reference herein.

We make available free of charge within the Corporate Governance portion of the investor relations section of our web site, at www.aquaamerica.com, our Corporate Governance Guidelines, the Charters of each Committee of our Board of Directors, and our Code of Ethical Business Conduct (the "Code of Ethics"). Amendments to the Code of Ethics, and any grant of a waiver from a provision of the Code requiring disclosure under applicable rules of the SEC, will be disclosed on our web site. The reference to our web site is intended to be an inactive textual reference only, and the contents of such web site are not incorporated by reference herein and should not be considered part of this or any other report that we file with or furnish to the SEC.

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Our Executive Officers

The following table and the notes thereto set forth information with respect to our executive officers, including their names, ages, positions with Aqua America and business experience during the last five years:

Name	Age	Position with Aqua America (1)
Christopher H. Franklin	52	Chairman (January 2018 to present); President and Chief Executive Officer (July 2015 to present); Executive Vice President and President and Chief Operating Officer, Regulated Operations (January 2012 to July 2015); Regional President – Midwest and Southern Operations and Senior Vice President, Corporate and Public Affairs (January 2010 to January 2012); Regional President, Aqua America – Southern Operations and Senior Vice President, Public Affairs and Customer Operations (February 2007 to January 2010); Vice President, Public Affairs and Customer Operations (May 2005 to February 2007); Vice President, Corporate and Public Affairs (February 1997 to May 2005); Manager Corporate and Public Affairs (December 1992 to February 1997)
David P. Smeltzer	59	Executive Vice President and Chief Financial Officer (January 2012 to present); Chief Financial Officer (February 2007 to January 2012); Senior Vice President - Finance and Chief Financial Officer (December 1999 to February 2007); Vice President - Finance and Chief Financial Officer (May 1999 to December 1999); Vice President - Rates and Regulatory Relations, Philadelphia Suburban Water Company (March 1991 to May 1999); Vice President - Controller of Philadelphia Suburban Water Company (March 1986 to March 1991)
Richard S. Fox	56	Chief Operating Officer (July 2015 to present); Regional President, Regulated Utilities (January 2012 to July 2015); President Aqua Utilities, Florida, Inc. (August 2011 to January 2012); Vice President, Customer Service (June 2002 to August 2011)
Christopher P. Luning	50	Senior Vice President, General Counsel, and Secretary (April 2012 to present); Vice President Corporate Development and Corporate Counsel (June 2008 to April 2012); Vice President and Deputy General Counsel (May 2005 to June 2008); Assistant General Counsel (March 2003 to May 2005)
William C. Ross	72	Senior Vice President, Engineering and Environmental Affairs (January 2012 to present); Vice President, Engineering and Environmental Affairs (February 2001 to January 2012); Senior Manager Planning and Engineering Philadelphia Suburban Water Company (February 1998 to February 2001)
Robert A. Rubin	55	Senior Vice President, Controller and Chief Accounting Officer (January 2012 to present); Vice President, Controller and Chief Accounting Officer (May 2005 to January 2012); Controller and Chief Accounting Officer (March 2004 to May 2005); Controller (March 1999 to March 2004); Assistant Controller (June 1994 to March 1999); Accounting Manager (June 1989 to June 1994)
Daniel J. Schuller	48	Executive Vice President, Strategy and Corporate Development (July 2015 to present); Investment Principal – J.P. Morgan Asset Management – Infrastructure Investments Group (2007 to 2015)

Prior to January 16, 2004, Aqua Pennsylvania was known as Philadelphia Suburban Water Company.

(1) In addition to the capacities indicated, the individuals named in the above table hold other offices or directorships with subsidiaries of the Company. Officers serve at the discretion of the Board of Directors.

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Item 11. *Executive Compensation*

The information appearing in the sections captioned *Executive Compensation* and *Director Compensation* of the definitive Proxy Statement relating to our 2018 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, is incorporated by reference herein.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

Ownership of Common Stock - The information appearing in the section captioned Ownership of Common Stock of the Proxy Statement relating to our 2018 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, is incorporated by reference herein.

Securities Authorized for Issuance under Equity Compensation Plans - The following table provides information for our equity compensation plans as of December 31, 2017:

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	943,452 (1)	$19.83 (2)	3,720,624
Equity compensation plans not approved by security holders	-	-	-
Total	943,452	19.83	3,720,624

(1) Consists of 364,932 shares issuable upon exercise of outstanding options, 461,733 shares issuable upon conversion of outstanding performance share units, and 116,787 shares issuable upon conversion of outstanding restricted share units.

(2) Calculated based upon outstanding options of 364,932 shares of our common stock.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

The information appearing in the sections captioned *Corporate Governance – Director Independence* and *– Policies and Procedures For Approval of Related Person Transactions* of the definitive Proxy Statement relating to our 2018 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, is incorporated by reference herein.

Item 14. *Principal Accountant Fees and Services*

The information appearing in the section captioned *Proposal No. 2 – Services and Fees* of the definitive Proxy Statement relating to our 2018 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, is incorporated by reference herein.

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PART IV

Item 15. *Exhibits and Financial Statement Schedules*

Financial Statements. The consolidated financial statements and supplementary data included in Part II, Item 8 are hereby incorporated by reference herein.

Financial Statement Schedules.

Schedule 1. – Condensed Parent Company Financial Statements. All other schedules are omitted because they are not applicable or not required, or because the required information is included in the consolidated financial statements or notes thereto.

Exhibits, Including Those Incorporated by Reference. A list of exhibits filed as part of this Form 10-K is set forth in the Exhibit Index hereto which is incorporated by reference herein. Where so indicated, exhibits which were previously filed are incorporated by reference. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated in the exhibit index.

Item 16. *Form 10-K Summary*

Registrants may voluntarily include a summary of information required by Form 10-K under this Item 16. The Company has elected not to include such summary information in this Annual Report.

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EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference to			
		Form	File No.	Exhibit(s)	Filing Date
3.1	Amended and Restated Articles of Incorporation of Aqua America, Inc., dated as of May 10, 2012	8-K	001-06659	3.1	May 11, 2012
3.2	Amended and Restated Bylaws of Aqua America, Inc. (as amended effective as of May 10, 2012)	8-K	001-06659	3.2	May 11, 2012
4.1.1	Indenture of Mortgage dated as of January 1, 1941 between Aqua Pennsylvania, Inc. (f/k/a Philadelphia Suburban Water Company) and The Bank of New York Mellon Trust Company, as successor trustee to First Pennsylvania Bank, N.A. (f/k/a The Pennsylvania Company for Insurance on Lives and Granting Annuities)	10-K	001-06659	4.1.1	February 26, 2016
4.1.2	Twenty-fourth Supplemental Indenture dated as of June 1, 1988	10-K	001-06659	4.1.2	February 26, 2016
4.1.3	Twenty-sixth Supplemental Indenture dated as of November 1, 1991	10-K	001-06659	4.1.3	February 26, 2016
4.1.4	Twenty-ninth Supplemental Indenture dated as of March 30, 1995	10-Q	001-06659	4.17	May 10, 1995
4.1.5	Thirty-third Supplemental Indenture, dated as of November 15, 1999	10-K	001-06659	4.27	March 29, 2000
4.1.6	Thirty-fifth Supplemental Indenture, dated as of January 1, 2002	10-K	001-06659	4.22	March 20, 2002
4.1.7	Forty-second Supplemental Indenture, dated as of December 1, 2007	10-K	001-06659	4.36	February 27, 2008
4.1.8	Forty-third Supplemental Indenture, dated as of December 1, 2008	10-K	001-06659	4.37	February 27, 2009
4.1.9	Forty-fourth Supplemental Indenture, dated as of July 1, 2009	10-Q	001-06659	4.38	August 6, 2009
4.1.10	Forty-fifth Supplemental Indenture, dated as of October 15, 2009	10-K	001-06659	4.39	February 26, 2010
4.1.11	Forty-sixth Supplemental Indenture, dated as of October 15, 2010	10-K	001-06659	4.35	February 25, 2011
4.1.12	Forty-seventh Supplemental Indenture, dated as of October 15, 2012	10-K	001-06659	4.24	February 28, 2013
4.1.13	Forty-eighth Supplemental Indenture, dated as of October 1, 2013	10-K	001-06659	4.1.17	March 3, 2014
4.1.14	Form of Supplemental Indenture during and after 2014	10-K	001-06659	4.1.15	February 26, 2016
4.1.14.1	Schedule of Outstanding Supplemental Indentures during and after 2014	^	^	^	^

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4.2	Note Purchase Agreement, dated July 31, 2003, by and among the Aqua America, Inc. and the note purchasers thereto	10-Q	001-06659	4.27	November 13, 2003
4.3	Bond Purchase Agreement, dated December 12, 2007, by and among the Montgomery County Industrial Development Authority, Aqua Pennsylvania, Inc. and Sovereign Securities Corporation, LLC	10-K	001-06659	10.34	February 27, 2008
4.4	Bond Purchase Agreement, dated December 4, 2008, by and among the Pennsylvania Economic Development Financing Authority, Aqua Pennsylvania, Inc. and Sovereign Securities Corporation, LLC	10-K	001-06659	10.35	February 27, 2009
4.5	Bond Purchase Agreement, dated June 30, 2009, by and among the Pennsylvania Economic Development Financing Authority, Aqua Pennsylvania, Inc., Jeffries and Company, Inc., and Janney Montgomery Scott LLC	10-Q	001-06659	10.52	August 6, 2009
4.6	Bond Purchase Agreement , dated October 20, 2009, by and among the Pennsylvania Economic Development Financing Authority, Aqua Pennsylvania, Inc., Jeffries and Company, Inc., Janney Montgomery Scott LLC, and PNC Capital Markets LLC	10-K	001-06659	10.59	February 26, 2010
4.7	Bond Purchase Agreement, dated October 27, 2010, by and among the Pennsylvania Economic Development Financing Authority, Aqua Pennsylvania, Inc., Jeffries and Company, Inc., PNC Capital Markets LLC, and TD Securities (USA) LLC	10-K	001-06659	10.51	February 25, 2011
4.8	Bond Purchase Agreement , dated November 8, 2012, by and among Aqua Pennsylvania, Inc., Teachers Insurance and Annuity Association, John Hancock Life Insurance Company, John Hancock Life Insurance Company of New York, John Hancock Life & Health Insurance Company, The Lincoln National Life Insurance Company, Lincoln Life & Annuity Company of New York, New York Life Insurance Company, New York Life Insurance and Annuity Corporation, Minnesota Life Insurance Company, United Health Care Insurance Company, American Republic Insurance Company, Western Fraternal Life Association	10-K	001-06659	10.54	February 28, 2013

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4.9	Bond Purchase Agreement, dated October 24, 2013, by and among Aqua Pennsylvania, Inc., John Hancock Life Insurance Company (U.S.A), John Hancock Life Insurance Company of New York, John Hancock Life & Health Insurance Company, The Lincoln National Life Insurance Company, Thrivent Financial for Lutherans, United Insurance Company of America, Equitable Life & Casualty Insurance Company, Catholic United Financial, and Great Western Insurance Company	10-K	001-06659	10.45	March 3, 2014
4.10	Bond Purchase Agreement, dated December 29, 2014, by and among Aqua Pennsylvania, Inc., Thrivent Financial for Lutherans, State Farm Life Insurance Company, John Hancock Life Insurance Company (U.S.A), Phoenix Life Insurance Company, PHL Variable Insurance Company, United of Omaha Life Insurance Company, Mutual of Omaha Insurance Company, and Companion Life Insurance Company	10-K	001-06659	10.58	February 27, 2015
4.11	Bond Purchase Agreement, dated December 3, 2015 by and among Aqua Pennsylvania, Inc., Thrivent Financial for Lutherans, State Farm Life Insurance Company, John Hancock Life Insurance Company (U.S.A), The Lincoln National Life Insurance Company, Teachers Insurance And Annuity Association Of America, CMFG Life Insurance Company, Genworth Life Insurance Company, Phoenix Life Insurance Company, PHL Variable Insurance Company, United Of Omaha Life Insurance Company, The State Life Insurance Company, Pioneer Mutual Life Insurance Company, MONY Life Insurance Company	10-K	001-06659	4.12	February 26, 2016
4.12	Note Purchase Agreement, dated November 3, 2016, by and among Aqua America Inc. and the note purchasers thereto	10-K	001-06659	4.13	February 24, 2017
4.13	Bond Purchase Agreement, dated December 15, 2016 by and among Aqua Pennsylvania, Inc., Teachers Insurance and Annuity Association of America, New York Life Insurance Company, New York Life Insurance and Annuity Corporation, John Hancock Life Insurance Company, American Equity Investment Life Insurance Company, Genworth Life and Annuity Insurance Company, Phoenix Life Insurance Company, PHL Variable Insurance Company, American United Life Insurance Company, The State Life Insurance Company, and Pioneer Mutual Life Insurance Company	10-K	001-06659	4.14	February 24, 2017
4.14	Bond Purchase Agreement, dated July 10, 2017 by and among Aqua Illinois, Inc., Teachers Insurance and Annuity Association of America	10-Q	001-06659	4.1	November 2, 2017

4.15	Bond Purchase Agreement, dated July 20, 2017 by and among Aqua Pennsylvania, Inc., New York Life Insurance Company, New York Life Insurance and Annuity Corporation, New York Life Insurance and Annuity Corporation Institutionally Owned Life Insurance Separate Account (BOLI 3), New York Life Insurance and Annuity Corporation Institutionally Owned Life Insurance Separate Account (BOLI 3-2)	10-Q	001-06659	4.2	November 2, 2017
10.1	Revolving Credit Agreement, dated as of March 23, 2012, between Aqua America, Inc. and PNC Bank, National Association, CoBank, ACB, and Huntington National Bank	10-Q	001-06659	10.60	May 7, 2012
10.1.1	First Amendment to Revolving Credit Agreement , dated as of January 31, 2013, between Aqua America, Inc. and PNC Bank, National Association, CoBank, ACB, and Huntington National Bank	10-Q	001-06659	10.53	November 6, 2014
10.1.2	Second Amendment to Revolving Credit Agreement, dated as of August 20, 2014, between Aqua America, Inc. and PNC Bank, National Association, CoBank, ACB, and Huntington National Bank	10-Q	001-06659	10.54	November 6, 2014
10.1.3	Third Amendment to Revolving Credit Agreement, dated as of February 24, 2016, between Aqua America, Inc. and PNC Bank, National Association, CoBank, ACB, Huntingdon National Bank, and Bank of America, N.A.	10-Q	001-06659	10.2.3	May 6, 2016
10.1.4	Amended and Restated Revolving Credit Agreement, dated as of November 17, 2016 between Aqua Pennsylvania and PNC Bank, National Association, TD Bank, N.A., Citizens Bank of Pennsylvania, and Huntington National Bank	10-K	001-06659	10.2.4	February 24, 2017
10.1.5	First Amendment to Revolving Credit Agreement, dated as of November 16, 2017 between Aqua Pennsylvania and PNC Bank, National Association, Citizens Bank of Pennsylvania, TD Bank, N.A., and Huntington National Bank	^	^	^	^
10.2	Aqua America, Inc. Deferred Compensation Plan Master Trust Agreement with PNC Bank, National Association, dated as of December 31, 1996*	10-K	001-06659	10.24	March 25, 1997
10.2.1	Amendment 2008-1 to the Aqua America, Inc. Deferred Compensation Plan Master Trust Agreement, dated as of December 15, 2008*	10-K	001-06659	10.50	February 27, 2009
10.3	Aqua America, Inc. 2009 Executive Deferral Plan (as amended and restated effective January 1, 2009)*	S-8	333-156047	4.1	December 10, 2008
10.4	Aqua America, Inc. Supplemental Pension Benefit Plan for Salaried Employees (as amended and restated effective January 1, 2011)*.	10-K	001-06659	10.58	February 27, 2012
10.5	Aqua America. Inc. Dividend Reinvestment and Direct Stock Purchase Plan*	S-3ASR	333-219545	N/A	July 28, 2017

10.6	Aqua America, Inc. 2004 Equity Compensation Plan (as amended and restated as of January 1, 2009)*	10-K	001-06659	10.36	February 27, 2009
10.6.1	Form of Incentive Stock Option and Dividend Equivalent Grant Agreement*	10-K	001-06659	10.49	February 27, 2009
10.6.2	Form of Amendment to Incentive Stock Option and Dividend Equivalent Grant Agreements for executive officers *	10-K	001-06659	10.8.2	February 26, 2016
10.7	Aqua America, Inc. 2009 Omnibus Equity Compensation Plan (as amended effective February 22, 2017) *	10-K	001-06659	10.8	February 24, 2017
10.7.1	Form of Performance-Based Share Unit Grant for Chief Executive Officer*	10-K	001-06659	10.9.1	February 26, 2016
10.7.2	Performance-Based Share Unit Grant Terms and Conditions for Chief Executive Officer*	10-Q	001-06659	10.51(B)	May 8, 2014
10.7.3	Form of Performance-Based Share Unit Grant for all other executive officers*	10-Q	001-06659	10.36	May 6, 2015
10.7.4	Performance-Based Share Unit Grant Terms and Conditions for all other executive officers*	10-Q	001-06659	10.37	May 6, 2015
10.7.5	Form of Restricted Stock Unit Grant for Chief Executive Officer*	10-K	001-06659	10.9.5	February 26, 2016
10.7.6	Restricted Stock Unit Grant Terms and Conditions for Chief Executive Officer*	10-Q	001-06659	10.52(B)	May 8, 2014
10.7.7	Form of Restricted Stock Unit Grant for all other executive officers*	10-Q	001-06659	10.40	May 6, 2015
10.7.8	Restricted Stock Unit Grant Terms and Conditions for all other executive officers*	10-Q	001-06659	10.41	May 6, 2015
10.7.9	Performance-Based Share Unit Grant Terms and Conditions*	10-Q	001-06659	10.1	May 4, 2017
10.7.10	Restricted Stock Unit Grant Terms and Conditions for Chief Executive Officer*	10-Q	001-06659	10.2	May 4, 2017
10.7.11	Restricted Stock Unit Grant Terms and Conditions for all other executive officers*	10-Q	001-06659	10.3	May 4, 2017
10.7.12	Stock Option Grant Terms and Conditions*	10-Q	001-06659	10.4	May 4, 2017
10.8	Aqua America, Inc. 2012 Employee Stock Purchase Plan*	10-K	001-06659	10.10	February 26, 2016
10.9	Aqua America, Inc. and Subsidiaries Annual Cash Incentive Compensation Plan (adopted February 26, 2013)*	10-K	001-06659	10.56	February 28, 2013
10.10	Form of Change in Control Agreement between the Company and executive officers*	10-Q	001-06659	10.1	November 6, 2015
10.10.1	Schedule of Change in Control Agreement between the Company and executive officers*	10-K	001-06659	10.12.1	February 26, 2016
10.11	Change in Control Agreement, dated December 31, 2008, between Aqua America, Inc. and Christopher H. Franklin*	10-K	001-06659	10.46	February 27, 2009
10.12	Non-Employee Directors' Compensation for 2016*	10-K	001-06659	10.16	February 26, 2016
10.13	Employment Agreement, dated June 2, 2015, between Aqua America, Inc. and Christopher Franklin*	8-K	001-06659	10.1	June 3, 2015
10.14	Non-Employee Directors' Compensation effective January 1, 2018*	8-K	001-06659	10.1	December 15, 2017

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21.1	Subsidiaries of Aqua America, Inc.	^	^	^	^
23.1	Consent of Independent Registered Public Accounting Firm – PricewaterhouseCoopers LLP	^	^	^	^
31.1	Certification of Chief Executive Officer, pursuant to Rule 13a-14(a) under the Securities and Exchange Act of 1934	^	^	^	^
31.2	Certification of Chief Financial Officer, pursuant to Rule 13a-14(a) under the Securities and Exchange Act of 1934	^	^	^	^
32.1	Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350	^^	^^	^^	^^
32.2	Certification of Chief Financial Officer, pursuant to 18 U.S.C. Section 1350	^^	^^	^^	^^
101.INS	XBRL Instance Document	^	^	^	^
101.SCH	XBRL Taxonomy Extension Schema Document	^	^	^	^
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	^	^	^	^
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	^	^	^	^
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	^	^	^	^
101.PRES	XBRL Taxonomy Extension Presentation Linkbase Document	^	^	^	^

In accordance with Item 601(b)(4)(iii)(A) of Regulation S-K, copies of specific instruments defining the rights of holders of long-term debt of the Company or its subsidiaries are not filed herewith. Pursuant to this regulation, we hereby agree to furnish a copy of any such instrument to the SEC upon request.

*Indicates management contract or compensatory plan or arrangement

^ Filed herewith

^^Furnished herewith

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AQUA AMERICA, INC.

/s/ Christopher H. Franklin
Christopher H. Franklin
Chairman, President and Chief Executive Officer

Date: February 28, 2018

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Pursuant to the requirements of the Securities and Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of the Registrant on February 28, 2018 in the capacities indicated below.

Signature	Title
/s/ Christopher H. Franklin Christopher H. Franklin	Chairman, President and Chief Executive Officer, Director (Principal Executive Officer)
/s/ David P. Smeltzer David P. Smeltzer	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ Robert A. Rubin Robert A. Rubin	Senior Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer)
/s/ Carolyn J. Burke Carolyn J. Burke	Director
/s/ Nicholas DeBenedictis Nicholas DeBenedictis	Chairman Emeritus and Director
/s/ Richard H. Glanton Richard H. Glanton	Director
/s/ William P. Hankowsky William P. Hankowsky	Director
/s/ Daniel J. Hilferty Daniel J. Hilferty	Director
/s/ Wendell F. Holland Wendell F. Holland	Director
/s/ Ellen T. Ruff Ellen T. Ruff	Director

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Aqua America, Inc.

Schedule 1 – Condensed Parent Company Financial Statements

Condensed Balance Sheets

(In thousands of dollars)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Accounts receivable, net	$ 139	$ 441
Accounts receivable - affiliates	55,108	60,264
Prepayments and other current assets	3,578	3,782
Total current assets	58,825	64,487
Deferred charges and other assets, net	29,397	22,231
Notes receivable - affiliates	329,738	345,149
Deferred income tax asset	32,782	67,508
Investment in subsidiaries	2,213,102	2,029,395
Total assets	$ 2,663,844	$ 2,528,770
Liabilities and Equity		
Stockholders' equity	$ 1,957,621	$ 1,850,068
Long-term debt, excluding current portion, net of debt issuance costs	497,958	483,817
Current liabilities:		
Current portion of long-term debt	30,800	26,050
Accrued interest	3,267	3,469
Accounts payable - affiliates	34,537	23,582
Other accrued liabilities	9,329	10,707
Total current liabilities	77,933	63,808
Other liabilities	130,332	131,077
Total liabilities and equity	$ 2,663,844	$ 2,528,770

The accompanying condensed notes are an integral part of these condensed financial statements.

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Aqua America, Inc.

Schedule 1 – Condensed Parent Company Financial Statements

Condensed Statements of Income and Comprehensive Income

(In thousands, except per share amounts)

	Years ended December 31,		
	2017	2016	2015
Other income	$ 1,629	$ 3,301	$ 3,034
Operating expense and other expenses	53	4,569	1,440
Operating income (loss)	1,576	(1,268)	1,594
Interest expense, net	5,210	2,901	1,833
Gain on sale of other asset	-	(87)	-
Loss before equity in earnings of subsidiaries and income taxes	(3,634)	(4,082)	(239)
Equity in earnings of subsidiaries	244,327	236,309	201,003
Income before income taxes	240,693	232,227	200,764
Provision for income taxes	955	(1,955)	(1,026)
Net income	$ 239,738	$ 234,182	$ 201,790
Comprehensive income	$ 239,929	$ 234,164	$ 201,689
Net income per common share:			
Basic	$ 1.36	$ 1.32	$ 1.14
Diluted	$ 1.35	$ 1.32	$ 1.14
Average common shares outstanding during the period:			
Basic	177,612	177,273	176,788
Diluted	178,175	177,846	177,517

The accompanying condensed notes are an integral part of these condensed financial statements.

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Aqua America, Inc.

Schedule 1 – Condensed Parent Company Financial Statements

Condensed Statements of Cash Flows

(In thousands of dollars)

	Years ended December 31, 2017	2016	2015
Net cash flows from operating activities	$ 98,821	$ 84,649	$ 153,916
Cash flows from investing activities:			
Acquisitions of utility systems and other, net	(220)	(3,713)	(26,722)
Net proceeds from the sale of utility systems and other assets	-	205	-
Decrease (increase) in investment of subsidiary	20,021	(26,470)	(27,596)
Other	1,811	204	(1,031)
Net cash flows from (used in) investing activities	21,612	(29,774)	(55,349)
Cash flows from financing activities:			
Proceeds from long-term debt	286,969	418,957	298,879
Repayments of long-term debt	(268,050)	(346,050)	(259,158)
Proceeds from issuing common stock	1,453	1,388	677
Proceeds from exercised stock options	2,873	4,260	7,540
Share-based compensation windfall tax benefits	-	1,332	1,843
Repurchase of common stock	(2,167)	(3,028)	(25,247)
Dividends paid on common stock	(140,660)	(130,923)	(121,248)
Other	(851)	(811)	(853)
Net cash flows used in financing activities	(120,433)	(54,875)	(97,567)
Net change in cash and cash equivalents	-	-	-
Cash and cash equivalents at beginning of year	-	-	-
Cash and cash equivalents at end of year	$ -	$ -	$ -

See Note 1 - *Basis of Presentation*

The accompanying condensed notes are an integral part of these condensed financial statements.

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Aqua America, Inc.

Notes to Condensed Parent Company Financial Statements

(In thousands of dollars)

Note 1 – *Basis of Presentation* – The accompanying condensed financial statements of Aqua America, Inc. (the "Parent") should be read in conjunction with the consolidated financial statements and notes thereto of Aqua America, Inc. and subsidiaries (collectively, the "Registrant") included in Part II, Item 8 of the Form 10-K. The Parent's significant accounting policies are consistent with those of the Registrant.

The Parent borrows from third parties and provides funds to its subsidiaries, in support of their operations. Amounts owed to the Parent for borrowings under this facility are reflected as inter-company receivables on the condensed balance sheets. The interest rate charged to the subsidiaries is sufficient to cover the Parent's interest costs under its associated borrowings.

As of December 31, 2017 and 2016, the Parent had a current accounts receivable – affiliates balance of $55,108 and $60,264. As of December 31, 2017 and 2016, the Parent had a notes receivable – affiliates balance of $329,738 and $345,149. The changes in these balances represent non-cash adjustments that are recorded through the Parent's investment in subsidiaries.

In the ordinary course of business, the Parent indemnifies a third-party for surety bonds issued on behalf of subsidiary companies, guarantees the performance of one of its regulated utilities in a jurisdiction that requires such guarantees, and guarantees several projects associated with the treatment of water in a jurisdiction.

Note 2 – *Dividends from subsidiaries* – Dividends in the amount of $51,100, $45,750, and $74,866 were paid to the Parent by its wholly-owned subsidiaries during the years ended December 31, 2017, 2016, and 2015, respectively.

Note 3 – *Long-term debt* – the Parent has long-term debt under unsecured note purchase agreements with investors in addition to its $250,000 revolving credit agreement. Excluding amounts due under the revolving credit agreement, the debt maturities of the Parent's long-term debt are as follows:

Year		Debt Maturity
2018	$	30,800
2019		50,000
2020		28,200
2021		17,250
2022		17,250
Thereafter		325,800

Appendix I

Balance Sheet

GL292 Date: 11/07/18 JOB SUBMISSION PARAMETERS
Time: 13:33

User Name: AQUAAMERICA\mancinif
Job Name: GL292PSW
Step Nbr: 1

Main

Company: 15 AQUA PENNSYLVANIA INC. USD
or Company Group:

Year Code:
or
Year: 2017
Period: 12 Period 12

Organization

Accounting Units:

Accounting Unit List:

Level Group:

Individual Reporting

Company: X Level One: Level Two:
Level Three: Level Four: Level Five:

Report Options

Chart Depth: All
Account Detail: S Subaccount
Suppress Zero Accounts: Y Yes
Report Sequence: L Level
Report Currency: B Base
XBRL Tag: N No

Balance Sheet

GL292 Date 11/07/18 Company 15 - AQUA PENNSYLVANIA INC. USD Page 1
Time 13:33 Balance Sheet
For Period 12 Ending December 31, 2017 Fiscal Year 2017

Consolidated AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
ASSETS	Assets and Other Debits				
NET PLANT	Net Plant				
NETUTL PLANT	Net Utility Plant				
UTIL PLANT	Utility Plant				
PPE	PPE				
103000-0000	Property Held for Future Use	6,702,932.38	5,106,983.91	1,595,948.47	31.3
104000-0000	Utility Plant Purchased/Sold	5,692,339.84	1,196,372.32	4,495,967.52	375.8
106000-0000	PPE-Unclass Complete Construct	93,512,589.40	69,421,172.46	24,091,416.94	34.7
300000-0000	PPE-Utility Plant in Service	4,062,869,105.60	3,792,470,881.63	270,398,223.97	7.1
300001-0000	PPE-Dedicated Property Estimate	1,539,012.80	3,372,645.79	1,833,632.99-	54.4-
	Total PPE	4,170,315,980.02	3,871,568,056.11	298,747,923.91	7.7
UTIL PLT ACQ	UTIL PLT ACQ ADJ				
114000-0000	U Plant Acq Adj	17,153,046.03-	15,476,017.48-	1,677,028.55-	10.8
115000-0000	Accum Amort Util Plant Acq Adj	10,405,757.28	9,830,199.72	575,557.56	5.9
	Total UTIL PLT ACQ ADJ	6,747,288.75-	5,645,817.76-	1,101,470.99-	19.5
	Total Utility Plant	4,163,568,691.27	3,865,922,238.35	297,646,452.92	7.7
ACCUM DEPR	ACCUM DEPR				
108000-0000	AD-General	869,550,571.22-	806,196,224.19-	63,354,347.03-	7.9
110310-0000	AD-CAC MAINS & ACCESSORIES	8,312,634.45	8,250,339.87	62,294.58	.8
	Total ACCUM DEPR	861,237,936.77-	797,945,884.32-	63,292,052.45-	7.9
	Total Net Utility Plant	3,302,330,754.50	3,067,976,354.03	234,354,400.47	7.6
CWIP	CWIP				
105015-0000	CWIP-Contributed Property	37,464,800.06	22,884,828.69	14,579,971.37	63.7
105016-0000	CWIP-Advances	31,976,795.38	24,102,067.90	7,874,727.48	32.7
105020-0000	CWIP-Capital-Payroll-Rg	130,536,125.01	119,358,542.19	11,177,582.82	9.4
105029-0000	CWIP-Capital-Payroll-OT	29,916,951.21	27,052,327.77	2,864,623.44	10.6
105030-0000	CWIP-ACCOUNTS PAYABLE	2,322,305,397.69	2,079,968,339.12	242,337,058.57	11.7
105040-0000	CWIP-INVENTORY	261,557,435.01	238,801,003.42	22,756,431.59	9.5
105050-0000	CWIP-TRANSPORTATION	22,065,902.74	20,834,865.47	1,231,037.27	5.9
105060-0000	CWIP-GENERAL OVERHEAD	6,303,300.38-	8,754,669.05-	2,451,368.67	28.0-
105070-0000	CWIP-PAYROLL OVERHEAD	117,562,691.13	105,422,429.28	12,140,261.85	11.5
105080-0000	CWIP-AFUDC	11,869,425.20	11,869,425.20	0.00	
105081-0000	CWIP-AFUDC Debt	17,338,731.15	14,982,837.37	2,355,893.78	15.7
105085-0000	CWIP-AFUDC Equity	12,798,288.66	7,635,315.76	5,162,972.90	67.6
105090-0000	CWIP-CLOSING	2,857,838,432.88-	2,546,249,133.57-	311,589,299.31-	12.2
	Total CWIP	131,250,809.98	117,908,179.55	13,342,630.43	11.3
	Total Net Plant	3,433,581,564.48	3,185,884,533.58	247,697,030.90	7.8
OTHER PROP/I	Other Property and Investment				
OTHER PPE	OTHER PPE				
121000-0000	Nonutility Property	2,784,896.57	2,784,896.57	0.00	
122000-0000	Accum Depr/Amort-Nonutil Prop	544,694.59-	525,098.25-	19,596.34-	3.7
	Total OTHER PPE	2,240,201.98	2,259,798.32	19,596.34-	.9-
	Total Other Property and Inves	2,240,201.98	2,259,798.32	19,596.34-	.9-
CURRENT	Current and Accrued Assets				

Balance Sheet

GL292 Date 11/07/18 Company 15 - AQUA PENNSYLVANIA INC. USD Page 2
Time 13:33 Balance Sheet
For Period 12 Ending December 31, 2017 Fiscal Year 2017

Consolidated AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
CASH IN BANK	CASH IN BANK				
131201-0000	Cash-1ST CITIZENS-SUSQ	0.00	3.07-	3.07	100.0-
131202-0000	Cash-1ST NAT.TRUST-RC	0.00	110.71	110.71-	100.0-
131211-0000	Cash-FIDELITY S&L	99,725.74	86,770.11	12,955.63	14.9
131218-0000	Cash-NAT.CITY-SHENANGO	14,481.69	16,235.97	1,754.28-	10.8-
131230-0000	Cash-PNC	705,096.56	2,035,692.58	1,330,596.02-	65.4-
131254-0000	CASH-WAYNE PENNVEST ESCROW	398,361.05	396,945.66	1,415.39	.4
131261-0000	Cash-Citizens Bank-Money Market	6,901.49	0.00	6,901.49	
	Total CASH IN BANK	1,224,566.53	2,535,751.96	1,311,185.43-	51.7-
WORKING FUND	WORKING FUND				
134000-0000	Working Funds	2,553.45	2,553.45	0.00	
134010-0000	Working Funds-OFFICE FUNDS	13,850.00	13,850.00	0.00	
	Total WORKING FUND	16,403.45	16,403.45	0.00	
CUST A/R	CUST A/R				
141000-0000	Customer Accounts Receivable	35,848,487.00	35,234,056.72	614,430.28	1.7
141010-0000	Customer AR Non CIS	13,994.00-	0.00	13,994.00-	
	Total CUST A/R	35,834,493.00	35,234,056.72	600,436.28	1.7
OTHER AR	OTHER AR				
142000-0000	Other A/R	519,522.40	503,992.74	15,529.66	3.1
142080-0000	Other A/R-Contract Ops	33,523.96	72,259.10	38,735.14-	53.6-
172000-0000	Rents Receivable	400.00	350.00-	750.00	214.3-
	Total OTHER AR	553,446.36	575,901.84	22,455.48-	3.9-
RESERVE UN	RESERVE - UN				
143000-0000	RESERVE-UNCOLLECTABLE ACCTS	4,072,387.41-	3,869,999.46-	202,387.95-	5.2
	Total RESERVE - UN	4,072,387.41-	3,869,999.46-	202,387.95-	5.2
INTERCO	ALL INTERCOMPANY				
SYSTEMINT	ALL SYSTEM INTER&ZONE				
INTERCOMPANY	SYSTEM INTERCOMPANY				
911000-0000	Sys IntComp Acct Co 10 - Corp	4,127,367.66	4,701,597.19	574,229.53-	12.2-
911100-0000	Sys IntComp Acct Co 11 - Serv	4,226,632.82-	3,313,539.43-	913,093.39-	27.6
911400-0000	Sys IntComp Acct Co 14 - Aqua Reso	42,126.78	38,275.88	3,850.90	10.1
911800-0000	Sys IntComp Acct Co 18 - Cust Serv	493,779.36-	477,290.35-	16,489.01-	3.5
911900-0000	Sys IntComp Acct Co 19 - Aqua Infr	326.98	10.05	316.93	3153.5
912300-0000	Sys IntComp Acct Co 23 - OH	10,239.74	6,736.30	3,503.44	52.0
912400-0000	Sys IntComp Acct Co 24 - IL	59,702.98-	6,385.25	66,088.23-	1035.0-
912500-0000	Sys IntComp Acct Co 25 - NJ	21,632.46	52,390.72	30,758.26-	58.7-
913100-0000	Sys IntComp Acct Co 31 - TX	1,464.59	2,185.31	720.72-	33.0-
913200-0000	Sys IntComp Acct Co 32 - IN	4,869.93	86.32	4,783.61	5541.7
913400-0000	Sys IntComp Acct Co 34 - VA	3,490.09	8,722.98	5,232.89-	60.0-
913500-0000	Sys IntComp Acct Co 35 - NC	4,912.15	4,881.19	30.96	.6
	Total SYSTEM INTERCOMPANY	563,684.78-	1,030,441.41	1,594,126.19-	154.7-
INTRAZONE	SYSTEM ZONE				
921501-0000	IntraZone Acct Co 15 Zone 1	80,403,317.30-	66,897,728.75-	13,505,588.55-	20.2
921502-0000	IntraZone Acct Co 15 Zone 2	61,321,464.37	46,326,464.74	14,994,999.63	32.4
921503-0000	IntraZone Acct Co 15 Zone 3	558,491.68	564,551.65	6,059.97-	1.1-
921504-0000	IntraZone Acct Co 15 Zone 4	13,575,531.49	14,677,276.51	1,101,745.02-	7.5-

Balance Sheet

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Balance Sheet
For Period 12 Ending December 31, 2017 | Fiscal Year 2017

Consolidated | AQUA PENNSYLVANIA INC. | Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
INTRAZONE	SYSTEM ZONE				
921506-0000	IntraZone Acct Co 15 Zone 6	2,560,856.77	2,562,038.05	1,181.28-	
921507-0000	IntraZone Acct Co 15 Zone 7	54.91-	54.91-	0.00	
921508-0000	IntraZone Acct Co 15 Zone 8	2,387,027.90	2,767,452.71	380,424.81-	13.7-
	Total SYSTEM ZONE	0.00	0.00	0.00	
	Total ALL SYSTEM INTER&ZONE	563,684.78-	1,030,441.41	1,594,126.19-	154.7-
	Total ALL INTERCOMPANY	563,684.78-	1,030,441.41	1,594,126.19-	154.7-
MATERIALS AN	MATERIALS AN				
151000-0000	Plant Material & Supplies	6,853,178.86	5,889,658.31	963,520.55	16.4
	Total MATERIALS AN	6,853,178.86	5,889,658.31	963,520.55	16.4
UNBILLED REV	UNBILLED REV				
173000-0000	Unbilled-Revenue	18,800,443.34	18,547,372.47	253,070.87	1.4
173010-0000	Unbilled Revenue Non CIS	652.10-	0.00	652.10-	
	Total UNBILLED REV	18,799,791.24	18,547,372.47	252,418.77	1.4
OTHER PREPAY	OTHER PREPAY				
162000-0000	Other Prepaids	78,742.61	598,418.07	519,675.46-	86.8-
162030-0000	OTHER PPD-EXCISE	0.00	200,167.80	200,167.80-	100.0-
162140-0000	OTHER PPD-PUC ASSESSMENT	882,213.51	916,573.96	34,360.45-	3.7-
162150-0000	OTHER PPD-SBA ASSESSMENT	25,907.01	16,463.54	9,443.47	57.4
162160-0000	OTHER PPD-CONS ADVOC ASSMT	140,036.01	139,937.48	98.53	.1
162170-0000	OTHER PPD-AWWA DUES	9,482.50	9,391.99	90.51	1.0
	Total OTHER PREPAY	1,136,381.64	1,880,952.84	744,571.20-	39.6-
	Total Current and Accrued Asse	59,782,188.89	61,840,539.54	2,058,350.65-	3.3-
NON CURRENT	Non-Current Assets				
UNAMR DB EXP	UMAMORT DEBT EXP				
181000-0000	Unamortized Debt Expense	120,318.68	124,383.23	4,064.55-	3.3-
	Total UMAMORT DEBT EXP	120,318.68	124,383.23	4,064.55-	3.3-
RATE CASE	RATE CASE				
186101-0000	Deferred Rate Case Exp-1	64,254.15	0.00	64,254.15	
	Total RATE CASE	64,254.15	0.00	64,254.15	
PRELIMINARY	PRELIMINARY				
183020-0000	PRELIM SURVEY-ACCTS PAY	211,341.08	211,341.08	0.00	
	Total PRELIMINARY	211,341.08	211,341.08	0.00	
REG ASSETS	REG ASSETS				
186325-0000	Reg Asset-EXC FUND/DEF-OPEB	165,421.00-	294,497.00-	129,076.00	43.8-
186330-0000	Reg Asset-TAXES(FAS 109)	557,696,235.20	807,160,494.02	249,464,258.82-	30.9-
186355-0000	Reg Asset-AFUDC Gross Up (WIP)	3,906,849.70	2,340,205.17	1,566,644.53	66.9
186366-0000	Reg Asset-AFUDC Gross Up (InSvc)	5,171,604.96	3,076,607.41	2,094,997.55	68.1
186367-0000	Reg Asset-AFUDC Gross Up (AD)	167,177.31-	75,918.68-	91,258.63-	120.2
186380-0000	Reg Asset-PENSION/SERP AML	31,159.00	37,487.00	6,328.00-	16.9-
186381-0000	Reg Asset-Vacation Balancing Account	304,430.99	280,311.31	24,119.68	8.6
186400-0000	Reg Asset-FAS143	5,367,497.41	4,985,862.62	381,634.79	7.7

Balance Sheet

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Balance Sheet
For Period 12 Ending December 31, 2017 — Fiscal Year 2017

Consolidated — AQUA PENNSYLVANIA INC. — Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
	Total REG ASSETS	572,145,178.95	817,510,551.85	245,365,372.90-	30.0-
RWIP	RWIP				
184010-0000	RWIP-PAYROLL-Rg	7,653,734.14	7,301,072.49	352,661.65	4.8
184019-0000	RWIP-PAYROLL-Ot	1,593,091.96	1,412,632.12	180,459.84	12.8
184020-0000	RWIP-ACCOUNTS PAYABLE	25,945,302.40	24,137,819.08	1,807,483.32	7.5
184030-0000	RWIP-INVENTORY	270,507.66	175,167.56	95,340.10	54.4
184040-0000	RWIP-TRANSPORTATION	619.49-	632.47-	12.98	2.1-
184050-0000	RWIP-GENERAL OVERHEAD	1,330,394.98	1,260,330.26	70,064.72	5.6
184060-0000	RWIP-PAYROLL OVERHEAD	7,096,769.67	6,676,742.09	420,027.58	6.3
184070-0000	RWIP-CASH SALVAGE	1,863,138.30-	1,371,372.25-	491,766.05-	35.9
184099-0000	RWIP-CLOSING	40,509,761.52-	38,684,959.45-	1,824,802.07-	4.7
	Total RWIP	1,516,281.50	906,799.43	609,482.07	67.2
OTH DEF DBTS	OTHER DEFER DBTS				
186210-0000	Other Deferred DB-SUSP-AMORTIZ	523,244.12	518,712.91	4,531.21	.9
186270-0000	Other Deferred DB-SERVICE LINE	33,592.92	39,433.95	5,841.03-	14.8-
	Total OTHER DEFER DBTS	556,837.04	558,146.86	1,309.82-	.2-
GOODWILL	GOODWILL				
116000-0000	Good Will-Water	9,792,191.74	9,792,191.74	0.00	
	Total GOODWILL	9,792,191.74	9,792,191.74	0.00	
	Total Non-Current Assets	584,406,403.14	829,103,414.19	244,697,011.05-	29.5-
	Total Assets and Other Debits	4,080,010,358.49	4,079,088,285.63	922,072.86	
LIABS/EQUITY	Liabilities and Equity Capital				
TOT CAPITAL	Total Capitalization				
COM STOCK EQ	Equity Capital				
COMMON STOCK	COMMON STOCK				
201000-0000	Common Capital Stock	110,000.00-	110,000.00-	0.00	
	Total COMMON STOCK	110,000.00-	110,000.00-	0.00	
CAPITAL SURP	CAPITAL SURP				
211000-0000	Other Paid-In Capital	96,691,956.77-	116,489,242.69-	19,797,285.92	17.0-
211002-0000	Other Paid-In Cap-PSU	4,389,837.72-	3,731,392.44-	658,445.28-	17.6
211003-0000	Other Paid-In Cap-RSU	446,677.14-	377,296.44-	69,380.70-	18.4
211500-0000	Other Paid-In Cap-Stock Option Expe	8,436,539.92-	8,406,567.62-	29,972.30-	.4
211501-0000	Other Paid-In Cap - Tax on Stock Ba	1,644,203.90-	1,644,203.90-	0.00	
211600-0000	Other Paid-In Cap-Restricted Stock	449,399.37-	449,399.37-	0.00	
	Total CAPITAL SURP	112,058,614.82-	131,098,102.46-	19,039,487.64	14.5-
RE	Retained Earnings				
RE PY	RE PY				
215000-0000	Unapproriated Retained Earning	1,281,014,888.52-	1,138,077,092.97-	142,937,795.55-	12.6
	Total RE PY	1,281,014,888.52-	1,138,077,092.97-	142,937,795.55-	12.6
RE CY	RE CY				
215100-0000	Undistrib Retained Earnings	177,508,727.04-	172,937,795.55-	4,570,931.49-	2.6
215101-0000	Undistributed RE (Manual)	8,277,018.86	6,437,052.74	1,839,966.12	28.6

Balance Sheet

GL292 Date 11/07/18 Time 13:33 | Company 15 - AQUA PENNSYLVANIA INC. Balance Sheet For Period 12 Ending December 31, 2017 | USD | Fiscal Year 2017 | Page 5

Consolidated | AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
	Total RE CY	169,231,708.18-	166,500,742.81-	2,730,965.37-	1.6
DIVIDEND COM	DIVIDENDS COMMON				
215300-0000	Dividend Appropriation Common	50,000,000.00	30,000,000.00	20,000,000.00	66.7
	Total DIVIDENDS COMMON	50,000,000.00	30,000,000.00	20,000,000.00	66.7
EARN IN SUBS	EARNINGS IN SUBS				
215200-0000	EARNINGS OF SUBSIDIARIES	15,757,525.60-	13,917,559.48-	1,839,966.12-	13.2
	Total EARNINGS IN SUBS	15,757,525.60-	13,917,559.48-	1,839,966.12-	13.2
REACQ CAPSTK	REACQ CAP STOCK				
216000-0000	Reacquired Capital Stock	1,000.00	1,000.00	0.00	
	Total REACQ CAP STOCK	1,000.00	1,000.00	0.00	
	Total Retained Earnings	1,416,003,122.30-	1,288,494,395.26-	127,508,727.04-	9.9
	Total Equity Capital	1,528,171,737.12-	1,419,702,497.72-	108,469,239.40-	7.6
LT DEBT	Long-Term Debt				
LTD	LTD				
221010-0000	Long-Term Debt-FMB	1,215,857,001.98-	1,029,257,001.98-	186,600,000.00-	18.1
224020-0000	Long-Term Debt-PENNVEST	44,732,461.10-	50,570,929.39-	5,838,468.29	11.5-
251000-0000	Unamortized Bond Premium	1,934,075.00-	1,986,607.00-	52,532.00	2.6-
	Total LTD	1,262,523,538.08-	1,081,814,538.37-	180,708,999.71-	16.7
DEBT IS COST	Unamortized debt issue cost				
225020-0000	Unamortized debt issue costs - exte	13,496,253.18	13,860,091.93	363,838.75-	2.6-
	Total Unamortized debt issue c	13,496,253.18	13,860,091.93	363,838.75-	2.6-
	Total Long-Term Debt	1,249,027,284.90-	1,067,954,446.44-	181,072,838.46-	17.0
ST DEBT	Short-Term Debt				
LOANS PAYBLE	LOANS PAYABLE				
232101-0000	Loans Payable-REVOLVR-CUR PRTN	3,649,997.88-	5,545,213.23-	1,895,215.35	34.2-
	Total LOANS PAYABLE	3,649,997.88-	5,545,213.23-	1,895,215.35	34.2-
	Total Short-Term Debt	3,649,997.88-	5,545,213.23-	1,895,215.35	34.2-
	Total Total Capitalization	2,780,849,019.90-	2,493,202,157.39-	287,646,862.51-	11.5
TOT LIAB	Total Liabilities				
CURENT LIAB	Current and Accrued Liabilit				
CURRENT PORT	CURRENT PORT				
232510-0000	Current Portion Ltd-FMB	68,400,000.00-	116,362,180.00-	47,962,180.00	41.2-
232520-0000	Current Portion Ltd-PENNVEST	5,838,467.44-	5,683,256.03-	155,211.41-	2.7
	Total CURRENT PORT	74,238,467.44-	122,045,436.03-	47,806,968.59	39.2-
AP	AP				
231000-0000	A/P	8,924,084.59-	9,085,722.03-	161,637.44	1.8-
231001-0000	A/P-Accrued Trade	694,386.16-	511,941.16-	182,445.00-	35.6
231002-0000	A/P-Accrued Purchased Water	339,066.31-	978,170.13-	639,103.82	65.3-
231003-0000	A/P-Accrued Electric	1,062,061.40-	1,124,526.00-	62,464.60	5.6-
231005-0000	A/P-Use Tax Payable	267.86-	118.30-	149.56-	126.4
231006-0000	A/P-Refunds to Customers	1,828.78-	74.90-	1,753.88-	2341.6

Balance Sheet

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Time 13:33 Balance Sheet
For Period 12 Ending December 31, 2017 Fiscal Year 2017

Consolidated AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
AP	AP				
231200-0000	A/P-Contractors Retainage	3,428,426.40-	3,172,371.52-	256,054.88-	8.1
231300-0000	A/P-Received, Not Invoiced	13,306,287.96-	8,427,390.05-	4,878,897.91-	57.9
231399-0000	A/P-Received, Not Inv-2003 Bal	1,673,982.37	886,859.41	787,122.96	88.8
231510-0000	A/P-Invoice Tolerance	0.00	.02	.02-	100.0-
	Total AP	26,082,427.09-	22,413,454.66-	3,668,972.43-	16.4
TAX ACC FED	TAXES ACC FED				
236124-0000	Accrued Tax-Fed-Other	48,595,340.80	72,644,548.48	24,049,207.68-	33.1-
	Total TAXES ACC FED	48,595,340.80	72,644,548.48	24,049,207.68-	33.1-
TAX ACC STE	TAXES ACC STATE				
236127-0000	Accrued Tax-ST-CN Income	304,320.11-	493,764.68-	189,444.57	38.4-
	Total TAXES ACC STATE	304,320.11-	493,764.68-	189,444.57	38.4-
TAX ACC OTHR	TAXES ACC OTHER				
236111-0000	Accrued Tax-Oth-PROPERTY	621,788.77-	738,012.27-	116,223.50	15.7-
236113-0000	Accrued Tax-Oth-CAPITAL STOCK	0.00	2,229.00	2,229.00-	100.0-
236201-0000	Accrued Tax-Oth-EMPLOYER FICA	20,287.04-	63,725.13-	43,438.09	68.2-
	Total TAXES ACC OTHER	642,075.81-	799,508.40-	157,432.59	19.7-
INTEREST ACC	INTEREST ACC				
237110-0000	Accrued Int LTD-FMB	14,623,115.43-	12,926,394.09-	1,696,721.34-	13.1
237120-0000	Accrued Int LTD-PENNVEST	107,746.62-	119,452.12-	11,705.50	9.8-
237250-0000	Accrued Int-Other-STD	3,198.34-	6,771.75-	3,573.41	52.8-
	Total INTEREST ACC	14,734,060.39-	13,052,617.96-	1,681,442.43-	12.9
OTHR CURLIAB	OTHER CUR LIAB				
241001-0000	Accrued Liab-OTHER	249,410.93-	279,421.16-	30,010.23	10.7-
241004-0000	Accrued Liab-ANTENNA LEASES	683,742.59-	750,447.37-	66,704.78	8.9-
241006-0000	Accrued Liab-AUDIT FEES	329,530.86-	306,841.93-	22,688.93-	7.4
241008-0000	Accrued Liab-PAVING MAINS	63,384.68-	107,157.79-	43,773.11	40.8-
241011-0000	Accrued Liab-UNCLAIMED CHECKS	127,064.36-	116,480.19-	10,584.17-	9.1
243030-0000	ACCRUED BONUS	1,003,000.00-	960,000.00-	43,000.00-	4.5
243130-0000	ACCRUED SALARIES AND WAGES	254,042.54-	636,662.06-	382,619.52	60.1-
243137-0000	Accrued Vacation	304,430.99-	280,311.31-	24,119.68-	8.6
243140-0000	PAYROLL CLEARING	634,792.68-	0.00	634,792.68-	
261003-0000	Accrued Insur Liab-UNINSURED	0.00	125,000.00-	125,000.00	100.0-
263002-0000	NQ Pension Reserve - Current	0.00	37,701.12-	37,701.12	100.0-
263103-0000	EMPLOYEE PROFIT SHARING	575,982.03-	441,838.45-	134,143.58-	30.4
	Total OTHER CUR LIAB	4,225,381.66-	4,041,861.38-	183,520.28-	4.5
	Total Current and Accrued Liab	71,631,391.70-	90,202,094.63-	18,570,702.93	20.6-
DEF NC LIAB	Deferred and Non-Current and				
ADV FOR CNST	ADV FOR CONST				
252051-0000	Adv Cust-NON CASH BUILDER OR DEVELO	126,000.00-	126,000.00-	0.00	
252052-0000	Adv Cust-NON CASH DEVELOPER DEDICAT	51,090,391.03-	48,070,975.22-	3,019,415.81-	6.3
252055-0000	Adv Cust-CASH BUILDER OR DEVELOPER	1,086,059.02-	981,884.02-	104,175.00-	10.6
252102-0000	Adv Cust-CASH OTHER	440,028.48-	534,338.48-	94,310.00	17.6-
252121-0000	Adv Cust-NON CASH TAX ON CAC	3,746.48-	26,190.29-	22,443.81	85.7-
252199-0000	Adv Cust-Non Cash Dedicated Propert	1,539,012.80-	3,372,645.79-	1,833,632.99	54.4-

Balance Sheet

GL292 Date 11/07/18 Company 15 - AQUA PENNSYLVANIA INC. USD Page 7
Time 13:33 Balance Sheet
For Period 12 Ending December 31, 2017 Fiscal Year 2017

Consolidated AQUA PENNSYLVANIA INC. Consolidated

Account Nbr	Description	Current Year	Previous Year	Change	Percent
	Total ADV FOR CONST	54,285,237.81-	53,112,033.80-	1,173,204.01-	2.2
REG LIAB	REG LIAB				
253115-0000	Reg Liab-Pension/OPEB	63,652,424.11-	59,881,898.11-	3,770,526.00-	6.3
253116-0000	Reg Liab-FAS 109	323,448,950.00-	152,663,387.00-	170,785,563.00-	111.9
	Total REG LIAB	387,101,374.11-	212,545,285.11-	174,556,089.00-	82.1
LT DEF FIT	LT DEF FIT				
282020-0000	Deferred FIT Depreciation	421,872,036.31-	824,582,994.27-	402,710,957.96	48.8-
283050-0000	Federal Deferred Tax-Other	2,024,004.75-	21,431,712.75-	19,407,708.00	90.6-
	Total LT DEF FIT	423,896,041.06-	846,014,707.02-	422,118,665.96	49.9-
LT DEF SIT	LT DEF SIT				
282030-0000	State Deferred Tax-Depr	294,396,146.00-	311,496,462.00-	17,100,316.00	5.5-
283060-0000	State Deferred Tax-Other	49,534,355.41	42,602,365.41	6,931,990.00	16.3
	Total LT DEF SIT	244,861,790.59-	268,894,096.59-	24,032,306.00	8.9-
UNAMORT ITC	UNAMORT ITC				
255101-0000	Deferred Taxes - Unamortized ITC (F	4,628,083.95-	4,881,496.95-	253,413.00	5.2-
	Total UNAMORT ITC	4,628,083.95-	4,881,496.95-	253,413.00	5.2-
CIAC	CIAC				
271020-0000	CIAC-TAX DEPOSIT FULL GROSS UP	1,530,814.72-	1,530,814.72-	0.00	
271030-0000	CIAC-RESIDNT FIRE TAX DEP FULL	77,042.53-	77,042.53-	0.00	
271070-0000	CIAC-CASH TAX ON CIAC	3,168,525.55-	2,962,860.94-	205,664.61-	6.9
271301-0000	CIAC-NON CASH TRANSFERS FROM CAC	115,082,531.87-	111,794,895.95-	3,287,635.92-	2.9
271302-0000	CIAC-NON CASH REFUNDABLE DEVELOPER	25,966,094.70-	11,986,123.33-	13,979,971.37-	116.6
271304-0000	CIAC-CASH NON REFUNDABLE TAP FEE	20,957.88-	20,957.88-	0.00	
271305-0000	CIAC-CASH THIRD PARTY DAMAGE TO INF	6,336.18-	6,336.18-	0.00	
271307-0000	CIAC-CASH CUSTOMER DEPOSITS FOR COM	4,601,679.90-	4,262,209.40-	339,470.50-	8.0
271308-0000	CIAC-CASH NON REFUNDABLE BUILDER OR	32,476,984.42-	30,723,617.79-	1,753,366.63-	5.7
	Total CIAC	182,930,967.75-	163,364,858.72-	19,566,109.03-	12.0
OTHR NC LIAB	OTHER NCUR LIAB				
253200-0000	OPEB Reserve - Non Current	7,374,933.46-	5,695,430.97-	1,679,502.49-	29.5
253250-0000	Pension Reserve - Non Current	55,472,521.14	48,501,995.14	6,970,526.00	14.4
253350-0000	NQ Pension Reserve - Non Current	118,824.12	147,342.47-	266,166.59	180.6-
253420-0000	Uncertain Tax Position Reserve-Fede	12,919,315.00-	21,317,365.00-	8,398,050.00	39.4-
253421-0000	Uncertain Tax Position Reserve-Stat	693,239.00-	614,973.00-	78,266.00-	12.7
	Total OTHER NCUR LIAB	34,603,857.80	20,726,883.70	13,876,974.10	67.0
	Total Deferred and Non-Current	1,263,099,637.47-	1,528,085,594.49-	264,985,957.02	17.3-
CIAC ACC AMR	CIAC ACC AMORT				
272000-0000	Accum Amort of CIAC	35,569,690.58	32,401,560.88	3,168,129.70	9.8
	Total CIAC ACC AMORT	35,569,690.58	32,401,560.88	3,168,129.70	9.8
	Total Total Liabilities	1,299,161,338.59-	1,585,886,128.24-	286,724,789.65	18.1-
	Total Liabilities and Equity C	4,080,010,358.49-	4,079,088,285.63-	922,072.86-	

VIS15-PAY AQUA PENNSYLVANIA INC.
11/07/18 Variance Income Statement
13:34 December 31, 2017
** Consolidated Level Range **
*Co

	YEAR TO DATE ACTUAL 2017	YEAR TO DATE BUDGET 2017	YEAR TO DATE ACTUAL 2016	VARIANCE CURRENT ACTUAL vs BUDGET AMOUNT	VARIANCE CURRENT ACTUAL vs BUDGET PERCENT	VARIANCE CURRENT ACTUAL vs PRIOR YEAR AMOUNT	VARIANCE CURRENT ACTUAL vs PRIOR YEAR PERCENT
REVENUE							
Utility Revenue-Water	401,001,447.69	405,749,610.00	406,200,475.29	(4,748,162.31)	(1.17)%	(5,199,027.60)	(1.28)%
Utility Revenue-Waste Water	13,180,830.26	14,037,279.00	12,114,547.94	(856,448.74)	(6.10)%	1,066,282.32	8.80 %
Non-Utility Revenue	5,412,075.11	5,124,484.00	5,388,101.19	287,591.11	5.61 %	23,973.92	0.45 %
TOTAL REVENUE	419,594,353.06	424,911,373.00	423,703,124.42	(5,317,019.94)	(1.25)%	(4,108,771.36)	(0.97)%
OPERATIONS AND MAINTENANCE							
Labor	32,142,781.89	32,908,045.00	32,348,489.62	765,263.11	2.33 %	205,707.73	0.64 %
Employee Benefits	19,941,792.81	11,346,487.00	22,718,321.65	(8,595,305.81)	(75.75)	2,776,528.84	12.22
Purchased Water	7,126,426.67	8,022,381.00	12,122,443.48	895,954.33	11.17	4,996,016.81	41.21
Purchased WW Treatement	630,049.84	638,200.00	575,688.50	8,150.16	1.28	(54,361.34)	(9.44)
Sludge	1,090,250.38	1,252,689.00	1,039,066.25	162,438.62	12.97	(51,184.13)	(4.93)
Power	11,730,459.64	12,871,269.00	11,499,004.25	1,140,809.36	8.86	(231,455.39)	(2.01)
Chemicals	5,324,747.38	5,315,484.00	5,145,444.57	(9,263.38)	(0.17)	(179,302.81)	(3.49)
Management Fees - Corp	21,833,758.65	22,135,204.00	21,266,729.24	301,445.35	1.36	(567,029.41)	(2.67)
Management Fees - Region							
Management Fees - States	495.00	2,125.00	495.00	1,630.00	76.71		
Cust Operations-ACO alloc	5,172,594.07	5,775,894.00	5,408,327.46	603,299.93	10.45	235,733.39	4.36
Cust Operations-Direct	3,479,395.63	3,888,492.00	3,643,745.62	409,096.37	10.52	164,349.99	4.51
Cust Operations-Non ACO							
Outside Services - Engineering	204,866.69	197,504.00	178,634.39	(7,362.69)	(3.73)	(26,232.30)	(14.69)
Outside Services - Accounting	693,257.62	693,864.00	654,896.04	606.38	0.09	(38,361.58)	(5.86)
Outside Services - Legal	499,360.08	467,256.00	229,017.64	(32,104.08)	(6.87)	(270,342.44)	(118.04)
Outside Services - Labtest	518,588.20	719,039.00	488,443.59	200,450.80	27.88	(30,144.61)	(6.17)
Outside Services - IT	166,371.70	235,888.00	216,178.32	69,516.30	29.47	49,806.62	23.04
Outside Services - Operations	1,763,318.94	2,142,099.00	1,729,473.15	378,780.06	17.68	(33,845.79)	(1.96)
Outside Services - Maintenance	7,566,860.67	4,651,567.00	4,354,511.25	(2,915,293.67)	(62.67)	(3,212,349.42)	(73.77)
Outside Services - Other	2,478,030.62	2,490,793.00	2,364,236.79	12,762.38	0.51	(113,793.83)	(4.81)
Leases	791,148.75	793,890.00	763,640.97	2,741.25	0.35	(27,507.78)	(3.60)
Supplies	2,064,499.43	2,355,552.00	2,464,935.35	291,052.57	12.36	400,435.92	16.25
Transportation	1,126,375.73	1,301,937.00	885,165.59	175,561.27	13.49	(241,210.14)	(27.25)
Insurance	5,030,357.14	4,942,644.00	4,885,260.39	(87,713.14)	(1.78)	(145,096.75)	(2.97)
Bad Debt Expense	2,022,748.09	1,985,456.00	2,295,335.87	(37,292.09)	(1.88)	272,587.78	11.88
Other Expense	2,830,374.19	3,563,671.00	3,071,446.51	733,296.81	20.58 %	241,072.32	7.85 %
Capital OH Credit	(12,560,263.01)	(9,839,352.00)	(11,994,809.83)	2,720,911.01	(27.65)%	565,453.18	(4.71)%
Other Non-Util Oper Exp	4,220,848.63	2,096,616.00	1,799,496.22	(2,124,232.63)	(101.32)	(2,421,352.41)	(134.56)
Total Operations & Maintenance	127,889,495.43	122,954,694.00	130,153,617.88	(4,934,801.43)	(4.01)%	2,264,122.45	1.74 %
Amortization	(440,491.30)	(287,808.00)	(260,502.44)	152,683.30	(53.05)%	179,988.86	(69.09)%
Depreciation	82,684,464.15	82,500,061.00	77,919,214.91	(184,403.15)	(0.22)%	(4,765,249.24)	(6.12)%
Taxes Other	10,945,577.25	11,038,501.00	10,814,849.23	92,923.75	0.84 %	(130,728.02)	(1.21)%
Federal Taxes	(14,315,757.46)	(16,288,619.00)	(7,219,649.00)	(1,972,861.54)	12.11	7,096,108.46	(98.29)
State Taxes	(8,337,612.96)	(7,369,724.00)	(4,412,642.00)	967,888.96	(13.13)	3,924,970.96	(88.95)
Operating Income	221,168,677.95	232,364,268.00	216,708,235.84	(11,195,590.05)	(4.82)%	4,460,442.11	2.06 %
Gain on Sale of Assets	(366,110.50)	(150,000.00)	(246,342.33)	216,110.50	(144.07)%	119,768.17	(48.62)%
OTH NET PERIODIC BENEFIT COSTS							
Equity earnings in JV							
Minority Interest of Subs							
AFUDC	(11,188,365.88)	(6,771,782.00)	(6,741,625.63)	4,416,583.88	(65.22)	4,446,740.25	(65.96)

VIS15-PAY AQUA PENNSYLVANIA INC.
11/07/18 Variance Income Statement
13:34 December 31, 2017
** Consolidated Level Range **
*Co

	YEAR TO DATE			VARIANCE CURRENT ACTUAL vs BUDGET		VARIANCE CURRENT ACTUAL vs PRIOR YEAR	
	ACTUAL 2017	BUDGET 2017	ACTUAL 2016	AMOUNT	PERCENT	AMOUNT	PERCENT
Income Before Debt Interest	232,723,154.33	239,286,050.00	223,696,203.80	(6,562,895.67)	(2.74)%	9,026,950.53	4.04 %
Debt Interest-Associated COS							
Debt Interest-Short Term Debt	442,496.26	200,004.00	360,522.61	(242,492.26)	(121.24)	(81,973.65)	(22.74)
Debt Interest-Long Term Debt	54,060,723.20	56,841,331.00	49,655,232.52	2,780,607.80	4.89	(4,405,490.68)	(8.87)
Debt Interest-Customer Deposit							
Interest Income	(8,653.76)	(360.00)	(1,342.15)	8,293.76	(2,303.82)	7,311.61	(544.77)
Other Interest Expense			720.00			720.00	100.00
Amort-Debt Issuance Costs	719,861.59	761,508.00	743,275.27	41,646.41	5.47	23,413.68	3.15
Debt Expense	55,214,427.29	57,802,483.00	50,758,408.25	2,588,055.71	4.48 %	(4,456,019.04)	(8.78)%
Dividends							
Net Income	177,508,727.04	181,483,567.00	172,937,795.55	(3,974,839.96)	(2.19)%	4,570,931.49	2.64 %
Preferred Dividends							
Net Income Avail for Common	177,508,727.04	181,483,567.00	172,937,795.55	(3,974,839.96)	(2.19)%	4,570,931.49	2.64 %

Appendix J

PEOPLES NATURAL GAS COMPANY LLC

BALANCE SHEETS
AS OF DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	2016
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 1,727	$ 1,011
Accounts receivable:		
Customers	150,327	113,234
Other	5,707	4,692
Affiliates	1,981	3,029
Inventories:		
Materials and supplies	3,092	3,092
Gas stored	23,137	17,840
Regulatory assets	7,233	16,264
Deferred income taxes	6,994	3,349
Other	10,232	10,644
Total current assets	210,431	173,156
INVESTMENTS	3,733	3,147
PROPERTY, PLANT AND EQUIPMENT:		
Property, plant and equipment	2,452,415	2,304,059
Accumulated depreciation and amortization	(849,435)	(821,831)
Total property, plant and equipment—net	1,602,980	1,482,227
DEFERRED CHARGES AND OTHER ASSETS:		
Goodwill	284,895	284,895
Intangible assets—net	61,287	64,460
Regulatory assets	146,571	146,329
Other	2,124	1,835
Total deferred charges and other assets	494,877	497,519
TOTAL	$ 2,312,021	$ 2,156,049

(Continued)

PEOPLES NATURAL GAS COMPANY LLC

BALANCE SHEETS
AS OF DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	**2016**
LIABILITIES AND MEMBER'S EQUITY		
CURRENT LIABILITIES:		
Accounts payable—trade & affiliates	$ 84,390	$ 99,346
Notes payable to affiliates	71,219	66,076
Current portion of long-term debt	-	144,746
Accrued interest, payroll and taxes	38,503	36,647
Capital lease obligation	-	18,951
Regulatory liabilities	1,728	1,442
Other	19,538	16,013
Total current liabilities	215,378	383,222
LONG-TERM DEBT	865,780	638,902
DEFERRED CREDITS AND OTHER LIABILITIES:		
Deferred income taxes	138,251	197,862
Asset retirement obligations	36,669	36,413
Pension and other postretirement benefit liabilities	27,313	26,477
Regulatory liabilities	96,540	-
Other	14,120	16,059
Total deferred credits and other liabilities	312,893	276,810
Total liabilities	1,394,052	1,298,934
MEMBER'S EQUITY	917,970	857,115
TOTAL	$2,312,021	$2,156,049

PEOPLES NATURAL GAS COMPANY LLC

UNAUDITED STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	**2016**
OPERATING REVENUE	$675,849	$588,329
OPERATING EXPENSES:		
Purchased gas	272,144	193,907
Other operations and maintenance	162,662	162,020
Depreciation and amortization	64,986	61,334
Other taxes	9,026	8,998
Total operating expenses	508,818	426,258
INCOME FROM OPERATIONS	167,031	162,071
OTHER EXPENSE—Net	3,875	3,713
INTEREST CHARGES	32,552	37,104
INCOME BEFORE INCOME TAXES	130,604	121,254
PROVISION FOR INCOME TAXES	56,949	49,053
NET INCOME	$ 73,655	$ 72,201

Appendix K

PEOPLES GAS COMPANY LLC

BALANCE SHEETS
AS OF DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	2016
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 4,471	$ 1,849
Accounts receivable:		
Customers	18,646	14,684
Other	189	227
Affiliates	749	830
Inventories:		
Materials and supplies	576	572
Gas stored	7,500	6,802
Regulatory assets	3,830	5,468
Deferred income taxes	1,186	1,127
Other	1,410	4,308
Total current assets	38,557	35,867
PROPERTY, PLANT AND EQUIPMENT:		
Property, plant and equipment	336,558	314,891
Accumulated depreciation and amortization	(112,111)	(108,248)
Total property, plant and equipment—net	224,447	206,643
DEFERRED CHARGES AND OTHER ASSETS:		
Goodwill	3,103	3,103
Intangible assets—net	12,276	12,760
Regulatory assets	24,873	22,341
Other	46	46
Total deferred charges and other assets	40,298	38,250
TOTAL	$ 303,302	$ 280,760

(Continued)

PEOPLES GAS COMPANY LLC

BALANCE SHEETS
AS OF DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	2016
LIABILITIES AND MEMBER'S EQUITY		
CURRENT LIABILITIES:		
Accounts payable—trade & affiliates	$ 8,558	$ 10,783
Notes payable to affiliates	70,561	-
Current portion of long-term debt	4,091	4,091
Accrued interest, payroll and taxes	2,937	3,445
Other	1,783	2,827
Total current liabilities	87,929	21,146
LONG-TERM DEBT	62,647	121,378
DEFERRED CREDITS AND OTHER LIABILITIES:		
Deferred income taxes	14,532	20,051
Asset retirement obligations	1,978	2,019
Pension and other postretirement benefit liabilities	11,944	12,297
Regulatory liabilities	13,144	-
Other	522	1,055
Total deferred credits and other liabilities	42,121	35,423
Total liabilities	192,696	177,947
MEMBER'S EQUITY	110,606	102,813
TOTAL	$ 303,302	$ 280,760

PEOPLES GAS COMPANY LLC

STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(In thousands) (unaudited)

	2017	2016
OPERATING REVENUE	$ 91,255	$ 78,733
OPERATING EXPENSES:		
Purchased gas	29,028	19,787
Other operations and maintenance	24,202	24,439
Depreciation and amortization	9,472	8,867
Other taxes	1,229	1,214
Total operating expenses	63,930	54,307
INCOME FROM OPERATIONS	27,324	24,426
OTHER EXPENSE—Net	51	167
INTEREST CHARGES	4,829	4,604
INCOME BEFORE INCOME TAXES	22,444	19,655
PROVISION FOR INCOME TAXES	9,951	7,649
NET INCOME	$ 12,493	$ 12,006

VERIFICATION

I, Morgan K. O'Brien, being the President and Chief Executive Officer of Peoples Natural Gas Company LLC and PNG Companies LLC, hereby state that the facts set forth in the foregoing Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC, and Peoples Gas Company LLC, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Morgan K. O'Brien

Morgan K. O'Brien

Dated: November 13, 2018

VERIFICATION

I, Christopher P. Luning, being the Senior Vice President, General Counsel and Secretary, of Aqua America, Inc., hereby state that the facts set forth in the foregoing Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC, and Peoples Gas Company LLC, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Christopher P. Luning

Dated: November 13, 2018

HIGHLY CONFIDENTIAL

Joint Applicants

Exhibit DJS-2

(No Public Version Available)

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket Nos. A-2018-3006061
A-2018-3006062
A-2018-3006063

Aqua America, Inc.

Peoples Natural Gas Company LLC

Peoples Natural Gas Company LLC – Equitable Division

Peoples Gas Company LLC

Statement No. 2

Direct Testimony of Daniel J. Schuller

Topics Addressed:	**Financial Fitness of Aqua America, Inc.** **Financing the Proposed Transaction** **Aqua America, Inc.'s Access to Capital** **Post-Transaction Books of Account** **Benefits of the Proposed Transaction**

Dated: December 6, 2018

17798173v5

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Daniel J. Schuller. My business address is 762 West Lancaster Avenue, Bryn Mawr, PA 19010.

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

A. I am employed as the Executive Vice President and Chief Financial Officer of Aqua America, Inc. ("Aqua America"). I provide services to Aqua America and Aqua Pennsylvania, Inc. ("Aqua PA"), including Aqua PA's subsidiary Aqua Pennsylvania Wastewater, Inc. ("Aqua PA Wastewater").[1]

Q. What are your principal duties and responsibilities as Executive Vice President and Chief Financial Officer of Aqua America?

A. I am responsible for all financial operations for Aqua America, including accounting, SEC reporting, financial planning and analysis, tax and treasury.

Q. What is your educational background?

A. I graduated from Purdue University, where I earned a Bachelor of Science, Master of Science, and Doctorate in Civil Engineering. In addition, I attended NARUC's Western Utility Rate School and have participated in continuing executive education at the University of Chicago's Booth School of Business.

[1] Unless otherwise specified herein, references to Aqua PA also include Aqua PA Wastewater.

Q. Please describe your professional experience.

A. Prior to joining Aqua America in 2015, I spent eight years focused on infrastructure investments with J.P. Morgan Asset Management's Infrastructure Investments Group. In this role, I was responsible for a three-state water and wastewater utility owned by the group's infrastructure fund. I also sat on the board of directors of a natural gas LDC owned by the fund. Prior to J.P. Morgan, I spent eight years as a management consultant with Mars & Co. Upon joining Aqua America, I was Executive Vice President of Strategy & Corporate Development. In this role, I was responsible for overseeing Aqua America's efforts to proactively serve additional customers throughout our eight-state footprint.

Q. Have you previously testified before the Pennsylvania Public Utility Commission ("Commission")?

A. No. However, I have submitted direct testimony before the Kentucky Public Service Commission and West Virginia Public Service Commission related to regulatory approvals of Aqua America's proposed acquisition of LDC Funding LLC (the "Proposed Transaction") at Case No. 2018-00369 and Case No. 18-1475-G-PC, respectively.

Q. Please describe the purpose of your direct testimony.

A. I will describe Aqua America's financial fitness to own and manage the natural gas operations of both Peoples Natural Gas Company, LLC ("Peoples Natural Gas")[2] and Peoples Gas Company LLC ("Peoples Gas"), collectively the "Peoples Companies." I

[2] Unless otherwise specified herein, references to Peoples Natural Gas include the Equitable Division.

will also describe Aqua America's financing of the Proposed Transaction. I will also explain Aqua America's access to capital, both debt and equity, to finance ongoing operations of both Aqua America's water/wastewater operations and the Peoples Companies and, in particular, the capital needed by the Peoples Companies to execute their long-term replacement of aging infrastructure. I also will describe Aqua America's proposed separation and maintenance of separate books of account for the Peoples Companies following the consummation of the Proposed Transaction. I also will explain the benefits that arise from Aqua America's status as a publicly traded company.

Q. Are you sponsoring any exhibits with your testimony?

A. Yes. I am sponsoring the Joint Application and related appendices, excluding HIGHLY CONFIDENTIAL Appendix A, filed on November 13, 2018 as Joint Applicants Exhibit DJS-1. I also am sponsoring HIGHLY CONFIDENTIAL Joint Applicants Exhibit DJS-2, which is a copy of the Purchase Agreement between Aqua America and LDC Parent LLC ("Purchase Agreement"). The Purchase Agreement was filed as HIGHLY CONFIDENTIAL Appendix A to the Joint Application.

Q. Is Aqua America financially fit to undertake the Proposed Transaction?

A. Yes. Aqua America is a water and wastewater holding company that has had substantial experience in raising both debt and equity capital in the public and private markets for over 130 years. Through its operating subsidiaries in eight states, Aqua America has over $5.4 billion in utility assets, and $809 million in annual revenues. Aqua America also has substantial experience with post-acquisition integration planning and execution. Over time, Aqua America and its subsidiaries have worked cooperatively with state agencies and been willing to step in, assist with, and ultimately take over troubled water and wastewater systems for the public good. These systems typically require significant infrastructure upgrades. Such acquisitions demonstrate Aqua America's ability to acquire companies and utility assets and finance the growing capital needs associated with owning and operating these utility systems.

Q. Please explain how Aqua America intends to finance the Proposed Transaction.

A. The consideration to acquire LDC Funding LLC ("Funding") and its subsidiaries is a base price of $4.275 million. The final price is subject to adjustment, as set forth in the Purchase Agreement, for net working capital, capital expenditures, and indebtedness up to closing of the Proposed Transaction ("Closing").

Included in the base price is Aqua America's agreement to assume existing external debt of PNG Companies LLC ("PNG"). PNG currently has issued and outstanding term notes in the amount of approximately $1.1 billion. This debt will remain at PNG following Closing. In addition, PNG has an outstanding revolver agreement for short-term debt. The current amount of debt outstanding under the revolver is approximately $140 million and is expected to be approximately $50-100 million at Closing. Aqua America intends to pay off this $500 million revolving credit facility and terminate it at Closing. A new $1 billion revolving credit facility, sized to accommodate the borrowing needs of the gas, water and wastewater subsidiaries, is expected to be put in place at the Aqua America level with a bank group of ten total banks. This new revolver will provide for borrowings at a lower interest rate than the

Peoples Companies' current revolving credit facility.

Q. Will PNG's debt remain rated following the Closing?

A. Yes. Consistent with the commitment made by the Peoples Companies as described in Mr. O'Brien's testimony, Joint Applicants St. No. 3, PNG will maintain credit ratings with two credit rating agencies as long as it has outstanding notes.

Q. Will the existing term debt agreements between PNG and the Peoples Companies remain in place following the Closing?

A. Yes. PNG provides the debt financing for the Peoples Companies currently and those arrangements will continue following the Closing.

Q. How will Aqua America finance the remainder of the consideration?

A. Aqua America will finance the remaining consideration through a combination of equity capital and third-party debt financing. Aqua America has secured a fully committed bridge facility to fund the transaction. The bridge was underwritten by Goldman Sachs and Royal Bank of Canada, and was subsequently syndicated to a group of 13 total banks. Rather than relying on the bridge facility to close the transaction, it is Aqua America's intent to raise permanent debt and equity capital utilizing multiple options in the upcoming months prior to Closing. The financing would be structured to maintain strong investment grade credit ratings. Aqua America anticipates issuing approximately \$2.2 to \$2.9 billion of common equity and equity-linked securities (i.e., instrument where the payout is connected to an underlying equity as opposed to a fixed income security).

In addition, Aqua America anticipates approximately $0.4 to $0.9 billion of incremental Aqua America debt issued to fund the remainder of the transaction.

Q. Is the Proposed Transaction anticipated to involve any significant transaction costs?

A. There have been and will be transaction costs, including fees associated with the sale of equity and the issuance of debt, bridge facility fees, and transaction advisory and support costs. None of these will be included in any rate filing of the Peoples Companies or Aqua PA for recovery.

Q. Will Aqua America seek to recover the amount of any premium or any acquisition costs from the Proposed Transaction through the rates of either the Peoples Companies or Aqua PA?

A. No. Aqua America recognizes that acquisition premiums and acquisition costs from the Proposed Transaction are not recoverable in rates, and Aqua America commits that there will not be a claim for these amounts in future rate filings of the Peoples Companies or Aqua PA.

Q. What does Aqua America intend the capital structures of the Peoples Companies and Aqua PA to be following the Closing?

A. Aqua America will maintain its capital structure for its water companies, and appropriate capital structures for the gas companies.

Q. How does Aqua America intend to raise debt for the Peoples Companies and for the

water/wastewater affiliates following Closing?

A. Following closing, new debt will be raised either at the Aqua America or subsidiary level, as appropriate, based on market conditions. Aqua America will evaluate both publicly-issued and private placement debt to achieve the optimal rates for ratepayers over the long term. The Applicants remain committed to securing financing sufficient to ensure that they continue to provide safe and reliable service to customers.

Q. What are the expected annual capital needs of the Peoples Companies and their affiliates in Kentucky and West Virginia?

A. Aqua America is expecting to secure an additional $85-125 million of debt annually to support $300-375 million of annual commitments for the replacement of aging pipeline infrastructure in Pennsylvania, Kentucky, and West Virginia. Internally sourced funds, including cash from depreciation and retained earnings, will provide further funds to finance ongoing capital needs.

Q. Will Aqua America be able to raise the additional capital needed to meet the needs of the acquired companies as well as the ongoing needs of Aqua America's water and wastewater operations?

A. Yes, as evidenced by Aqua America's history of raising capital to support its $500 million annual capital budget program, Aqua America would be able to secure financing to support the Peoples Companies' infrastructure replacement program. For example, in 2018, Aqua America secured a total of $275 million in long-term debt to support its infrastructure investments and water and wastewater acquisitions.

Q. What procedures will Aqua America adopt concerning affiliated relationships between the Peoples Companies and Aqua PA?

A. Aqua America will enter into the appropriate affiliated interest agreements and file those that require regulatory approval. In addition, Aqua America will maintain separate books of account for Aqua PA and for the Peoples Companies following consummation of the acquisition.

Q. Is Aqua America a publicly-held company?

A. Yes, Aqua America is a publicly-held company and has been listed on the New York Stock Exchange for approximately 48 years. As of October 31, 2018, Aqua America has issued 180,998,152 common shares, and 177,939,879 of common shares are outstanding. The common stock is single class and trades under the symbol "WTR."

Q. Are there benefits to ownership of the Peoples Companies by Aqua America?

A. Yes. There are various benefits from ownership of the Peoples Companies by Aqua America, as a publicly-held company.

For one, publicly-held regulated utilities tend to have long time horizons. For example, Aqua America has traditionally held utility systems for multiple decades or even for over a century. We believe that long-term ownership can result in decisions that are better for customers, employees, and the communities that we serve. Long-term ownership generally leads to a willingness to make capital investments to renew and expand infrastructure to provide continued safe, reliable utility service. Additionally, this ownership model promotes a sustained, high level of engagement in civic and community affairs.

Another benefit from public ownership would be expanded access to equity capital. While a private equity fund may have sources of additional equity capital, when needed, Aqua America can more-easily raise equity capital because of the availability of public stock issuances. Due to the acquisition, the Peoples Companies, through Aqua America, would have access to equity capital that can be raised in all market environments from a large, diverse pool of U.S. and international investors. The increased scale provided by the acquisition will result in even greater access to equity capital than Aqua America enjoys today.

The combined company is expected to maintain an equivalent strong investment grade credit rating to that of the Peoples Companies. As a subsidiary of Aqua America, the Peoples Companies are expected to be able to raise the substantial amount of debt needed for infrastructure replacement at a cost equal to the current cost incurred by the Peoples Companies, for comparable tenors. I believe having greater access to a diverse portfolio of debt and equity capital sources is a benefit and will allow Aqua America to select the most appropriate financing for its subsidiaries based on market conditions.

Q. Please opine on further benefits.

A. Following acquisition by Aqua America, corporate governance of the Peoples Companies will be even more transparent than the transparency to which the Peoples Companies are already committed through prior settlement commitments and Commission requirements on equity fund ownership of Pennsylvania utilities. As a publicly traded company, Aqua America is automatically subject to numerous reporting requirements that provide information to shareholders, government agencies including the Commission, and the public. Aqua America is subject to all reporting requirements of the New York Stock Exchange and the United States Securities and Exchange Commission, including requirements to provide a detailed report on its operations and maintenance expenses, revenues, and other financial reporting, submit executive compensation to its shareholders, hold annual voting on all of its directors, hold all employees accountable pursuant to a comprehensive and published Code of Ethics, and provide oversight and governance pursuant to published Corporate Governance Guidelines. Among the various reporting requirements that would apply to corporate governance of the Peoples Companies following the acquisition would be the Sarbanes-Oxley Act of 2002. Aqua America is currently subject to the provisions of Sarbanes-Oxley.

More examples of transparency regarding Aqua America's governance and financial status are readily available on Aqua America's website which includes Board Committee charters, governance documents, key ratios, SEC filings, quarterly results, and annual reports.

In addition, Aqua America will continue to maintain substantial transparency to its capital structure. As explained above, acquisition debt would be raised publicly, and current plans are to raise debt to support the capital programs at either holding company or operating company levels through either public or private markets. Separate capital structures would be maintained for gas and water/wastewater operations for the foreseeable future.

Aqua America's ongoing creditworthiness to raise capital now and in the future will continue to be a matter of public knowledge.

Q. Please comment on the benefits provided by Aqua America's corporate structure.

A. Aqua America's corporate structure was provided as Appendix B to Joint Applicants Exhibit DJS-1. Aqua America has always provided this information and will continue to do so. As a publicly held corporation, Aqua America's subsidiary ownership and organization will be transparent, including the ownership of subsidiaries that are not in the chain of ownership of Aqua PA or the Peoples Companies. I note that Aqua America is a Pennsylvania corporation and there is no additional holding company above it.

Q. Does this conclude your direct testimony?

A. Yes, it does. I reserve the right to supplement my testimony as additional issues arise during the course of the proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket Nos. A-2018-3006061
A-2018-3006062
A-2018-3006063

Aqua America, Inc.

Peoples Natural Gas Company LLC – Peoples Division

Peoples Natural Gas Company LLC – Equitable Division

Peoples Gas Company LLC

Statement No. 3

Direct Testimony of Morgan K. O'Brien

Topics Addressed:	**Overview of the Peoples Companies** **Current and Post-Transaction Management** **The Peoples Companies' LTIIP** **The Peoples Companies' UFG Mitigation Plan** **Community Presence** **Effect On Natural Gas Competition and Choice** **The Peoples Companies' SAP Platform**

Dated: December 6, 2018

17744207v5

Q. Please state your name and business address.

A. My name is Morgan K. O'Brien. My business address is 375 North Shore Drive, Suite 600, Pittsburgh, Pennsylvania 15212.

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

A. I am employed by Peoples Natural Gas Company LLC ("Peoples Natural Gas") as President and Chief Executive Officer ("CEO"). I also am the President and CEO of Peoples Natural Gas' direct parent, PNG Companies LLC ("PNG"). PNG also is the parent of Peoples Gas Company LLC ("Peoples Gas"). I will refer to PNG and its subsidiaries as the "Peoples Companies."

Q. What are your principal duties and responsibilities as President and CEO of the Peoples Companies?

A. As CEO of the Peoples Companies, I have the overall responsibility of leading the business and establishing the Peoples Companies' strategic plan for Peoples Natural Gas, as well as for Peoples Gas.

Setting and executing the Peoples Companies' strategy as utility companies is my principal role, followed by building the Peoples Companies' culture. Work gets done through people, and people are profoundly affected by culture, both positively and negatively.

Since the initial acquisition of Peoples Natural Gas in 2010 by SteelRiver Infrastructure North America LP ("SRIFNA"), my responsibility has been to create a stand-alone organization that will provide the highest levels of service and reliability to customers. The subsequent acquisitions of Peoples Gas and Equitable Gas Company have broadened that responsibility to many additional customers and employees. Although that work is not yet finished, we have made great progress in establishing a stand-alone organization and implementing significant steps that have improved service and will continue to do so. As a result, my current responsibilities now include overseeing the modernization of the Peoples Companies' aging systems to meet the needs of our customers and region and focusing on maximizing the technology investments to ensure the Peoples Companies are providing the best customer service in the Commonwealth. We are committed to realizing that vision. I also serve as the Peoples Companies' chief spokesperson and educator on important energy issues being debated and deliberated on both the federal and state level.

Q. What is your educational background?

A. I am a graduate of Robert Morris University with a Bachelor of Science undergraduate degree and a Master's of Science degree in Taxation.

Q. Please describe your professional experience.

A. I began my career in 1982 working in public accounting as a CPA. Subsequently, I spent 19 years with Duquesne Light Company ("Duquesne"), the last 8 and one-half years as President and CEO. During my term as CEO, Duquesne made substantial improvements in reliability and customer service. During my final year at Duquesne, the company was recognized as the top customer service utility in the region by J.D. Power and Associates. On February 1, 2010, I accepted the position of President and CEO of Peoples Natural Gas.

Q. Have you previously testified before the Pennsylvania Public Utility Commission?

A. Yes, on several occasions. During my 19 year career at Duquesne, I testified in numerous regulatory proceedings, including the company's electric restructuring plan, the proposed merger with Allegheny Energy, numerous Provider of Last Resort proceedings, the acquisition of Duquesne by an investor consortium, as well as other regulatory proceedings before this Commission. I also submitted testimony in Peoples Natural Gas' base rate case at Docket No. R-2012-2285985. I also submitted direct and rebuttal testimony in the proceeding at Docket Nos. A-2013-2353647, A-2013-2353649 and A-2013-2353651 concerning the acquisition of Equitable Gas Company and its merger into Peoples Natural Gas.

Q. Please provide a summary of your testimony.

A. I will:

- Provide an explanation of the location of the Peoples Companies and the customers they serve and provide maps of the companies' overlapping service territories;
- Explain the current management structure of the companies and my understanding of how that management structure will be integrated into the management of Aqua America post acquisition;

- Sponsor the current financial statements of the Peoples Companies;
- Explain the current combined Long Term Infrastructure Improvement Plan ("LTIIP") of the Peoples Companies and our substantial efforts to improve and replace at risk pipe in a manner that avoids the duplication of pipelines in the overlapping service areas;
- Explain the current Combined Unaccounted for Gas ("UFG") Mitigation Plan;
- Explain the ongoing commitments of the Peoples Companies resulting from the Peoples/Equitable merger proceeding;
- Explain the Peoples Companies' community support and limited income programs;
- Explain that the acquisition of the Peoples Companies will not harm retail competition and explain the status of the Peoples Companies' customer choice programs; and
- Explain the development of the Peoples Companies' state of the art information systems on the SAP platform.

Q. Please explain the location of service areas of the Peoples Companies.

A. Peoples Natural Gas, including its Equitable Division, provides natural gas services to approximately 622,000 customers in all or portions of the following Pennsylvania counties: Allegheny, Armstrong, Beaver, Blair, Butler, Cambria, Clarion, Fayette, Greene, Indiana, Jefferson, Lawrence, Mercer, Somerset, Venango, Washington and Westmoreland. Peoples Gas provides natural gas services to approximately 61,000 customers throughout its service territory, which includes all or portions of the following

Pennsylvania counties: Allegheny, Armstrong, Beaver, Butler, Cambria, Clarion, Clearfield, Indiana, Jefferson, and Westmoreland.

Q. Have you provided a map showing the service territories of the Peoples Companies?

A. Yes. Joint Applicants Exhibit DJS-1, Appendices D and E, identify the overlapping service territories of the Peoples Companies.

Q. Please explain how the Peoples Companies are currently structured and managed.

A. Appendix F of the Application in this proceeding, Joint Applicants Exhibit DJS-1, provides the current corporate ownership structure of the Peoples Companies. Peoples Natural Gas, which contains the Peoples and Equitable Divisions, is a direct subsidiary of PNG. Peoples Gas (formerly TW Phillips Gas and Oil Company) also is a subsidiary of PNG.

One management team and various departments under my supervision currently serve all of the Peoples Companies under my direction as CEO of PNG. PNG contains all mid and senior level management, as well as support department personnel and offers services to all affiliated entities. Peoples Natural Gas houses field union personnel and their direct supervision and provides operation services to both Peoples Natural Gas and Peoples Gas under a Commission-approved Operation Services Agreement.

Q. How will the structure and management of the Peoples Companies' change as a result of the acquisition of the Peoples Companies?

A. As shown in Appendix G to the Application, Joint Applicants Exhibit DJS-1, LDC Funding LLC, an indirect parent of PNG, will become a subsidiary of Aqua America.

I will remain the CEO of PNG and the leadership team which I lead and supervise will continue to operate and manage the Peoples Companies. I look forward to continuing my role as the chief spokesperson and educator on important energy issues being debated and deliberated on both the federal and state level for the gas portion of the Peoples Companies.

Q. Will the Peoples Companies continue to have the technical fitness necessary to operate a natural gas distribution company following the acquisition by Aqua America?

A. Yes, the Peoples Companies' management team has all of the experience and skill necessary to manage and operate a natural gas distribution company effectively.

Q. Are you sponsoring the financial statements of the Peoples Companies?

A. Yes. Joint Applicants Exhibit DJS-1, Appendices J and K provide the balance sheets and income statements of the Peoples and Equitable Divisions and of Peoples Gas, respectively.

Q. Please explain the LTIIP of the Peoples Companies.

A. The Peoples Companies, and their predecessor companies, have had LTIIPs in place since 2013. The most-recently approved version is a Combined Distribution LTIIP that encompasses the Peoples Companies, Peoples Natural Gas - Peoples Division, Peoples Natural Gas - Equitable Division and Peoples Gas. The current plan increases planned spending on Mains and Services investment by $228.8 million over the five-year term (2017-2021) from $593.7 million to $822.5 million as compared to the prior plan and will result in 620 miles of at-risk pipe and 83,041 services being removed from the system. Spending for all LTIIP categories will total $919.4 million during this period.

Q. On what does the Combined Distribution LTIIP focus?

A. The Combined Distribution LTIIP is focused on removing the highest risk pipe across all of the Peoples Companies first, which will result in having 75% of the customers removed from high risk pipe in the first 10 years and the remaining 25% of the customers removed in the remaining years. The highest risk pipes are mainly located in urban areas, which have the highest concentration of customers being served. These pipe replacement projects are significantly more costly per mile than the rural pipe replacement projects causing the actual miles being replaced to be lower in the early years and greater in the latter years. But, as has been shown in the Commission-approved Combined Distribution LTIIP, a greater amount of risk is mitigated (less customers being served off of high risk pipe) in the early years by prioritizing using the Peoples Companies' risk factors.

Q. Please provide an update on the Peoples Companies' combined UFG mitigation plan.

A. The Peoples Companies have also filed with the Commission and are implementing a combined UFG mitigation plan that focuses on reducing UFG for gathering lines. The first phase of this plan overlaps with the last four years of the Combined Distribution LTIIP and will result in the removal of an additional 115 miles of at risk pipe from the gathering systems of the three legacy companies. A notable item in this area that is not yet complete is the analysis and assessment of the Goodwin and Tombaugh gathering systems that were acquired in the Equitable Asset Exchange. The Peoples Companies began their assessment of the systems shortly after closing, are concluding their analysis of these pipelines, and intend to present a plan to the Commission and parties in the near future.

Completion of the current Combined Distribution LTIIP for 2017-2021 and the replacement of the remainder of at-risk pipe will require substantial capital commitments for an extended period that will continue well beyond the term of the current LTIIP.

Q. Please explain the commitments made in the Peoples/Equitable merger proceeding at Docket Nos. A-2013-2353647, A-2013-2353649 and A-2013-2353651.

A. In 2013, the Commission approved a merger of Peoples Natural Gas and Equitable Gas Company which resulted in the acquisition of Equitable by PNG. The former Equitable Gas Company is now a division of Peoples Natural Gas.

The Peoples Companies have met, or intend to meet, all of the settlement commitments made in conjunction with the acquisition of the former Equitable Gas Company, as listed for the categories below:

- **Financial Conditions:** The Peoples Companies have not sought recovery of transaction costs or any acquisition premium and have maintained capitalization ratios within settlement parameters. The Peoples Companies have also worked to phase out Gas on Gas competition between the now-affiliated entities.
- **Books and Records:** The Peoples Companies have sought approval for all affiliated interest agreements and maintain financial controls among affiliated entities. Peoples Natural Gas maintains separate books and records for its Peoples and Equitable Divisions and will continue to do so until the Commission approves a merger of the base rates of the Divisions.
- **Management:** Peoples Natural Gas has maintained field offices and staffing sufficient to provide safe and reliable service to its customers. At present, there are 12 field offices throughout Pennsylvania and the Headquarters remains in Pittsburgh.
- **Customer Service:** Peoples Natural Gas has met all of the call center metric targets. Peoples Natural Gas is continuing to work on meeting the Emergency response metric target. The current performance is at 98.2% compared to a target of 99% of emergency calls responded to within 60 minutes.
- **Universal Service:** All universal service commitments have been met including additional LIURP funding with portions funded by the Peoples Companies' investors.
- **Community Commitment:** Peoples Natural Gas has exceeded its committed contributions to the Dollar Energy Fund and other community initiatives in its service territory.
- **Gas Purchase and Supplier Commitments:** Peoples Natural Gas has provided

access to and maintained interconnections to allow suppliers access to its system through the upstream Allegheny Valley Connector pipeline as required. Peoples Natural Gas has also implemented enhancements to supplier choice requested through a collaborative with third party suppliers and parties to the acquisition, and has implemented a Purchase of Receivables program on the Equitable Division.

- **DSM Programs:** Peoples has also completed a study of DSM programs as required by the Acquisition Settlement and filed to implement an energy efficiency and conservation program consistent with the study at Docket M-2017-2640306. That proceeding is still pending before the Commission.

Q. Please explain the Peoples Companies' commitment to the communities they serve.

A. Community commitment is not only one of the Peoples Companies' stated core values, it is how we have become recognized in the communities we serve as a true community leader. In a time when governmental support is becoming more challenging at both the federal and state levels, the need for social services in our region continues to grow. Peoples Natural Gas committed in the Equitable acquisition case settlement to provide annual corporate contributions and community support in southwestern Pennsylvania of at least $1.4 million. We have exceeded this commitment level by contributing in 2017 more than $1.5 million to at least 200 community-based organizations and charities that provide vital human services to people in need. That level of contributions will continue for 2018. The Peoples Companies make financial commitments to organizations that serve our service territory communities – both large organizations and small. Some examples of organizations we support are the Greater Pittsburgh Food Bank, United Way, Leukemia/Lymphoma Society, Dollar Energy Fund, March of Dimes, Salvation Army, Leukemia/Lymphoma Society and Greater Pittsburgh Literacy Council.

One of the key values our employees have embraced is the need to support the communities we serve. I am proud to say that we have a very active Volunteer Activities Committee and many of our employees volunteer on the boards of community organizations. A large number of Peoples Natural Gas' corporate donations are made to organizations in which our employees are actively involved or actively support.

This includes giving time and money to help those in need. We offer ongoing volunteer events such as collecting and packing food in partnership with local food banks, cleaning the rivers with Paddle without Pollution, mentoring youths through Big Brothers Big Sisters or providing winter outwear for children with the Salvation Army's Project Bundle Up. This is helping our customers to see us differently, as something other than a company who sends them a bill every month for their utility services, and at the same time building a pride in the employee ranks that we have not seen before.

Q. Please explain the Peoples Companies' programs for assisting customers.

A. As public utilities, the Peoples Companies serve all types of consumers from large industrial users and universities to seniors and families. Our service territory is wide and covers urban areas such as the city of Pittsburgh and rural areas. While the majority of customers can afford natural gas service, there are seniors and families that really struggle to make ends meet. In addition, there are many communities we serve in which economic challenges have left many of our customers struggling for the essential and basic human needs that everyone is entitled to receive. We created a suite of programs and services to increase affordability, provide a safety net for limited income homeowners facing a costly gas related repair and, perhaps most importantly, to connect those in need with resources beyond gas service. We have also partnered with the United Way to allow our customers who are challenged to pay their utility bill to also have access to many important social service programs through the use of the 211 helpline. We know many of our customers who struggle to pay their gas bills, most likely also struggle for life's basic human needs like food, shelter and heath care assistance.

Our Customer Assistance Program ("CAP") is an affordable payment plan based on income. Our program's eligibility requirements are more expansive than any other utility in the state. While traditional CAP programs accept customers with incomes up to 150% of Federal Poverty Levels ("FPL"), our program welcomes customers with incomes between 151% and 200% of FPL who have accrued balances and need a more affordable monthly payment.

Energy Assistance is a key component of affordability. Our customers have access to grants from the federally funded Low Income Home Energy Assistance Program ("LIHEAP"). Our role in LIHEAP is to increase awareness of the program and to assist customers who want to apply. We advertise LIHEAP in our bills, on our website, through print and radio advertising, and social media. We also work closely with local social service agencies by providing colorful printed materials such as posters and cards. This year we created a digital toolkit with links that agencies can utilize in their newsletters, web pages and social media. Our extensive campaign is expected to have four million impressions.

We offer a low-income weatherization program to help high users reduce energy usage while also improving the health and safety of their homes. Our emergency heating appliance and gas line program is important to our limited income homeowners who do not have funds readily available to address a sudden emergency such as a failed furnace or leaking gas service line.

By far, our biggest asset in serving our vulnerable customers is our employees. Our employees have direct contact with our customers through calls to our call center or visits to their homes. So often, a customer who cannot pay their gas bill struggles to pay rent and other utility bills and to feed their family. Our field employees, in particular, were concerned about difficult situations they were seeing such as a newly-widowed senior, unaware of the growing gas bill or the family with a disabled child that was overwhelmed with competing responsibilities. This year, we set up a phone line to connect these field employees directly to our Customer Relations team so they could step in and help the customer with not only managing the gas bill, but referrals to other agencies and resources to improve their living situation. We call this "Help at Peoples Now" and it has been a great partnership between our field and office teams that has positively impacted individual customers. This alternative to previously shutting the gas service off has made a meaningful impact to many customers who qualify for programs that for many reasons they either weren't aware existed or chose not to participate.

The Peoples Companies' commitment to this region and our customers is unwavering. All customers are important to us. Some need support due to economic or life challenges. Providing a suite of programs and a team of employees who are focused on helping customers connect to valuable resources is just one example of how we strive to impact our region in a positive way.

Q. Please explain the Peoples Companies' programs to support choice of suppliers.

A. The Peoples Companies support customer choice of suppliers in all three of the Peoples Companies' tariffed service territories through administration of a common program. Currently about 16% of the Peoples Companies' residential market chooses to purchase their gas supply from third party suppliers. For the commercial market, about 29% of the customers and about 80% of the volume is supplied by third parties. For the industrial market 81% of the customers and over 99% of the volume are sourced by third parties.

Q. Will the acquisition of the Peoples Companies affect the availability of customer choice in any negative way?

A. No. The coordination of procedures for choice of supplier across the three companies are designed to facilitate supplier and customer participation in choosing a supplier. The acquisition will not affect this process.

Q. Please explain the development of the Peoples Companies' state of the art information technology systems.

A. When SRIFNA acquired Peoples Natural Gas it did not acquire any billing or IT systems, as such services were previously provided by Dominion Resources. Dominion Resources provided these services under an 18-month transition services agreement to Peoples Natural Gas following the closing. During this period, Peoples Natural Gas was required to start up billing and other IT systems to operate Peoples Natural Gas, most of which was done under the SAP platform, which has proven to be both expandable and scalable. This system was then extended to Peoples Gas and ultimately Equitable Division customers following those acquisitions.

The result is that the Peoples Companies have a highly effective IT infrastructure that does not have many of the limitations of legacy IT systems used by many other utilities.

Q. Does this conclude your direct testimony?

A. Yes, it does. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket Nos. A-2018-3006061
A-2018-3006062
A-2018-3006063

Aqua America, Inc.

Peoples Natural Gas Company LLC

Peoples Natural Gas Company LLC – Equitable Division

Peoples Gas Company LLC

Statement No. 4

Direct Testimony of Richard S. Fox

Topics Addressed:	**Technical Fitness** **Safety Culture and Commitment** **Shared Operations Post-Transaction**

Dated: December 6, 2018

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Richard S. Fox. My business address is 762 West Lancaster Avenue Bryn Mawr, PA 19010.

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

A. I am employed as the Executive Vice President and Chief Operating Officer, Regulated Operations of Aqua America, Inc. ("Aqua America"). As an employee of Aqua Services, Inc., the service company that provides common management and services to all Aqua subsidiaries, I provide services to Aqua America, Aqua Pennsylvania, Inc. ("Aqua PA"), including Aqua PA's subsidiary Aqua Pennsylvania Wastewater, Inc. ("Aqua PA Wastewater"), and the regulated Aqua America subsidiaries in other states.

Q. What are your principal duties and responsibilities as Executive Vice President and Chief Operating Officer, Regulated Operations at Aqua America?

A. I am responsible for the overall operations of the combined Aqua America utilities including the functional organizations that construct, operate and maintain the water and wastewater utility treatment plants and the water distribution and wastewater collection systems. Additionally, I am responsible for state and corporate safety, engineering, environmental compliance, and other functions that support the operating units. Organizationally, the state presidents of five Aqua America utilities, including the president of Aqua PA, report to me; the other three state presidents report to the Deputy

Chief Operating Officer. Collectively, we are charged with operating the water and wastewater utility assets in a safe and environmentally compliant manner to ensure public health and environmental stewardship for the benefit of our customers and their communities.

Q. What is your educational background?

A. In 1983, I earned a Bachelor of Science degree in chemical engineering from Virginia Polytechnic Institute and State University (Virginia Tech). In 2002, I earned a Master of Business Administration ("MBA") degree from Villanova University.

Q. Please describe your professional experience.

A. In my roughly 35-year career, I have worked for three primary employers. After graduating from Virginia Tech, I was employed in Hopewell, Virginia for ICI Films, a subsidiary of ICI Americas, Inc., which, in turn, was a subsidiary of the international United Kingdom based company, Imperial Chemical Industries, PLC. ICI Films produced high technology biaxially oriented polyester films for magnetic, industrial, and packaging applications. At ICI, I held positions as a process engineer, production engineer, and area manager.

In 1992, I joined Toray Plastics America, Inc. ("TPA") in North Kingstown, Rhode Island, a subsidiary of the international Japan based company Toray Industries, Inc. TPA produced specialty coextruded biaxially oriented polypropylene films primarily for the food packaging industry. At TPA, I held the position of technical manager and was responsible for the introduction of Toray products to the U.S. market through product design and development, process control optimization, plant productivity, and product quality assurance.

From 2000-2002 I attended Villanova University where I earned a Master of Business Administration degree.

In 2002, I was hired by Philadelphia Suburban Company, Inc., ("PSC") the predecessor company to Aqua America. Aqua America owns and operates regulated water and wastewater utilities under the jurisdiction of respective public utility commissions (or similar agencies) in each state where it operates. While at PSC/Aqua America, I held various roles of increasing responsibility including Manager of Customer Service, Vice President of Aqua Customer Operations, President of Aqua Utilities Florida, Vice President and Regional President of Aqua America, and finally Executive Vice President, Chief Operating Officer, Regulated Operations.

Q. Have you previously testified before the Pennsylvania Public Utility Commission ("Commission")?

A. Yes, I provided testimony in the 2007 Aqua PA water rate case, docketed at R-00072711.

Q. Please describe the purpose of your direct testimony.

A. I will describe Aqua America's technical fitness to own and manage the natural gas operations of both Peoples Natural Gas Company LLC ("Peoples Natural Gas") and Peoples Gas Company LLC ("Peoples Gas"), collectively the "Peoples Companies" or

"Peoples." Specifically, I will describe Aqua America's significant experience: owning and operating public utility assets throughout its eight-state footprint; owning and managing another Pennsylvania public utility, *i.e.* Aqua PA; owning and operating pipeline public utility assets in conformance with the Public Utility Code and the Commission's regulations and orders; and implementing and managing Commission-approved Long-Term Infrastructure Improvement Plans ("LTIIPs").

I will also describe Aqua America's current operations in Pennsylvania and why Aqua America's past successes integrating other public utility operations with those of its subsidiaries demonstrates that Aqua America's proposed acquisition of Peoples Natural Gas and Peoples Gas is in the public interest.

Next, I will discuss Aqua America's safety mission and practices and how safety excellence will continue to be a priority and continued after the close of the Proposed Transaction. Finally, I will describe the potential for sharing core competencies and operations between Aqua PA, Peoples Natural Gas and Peoples Gas after closing of Aqua America's acquisition of LDC Funding LLC ("Proposed Transaction").

II. TECHNICAL FITNESS

A. Aqua America Currently Has Substantial Experience Owning And Operating Public Utility Assets

Q. Please describe Aqua America.

A. Aqua America is the second largest investor-owned water utility in the country, and is a financially strong, owner and operator of pipe-based utility assets in the United States. Aqua America owns and operates approximately 1,486 water systems across its eight-state footprint, producing more than 82 billion gallons of quality drinking water in 2017. The average capital budget for Aqua America's subsidiaries is approximately $500 million combined among its eight state service territories. It serves approximately three million people drinking water sourced from three different types of water sources, specifically surface water (rivers, creeks, and lakes), groundwater (aquifers), and purchased water (via interconnects to other water purveyors). This has some analog to the Peoples source of supply including local gas wells, interstate transmission pipelines, and underground storage reservoirs. Additionally, Aqua America owns and operates approximately 187 wastewater systems. These too are "pipe based" utilities requiring operations, maintenance, and capital planning to provide safe and reliable service to customers and protect the environment.

Q. Please describe Aqua America's experience with pipeline infrastructure replacement.

A. Aqua America's subsidiaries have prudently replaced a substantial amount of infrastructure. Over the past 10 years, Aqua America water subsidiaries have invested approximately $3.5 billion in infrastructure improvements which includes replacement of approximately 1,600 miles of water pipes (mains) in the water distribution systems. Aqua America's subsidiaries will continue to replace infrastructure for the foreseeable future.

Q. Has Aqua America or any of its subsidiaries been recognized for excellent operation

and management of water and wastewater utility assets within or outside of Pennsylvania?

A. We believe the best recognition of excellent performance is knowing that our customers receive safe and compliant drinking water and enjoy clean and safe waterways because of the high-quality effluent that we discharge from our wastewater treatment plants. However, from time to time, external agencies do recognize our performance with awards and commendations. Specifically, over the past few years Aqua PA has received the following awards and recognitions:

1. Water Treatment Filter Plant Performance Evaluations by Pennsylvania Department of Environmental Protection (PADEP).
    a. 2018. Ridley Water Treatment Plant – Commendable
    b. 2018. Upper Merion Reservoir Water Treatment Plant- Commendable
    c. 2017. Bristol Water Treatment Plant– Commendable
    d. 2017. Neshaminy Water Treatment Plant– Commendable
    e. 2017. Roaring Creek Water Treatment Plant– Commendable
    f. 2016. Crum Creek Water Treatment Plant– Commendable
    g. 2016. Pickering West Water Treatment Plant - Commendable

2. PA Meritorious Operator – Recognized by Pennsylvania Chapter of the American Water Works Association
    a. Curt Steffy - 2009
    b. David Marozzi - 2015
    c. Richard Kotwica - 2018

3. Leadership in Energy and Environmental Design (LEED) Silver Certification – Recognized by United States Green Buildings Council (USGBC) for the Ridley Water Treatment Plant, Media, PA - 2014

4. Partnership for Safe Water (Drinking Water) - Recognition by American Water Works Association (AWWA) as part of an alliance of the United States Environmental Protection Agency (EPA), the Association of State Drinking Water Administrators (ASDWA), the Association of Metropolitan Water Agencies (AMWA), the National Association of Water Companies (NAWC), and the Water Research Foundation (WRF).

a. President's Award for Water Treatment - Roaring Creek Filtration Plant (Phase IV) – 2016
b. Ridley Creek Water Treatment Plant (Phase III) – 2018
c. Ingrams Mill Treatment Plant (Phase III)- 2012
d. All water treatment plants enrolled since 2009 in the Partnership for Safe Water and recognized as at least Phase II status

5. Partnership for Clean Water (Waste Water) – Analog program to the Partnership for Safe Water and administrated by the AWWA. The following Aqua PA wastewater treatment plants (WWTP) are enrolled in this program:
   a. Media WWTP – 2016
   b. Bridlewood WWTP – 2018
   c. Penn Township WWTP – 2018

6. Upper Merion Water Treatment Plant - For the Frequency Regulation Batteries at Upper Merion WTP, the project was the recipient of a Pennsylvania Energy Development Authority (PEDA) grant award in the amount of $500,000.

Q. What experience does Aqua America have owning and managing public utilities in Pennsylvania?

A. Aqua America has extensive experience owning and managing public utilities in Pennsylvania. Its wholly-owned subsidiary, Aqua PA, provides water and wastewater services to over 435,000 water customer accounts and approximately 24,000 wastewater customer accounts (representing a population of approximately 1.4 million people). In providing water and wastewater service to Pennsylvania customers, Aqua PA has significant expertise in owning and operating pipeline based public utility assets in conformance with the Pennsylvania Public Utility Code ("Code") and the Commission's regulations and orders. Aqua Pennsylvania, or its predecessors, have been providing drinking water to its customers for over 130 years and has operated successfully under the jurisdiction of the Commission.

Q. Please describe Aqua PA's experience in replacing pipeline infrastructure in Pennsylvania.

A. Aqua PA's investment in the state's water and wastewater infrastructure continues to benefit customers and the environment alike. When Aqua PA first began to accelerate pipeline replacement in 1996, Aqua PA's pipes were being replaced on an average pace equivalent to a 900-year replacement cycle. Today, that has been significantly reduced to approximately a 90-year replacement cycle pace, which is more in line with the expected typical life of water pipe materials of roughly 100 years. The benefits of Aqua PA's main replacement program have been most dramatic in its southeastern division, which is the largest division, with 4,600 miles of main that serve approximately one million people. As a result of this multi-year pipe replacement program, main breaks have been reduced by 70% to an all-time low of eight breaks per 100 miles of pipe per year, and customer complaints, typically for discolored water, have fallen by 59%. Non-revenue water, a measure of pipe leakage and other causes, also continues to trend downward, reducing expenses for power and treatment chemicals. Mr. James Barbato further explains Aqua PA's main replacement program in his direct testimony, Joint Applicants St. No. 5.

Q. Does Aqua America have significant experience owning and operating natural gas utilities in Pennsylvania?

A. No. However, as noted above, Aqua America has significant expertise in owning and operating the pipeline public utility assets of its Pennsylvania subsidiary, Aqua PA, in conformance with the Code and the Commission's regulations and orders.

More importantly, as I discuss further below, Aqua America will retain the same highly-experienced teams already in place at the Peoples Companies, which will continue to lead the natural gas operations of the Peoples Companies post-closing under the Aqua America corporate umbrella. This leadership team for the Peoples Companies, who are being retained to operate this segment of the proposed combined company, do have significant experience owning and operating natural gas utilities in Pennsylvania.

Further, as explained further by Mr. Barbato, Aqua PA currently maintains separate LTIIPs for its water and wastewater assets, and regularly meets the infrastructure replacement targets established by its LTIIPs. *See* Joint Applicants St. No. 5. Over the past 10 years, Aqua PA has replaced more than 1,300 miles of pipe and invested over $1.1 billion in pipeline replacement. *See* Joint Applicants St. No. 5. Aqua PA's commitment to the replacement of aging pipeline infrastructure to provide safe, reliable and efficient service to Pennsylvania customers demonstrates its understanding of the challenges associated with owning, operating and managing public utility pipeline assets. This same commitment to infrastructure and customers will be applied by Aqua America to the Peoples Companies' operating unit for natural gas.

Q. Why is Aqua America's technical experience owning and operating a Pennsylvania public utility significant to the Proposed Transaction?

A. Aqua America's technical experience owning and operating Aqua PA demonstrates its experience owning and operating public utility pipeline assets in conformance with the Code and the Commission's regulations. This experience, combined with the expertise and commitment of existing Peoples employees who are being retained after closing of the Proposed Transaction, demonstrates that Aqua America is, and will continue to be, committed to ensuring its public utility subsidiaries provide safe, reliable and efficient service to Pennsylvanians.

B. Aqua America's Prior Experience With Integration of Acquired Companies

Q. Please describe the operation of the Peoples Companies and Aqua PA under the leadership of Aqua America after closing of the Proposed Transaction.

A. Aqua America's day one priority will be to ensure these systems continue to be operated as they are operated today with customer service, system safety, and reliability as the first priorities. Importantly, the existing employees and Pittsburgh-based leadership currently in place at the Peoples Companies will continue to lead the natural gas operations of the Peoples Companies after closing of the Proposed Transaction. This may have been different had another natural gas company purchased the Peoples Companies. Similarly, the existing employees and Bryn Mawr-based leadership currently in place at Aqua PA will continue to lead the water and wastewater operations of Aqua PA after closing of the Proposed Transaction. In this regard, the Proposed Transaction does not involve the elimination or consolidation of the operational expertise and intellectual capital currently in place at these companies. Rather, it combines the Joint Applicants' individual expertise under one corporate parent.

Q. Why is the retention of the existing employees and Pittsburgh-based leadership of the Peoples Companies significant?

A. As already described, retaining these employees and Pittsburgh-based leadership will ensure a seamless transition for the provision of service after the close of the Proposed Transaction. In addition, as explained in the direct testimony of Morgan O'Brien, the employees and leadership of the Peoples Companies responsible for the safe, reliable and efficient operation of these companies have an excellent track-record in operating and managing natural gas utilities and share Aqua PA's commitment to the replacement of aging pipeline infrastructure throughout the Commonwealth. *See* Joint Applicants St. No. 3. As such, the Proposed Transaction will provide Aqua America access to the intellectual capital and expertise of the Peoples Companies' existing employees and Pittsburgh-based leadership, with respect to operating and managing natural gas pipeline assets.

Q. Has Aqua America successfully integrated the expertise and intellectual capital of other acquired water utilities under its corporate umbrella in the past?

A. Yes.

Q. Please explain.

A. I'll offer two examples. In 2012, Aqua America acquired the Ohio operations of American Water known as Ohio American Water ("Ohio American"). At the time, Aqua

Ohio had about 86,000 customers and Ohio American added about 57,500 customers and there were 106 active employees in Ohio American. All of these employees and functions were fully assimilated into Aqua Ohio on day one. A limited number of Ohio American employees, who met Ohio American's age and years of service thresholds, elected to take an early retirement. These included the Ohio American President as well as the Division Manager in Ashtabula. The balance of the employees moved into management or union positions. Among those, fourteen are still active in key leadership positions either at a divisional or statewide level in the now combined Aqua Ohio organization. In addition to those who continue to serve our Ohio customers in the roles they held before the acquisition, a number of former Ohio American employees have been given the opportunity for expanded roles. A couple of examples follow:

- The Plant Manager in Marion, Ohio was promoted to Division Manager and was given responsibilities for both the Marion and Tiffin operations.
- The Area Manager in Franklin County was promoted to lead the Aqua Ohio statewide environmental compliance activities.
- Also, in Franklin County, one employee was promoted to Production Manager overseeing both drinking water and wastewater treatment operations and another was promoted from the union ranks to Field Supervisor to lead the water and wastewater distribution operations.

It is important to note that the Ohio American integration was different in that we were combining two operations that essentially performed the same service, albeit in different geographic locations. For the Peoples Companies, the acquisition adds employees and operations that are different and thus the need to both retain and integrate intellectual capital and expertise is even greater. Hence, our commitment to maintaining the current employees and management at the Peoples Companies.

The second example is smaller in scale, but more recent, and still relevant to the benefit of integrating the expertise and intellectual capital of other acquired water utilities. Aqua Illinois acquired the wastewater operations of the Village of Manteno in 2018. The three existing employees were retained by Aqua Illinois and not only provide crucial continuity for the acquired operations but have already contributed to the benefit of other existing Aqua Illinois operations. A couple of examples follow:

- The Wastewater Plant Supervisor assumed a leadership role in Central Division wastewater operations, taking responsibility, in addition to Manteno, for existing facilities at Tri-Star Estates and Sun River Terrace Wastewater. Subsequently, Aqua Illinois also acquired the water and wastewater systems in nearby Peotone, Illinois and he coordinated the cross training of these new employees and the integration of these employees into the combined operations.
- The Operational Team Lead quickly became the "go-to person" for assessing wastewater problems throughout Central Division, making important decisions on wastewater facility repairs in both Kankakee and Will County. He also initiated a program to rehabilitate lift stations and other wastewater facilities and identified a cost saving improvement to modify lift station alarm set-points to eliminate unnecessary after-hours call-outs.

Both of these examples demonstrate the need and benefit of retaining employees of acquired utilities so that their expertise and operating knowledge is sustained, but also highlights the new opportunities for employee growth and the benefits that can be derived from integrating this expertise into the incumbent organization and operation.

Q. Please summarize how the day-to-day operations of the Peoples Companies and Aqua PA would be affected by the Proposed Transaction.

A. The day-to-day operations of these companies would largely be unaffected. As previously mentioned, Aqua America will retain the Pittsburgh-based employees and leadership of the Peoples Companies to ensure the natural gas pipeline and distribution system assets will continue to be managed and maintained by the persons that have historically provided the safe, reliable and efficient operation of these assets. Similarly, Aqua America will retain the Bryn Mawr-based employees and leadership of Aqua PA to ensure the water and wastewater pipeline assets will also continue to be managed and maintained by the persons that have historically provided the safe, reliable and efficient operation of these assets.

After closing of the Proposed Transaction, Aqua America would possess substantial technical expertise related to both natural gas operations and water and wastewater operations. Under the Aqua America corporate umbrella, the subsidiary companies would not only possess the requisite technical experience to operate their respective assets, but also have the opportunity to share their respective expertise with all Aqua America subsidiaries including Aqua PA and the Peoples Companies. Therefore, the contemplated change in ownership of the Peoples Companies would provide substantial benefits to all stakeholders, which I discuss in detail below.

III. SAFETY PRACTICES AND PROCEDURES

Q. Do Aqua America and its subsidiary water and wastewater operations maintain practices and procedures that promote a culture of safety?

A. Yes. Safety of both our employees and customers is at the forefront of what we do.

All of our employees are responsible for safely providing water and wastewater utility service. Technically, this responsibility falls under my duties. The safety program is led by a national director and team of specialists who work side-by-side with operations teams and management to implement safe working practices and procedures across our eight-state footprint. In addition to routine weather, exertion related, slips and falls, and environmental exposures, our workers face risks in day-to-day activities involving confined spaces, construction work zones, fall protection, chemical handling, electrical safety, and emergency response to name a few. All workers from front line to senior management are tasked to be aware of job hazards and empowered to create a safe work environment every day.

For this application, I will focus on the safety program in Pennsylvania. Local safety committees at the division level led by operations enables field level elevation of concerns, but also empowers employees to handle issues locally. Aqua America encourages a "bottom up" approach that generates ownership. Aqua PA is also a participant of the President's Safety Council, sponsored by me as Chief Operating Officer for overall program direction and support, to provide guidance on any issues brought forth by subordinate safety committees, and ensures sharing of best practices across subsidiaries. This is a "top down" approach that adds commitment, funding, and encourages consistency and standardization. We feel so strongly as a management team about the safety of our employees and customers that our compensation is directly tied to reaching safety performance metrics.

Q. Please describe Aqua America's success in creating and maintaining a culture of safety.

A. Aqua America's stated Vision summarizes its culture of safety as follows:

> *At Aqua America, we know that water is a precious resource – one that plays a critical role in sustaining life. We take seriously our responsibility to protect and provide this essential resource. We are committed to sustainable business practices; excellent customer service; attracting and developing top talent; the strategic growth of our company; delivering shareholder value; investing in technology and infrastructure; and giving back to the communities in which we operate. We do all these with integrity and transparency.*

With the exception of the direct reference for water, which could easily be supplemented with similar and relevant references to natural gas, this vision has guided our company in writing since it was captured in words a few years ago but more importantly in spirit for many years before that. This vision applies to everything, including safety, at Aqua America and has enabled the success we have achieved in the broadest definitions of safety (worker health and injury prevention, vehicle accidents, and customer health - through drinking water quality and environmental stewardship). The Peoples Companies already have a parallel and equivalent culture and success with respect to their safety (also in the broadest sense including pipeline safety, gas leak response, and methane emissions). As a combined company with the same management teams, the same employees, and these shared values and visions, we will continue to improve safety for our employees, our customers, our communities, and our environment.

Q. Why is this commitment to maintaining a culture of safety important in the context of the Proposed Transaction?

A. Aqua America's culture of safety further demonstrates that it is technically fit to own and operate natural gas pipeline assets through its acquisition of the Peoples Companies. Aqua America has substantial experience addressing the challenges of safely owning, operating and maintaining pipeline utility assets. The Proposed Transaction would add Aqua America's experience to the substantial expertise and experience currently possessed by the Peoples Companies and would create a combined entity that is dedicated to safely owning and operating public utility pipeline assets.

IV. <u>POTENTIAL POST-TRANSACTION SHARED OPERATIONS</u>

Q. After the close of the acquisition, will there be any opportunities for the Peoples Companies and Aqua America to share operations experience to the benefit of stakeholders?

A. Yes. Both Aqua America and the Peoples Companies share complementary core competencies. These include expertise in pipeline replacement, strong relationships with customers, credibility with regulators and operational excellence. All of these would create long-term value for stakeholders. Mr. Barbato expands upon sharing expertise in pipeline replacement in particular in his testimony, Joint Applicants St. No. 5.

Q. How would sharing this expertise benefit stakeholders?

A. My expectation is that because Aqua America, its subsidiaries and the Peoples Companies are quite good at what they do today, there is an opportunity for each company to learn from each other and perform all types of work more effectively. One clear benefit in regard to the Peoples Companies is that any improvement in effectiveness could allow even more or faster replacement of the riskier natural gas pipes for the same level of resources than currently planned. As stated in other testimony, Aqua America will commit to continue the Combined Distribution LTIIP of the Peoples Companies following the acquisition as approved by the Commission. However, in addition, Aqua America commits to reviewing the current Combined Distribution LTIIP of the Peoples Companies and considering, in consultation with the subject matter experts at the Peoples Companies, whether further acceleration would benefit the Peoples Companies' customers. These commitments demonstrate that the Proposed Transaction would provide significant opportunities for Aqua America and the Peoples Companies to share their respective expertise in public utility infrastructure replacement and continue to pursue aggressive replacement strategies to provide for the safe, reliable and efficient provision of public utility services.

Additionally, Aqua America, through the Peoples Companies subsidiaries, will commit to continuing the existing unaccounted for gas ("UFG") mitigation plan that the Peoples Companies have already developed.

Q. You mentioned that Aqua America and the Peoples Companies each currently have strong relationships with their customers. Please explain.

A. Aqua America, and in particular Aqua PA for this discussion, is committed to providing exceptional customer service to our customers. Foremost, Aqua PA is committed to sharing information and educating our customers on a variety of different issues that impact them. Aqua PA proactively utilizes our website, social platforms, bill inserts, messages printed on the bills, and our emergency notification system known as WaterSmart. For Aqua PA's distribution replacement program, Aqua PA provides notice to customers ahead of time of any possible disturbance to their street related to the project, and by coordinating with local officials. If the Proposed Transaction is approved by the Commission, Aqua America and the Peoples Companies would continue to deliver this commitment to customers.

I note that the Peoples Companies participate in the Customer Service Performance study published by the Commission. This study measures many critical customer satisfaction measures including call center operating metrics, billing, meter reading and response to disputes. In addition, the study measures customer satisfaction through a transactional survey which measures performance in the areas of call center, field technicians and overall satisfaction with representatives from the Peoples Companies who handle customer contacts. The Peoples Companies have consistently performed in the top third in all categories. Aqua America will be committed to this consistent performance.

Q. Please explain how Aqua America and the Peoples Companies will be able to share their experience with regulators.

A. I am going to answer this question in the context of all regulators. Both current companies, Aqua America and the Peoples Companies, are regulated by numerous government agencies. In the case of Aqua America, we are regulated by the state public utility commissions (or equivalent agency) in each state. In addition, we are regulated by the state agency responsible for environmental protection, the state agency responsible for public health, and the federal Occupational Safety and Health Administration, as primary operational regulators. There are others. In addition, the Peoples Companies are regulated by the federal Department of Transportation or their state primacy agencies for pipeline safety. Both companies have a long history of compliance and cooperation with regulators to meet or exceed the requirements that our customers and the community require. This same commitment would be retained by both operating units, Aqua America and the Peoples Companies, once they are combined.

Q. You previously mentioned that the Proposed Transaction would allow Aqua America and the Peoples Companies to share and create operational efficiencies.

Please explain.

A. If approved, the Applicants believe that they would be able to share operational best practices, engineering, construction, IT systems, and, over time, leverage economies of scale in purchasing, consultants, system maintenance and some service department functions, to the benefit of customers and other stakeholders.

Q. Please explain how the Peoples Companies and Aqua America will be able to share best practices.

A. Currently, both Aqua America and the Peoples Companies share complementary core competencies and perform many functions that are similar. For example, both utilities utilize departments that focus on construction, restoration, metering and meter reading, compliance, and call center operations.

As a combined company, with shared executive leadership, the forum will exist for both operating units, water and gas, to exchange each other's processes and procedures for performing the above and other functions. It is my expectation that this exchange of ideas will lead to opportunities for improvement. These improvements, almost by definition, will benefit customers by providing better service, reliability, efficiency, quality, etc. These efficiencies and improvements result from combining and comparing the Joint Applicants' best practices in these core areas under the same corporate umbrella.

As an example for the Peoples Companies, Aqua PA's processes for securing long term fixed price contracts for construction contractors can provide benefits.

Properly managed, these contracts reduce price risk, but perhaps more importantly, secure the required resources on a long-term basis to perform the construction work required to implement a multi-year LTIIP.

Q. Please explain how the Peoples Companies and Aqua America will be able to share IT assets.

A. As noted in the Application, one example is the Peoples Companies installed a new enterprise scale SAP information technology platform for financial reporting, customer information system, and other functions following acquisition by SteelRiver Infrastructure Fund North America. Aqua America has systems that provide these same functions. However, the systems at Aqua America do not currently utilize a standardized technology platform and, in the case of the customer information system, will need to be replaced or upgraded at some point in the future. These types of IT projects are inherently risky. However, by leveraging the existing system that has been developed and implemented successfully by the Peoples Companies for essentially the same type of service (i.e. a metered utility), Aqua America may be able to make the replacement/upgrade that is required with less cost and lower risks than a "greenfield" implementation. Once we can confirm our belief that leveraging the Peoples Companies' SAP platform will be a prudent approach, this will have direct benefits for the customer service the combined companies provide.

Q. How would sharing a standardized SAP Technology Platform benefit the

stakeholders of Aqua America and the Peoples Companies?

A. In addition to the benefits described above for the implementation of standardized technology, if both the gas and water/wastewater operations operate from the same platform, the combined company would be able to develop a large, multi-utility service company. At that time, Aqua America can leverage a larger platform to create a more efficient and effective overhead structure than can be possible for each operation on a standalone basis. This may benefit areas such as finance, human resources, regulatory, IT and supply chain. A single IT platform also may improve the efficiency of customer services since many of the business processes are similar and one system is easier and less costly to maintain and operate than two.

Q. Will the potential to share operations have any other benefits for Aqua America's and the Peoples Companies' stakeholders?

A. As noted in the Application, the Proposed Transaction will create opportunities for economies of scale to enhance service across natural gas and water and wastewater operations. The Proposed Transaction will result in a larger customer base of both gas and water and economies of scale will allow Aqua America to create greater and more efficient opportunities for investment in technology solutions. This technology can enhance customer service tools, and provide tools for enhanced management of similar activities, including the design and engineering of pipe replacement programs, mapping of pipelines, and other work efficiency tools that might not be economical on a standalone basis.

Q. Does this conclude your direct testimony?

A. Yes, it does. I reserve the right to supplement my testimony as additional issues arise during the course of the proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket Nos. A-2018-3006061
A-2018-3006062
A-2018-3006063

Aqua America, Inc.

Peoples Natural Gas Company LLC

Peoples Natural Gas Company LLC – Equitable Division

Peoples Gas Company LLC

Statement No. 5

Direct Testimony of James C. Barbato

Topics Addressed: **Aqua PA's Water and Wastewater Pipe Experience**
Alignment of Commitments to Safety And Proactive Infrastructure Replacement
Post-Transaction Commitments

Dated: December 6, 2018

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is James C. Barbato. My business address is 762 West Lancaster Avenue, Bryn Mawr, PA 19010.

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

A. I am employed as the Vice President, Corporate Engineering of Aqua America, Inc. ("Aqua America"). I provide services to Aqua America and Aqua Pennsylvania, Inc. ("Aqua PA"), including Aqua PA's subsidiary Aqua Pennsylvania Wastewater, Inc. ("Aqua PA Wastewater")[1] as well as the same services for the other seven state subsidiaries.

Q. What are your principal duties and responsibilities as Vice President, Corporate Engineering at Aqua America?

A. I am responsible for Aqua America's shared engineering services that support our states subsidiaries including our GIS program, energy management, larger capital project execution and Automation Control. Additionally, I manage the capital planning process, ensuring that our compliance, safety and other priorities are developed into projects and executed for all eight operating subsidiaries including Aqua PA.

Q. What is your educational background?

A. I graduated from Drexel University in 1999 where I earned a Bachelor of Science degree

[1] Unless otherwise specified herein, references to Aqua PA also include Aqua PA Wastewater.

in Civil Engineering. I also graduated from the University of Delaware in 2003 where I earned a Masters of Business Administration degree.

Q. Please describe your professional experience.

A. Prior to joining Aqua in 2007, I spent nine years in the refining sector with the Valero Energy Corporation focused on project delivery and execution. Upon joining Aqua, I was Regional Engineer for several of our state subsidiaries including Aqua New Jersey and Aqua Virginia where I was tasked with short-term and long-term capital planning, budgeting, designing and implementing capital projects. I am also a licensed professional engineer in three states, Delaware, New Jersey and Virginia.

Q. Have you previously testified before the Pennsylvania Public Utility Commission ("Commission")?

A. No. However, I have submitted direct testimony before the New Jersey Board of Public Utilities related to numerous regulatory petitions for the Aqua New Jersey subsidiary.

Q. Please describe the purpose of your direct testimony.

A. The purpose of my direct testimony is to provide a detailed overview of Aqua America's experience safely owning, managing and operating pipeline-based public utility systems in Pennsylvania and across the country. First, I will describe Aqua PA's experience managing water and wastewater pipeline assets in Pennsylvania, including its pipeline replacement plans and strategies and the direct benefits that have resulted from the implementation of such plans and strategies. Next, I discuss how Aqua America's experience and commitment to the safe operation and proactive replacement of public utility pipeline infrastructure aligns with and bolsters the culture of safety and replacement currently in place at Peoples Natural Gas Company LLC, including its Equitable Division, ("Peoples Natural Gas") and Peoples Gas Company LLC ("Peoples Gas"), collectively referred to as "the Peoples Companies." Finally, I provide an overview items that Aqua America is willing to explore as part of its acquisition of the Peoples Companies (the "Proposed Transaction") to support and maintain the Peoples Companies' existing infrastructure replacement programs and commitments.

II. AQUA PA'S EXPERIENCE WITH PIPELINE-BASED PUBLIC UTILITY INFRASTRUCTURE

Q. Please describe the nature of the pipeline public utility assets owned, operated and maintained by Aqua PA.

A. Aqua PA owns and operates water systems serving approximately 435,000 customers in 32 counties throughout Pennsylvania, and wastewater systems serving approximately 24,000 customers in 15 counties. Its water distribution systems include approximately 5,800 miles of pipe, 23,400 hydrants, 75,000 valves, and 425,000 customer meters. Aqua PA's service territories include a contiguous distribution system within portions of Bucks, Chester, Delaware, and Montgomery counties and separate smaller systems throughout the remainder of Pennsylvania.

Q. Are there substantial similarities between the type of pipelines used to provide water and wastewater service, and the type of pipelines used to provide natural gas service?

A. Yes. The infrastructures for both water/wastewater and natural gas utilize buried pipeline infrastructure to transmit a natural resource to customers. Both types of utilities utilize similar networks of transmission pipelines, distribution pipelines, regulating stations, utility right of ways, service lines and meters serving customers. Both utilities provide a service through a pressurized pipeline which reaches directly into customers' homes and businesses.

Q. Are there substantial similarities between the challenges faced by water and wastewater utilities and natural gas utilities when it comes to the replacement of aging pipeline infrastructure?

A. Yes. Both utilities operate with Commission-approved Long-Term Infrastructure Improvement Plans ("LTIIP"), which covers infrastructure investment under the Distribution System Improvement Charge ("DSIC"). The implementation of main replacement projects under the DSIC program and other construction related activities demonstrates the similar challenges faced by both utilities. Both utilities prioritize their pipeline replacement efforts based on age and condition of mains. In undertaking these projects, both companies must be mindful of many other factors including securing permits from local and state agencies, coordinating with Township paving projects, qualifying contractors to perform work, securing materials for construction projects, interacting with customers during service outage periods and connecting new infrastructure to the pressurized existing infrastructure.

Q. **How has Aqua Pennsylvania addressed these challenges in its replacement of aging water and wastewater pipeline infrastructure?**

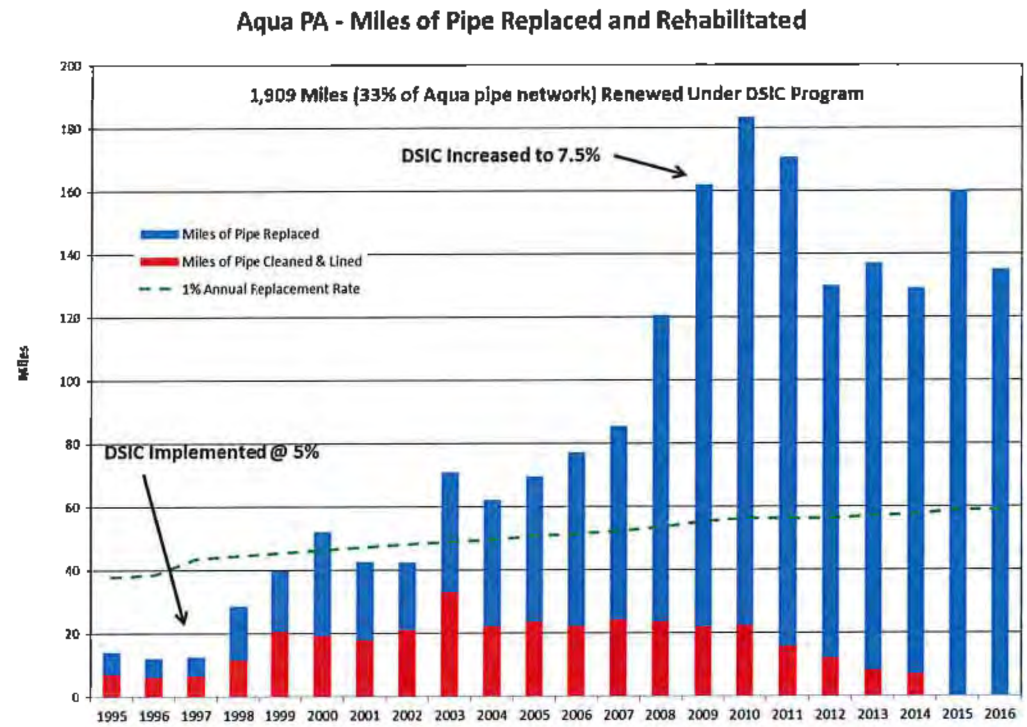
A. In the mid-1980s, Aqua PA (then known as Philadelphia Suburban Water Company) was one of the first water companies in Pennsylvania to request the Commission to replace the prior 4% compound depreciation method with a straight line, remaining life method. This change increased the amount of depreciation recovered in rates, which increased the internally generated funds available to fund plant replacement. However, this change was insufficient to support accelerated main replacement. In the mid-1990s, Aqua PA's mains were on a 900-year replacement cycle. With a growing, and aging, system, Aqua PA recognized that further innovative thinking with respect to pipeline replacement was needed. Again, Aqua PA took a leading role in presenting to, and obtaining approval from, the Commission for an innovative mechanism to support infrastructure replacement, the DISC.

Subsequently, the General Assembly adopted Section 1307(g) of the Public Utility Code, 66 Pa. C.S § 1307(g), which expressly authorized a DSIC for water utilities. Aqua PA proposed and received authority to implement a DSIC in 1996. Since that time, Aqua PA has had an ongoing water main renewal program that includes replacement of aged and aging pipeline distribution infrastructure. The DSIC has been an integral tool in enabling Aqua PA to replace aging pipeline infrastructure throughout the Commonwealth.

Q. **Please describe Aqua PA's utilization of the DSIC after the passage of enabling legislation.**

A. As noted above, Aqua PA implemented a DSIC in 1996. Since then, Aqua PA has proactively utilized the DSIC to fund investments in the accelerated replacement of pipeline infrastructure throughout its service territory. In fact, Aqua PA became a leader in pipeline infrastructure replacement in Pennsylvania and has been recognized for implementing its replacement strategies in a safe, prudent and efficient manner. Aqua PA received the 2008 National Association of Water Companies Innovation Award for the implementation of two management systems to prioritize and efficiently manage the replacement of pipeline infrastructure.

In December of 2008, Aqua PA requested that the Commission increase the maximum DISC cap to 7.5% in order to provide additional resources to expand and accelerate the replacement of its aging infrastructure. At the time of the filing, increasing the maximum DSIC rate by 2.5% facilitated an additional $65.5 million in DSIC-eligible capital expenditures, which supported approximately 50 to 70 additional miles of main replacements before reaching the proposed 7.5% DSIC cap. The Commission approved Aqua PA's accelerated DSIC on July 23, 2009. The chart below from the Aqua PA LTIIP filing demonstrates the additional investment and infrastructure replaced as a result of the accelerated 7.5% DSIC cap.



Q. Please discuss some of the benefits experienced by Aqua PA in its proactive and prudent approach to distribution replacement.

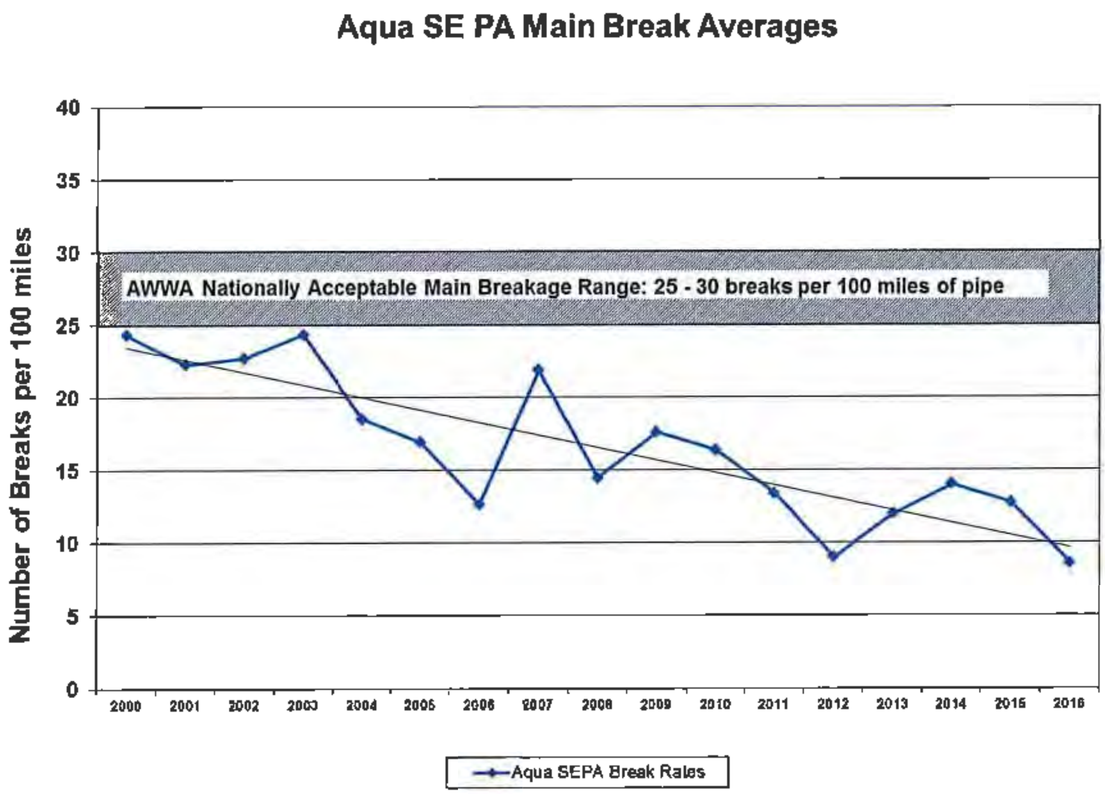
A. The value of accelerated infrastructure improvement is substantial, benefiting customers today and well into the future with improved service reliability, improved water quality, increased water pressure, fewer main breaks, improved flow protection, fewer service interruptions, and lower levels of non-revenue water. Several specific examples are presented later in my testimony.

Q. Please provide some statistics on Aqua PA's main replacement and Aqua America DSIC replacement over the past 10 years.

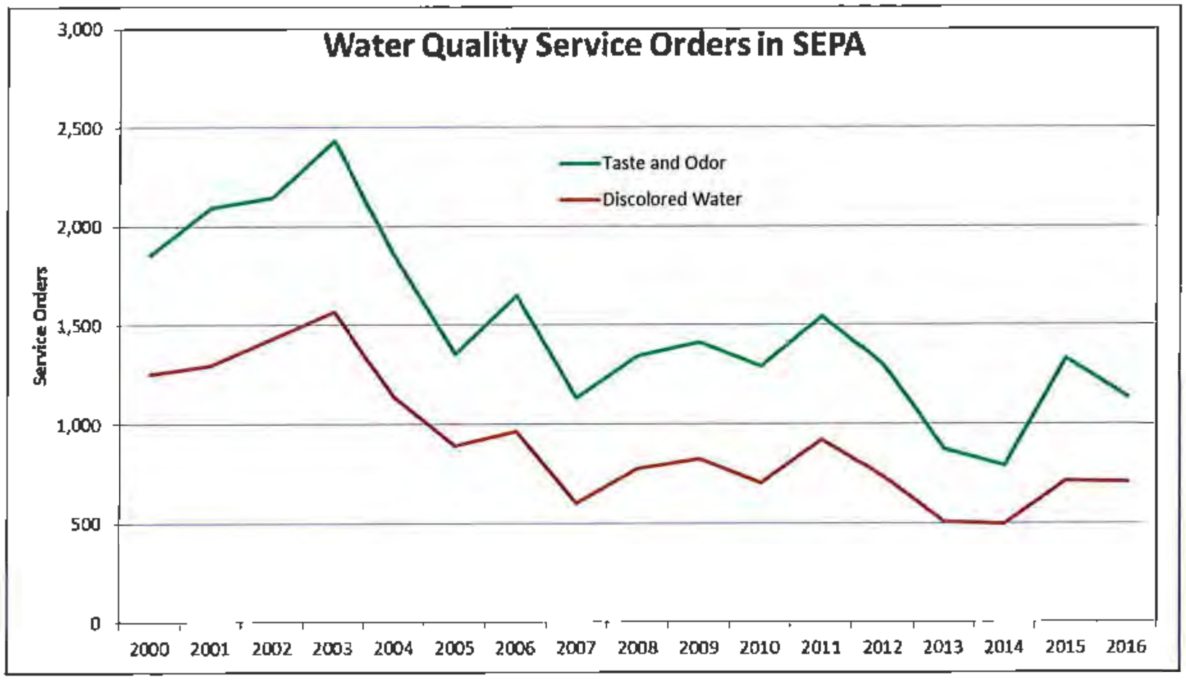
A. Over the past 10 years, Aqua PA has replaced over 1,300 miles of distribution mains throughout the Commonwealth as well as the commensurate number of services lines, valves, hydrants and customer meters. Under its current LTIIP, Aqua PA is replacing more than 2.3% of the pipe inventory on annual basis. The PA DSIC program has been successful in improving the overall system reliability, efficiency and water quality to our customers. Similar surcharge mechanisms have been adopted in six other of Aqua America's states in more recent years, and Aqua America has replaced over 1,600 miles of distribution mains throughout our footprint over the past 10 years.

Q. What have been some direct results of these actions?

A. The figure below shows the general decline in water main break rates for Aqua PA's main (Southeast) division since 2000. The Southeast Division ("SEPA") contains the original service territory of Aqua PA, and is the largest division of Aqua PA, with approximately 4,600 miles of main serving approximately one million people. Most water main breaks occur during the cold winter months, so yearly variations are expected based on the severity of the weather. However, there is a definite downward trend in main breaks resulting from the DSIC program. This results in fewer interruptions of service to customers thereby improving reliability.



The next chart shows a decline in the water quality complaints over the same period of time, which speaks to both the lower water quality complaints for both taste and odor complaints, and discolored water service orders.



Q. Please provide additional information concerning Aqua PA's LTIIP.

A. Aqua PA was first required to submit an LTIIP in 2017 for its water operations, as a result of the Commission's adoption of its Supplemental Implementation Order with respect to Act 11 of 2012. That LTIIP identifies the rehabilitation or replacement of approximately 1,500 miles of candidate pool distribution mains. In 2017 and projected for 2018, Aqua PA will replace over 260 miles of distribution mains, and will invest over $375 million in DSIC-eligible plant.

Q. Can you provide background on Aqua Pennsylvania's experience with acquiring systems throughout the Commonwealth?

A. Since 1999, Aqua has been acquiring various water systems throughout the Commonwealth. Many of these water distribution systems were in poor condition when acquired, have aged infrastructure and have experienced high water loss more commonly known now as non-revenue water. Corrective water quality and reliability measures, including water main replacement, have been, and continue to be, needed for these systems. Many of the issues identified above were inherited from the water systems that Aqua PA has acquired and the tools presented to improve these systems were applied from Aqua PA's main division. Mr. Fox outlines two specific larger acquisitions and, specifically, the utilization of the acquired company's existing resources post-acquisition. Aqua America is committed to the same type of success and collaboration for the Peoples Companies given the wide range of acquisition experience.

III. AQUA AMERICA'S COMMITMENT TO THE SAFE OPERATION AND ACCELERATED REPLACEMENT OF AGING PIPELINE INFRASTRUCTURE IS SHARED BY THE PEOPLES COMPANIES.

Q. Please describe the Peoples Companies commitment to the safe operation and accelerated replacement of aging pipeline infrastructure.

A. The Peoples Companies' commitments are demonstrated by the accelerated risk based distribution main replacement program in place, the Combined Distribution LTIIP approvals, the Unaccounted-For Gas ("UFG") Mitigation Plan and many other aspects of the Peoples Companies' business. Joint Applicants' witness Morgan O'Brien explains the Peoples Companies replacement programs and strategies in greater detail. *See* Joint Applicants St. No. 3.

Q. Do the Peoples Companies currently maintain a Commission-approved LTIIP?

A. Yes. Similar to Aqua PA, the Peoples Companies do maintain an LTIIP that sets forth an accelerated pipeline infrastructure replacement plan for pipeline infrastructure in their service areas. The Peoples Companies have a Combined Distribution LTIIP. The Combined Distribution LTIIP is now a single LTIIP addressing Peoples Natural Gas, Peoples Natural Gas-Equitable Division, and Peoples Gas.

Q. Have you reviewed the Peoples Companies' Combined Distribution LTIIP filings?

A. Yes.

Q. Please comment on the similarities and differences between Aqua PA's LTIIP and the Peoples Companies' Combined Distribution LTIIP filing.

A. As an initial matter, I note that while the basic strategies and commitments underlying the companies' LTIIPs are similar, *i.e.*, the companies' LTIIPs target aged pipeline infrastructure for replacement while maintaining reliable service to customers, the type of materials used in the pipeline infrastructure that is being replaced is different. While there are some associated differences related to the different types of material used in Aqua PA's and the Peoples Companies' respective pipeline assets, I note that, because the existing employees and management for both Aqua PA and the Peoples Companies will be maintained if the Proposed Transaction is approved, the post-acquisition companies' specific expertise and intellectual capital regarding water and wastewater pipeline and natural gas pipeline ownership, operation, maintenance and replacement will be maintained. Indeed, as explained by Joint Applicants' witness Mr. Fox, the Proposed Transaction offers unique opportunities for these companies to share their respective expertise to further improve existing operation, maintenance and replacement strategies. *See* Joint Applicants St. No. 4.

Q. Please continue.

A. Generally, the primary similarities between the Peoples Companies' and Aqua PA's respective LTIIPs include: (1) accelerated replacement of distribution mains and service laterals that have reached the end of their useful life while maintaining reliable service to customers; (2) the development of prioritization plans based on their respective systems' reliability metrics; (3) the resolution of restoration requirements with many communities across the Commonwealth; and (4) the implementation of long-term targeted distribution main replacement efforts.

As far as the primary differences in the companies' respective LTIIPs, and/or the pace of replacement thereunder, Aqua PA is currently replacing its "at risk" or "candidate pool" pipe at a pace of approximately 8.6%[2] per year, and the Peoples Companies is currently replacing its "at risk" pipe at a pace of approximately 4.3% per year. In addition, Aqua PA typically replaces mostly cast iron water mains with ductile iron mains, while Peoples typically replaces mostly cast iron and bare steel distribution main with plastic gas main.

Q. What do you believe would be the effect on the respective Aqua PA and Peoples Companies LTIIPs by the Proposed Transaction?

A. I believe that the alignment of these companies under the same corporate umbrella will result in a continued commitment to the replacement of aged pipeline public utility infrastructure. In addition, by sharing in this commitment, I believe the companies'

[2] The 8.6% replacement rate relates to Aqua PA's LTIIP candidate pool distribution pipe replacement. The 2.3% replacement rate stated earlier relates to the overall replacement of Aqua PA's system pipe.

personnel will be able to share their respective experience and expertise in pipeline infrastructure replacement to continue to efficiently meet or improve efficiency to exceed the infrastructure replacement goals set forth in their respective LTIIPs.

IV. AQUA AMERICA'S PROPOSED COMMITMENTS REGARDING PIPELINE INFRASTRUCTURE MAINTENANCE AND REPLACEMENT

Q. Please summarize the specific, initial infrastructure replacement commitments that Aqua America proposes with respect to its acquisition of the Peoples Companies.

A. Aqua America commits to take the following actions, should the Proposed Transaction be approved, including meeting the defined LTIIP main replacement schedules and the defined UFG targets outlined in the Section 1307(f) filings. Each of these commitments is explained in greater detail below.

Q. Please explain how Aqua America intends to support and maintain the Peoples Companies' LTIIP after closing of the Proposed Transaction.

A. Aqua America believes that the Peoples Companies have a robust LTIIP, approved by the Commission, that has proven to be effective based on the amount of pipe that has been replaced thus far. In cooperation with the Peoples Companies, Aqua America intends to, where appropriate, introduce additional resources into the main replacement equation in a safe, prudent, and efficient manner, and review the potential to further accelerate the replacement rate of at-risk pipe. To increase the reliability towards achieving the LTIIP replacement rates, and possible accelerated rates, for the Peoples Companies, Aqua America would consider many tools to determine the appropriate combination of strategies in coordination with the current Peoples Companies' leadership's and management's input, knowledge and experience. Some methods could include: 1) additional teams of contracted resources for main and service line installation and restoration activities; 2) additional teams of field employees to support the live gas connection activities; and 3) additional teams of support employees for engineering, design, accounting, procurement or other functions that would maintain the effectiveness of the main replacement program. The strategies would provide additional resources and improve effectiveness where necessary to remove as many barriers as possible towards the goal of fulfilling the LTIIP main replacement schedule.

Q. Does Aqua America propose any commitments that are specific to the Peoples Companies' existing gathering pipelines?

A Yes.

Q. Please describe your review of the Peoples Companies' existing gathering pipelines.

A. I have reviewed the latest Section 1307(f) annual gas purchasing cost reconciliation and recovery filing documents, including the settlement related to UFG for the gathering systems. The gathering systems for the Peoples Companies are unique compared to other natural gas utilities in Pennsylvania, in that none of the other major natural gas utilities own gathering systems. The Peoples Companies, on the other hand, maintain extensive gathering systems that consist of over 2,000 miles of pipe and 23 field compressor stations. In addition, I note that the gathering systems have higher UFG rates compared to traditional distribution only gas utilities. As part of the settlement from their recent Section 1307(f) filing, the Peoples Companies have agreed to a staggered and lowering bar of gathering UFG target ("UFG target") reductions in accordance with the UFG Mitigation Plan. The Peoples Companies will be subject to a gathering UFG target of 9.0% for the year ending August 31, 2019, 8.5% for the year ending August 31, 2020, and 7.5% for the year ending August 31, 2021.

Q. What commitments regarding the Peoples Companies UFG reductions does Aqua America propose to implement if the Proposed Transaction is approved?

A. Aqua America supports the Peoples Companies approach under the settlement for a phased plan to mitigate and reduce the UFG rates on the Peoples Companies gathering systems over the next three years. Under the settlement, the Peoples Companies will lower the UFG rates over their gathering systems as outlined above. Aqua America believes the UFG mitigation plan will be effective in achieving the desired results. However, where necessary, and if the most cost-effective approach, Aqua America would consider augmenting the UFG Mitigation Plan to include additional resources that would drive toward lower UFG rates across the service territory. I note that the Peoples Companies' UFG Mitigation Plan recognizes that gathering pipe replacement may not be the best solution in all instances. Aqua America will consult and coordinate with the Peoples Companies as they continue to develop solutions with respect to gathering pipe.

Q. Is Aqua America willing to consider discussing and implementing any other commitments with respect to the Peoples Companies after closing of the Proposed Transaction?

A. Yes. Both the Peoples Companies and Aqua America utilize sophisticated strategies to execute our capital programs. We plan to develop our operational collaboration team to leverage our best practices to the benefit of all our customers. These strategies include coordinating our capital planning processes, identifying common risk prioritization metrics, aligning our trench restoration practice, reviewing our technology platforms and summarizing our combined larger contractor network that all allow our respective main replacement programs to function in a highly efficient manner.

Q. Does this complete your direct testimony?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of the proceeding. Thank you.