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

FORM 11-K

☑ ANNUAL REPORT PURSUANT TO SECTION 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2010

OR

□ TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 1-6659

A. Full title of the Plan:

Aqua America, Inc. 401(k) Plan

B. Name of issuer of the securities held pursuant to the Plan and the address of its principal executive office:

AQUA AMERICA, INC. 762 W. Lancaster Avenue Bryn Mawr, PA 19010

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Report of Independent Registered Public Accounting Firm

To the Plan Administrator Aqua America, Inc. 401(k) Plan

We have audited the accompanying statements of net assets available for benefits of the Aqua America, Inc. 401(k) Plan (the "Plan") as of December 31, 2010 and 2009, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2010 and 2009, and the changes in net assets available for benefits for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules of assets (held at end of year) as of December 31, 2010 and reportable transactions for the year then ended are presented for purposes of additional analysis and are not a required part of the basic financial statements, but are supplemental information required by the Department of Labor's rules and regulations for reporting and disclosure under the Employee Retirement Income Security Act of 1974. These supplemental schedules are the responsibility of the Plan's management. The supplemental schedules have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ PARENTEBEARD LLC

Philadelphia, Pennsylvania June 24, 2011

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Aqua America, Inc. 401(k) Plan

Statements of Net Assets Available for Benefits December 31, 2010 and 2009

	2010	2009
Assets		
Investments, at fair value	\$126,378,579	\$102,770,902
Cash and cash equivalents	1,142	55,493
Employer contributions receivable Participants' contributions receivable	901,089 109,147	641,341 93,340
Notes receivable from participants	2,964,431	2,719,563
Total receivables	3,974,667	3,454,244
Total Assets	130,354,388	106,280,639
Liabilities		
Excess participant contributions payable	92,337	50,229
Net assets reflecting all investments at fair value	130,262,051	106,230,410
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	(1,036,666)	(145,540)
Net Assets Available for Benefits	\$129,225,385	\$106,084,870

See notes to financial statements.

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Aqua America, Inc. 401(k) Plan

Statements of Changes in Net Assets Available for Benefits Years Ended December 31, 2010 and 2009

	2010	2009
Investment Income		
Interest and dividends	\$ 2,898,379	\$ 2,618,160
Net appreciation in fair value of investments	16,895,085	7,873,579
Total Investment Income	19,793,464	10,491,739
Interest Income on Notes Receivable from Participants	144,720	156,219
Contributions		
Employer	2,315,311	2,190,514
Participants	5,883,485	5,631,632
Participant rollovers	122,585	401,620
Other	25,000	25,000
Total Contributions	8,346,381	8,248,766
Plan Transfers from		
New York Water Service Corporation Union 401(k) Plan	2,069,201	
Total Additions	30,353,766	18,896,724
Benefits Paid to Participants	(7,185,171)	(4,677,750)
Administrative Expenses	(28,080)	(11,660)
Total Deductions	(7,213,251)	(4,689,410)
Net Increase in Net Assets Available for Benefits	23,140,515	14,207,314
Net Assets Available for Benefits — Beginning of Year	106,084,870	91,877,556
Net Assets Available for Benefits — End of Year	\$129,225,385	\$106,084,870

See notes to financial statements.

Notes to Financial Statements December 31, 2010 and 2009

Note 1 — Description of Plan

The following description of the Aqua America, Inc. 401(k) Plan (the "Plan") is provided for general information purposes only. Participants should refer to the Plan document for more complete information.

General

The Plan is a defined contribution plan sponsored by Aqua America, Inc. (the "Plan Sponsor" and the "Plan Administrator"). Direct and indirect subsidiaries of Aqua America, Inc. that adopt the Plan are participating employers. All participating employers are referred to herein as the "Company". The Plan's Trustee is T. Rowe Price Trust Company. The Plan is designed to conform to all the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA") and with the applicable provisions of the Internal Revenue Code and the regulations thereunder.

On October 1, 2010 the New York Water Service Corporation Union 401(k) Plan was merged into the Plan.

Eligibility

Covered employees are any employees other than: (i) bargaining unit employees unless their union contract provides for participation in the Plan, (ii) leased employees, (iii) nonresident aliens and (iv) persons performing services who are classified by the Company as other common law employees. There are five groups of covered employees, designated as follows:

- Group 1 Covered Employee: any covered employee who was a participant in the Aqua America, Inc. Thrift Plan on December 31, 2007; any covered non-union employee of New York Water Service Corporation who was hired before December 31, 2006; and any covered employee of Aqua New York of Sea Cliff, Inc, who was hired before April 30, 2007.
- Group 2 Covered Employee: any covered employee who was a participant in the Aqua America, Inc. Employees 401(k) Savings Plan and Trust on December 31, 2007.
- Group 3 Covered Employee: any covered employee who was a participant in the Plan on December 31, 2007; any covered employee hired by Aqua New York of Sea Cliff, Inc. hired after the date Aqua New York of Sea Cliff, Inc. became an affiliate of Aqua America, Inc; any person who is a covered employee of any other entity that becomes an affiliate of Aqua America, Inc. on or after April 1, 2003 and that adopts the Plan as a participating employer; any covered employee hired or rehired on or after April 1, 2003 (except an employee rehired after March 2003 and prior to August 6, 2003 who was eligible to participate in another 401(k) plan of an employer; and employee, other than an employee classified as a seasonal employee shall become a participant in the Plan on the later of the employee.

Notes to Financial Statements December 31, 2010 and 2009

Note 1 — Description of Plan (Continued)

Eligibility (Continued)

- Group 4 Covered Employee: any covered employee who was a participant in the Personal Savings Plan for Local 473 Employees of the Philadelphia Suburban Division of Aqua Pennsylvania, Inc. on December 31, 2007.
- Group 5 Covered Employee: any covered employee who is a participant in the New York Water Service Corporation Union 401(k) Plan on October 5, 2010 and any employee hired by New York Water Services Corporation who is a member of the New York union (Utility Workers Union of America, AFL-CIO, Local 355).

In addition, any seasonal employee of Group 1, Group 3, Group 4 and Group 5 who was not a participant on June 1, 2008 shall become a participant in the Plan as of the first day of a calendar quarter coincident with or next following the date on which the employee first completes one year of service, provided the employee is a covered employee on such date.

Contributions

Participants may elect to contribute from 1% to 25% (15% for Group 1, 2 and 3 participants who are highly compensated) of their pretax compensation pursuant to a salary deferral election, up to an annual maximum permitted under applicable laws and regulations governing 401(k) plans of \$16,500 in 2010 and 2009, which are partially matched by the Company. Participants may also invest from 1% to 10% of their after-tax compensation, which is not matched by the Company. Additionally, participants who are age 50 or who will attain age 50 prior to the end of the Plan year may make an additional deferral contribution ("Catch-Up"), provided the participant made the maximum amount of deferral contributions permitted under the Plan. The maximum annual amount of allowable catch-up contribution for 2010 and 2009 is \$5,500. Participants may also make transfers between funds or suspend their contributions at any time, and may contribute amounts representing distributions from other qualified defined benefit or contribution plans ("Rollovers").

The Plan provides for employer contributions as follows:

Employer Matching Contributions

Employer matching contributions are as follows:

- Groups 1 and 3: The Company will make a matching contribution equal to 50% of the first 6% of a participant's compensation which is contributed to the Plan on a pre-tax basis. Matching contributions will be made to the Plan in the form of cash that is used for the purchase of Aqua America, Inc. common stock.
- Group 2: The Company will make a matching contribution equal to 40% of a participant's compensation which is contributed to the Plan on a pre-tax basis, up to a maximum of \$1,040 per year.

Notes to Financial Statements December 31, 2010 and 2009

Note 1 — Description of Plan (Continued)

Contributions (Continued)

- Group 4: The Company will make a matching contribution equal to 50% of the first 4% of a participant's compensation which is contributed to the Plan on a pre-tax basis.
- Group 5: Participants are not eligible for a Company match.

Discretionary Contributions

The Company may make additional discretionary contributions to the Plan for the benefit of active participants. Discretionary contributions are allocated to active Group 1 and Group 3 participant accounts on a pro-rated basis based on each participant's compensation compared to the compensation of all active participants in Group 1 and Group 3. Group 2, Group 4 and Group 5 are not eligible for discretionary contributions. This discretionary contribution will be made to the Plan in the form of cash that is used for the purchase of Aqua America, Inc. common stock. The Company made discretionary contributions of \$31,725 and \$0 for 2010 and 2009, respectively.

Employer Profit Sharing Contributions

The Company may, at its discretion, make a profit sharing contribution to the Plan to benefit all Group 3 eligible employees. The profit sharing contribution will be made in the form of cash and into participant-directed accounts. The Company made profit sharing contributions for 2010 and 2009 of \$874,822 and \$618,303, respectively.

Employer Performance Contributions

The Company may, at its discretion, make an employer performance contribution on behalf of eligible participants if certain established performance goals are achieved. Performance contributions are to be made to the Plan in the form of cash, Company stock, or any combination thereof. The Company did not make any performance contributions during 2010 and 2009.

Excess Contributions

In order to satisfy the relevant nondiscrimination provisions of the Plan for the year ended December 31, 2010 and 2009, the Plan reimbursed excess contributions to select participants during 2011 and 2010, respectively. Excess contributions amounting to \$92,337 and \$50,229 are recorded as a liability as of December 31, 2010 and 2009, respectively, and as a reduction of participant contributions in the respective year.

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Notes to Financial Statements December 31, 2010 and 2009

Note 1 — Description of Plan (Continued)

Contributions (Continued)

In March 2010, the Plan's Trustee discovered an error in the calculation used to determine the nondiscrimination test results for the plan year ended December 31, 2008, which resulted in the Plan not satisfying the applicable nondiscrimination requirements timely. As a result, excess contributions, which amounted to \$35,730, were deducted from the affected participants' accounts and recorded as benefit payments in 2010. All additional Qualified Non-Elective Contributions ("QNEC") and excise taxes, which amounted to \$32,009, were paid by the Plan's Trustee in 2010.

Other Contributions

The Plan maintains an Administrative Budget account funded by the Plan's Trustee. The funds in the account are treated as Plan assets and must be used only for payment of permissible Plan expenses or allocation to participants. The Administrative Budget funds are invested in the T. Rowe Price Prime Reserve Fund. The T. Rowe Price Prime Reserve fund is not an available investment option for Plan participants. All funds utilized from this account are treated as administrative Budget account were \$25,000 for 2010 and 2009, respectively. Administrative Budget account funds utilized amounted to \$15,434 and \$0 during 2010 and 2009, respectively. The balance in the Administrative Budget account was \$42,943 and \$33,377 as of December 31, 2010 and 2009, respectively.

Participants' Accounts

Each participant's account is credited with the participant's contribution and allocations of the Company's contribution and Plan earnings or losses. Allocations are based on participant contributions or account balances, as defined by the Plan document.

Vesting

Each participant will always be 100% vested in the balances in their deferral contribution, voluntary contribution, discretionary contribution, employer performance contribution and rollover contribution accounts. Group 2 covered employees are 100% vested in their employer matching contributions. Group 3 covered employees become 100% vested in their employer matching contributions after three years of service. Vesting for Group 1 and Group 4 covered employees' employer matching contributions is in accordance with the following schedule:

Years of Service *	% Vested
Less than 2	0%
2 but less than 3	20%
3 but less than 4	40%
4 but less than 5	60%
5 but less than 6	80%
6 or more	100%

* A "year of service" for vesting purposes means each plan year (the calendar year) in which the participant is credited with 1,000 or more hours of service.

Notes to Financial Statements December 31, 2010 and 2009

Note 1 — Description of Plan (Continued)

Common Stock Fund

Matching contributions and discretionary contributions may be made in cash or invested in Aqua America, Inc. common stock. Participants who are 100% vested in this fund have an opportunity to elect that any dividends with respect to Aqua America, Inc. common stock held be paid in cash to the participant rather than being allocated to their account to be invested in additional shares of Aqua America, Inc. common stock.

Investment Options

Participants can direct, at the time they enroll in the Plan, that their salary deferral and voluntary contributions be invested entirely in one of the funds offered by the Plan or divided among the funds. Subject to compliance with applicable state and federal securities laws, the Plan also permits participants to acquire an interest in Aqua America, Inc. common stock. Participants may change their investment instructions and reinvest their contributions in a different fund or funds at any time.

Payment of Benefits

Distributions from the Plan are normally made shortly after the participant's retirement, death or disability. If the participant's account balance does not exceed \$1,000, the participant will receive a lump-sum distribution as soon as practicable following termination of employment. If the account balance is greater than \$1,000 but less than \$5,000 and the participant does not elect to receive the distribution directly, then the Trustee will pay the distribution in a direct rollover to an individual retirement plan designated by the Plan Administrator. Withdrawals will be made in cash or shares of Aqua America, Inc. common stock, to the extent permitted by law. Under certain circumstances, a participant may withdraw all or a portion of the employee contributions while still employed.

Notes Receivable from Participants

Participants may borrow funds from their account balance in amounts that do not exceed the lesser of \$50,000 or 50% of their vested account balance for a period not to exceed five years, unless the note is used to purchase the participant's principal residence. Repayment is made through payroll deductions. All new notes receivable are issued at an interest rate of prime plus 1%. Applicable interest rates range from 4.25% to 10.0%.

Plan Forfeitures

Forfeited non-vested accounts are used first to restore any non-vested amounts (if a participant received a distribution and forfeited their non-vested account and resumed employment as a covered employee and repays the full amount of the distribution to the Plan prior to the earlier of (a) five years after the date on which the participant was reemployed or (b) the close of the first period of five consecutive one-year breaks-in-service, commencing after the distribution) which shall then be applied as promptly as practicable to reduce employer contributions. Contributions made by the Company are reduced by forfeited, non-vested amounts that accumulate during the year. Employer contributions were reduced by \$283,233 and \$0 during 2010 and 2009, respectively, as a result of forfeited nonvested accounts. The balance in the forfeiture account was \$7,284 and \$219,641 as of December 31, 2010 and 2009, respectively.

Notes to Financial Statements December 31, 2010 and 2009

Note 1 — Description of Plan (Continued)

Plan Amendment or Termination

Although the Company does not intend to terminate the Plan it may do so at its discretion, subject to the provisions of ERISA. All interests of the participants would be distributed to them in accordance with applicable provisions of the Internal Revenue Code.

Note 2 — Summary of Significant Accounting Policies

A summary of the significant accounting policies consistently applied in the preparation of the accompanying financial statements follows:

Basis of Accounting

The accompanying financial statements have been prepared using the accrual basis.

As described in the Financial Accounting Standards Board's ("FASB") accounting guidance for reporting of fully benefit-responsive investment contracts held by certain investment companies, investment contracts held by a defined contribution plan are required to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. The Statements of Net Assets Available for Benefits presents the fair value of the investment contracts as well as the adjustment of the fully benefit-responsive investment contract value. The Statements of Changes in Net Assets Available for Benefits is prepared on a contract value basis.

Use of Estimates

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires the Plan's management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure at the date of the financial statements, as well as reported amounts of additions and deductions during the reporting period. Significant estimates include the determination of the fair value of Plan assets. Actual results could differ from these estimates.

Administration

The Plan is administered by a committee (the "Committee") consisting of three or more individuals selected by and who may be removed at any time by the Board of Directors of Aqua America, Inc. The Committee members may be employees of Aqua America, Inc. and may be participants in the Plan. The Committee members receive no compensation from the Plan for their services in such capacity. The Committee has extensive administrative powers in connection with the Plan, including authority to interpret the provisions of the Plan, to adopt rules for its administration and to make other decisions with respect to the Plan.

Notes to Financial Statements December 31, 2010 and 2009

Note 2 — Summary of Significant Accounting Policies (Continued)

The Trustee for the Plan invests in the Plan's funds as instructed. The principal duties of the Trustee are to receive all contributions made to the Plan and to make investments and pay benefits.

Substantially all of the administrative expenses of the Plan are paid by the Company. The Company may, at its discretion, elect to have certain administrative expenses reimbursed by the Trustee.

Investment Valuation

The Plan's investments are stated at fair value. Investments in registered investment companies are valued at quoted market prices which represents the net asset value of shares held by the Plan. Common/collective trust funds are valued at unit value, which represents the fair value of the underlying assets. Therefore, the value of the common/collective trust fund is at fair value. The fair value of the underlying assets which are deemed fully benefit-responsive investment contracts is calculated by discounting the related cash flows based on current yields of similar investments with comparable durations. Aqua America, Inc. common stock is valued at its quoted market price. The fair value of the guaranteed investment contract is calculated by discounting the related cash flows based on current yields of similar investments with comparable durations. The Company considers all highly liquid investments with an original maturity of three months or less to be cash and cash equivalents.

On occasion, trades or fund exchanges initiated by a Plan participant may not settle by the last day of a calendar year but will settle in the subsequent plan year. In that event, the participant's account is credited with the cash value of such trades and fund exchanges and the cash is reported as cash and cash equivalents on the Statement of Net Assets Available for Benefits.

Investments of the Plan are exposed to various risks, such as interest rate, market, and credit. Due to the level of risk associated with certain investments and the level of uncertainty related to changes in the value of investments, it is at least reasonably possible that changes in risks in the near term would materially affect investment assets reported in the Statements of Net Assets Available for Benefits.

Dividend income is recorded on the ex-dividend date and interest income is recorded when earned. Realized gains and losses on the sale of Aqua America, Inc. stock are based on average cost of the securities sold. Purchases and sales are recorded on a trade date basis.

Investment Fees

Net investment returns reflect certain fees paid to the investment advisors, transfer agents, and others as further described in each fund prospectus or other published documents. These fees are deducted prior to allocation of the Plan's investment activity and thus are not separately identifiable as an expense.

Notes to Financial Statements December 31, 2010 and 2009

Note 2 — Summary of Significant Accounting Policies (Continued)

Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest.

Payments of Benefits

Benefits are recorded when paid.

Income Taxes

The Plan is exempt from federal income taxes under the Internal Revenue Code.

Recent Accounting Pronouncements

As of January 1, 2010, the Plan adopted the FASB's accounting guidance for reporting loans to participants, which requires that participant loans be classified in the Statement of Net Assets Available for Benefits as notes receivable from participants, which are segregated from Plan investments and measured at their unpaid principal balance plus any accrued but unpaid interest. The prior year has been reclassified to conform to the current year's presentation.

Note 3 — Fair Value Measurements

The Plan 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 the 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 Plan 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.

There have been no changes in the valuation techniques used to measure fair value for the years ended December 31, 2010 and 2009.



Notes to Financial Statements December 31, 2010 and 2009

Note 3 — Fair Value Measurements (Continued)

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2010:

	Level 1	Level 2	Level 3	Total
Registered investment companies				
Growth funds	\$ 43,577,366	\$ —	\$ —	\$ 43,577,366
Balanced funds	25,959,998	_	_	25,959,998
Fixed income funds	3,805,055	—	—	3,805,055
Value funds	2,262,953	—	—	2,262,953
Other funds	42,943			42,943
	75,648,315	—	—	75,648,315
Aqua America, Inc. common stock	40,026,583	—	_	40,026,583
Guaranteed investment contract	—	—	2,732,303	2,732,303
Common/collective trust fund		7,971,378		7,971,378
Total investments at fair value	\$115,674,898	\$ 7,971,378	\$ 2,732,303	\$126,378,579

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2009:

	Level 1	Level 2	Level 3	Total
Registered investment companies				
Growth funds	\$ 34,685,209	\$ —	\$ —	\$ 34,685,209
Balanced funds	22,196,808	—		22,196,808
Fixed income funds	3,337,565	—		3,337,565
Value funds	1,417,870	—		1,417,870
Other funds	33,377			33,377
	61,670,829	_	_	61,670,829
Aqua America, Inc. common stock	32,334,002	—	_	32,334,002
Guaranteed investment contract	—	—	2,607,165	2,607,165
Common/collective trust fund		6,158,906		6,158,906
Total investments at fair value	\$ 94,004,831	\$ 6,158,906	\$ 2,607,165	\$102,770,902

Notes to Financial Statements December 31, 2010 and 2009

Note 3 — Fair Value Measurements (Continued)

The following table sets forth a summary of changes in the fair value of the Plan's Level 3 investments for the years ended December 31, 2010 and 2009:

	Guaranteed investment contract			
	2010		2009	
Balance, beginning of year	\$	2,607,165	\$	3,028,405
Unrealized gains relating to instruments still held at the reporting date		810,873		235,984
Purchases, sales, issuances, and settlements (net)	. <u> </u>	(685,735)	. <u> </u>	(657,224)
Balance, end of year	\$	2,732,303	\$	2,607,165

The amounts shown above as unrealized gains relating to instruments still held at the reporting date include amounts representing a change in the fair value of fully benefit-responsive investment contracts. As discussed in Note 2, the activity for these investments is recorded on a contract value basis, thus the amounts above are not reflected in the Statements of Changes in Net Assets Available for Benefits.

Notes to Financial Statements December 31, 2010 and 2009

Note 4 — Investments

The following table presents the fair value of investments:

Investments	2010	2009
Investments at fair value, by reference to quoted market prices:		
Registered investment companies:		
T. Rowe Price 2015 Fund	\$ 13,558,530*	\$ 11,991,867*
T. Rowe Price 2020 Fund	14,236,801*	12,242,619*
T. Rowe Price 2025 Fund	10,690,175*	8,377,961*
T. Rowe Price 2030 Fund	8,010,749*	6,282,903*
Other registered investment companies	29,152,060	22,785,479
Total Registered Investment Companies	75,648,315	61,670,829
Common Stock:		
Aqua America, Inc. Common Stock	40,026,583*	32,334,002*
Total Investments at Fair Value, by Reference to Quoted Market Prices	115,674,898	94,004,831
Investments at fair value, by reference to other inputs:		
Guaranteed investment contract:		
Aetna Life Insurance Company Fixed Income Account	2,732,303**	2,607,165**
Common/collective trust fund:		
T. Rowe Price Stable Value Fund	7,971,378*,***	6,158,906*,***
Total Investments at Fair Value	\$126,378,579	\$102,770,902

* Investments represented 5% or more of the Plan's net assets available for benefits in the respective Plan year.

** Contract value of \$1,960,840 and \$2,646,575 as of 2010 and 2009, respectively.

*** Contract value of \$7,706,175 and \$5,973,956 as of 2010 and 2009, respectively.

The Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated (depreciated) in value during the years ended December 31, 2010 and 2009 as follows:

	2010	2009
Aqua America, Inc. common stock	\$ 9,057,587	\$ (5,603,791)
Registered investment companies	7,837,498	13,477,370
Total	\$ 16,895,085	\$ 7,873,579

Notes to Financial Statements December 31, 2010 and 2009

Note 5 — Investment Contract with Insurance Company

Effective January 1, 2008, the Plan's investments included a fully benefit-responsive investment contract with Aetna, Inc. Aetna Inc. maintains the contributions in a general account. Until on or about June 2, 2008, the account was credited with earnings on the underlying investments and charged for participant withdrawals and administrative expenses. Aetna, Inc. is contractually obligated to repay the principal and a specific interest rate that is guaranteed to the Plan. Due to restrictions in the Aetna contract, the guaranteed investment contract held by Aetna, Inc. was frozen to new contributions and transfers and an agreement was entered into with the Plan to transfer the funds to the T. Rowe Price Stable Value Fund over six annual installments, the first of which was made in June 2008. As described in Note 2, because the guaranteed investment contracts are fully benefit-responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the guaranteed investment contracts. Contract value, as reported by Aetna, Inc., represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value, except as described above.

There are no reserves against contract value for credit risk of the contract issuer or otherwise.

The fair value of the Aetna, Inc. investment contract at December 31, 2010 and 2009 was \$2,732,303 and \$2,607,165, respectively. The average yield for 2010 and 2009 was 3.6% and 3.5%, respectively. The crediting interest rate for 2010 and 2009 was 3.5%. The crediting interest rate is based on a formula agreed upon by the issuer, but may not be less than 3.5%. The interest rate for the Aetna, Inc. investment contract is fixed and guaranteed until maturity.

Certain events, such as premature termination of the contract by the Plan or the termination of the Plan would limit the Plan's ability to transact at contract value with Aetna, Inc. The Plan Administrator believes the occurrence of such events that would also limit the Plan's ability to transact at contract value with the Plan's participants is not probable.

Aqua America, Inc. 401(k) Plan

Notes to Financial Statements December 31, 2010 and 2009

Note 6 — Nonparticipant-Directed Investments

Information about the net assets available for benefits as of December 31, 2010 and 2009 and the significant components of the changes in net assets relating to the nonparticipant-directed investments for the years ended December 31, 2010 and 2009 is as follows:

	2010	2009
Net Assets:		
Aqua America, Inc. common stock	\$ 33,325,689	\$26,630,044
Employer contribution receivable	26,667	23,038
Total	\$ 33,352,356	\$26,653,082
Changes in Net Assets:		
Contributions	\$ 1,692,748	\$ 1,570,412
Interest and dividends	854,561	796,762
Net appreciation (depreciation)	7,537,460	(4,525,225)
Interfund transfers	(1,880,474)	(1,562,604)
Benefits paid to participants	(1,505,021)	(652,879)
Total	\$ 6,699,274	\$ (4,373,534)

Note 7 — Related Party and Party-in-Interest Transactions

Certain Plan investments are shares of registered investment companies managed by T. Rowe Price Company. T. Rowe Price Company is the Trustee as defined by the Plan and, therefore, these transactions qualify as party-in-interest transactions. Investment management fees paid to T. Rowe Price during 2010 and 2009 were netted against investment returns. As discussed in Note 1, employer matching contributions are invested in common stock of the Plan Sponsor. Participants may also elect to invest in Plan Sponsor common stock. These transactions qualify as related party and party-in-interest transactions. Total purchases at market value related to the stock for 2010 and 2009 were \$3,681,252 and \$3,068,034, respectively. Total sales at market value related to the stock for 2010 and 2009 were \$5,046,258 and \$3,346,762, respectively.

Note 8 — Tax Status

The Internal Revenue Service ("IRS") issued a determination letter dated September 30, 2003, which stated that the Plan and related trust qualified under applicable provisions of the Internal Revenue Code ("IRC") and, therefore, are exempt from federal income taxes. The Plan has been amended since receiving the determination letter, and on December 15, 2009 the Plan requested an updated determination letter from the Internal Revenue Service. However, the Plan Administrator and the Plan's counsel believe that the Plan is designed and is currently being operated in compliance with applicable requirements of the IRC. Therefore, no provision for income taxes has been included in the Plan's financial statements.

Notes to Financial Statements December 31, 2010 and 2009

Note 8 — Tax Status (Continued)

The Plan Administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2010, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan Administrator believes it is no longer subject to income tax examinations for years prior to 2009.

Note 9 — Subsequent Event

Effective in 2011, participants may elect to contribute from 1% to 25% (15% for Group 1, 2 and 3 participants who are highly compensated) of their compensation pursuant to a salary deferral election, either pre-tax to a traditional 401(k) or after-tax to a Roth 401(k) up to an annual maximum permitted under applicable laws and regulations governing 401(k) plans which are partially matched by the Company.

Note 10 — Reconciliation to Form 5500

The following is a reconciliation of investments at contract value per the financial statements at December 31, 2010 and 2009 to the Form 5500:

	2010	2009
Investments at fair value per the financial statements	\$126,378,579	\$102,770,902
Adjustment from fair value to contract value for fully benefit-responsive investment contract	(1,036,666)	(145,540)
Investments at contract value per Form 5500	\$125,341,913	\$102,625,362

Schedule of Assets (Held at End of Year) Form 5500 — Schedule H — Line 4i EIN: 23-1702594 PN: 005 December 31, 2010

<u>(a)</u>	Identity of Issue (b)	Description of Investment (c)	Cost (d)	Current Value (e)
	Growth funds:			
	American Funds EuroPacific Growth Fund	Registered Investment Company	N/A	\$ 1,690,326
	Columbia Small-Cap Growth Fund	Registered Investment Company	N/A	700,927
	Munder Mid-Cap Core Growth Fund	Registered Investment Company	N/A	702,942
*	T. Rowe Price Growth Stock Fund	Registered Investment Company	N/A	1,166,395
*	T. Rowe Price Retirement 2020 Fund	Registered Investment Company	N/A	14,236,801
*	T. Rowe Price Retirement 2025 Fund	Registered Investment Company	N/A	10,690,175
*	T. Rowe Price Retirement 2030 Fund	Registered Investment Company	N/A	8,010,749
*	T. Rowe Price Retirement 2035 Fund	Registered Investment Company	N/A	2,899,071
*	T. Rowe Price Retirement 2040 Fund	Registered Investment Company	N/A	1,958,272
*	T. Rowe Price Retirement 2045 Fund	Registered Investment Company	N/A	962,666
*	T. Rowe Price Retirement 2050 Fund	Registered Investment Company	N/A	279,047
*	T. Rowe Price Retirement 2055 Fund	Registered Investment Company	N/A	279,995
	Balanced funds:			
	Davis New York Venture Fund	Registered Investment Company	N/A	768,100
	Dodge & Cox International Stock Fund	Registered Investment Company	N/A	864,646
	Fidelity Balanced Fund	Registered Investment Company	N/A	1,703,121
	Kinetics Water Infrastructure Fund	Registered Investment Company	N/A	33,938
*	T. Rowe Price Retirement 2005 Fund	Registered Investment Company	N/A	1,374,775
*	T. Rowe Price Retirement 2010 Fund	Registered Investment Company	N/A	3,570,515
*	T. Rowe Price Retirement 2015 Fund	Registered Investment Company	N/A	13,558,530
	Vanguard 500 Index Fund	Registered Investment Company	N/A	1,033,269

Schedule of Assets (Held at End of Year) Form 5500 — Schedule H — Line 4i EIN: 23-1702594 PN: 005 December 31, 2010

<u>(a)</u>	Identity of Issue (b)	Description of Investment (c)	Cost (d)	Current Value (e)
	Balanced funds (continued):			
	Vanguard Mid-Cap Index Fund	Registered Investment Company	N/A	762,280
	Vanguard Small-Cap Index Fund	Registered Investment Company	N/A	577,550
	Vanguard Total International Stock Index Fund. Inv.	Registered Investment Company	N/A	916,053
*	T. Rowe Price Retirement Income Fund	Registered Investment Company	N/A	797,221
	Value funds:	Registered investment company	1.1/11	191,221
	Alliance NFJ Small Cap Value Fund	Registered Investment Company	N/A	1,012,903
	Goldman Sachs Mid-Cap Value Fund, Instl.	Registered Investment Company	N/A	536,707
	Vanguard Windsor II Fund, Inv.	Registered Investment Company	N/A	713,343
	Fixed income funds:			
	PIMCO Total Return Fund	Registered Investment Company	N/A	3,805,055
	Other funds:			
*	T. Rowe Price Prime Reserve Fund	Registered Investment Company	N/A	42,943
* **	Aetna Life Insurance Company Fixed Income Account	Guaranteed Investment Contract	N/A	1,960,840
* ***	T. Rowe Price Stable Value Fund	Common/Collective Trust Fund	N/A	7,706,175
*	Aqua America, Inc.	Common Stock	21,779,817	40,026,583
	Participant Loans	Participant Loans (interest rate 4.25% to 10.0%)	0	2,964,431
				\$128,306,344

* Represents party-in-interest to the Plan.

** Fair value = \$2,732,303.

*** Fair value = \$7,971,378.

N/A Historical cost has not been presented as investment is participant directed.

Aqua America, Inc. 401(k) Plan Schedule of Reportable Transactions Form 5500 — Schedule H — Line 4j EIN: 23-1702594 PN: 005 Year Ended December 31, 2010

Identity of Party Involved (a)) Description of Asset (b)	Purchase Price (c)	Selling Price (d)	Cost (g)	Current Value of Asset on Transaction Date (h)	<u>Net Gain (i)</u>
Single Transaction		None	None	None	None	None
Series of Transactions						
* Aqua America, Inc.	Common stock	\$3,681,252	\$ —	\$3,681,252	\$ 3,681,252	\$ —
* Aqua America, Inc.	Common stock		5,046,258	3,336,170	5,046,258	1,710,088
* Represents a party-in-ir	nterest to the Plan.					

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan Administrator has duly caused this annual report to be signed by the undersigned hereunto duly authorized.

Date: June 24, 2011

Aqua America, Inc. 401(k) Plan

/s/ Roy H. Stahl Roy H. Stahl Secretary Aqua America, Inc. Pension Committee Exhibit Index

Exhibit	
No.	Description
23.1	Consent of ParenteBeard LLC

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-148206) of Aqua America, Inc. of our report dated June 24, 2011 relating to the financial statements and supplementary schedules of the Aqua America, Inc. 401(k) Plan, included in this annual report on Form 11-K for the year ended December 31, 2010.

/s/ PARENTEBEARD LLC

Philadelphia, Pennsylvania June 24, 2011