

**STAFF'S REPORT
OF
INVESTIGATION**

In the Matter of the Application of Aqua)
Ohio, Inc. for Authority to Increase its)
Rates and Charges in its Masury Division.)

Case No. 09-560-WW-AIR

**Submitted
to
The Public Utilities Commission of Ohio**

THE PUBLIC UTILITIES COMMISSION OF OHIO

Alan R. Schriber, Chairman
Paul A. Centolella, Commissioner
Ronda Hartman Fergus, Commissioner
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Cheryl L. Roberto, Commissioner

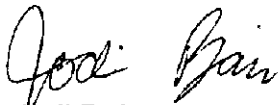
In accordance with the provisions of R.C. Section 4909.19, the Commission's Staff has conducted its investigation in the above matter and hereby submits its findings in the within Staff Report.

In accordance with R.C. Section 4909.19, copies of the Staff Report have been filed with the Docketing Division of the Commission and served by certified mail upon the mayors of all affected municipalities and other public officials deemed representative of the service area affected by the application. A copy of said report has also been served upon the utility or its authorized representative. Interested parties are advised that written objections to any portion of the Staff Report must be filed within thirty (30) days of the date of the filing of said report after which time the Commission will promptly set this matter for public hearing. Written notice of the time, place, and date of such hearing will be served upon all parties to the proceeding.

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Respectfully submitted,

Utilities Department

A handwritten signature in black ink, appearing to read "Jodi Bair". The signature is fluid and cursive, with the first name "Jodi" and last name "Bair" clearly distinguishable.

Jodi Bair
Director

Service Monitoring and Enforcement Department

A handwritten signature in black ink, appearing to read "John Williams". The signature is fluid and cursive, with the first name "John" and last name "Williams" clearly distinguishable.

John Williams
Interim Director

STAFF ACKNOWLEDGEMENTS

The Staff Report components reflect the results of investigations conducted by the Staff of the Applicant's rate application. The Staff person responsible for each component is shown below:

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BACKGROUND

The Applicant (Masury) is a division of Aqua Ohio, Inc., an Ohio corporation and a public utility supplying water to consumers within the State of Ohio. It was formerly a stand-alone company until a reorganization approved by the Commission in Case No. 01-1766-WW-UNC made it a division of Consumers Ohio Water Company (COWC). COWC became Aqua Ohio, Inc., a wholly owned subsidiary of Aqua America, Inc., in 2004 (Case No. 04-180-WW-ACN).

Masury, consisting of distribution lines, storage facilities, booster stations, valves, service lines and meters, purchases treated water from Aqua Pennsylvania – Shenango Division for sale to customers in Trumbull County. The division has 1,473 metered customers in the residential, commercial and industrial classifications.

On July 2, 2009, the Applicant filed a notice of intent to file an application for an increase in rates to be charged and collected for water service to customers in its entire service area. By its entry dated July 29, 2009, the Commission approved the requested test period beginning January 1, 2008 and ending December 31, 2008, and the requested date certain of June 1, 2008.

The application to increase rates, with the Standard Filing Requirements, was filed by the Applicant on August 7, 2009. By its entry dated September 23, 2009, the Commission ordered that the application be accepted for filing as of August 7, 2009.

On December 10, 2009, the Applicant filed a Motion to Correct Date Certain and Request for an Expedited Ruling. The date certain of June 1, 2008 was incorrectly listed in the application. The correct date is June 30, 2008, the midpoint of the Applicant's test year. By its order dated January 7, 2010, the Commission accepted the Applicant's revised date certain.

The Applicant's current rates and charges affected by this application were established in Case No. 00-713-WW-AIR by order of the Commission on March 22, 2001, and became effective March 23, 2001.

The Applicant's proposed rates in this proceeding, when applied to test year sales volumes, would generate additional revenue of \$389,957. This is an increase of 80.83% over current revenues.

OPERATING INCOME AND RATE BASE

SCOPE OF INVESTIGATION

The scope of investigation was designed to determine if the Applicant's filed exhibits concerning the test year operating income, rate base and other data are reasonable for ratemaking purposes and if the financial and statistical records supporting the data can be relied upon. The Staff interviewed the Applicant's key management personnel and reviewed both internal and financial reports to assure understanding of the Applicant's operation and organization. The Staff's investigation of test year operating income included verification of the operating revenue computation and an examination of the reasonableness and appropriateness of the operating expenses. The original cost of the property was tested for reasonableness through an examination of the Applicant's continuing property records. In addition, the existence and used and useful nature of the assets were verified through physical inspections.

The Applicant proposed various adjustments to operating income and rate base. The Staff reviewed and analyzed these adjustments and traced them to supporting work papers and to source data. As a result, the Staff accepted some of the proposed adjustments, used alternative approaches and/or proposed new adjustments as required to make test year operating income and rate base consistent with sound regulatory accounting practices, more representative of normal operations, and appropriate for ratemaking purposes.

The purpose of the Staff's investigation is to develop financial data for ratemaking purposes; it is not intended to provide the basis for expressing an opinion on the financial statements of the company as a whole. The following sections of this report summarize the results of the Staff's investigation which it believes are relevant to the determination of test year operating income and rate base.

REVENUE REQUIREMENTS

As shown on Schedule A-1, the Staff recommends a revenue increase ranging between \$312,695 and \$330,991. This represents an increase of 64.81% to 68.60% over test year operating revenues. This determination is based on the Staff's examination of the accounts and records of the Applicant for the test year ending December 31, 2008, and date certain as of June 30, 2008. The results of its examination are summarized in this report and the schedules, which incorporate the Staff's recommended rate of return, rate base, and adjusted test year operating income.

RATE BASE

The rate base represents the Applicant's net investment in plant as of the date certain, June 30, 2008, which was used and useful in providing water utility service to its customers, and upon which its investors are entitled to receive a fair and reasonable rate of return.

The Staff's analysis of the rate base is divided into Plant in Service, Depreciation Reserve, Construction Work in Progress, Working Capital, and Other Rate Base Items. A comparison of the rate base submitted by the Applicant and the Staff's recommendation is shown on Schedule B-1. Schedules B-2 through B-6 provides support for the Staff's findings.

Plant in Service

The plant in service, as presented by the Applicant, is the surviving original cost of the plant that is used and useful in providing water utility service to its customers. The Staff reviewed and tested the Applicant's plant accounting system to ascertain if the information in the Applicant's plant ledger represents a reliable source of original cost data. The Staff also conducted inspections to verify the existence of property and to determine its used and useful nature. The Staff determined that there were no significant discrepancies and that the Applicant's plant ledger represents a reliable source of original cost data (except as noted below).

As a result of its investigation, the Staff recommends an adjustment to the Applicant's date certain plant investment for ratemaking purposes. The recommended adjustment is identified below and reflected on Schedule B-2.1.

Account 346, Meters

The Staff adjusted Account 346, Meters, to exclude meter facilities that were formerly used to serve Trumbull County and that were no longer used and useful as of the date certain for this case. Trumbull County ceased being an Applicant customer in 2007 and was not a customer during the test year. The Staff adjustment of \$26,998 represents the total remaining plant-in-service balance of the three meter vaults. This adjustment is shown on Schedule B-2.2.

Depreciation

Depreciation accounting is the process that distributes the original cost of depreciable assets, adjusted for net salvage, over the normal useful life of the property in a

systematic and rational manner. The Staff's investigation of depreciation is segregated into two areas: Depreciation Reserve and Depreciation Accrual Rates and the corresponding Depreciation Expense. Each of these areas is discussed in detail in the following sections.

Depreciation Reserve

The Applicant maintains depreciation reserve by account. In order to determine if the Applicant's actual reserve for depreciation is proper and adequate, the Staff finds it useful to compare the actual reserve with a calculated theoretical reserve as a guide to whether past accrual rate calculations have been appropriate. The Staff compared the Applicant's actual reserve level with a calculated theoretical reserve, based on the current accrual rates and June 30, 2008 plant balances. The Staff determined that the level of the overall actual reserve was in close agreement with the theoretical reserve calculation. Therefore, the Staff is of the opinion that the jurisdictional reserve, as adjusted by the Staff on Schedule B-3, is proper and adequate and should be used for purposes of this proceeding. The Staff adjusted the Applicant's depreciation reserve by \$23,679 to exclude reserve associated with the Trumbull County Meters adjustment discussed in the Plant in Service section. This adjustment is shown on Schedule B-3.1.

Depreciation Accrual Rates and Expense

The current accrual rates for the Applicant's plant were prescribed by the Commission in Case No. 93-213-WW-AIR with the exception of the Service Center General Plant accounts which were prescribed by the Commission in Case No. 93-882-WW-AAM. The Staff is of the opinion that these accrual rates are proper and adequate for purposes of this proceeding.

The Staff's calculation of depreciation expense based on the jurisdictional plant in service balances at date certain and the accrual rates discussed above, is shown on Schedule B-3.2. The total jurisdictional depreciation expense, on Schedule B-3.2, was reduced \$1,542 to account for depreciation expense associated with Contributions in Aid of Construction (CIAC).

Construction Work in Progress

The Applicant did not request an allowance for construction work in progress in its filing. This is reflected on Schedule B-4.

Working Capital

Working Capital has been generally defined as the average amount of capital provided by investors in the company, over and above the investment in plant and other specifically identified rate base items, to bridge the gap between the time that expenditures are required to provide service and the time collections are received for this service.

The Applicant did not request a working capital allowance as shown on Applicant's Schedule B-5 and none is reflected on Staff's Schedule B-5.

Other Rate Base Items

The rate base was reduced by \$269,229 to account for the date certain balance of contributions in aid of construction, customer advances for construction, investment tax credit, deferred income taxes related to accelerated depreciation, deferred income taxes - rate case and tank painting expenses.

The Staff's calculation of other rate base items is provided on Schedule B-6 and flows to Schedule B-1.

ALLOCATIONS

The Applicant maintains separate records for each of its operating divisions and its service center. The values shown in the Applicant's filing reflect only those amounts attributable to Masury Division and an allocated portion of the Applicant's service center. It is necessary to allocate certain service center costs to the Applicant's property and to its operating revenues and expenses to ensure that the proposed rate of return applies only to that property rendering service to customers involved in this proceeding.

The allocation factor presented on the Applicant's Schedule B-7.1 relative to rate base is based upon date certain net plant. The Staff reviewed the Applicant's date certain information used to compute the net plant allocation factor and found its methodology consistent with that used by the Staff and approved by the Commission in the Applicant's prior cases. The Staff, therefore, recommends that the Applicant's net plant allocation factor be used for the purposes of this proceeding.

The allocation factor applied to the Applicant's operating income is a seven allocations factor formula that is based upon property, capital budget, customer equivalent, operating revenues, employees, payroll and water treated. The Staff believes that this allocation factor is consistent with the methodologies used by the Staff and approved by the Commission in the Applicant's prior cases.

OPERATING INCOME

The Applicant's test year operating income consists of twelve months of actual data for the period January 1, 2008 through December 31, 2008. The Staff adjusted the Applicant's test year operating income as required to render it appropriate as a basis for setting rates.

The Staff's pro forma operating income is the Staff's adjusted test year operating income modified to reflect the Applicant's proposed increase in revenues and the associated increases in uncollectible accounts expense, Ohio gross receipts taxes, and federal income taxes.

Schedules C-1 and C-2 present the Staff's determination of operating income. The calculations, methodologies and rationale used to develop the Staff's adjusted and pro forma operating income are detailed on Schedule A-1.1, C-1.1, C-3.1 through C-3.11, and C-4.

Proforma Adjustments

Schedule C-1.1 shows the Applicant's proposed increase in operating revenues based on the Applicant's proposed rates and associated increases in uncollectible accounts expenses, Ohio gross receipts taxes, and federal income taxes.

Current Adjustments

Metered Sales Revenue

The Applicant annualized metered sales revenues based on the current rates in effect and the consumption (July 2007 – June 2008) presented on Applicant's Schedule E-4. The Staff verified the consumption based on the Applicant's Cost of Service study and agreed with the Applicant's adjustment. This is reflected on Schedule C-3.1.

Unmetered Sales Revenue

The Applicant annualized unmetered sales revenue based on the current rates in effect and the consumption (July 2007 – June 2008) presented on Applicant's Schedule E-4. The Staff verified the consumption based on the Applicant's Cost of Service study and agreed with the Applicant's adjustment. This is reflected on Schedule C-3.2.

Other Operating Revenue

Both the Applicant and the Staff adjusted the late payment fee and miscellaneous revenues. The Staff verified the late payment revenue and the System Improvement Charge (SIC). The Staff's adjustment is shown on Schedule C-3.3.

Purchased Water Expense

The Applicant's adjusted purchased water expense reflects twelve months actual consumption presented on the Applicant's Schedule E-4 (July 2007 – June 2008) and the most recent purchased water rates, effective July 31, 2008. The Staff agrees with the Applicant's adjustment. The adjustment is presented on Schedule C-3.4.

Lobbying Expense

The Staff made an adjustment to remove the portion of the Applicant's annual dues paid to the National Association of Water Companies (national organization and the Ohio chapter) for lobbying activities. The activities were discovered during the course of the Staff's investigation. The Staff's adjustment is presented on Schedule C-3.5.

Uncollectible Expense

Both the Applicant and the Staff adjusted uncollectible accounts expense to reflect a ratio based on a historic three-year average of net write-offs to billed revenues. The Staff agrees with the Applicant's adjustment. The adjustment is shown on Schedule C-3.6.

Rate Case Expense

The Applicant proposes a 3-year amortization period for rate case expense. The Staff amortizes the expense over a 5-year period. The Staff believes a longer period is appropriate when taking the Applicant's last rate case, Case No. 00-713-WW-AIR, into consideration.

The Staff recommends that the Commission review the Applicant's revised estimate, which should be filed as a late-filed exhibit, before making a final

determination of the appropriate level of rate case expense. The Staff's adjustment is presented on Schedule C-3.7.

Tank Painting Expense

Both the Applicant and the Staff adjusted test year operating expenses to include an allowance for tank painting. The Applicant's allowance was calculated by trending current known costs from the Handy-Whitman Index, and amortizing such costs over thirteen years. The Staff agrees with the Applicant's adjustment. The Staff's adjustment is presented on Schedule C-3.8.

Depreciation Expense

Depreciation expense was adjusted to reflect the Staff's recommended depreciable plant in service as of date certain and the Staff's recommended accrual rates. The adjustment is shown on Schedule C-3.9 with supporting accrual rate calculations provided on Schedule B-3.2. Further discussion on depreciation can be found in the Rate Base section of this report.

Taxes Other Than Income Taxes

Taxes other than income taxes were adjusted to reflect the proper base and latest known rates. For example, property taxes were computed by applying the latest known property tax rate to the property valuation at date certain, and Ohio gross receipts taxes were calculated to reflect taxes based on test year revenues rather than on the basis of total receipts for a different fiscal period.

Schedule C-3.10 provides the summary of the calculated taxes and the resultant adjustments of those taxes. The supporting calculations are detailed on Schedules C-3.10a through C-3.10d.

Federal Income Tax

The Staff computed test year federal income taxes to reflect the recommended adjustments to operating revenues and expenses. This computation reflects the inter-period interest allocation, ratable flow through of investment tax credit, and normalization of tax-accelerated depreciation. Schedule C-3.11 shows the calculation of the federal income tax adjustment. Schedule C-4 shows the detailed calculation of federal income taxes.

Other Adjustments

Postage and Processing Fees

The Applicant proposed an adjustment on Schedule C-3 to the postage and processing fees to reflect a change from bi-monthly to monthly billing. The Commission approved the change in 2007, but it has not been implemented due to numerous problems with the Applicant's billing system. The Applicant is confident that the problems have been resolved, and is planning to enact monthly billing after the completion of this case. However, since the billing change has not taken place, the Applicant has not actually incurred the increased expense for postage and processing. Therefore, the Staff does not agree with the adjustment.

RATE OF RETURN

The Staff believes that a rate of return in the range of 7.54% to 8.05% is fair and reasonable. The recommended rate of return was developed using a cost of capital approach, which reflects the Applicant's market-derived cost of equity, the Applicant's embedded cost of long-term debt and preferred stock, and the embedded capital structure of the Applicant.¹

Capital Structure

The Applicant is a wholly-owned subsidiary of Aqua America, Inc. In the Applicant's prior cases, the Staff determined that the appropriate capital structure to be used in the rate of return analysis was that of the Aqua Ohio, Inc., rather than the parent consolidated capital structure. This determination was based on the level of revenues contributed by the utility subsidiaries and the level of equity financing which those subsidiaries maintained. The Staff believes that the use of the Aqua Ohio, Inc.'s capital structure is still appropriate.

Cost of Long Term Debt

The Staff has employed the embedded costs of long term debt of the Aqua Ohio, Inc., as of June 30, 2008. In the calculation of the weighted cost of debt, the Staff divided the annual interest by the carrying value. The debt calculation includes the effect of unamortized debt expense on both the interest cost and the carrying value. Staff determined the embedded cost of long term debt to be 6.33%.² The Applicant has no preferred stock.

Cost of Common Equity

As the stock of the Applicant is not traded on the market, the Staff has looked to proxies to determine the cost of common equity to the Applicant. The Staff considered a group of water utilities which are representative of the industry for purposes of cost of equity estimation. This group consists of publicly traded companies, listed as "Water Utilities" by Yahoo Stock Screener with a market capitalization above \$500 million, and included in the "Water Utility" group in the Value line Investment Survey Standard Edition. The result is a comparable group of four, which includes the following companies:

¹ See Schedule D-1.

² See Schedule D-1.2.

<u>Company Name</u>	<u>Ticker</u>
American Water Works Company, Inc.	AWK
American States Water Company	AWR
California Water Service Group	CWT
Aqua America, Inc.	WTR

The Staff employed a cost of equity estimate for the comparable group companies that is the average of their capital asset pricing model (CAPM) and discounted cash flow (DCF) derived estimates. In calculating its CAPM cost of common equity estimate, the Staff employed the average of the Value Line betas, being .7333 and the Ibbotson³ derived spread of arithmetic mean total returns between large company stocks and long term government bonds (i.e., "risk free return"; 5.6%). These were used in the CAPM formulation with the weighted average of 10 year and 30 year daily closing Treasury yields for the period from December 1, 2008 through November 30, 2009. The weighting was done in a manner that emphasized later quarters to a greater degree. The averaged 10 year yield is 3.34%. The averaged 30 year yield is 4.17%. These average to 3.76%. This was added to the product of the beta and the 5.6% spread, and resulted in a CAPM cost of equity estimate of 7.86%.⁴

In calculating its DCF cost of common equity estimate, for each comparable company, the Staff employed the annual average stock price, the sum of the last four quarterly dividends, estimates of the expected rate of growth of earnings, and generic issuance costs related to the external equity financing. The stock price employed is the average daily closing price for the period from December 1, 2008 through November 30, 2009.

The DCF model assumes that earnings growth and dividends growth are the same. The Staff averaged earnings per share estimates from Reuters, Yahoo, MSN, and Value Line to get DCF growth estimates for each company.⁵ The Value Line average incorporates both the explicit long-range earnings estimate shown in the "box" and the implicit continuous growth rate calculated from the estimates of earnings per share.

For the Staff's determination of DCF cost of equity, a non-constant DCF growth rate was assumed. Dividends were assumed to grow at a rate derived from financial analysts' growth estimates for the first five years (i.e., long term growth rate). The Staff's DCF growth estimates were used for the first five years, as they are averages of estimates from various investor news services. From the twenty-fifth year on, the growth rate was assumed to equal the long-term growth rate in GNP. For the sixth through twenty-fourth

³ Ibbotson Associates 2009 Yearbook: Stocks, Bonds, Bills and Inflation: Valuation Edition

⁴ See Schedule D-1.3.

⁵ See Schedule D-1.4.

years, dividends vary between the two rates in a linear fashion.⁶ The long-term growth rate in GNP was the average annual change in GNP from the U. S. Department of Commerce for 1929 through 2008.⁷

Based on long-term GNP growth, the respective company DCF growth estimate and dividend, a stream of annual dividends was calculated. The internal rate of return derived from the dividend stream and the stock price was used for Staff's non-constant growth DCF cost of equity estimate.

The comparable group non-constant DCF cost of equity estimates average 10.43%. When averaged with the 7.86% CAPM estimate, the result is 9.15%. Using a one-hundred basis point range of uncertainty, the cost of equity estimate becomes 8.65% to 9.65%.⁸ To provide for this return, allowance must be made for issuance and other costs, as shown on Schedule D-1.1, resulting in an adjustment factor of 1.00985. Applying this factor to the baseline cost of common equity range results in a recommendation of 8.73% to 9.74%.

⁶ See Schedules D-1.5 through D-1.8.

⁷ See Schedule D-1.9.

⁸ See Schedule D-1.1.

RATES AND TARIFFS

INTRODUCTION

In this proceeding, the Aqua Ohio-Masury Division requests authority to increase its rates and charges for general water service to all classes of customers. Applicant is a division of Aqua Ohio Water Company, and provides utility service to approximately 1473 customers. Applicant's current water rates were established by Commission Entry in Case No. 00-713-WW-AIR, and became effective March 23, 2001. Applicant now requests an increase in rates and charges that will generate additional revenue of \$389,957 representing an 80.8% increase to the current rates.

Rates and Tariff Staff has investigated the rate and tariff matters proposed by the Applicant. The results of Staff's investigation are reported herein. It is the Staff's intent to provide analysis with respect to the acceptability and reasonableness of the revenue recovery mechanisms contained in Applicant's proposed tariff. The specific rates and charges referenced as Staff proposals in this section were developed to generate Applicant's proposed revenue requirement. Such rates and charges may require adjustment to generate the revenue requirement authorized by the Commission. Typical customer bills under Applicant proposed and Staff proposed rates are presented at the end of this section.

TARIFF ANALYSIS

Ohio Administrative Code Review

The Commission reviewed the rules contained in 4901:1-15 of the Ohio Administrative Code (O.A.C.) twice since Applicant's last rate case, first in Case No. 01-2775-WS-ORD, and last in 07-292-WS-ORD. The latter amended rules became effective on August 22, 2008. It does not appear that Applicant revised their tariff after either case. To the degree that Applicant's tariff does not comply with the current O.A.C., Applicant should amend their tariff to adhere to 4901:1-15 O.A.C.

Below Staff discusses certain revisions, but this does not relieve the Applicant of their responsibility to review and amend their tariff to reach compliance.

General

There are several typographical and smaller errors that do not warrant specific comment. Staff will provide this information to the Applicant prior to finalizing the tariffs in this proceeding.

Staff finds that the Applicant's definitions do not comply with 4901:1-15-01 of the O.A.C. and should be amended.

Application for Service Form

The Applicant's Application for Service form, Section 4, Sheet No. 3, has the following language at the top of the form: "The Company will submit a revised application form for approval by the Public Utilities Commission within three (3) months of the depletion of its current supply."

Staff queried the Applicant as to the status of this form in Data Request No. 11. The reply was that the Company has only used one form in the last three years and attached a draft copy.

The draft copy is completely different even with respect to the intended audience. The current tariff form is for any person requesting service while the proposed copy is for subsequent connection applicants only. It also appears as though the subsequent connection form has been in existence for some time and is not new. Staff will presume that Applicant does not request a written application from persons requesting service since only one form has been used in three years.

Staff therefore recommends that the current tariff form and any reference in the tariff to requiring written application be deleted from the tariff and the Company will no longer request/require written applications for service.

Staff finds that the proposed subsequent connection form would be considered a type of a main extension agreement and, therefore, it is not necessary to have this form in the tariff.

Contracts for Water Service

Section 4 – Paragraph 4 of this section includes the Company's right to require a cash deposit in accordance with Rule 4901:1-17-05, O.A.C., but it omits the service applicant's right to use alternative methods to establish creditworthiness. Staff therefore recommends the Applicant add to Section 4 the following sentence: "The Company shall also provide the applicant alternative methods for establishing creditworthiness as prescribed by Rule 4901:1-17-03, O.A.C." Staff also believes this paragraph should clarify that the deposit amount relates only to services regulated by the Commission. Staff therefore recommends the Applicant revise the second sentence of Paragraph 4 by substituting the words "regulated services" in place of "all services."

General Regulations Governing Service

Section 5 – Paragraph 10 of this section concerns disconnection of service. There is an apparent error in this paragraph's first sentence where it states: "The Customer may discontinue all or any part of its service to any customer as stated below." Staff recommends the Applicant correct this sentence to state: "The Company may discontinue all or any part of its service to any customer as stated below."

Although Paragraph 10 discusses the Company's right to disconnect service, it omits those instances where it is prohibited from disconnecting service. Staff recommends the Applicant include in Paragraph 10 a listing of these instances as they are described in Rule 4901:1-15-27 (C), O.A.C.

Paragraph 10 also omits any discussion of the Customer's right to delay service disconnection or obtain reconnection by providing a medical certification that such disconnection would be especially dangerous to health. Staff recommends the Applicant add to Paragraph 10 the contents of Rule 4901:1-15-27 (I), which delineates the medical certification requirements.

Paragraph 11 of Section 5 contains procedures for reconnecting service after disconnection. Those procedures, however, do not fully mirror the contents of Rule 4901:1-15-28 (A), O.A.C., which requires the waterworks company to reconnect the customer by the close of the following regular company business day if the customer meets certain requirements. To make this paragraph consistent with the rule, Staff recommends the Applicant revise the first sentence to state: "A customer whose service has been disconnected for non-payment of bills or for violation of, or failure to comply with, the regulations of the Company, ~~may be reconnected only after the customer~~ shall be reconnected by the end of the following regular company business day, after the customer . . ."

Finally, Paragraph 15 of Section 5 describes the Company's complaint procedures, which refer to the PUCO's call center using an obsolete term "Public Interest Center." Staff recommends the Applicant revise this sentence to state: "If the complainant is not satisfied with the Company's report, the customer shall be informed of the availability of the Commission's complaint handling procedures, including the then current address and the toll free telephone number of the Commission's ~~Public Interest Center~~ Call Center."

Bills and Payments for Service

Bills for water service are rendered monthly in arrears. Bills for private fire protection service are rendered in advance. Staff finds these billing terms to be reasonable and recommends approval.

Section 6 – Paragraph 3 of this section relates to mailing and delivery of customer bills, and states the number of days after the billing date when bills would become delinquent. This paragraph omits, however, the requirement that all bills be mailed no later than the billing date, as required by Rule 4901:1-15-24 (A), O.A.C. Staff therefore recommends the Applicant insert a new first sentence stating: "Bills shall be mailed no later than the billing date stated on the customer's bill."

Paragraph 9 of this section relates to final bills rendered upon termination of service and includes a provision that unpaid final bills may be increased by the amount of costs incurred to collect the unpaid balance. Collection costs may include court costs and attorney fees, and the assessment of these costs should be determined by a court of law rather than a company's tariff. Adding collection costs to the final bill is also contrary to long-standing Commission policy for utilities to accumulate collection costs in an Uncollectible Expense account for recovery through base rates or an uncollectible rider. For these reasons, Staff recommends that the Applicant delete this provision from its tariff.

Finally, Section 6 omits any discussion about billing adjustments for inaccurate meters, improperly-calculated bills or the amount of time customers are allowed to pay billed amounts for previous undercharges. These situations are addressed in Rule 4901:1-15-24 (D) and (E), O.A.C. Staff recommends that the Applicant add the contents of these two rule provisions as a new paragraph in Section 6.

Metered Service

Section 7 covers such topics as meter installation, meter testing, and meter reading. Although Paragraph 8 of this section includes the Company's requirements concerning customer-requested meter tests, it omits the customer's rights, per Rule 4901:1-15-19 (B)(5), O.A.C., to be notified of the scheduled test date and to request that the customer or the customer's representative be present when the meter test is performed. Staff therefore recommends that the contents of the above-cited provision be included in Paragraph 8.

Appendix B – Notification of Customer Rights

Rule 4901:1-15-16 (B) requires each waterworks company to file a copy of its Notification of Customer Rights (NCR) as an attachment to its tariff. During its investigation in this case, Staff requested a copy of the NCR that the Applicant provides to its customers. Staff notes that the NCR the Applicant provides its customers is different from the version that is attached to its tariff. The following comments apply to the NCR version the applicant provides to its customers.

Section 1 of the NCR describes the Applicant's complaint procedures but does not include the language prescribed by Rule 4901:1-15-16 (A)(1), O.A.C., on how

customers may contact the Public Utilities Commission of Ohio (PUCO) and the Ohio Consumers' Counsel (OCC). Staff recommends the Applicant replace the last sentence of Section 1 with the PUCO/OCC contact language prescribed by the current version of above-cited rule.

Section 2 of the NCR contains some typographical errors. In subsection (F), the word "Cur" should be corrected to read "Curb"; and in the last sentence of subsection (G), the word "and" should be changed to "an". Finally, the last four subsections are erroneously numbered as 10 through 13, when they should be lettered as J through M.

Section 3 of the NCR pertains to billing and payments. Subsection 11 states that final bills may be increased by the amount of collection costs. This issue was addressed above with respect to Tariff Section 6, Paragraph 9. Staff recommends the Applicant delete the last sentence of Subsection 11 for the same reasons given above with respect to the analogous tariff section. Section 3 also contains some typographical errors. In subsection (C), the last word in the first sentence should be changed from "duo" to "due"; and in the first sentence of subsection (G), the word "son" should be changed to "on." Finally, the last two subsections are erroneously numbered as 10 and 11, when they should be lettered as J and K.

Section 4 of the NCR pertains to the disconnection of service; and subsection (9) states that service disconnection is prohibited if it would be especially dangerous to health. Subsection (9)(A) discusses the required medical certification form, but does not include a complete list of medical professionals who may sign the form. Staff recommends the Applicant include that list as stated in the current version of Rule 4901:1-15-27 (I)(1) and (3), O.A.C. Subsection (9)(B) states that a customer may also use a medical certificate to have service reconnected if the customer's service had been disconnected within the previous 14 days. Staff recommends the Applicant extend this 14-day period to 21 days to comply with the current requirements of Rule 4901:1-15-27 (I)(2), O.A.C. Section 4 also contains some typographical errors. In the last sentence of subsection (4), the word "Rue" should be changed to "Rule"; and in the first sentence of subsection (6)(B), the word "and" should be changed to "an". Finally, in the first sentence of subsection (9), the words "pursuant to the certification provisions following in this rule" should be correct to read: "pursuant to the following provisions."

Section 5 of the NCR pertains to meter tests requested by the customer, but omits the customer's rights, as specified in Rule 4901:1-15-19 (B)(5), O.A.C., to be notified of the scheduled meter test date and to have the customer or customer's representative present when the test is performed. Staff recommends the Applicant include these rights in Section 5.

Section 6 of the NCR describes the ways that customers may establish their creditworthiness. Subsection (c) needs to be clarified, however, to state the applicant may establish creditworthiness by demonstrating a good credit record with another water utility as specified in Rule 4901:1-17-03 (A)(3), O.A.C. Staff therefore recommends the Applicant revise subsection (c) by inserting the words "with another

utility" after the words "water service" and substituting the words "that utility's records" in place of "company records".

Bill Format

Applicant provided a copy of its bill form in response to Data Request No. 13. Staff has reviewed the bill form and finds that minor corrections could be made. Staff recommends that Applicant discuss the bill form with Staff to see what, if any, changes should be made.

MISCELLANEOUS CHARGES

Late Payment Charge

Staff finds that Applicant's late payment language complies with Commission policy as stated in the current tariff. The language on proposed tariff Section 2, Sheet 4, Schedule "D" is inadequate and needs to be replaced with the current tariff language and to include the following recommendation.

In response to Data Request No. 8, Applicant stated that they no longer keep envelopes to determine customer late fees. Rather the customer receives a six (6) day grace period (after due date) before late fees are applied. The six day grace period allows for any potential mail or processing delays. Staff does not interpret this as an extension of the due date, but rather as the Applicant stated a "grace" period.

Staff finds that the Applicant should update their Company policy to delete the outdated language and include the "grace" period policy.

Dishonored Payment Charge

Staff finds a dishonored payment charge is appropriate and should reflect the actual costs incurred by the Company to process such payments. The cost of dishonored payments should not be recovered by customers in general. Such payments decrease the funds available for the utility to meet its obligations with resulting:

- (1) Additions in working capital;
- (2) Interest expense associated with short term borrowing; and
- (3) Labor and non-labor expenses in processing the returned/dishonored payments

Applicant currently charges \$15 for dishonored checks. Applicant is proposing to increase this rate by \$1 to be \$16. In response to Data Request No. 10, Applicant itemized the cost of processing a dishonored payment. Staff has reviewed the itemized cost and finds a charge of \$16 for dishonored payments to be reasonable and within the industry standard and recommends its approval.

Staff finds that with today's technology, payments are made by means other than checks and from institutions other than banks. Staff recommends that the reference to Dishonored Check Charge in the Subject Index be changed to Dishonored Payment Charge.

Reconnection Charge

Applicant is seeking to increase its reconnection charge to \$43. Applicant's tariff contains a reconnection charge of \$29 for reconnections performed during normal business hours and actual out-of-pocket costs for reconnections performed after normal business hours.

In response to Data Request No. 9, Applicant itemized the cost to reconnect a customer during normal business hours. Staff has reviewed these costs and finds a charge of \$43 to be reasonable and recommends approval of the increase.

Account Activation Charge

Applicant requests the creation of an Account Activation Charge of \$21. The description in the proposed tariff is "...will be charged for a service connection during the Company's regular business hours."

In response to Data Request No. 12 Applicant stated that the Account Activation charge is for all new services as well as for customers changing residences. They further explained that the charge is based on the costs to establish the new account in the customer accounting system.

Staff has reviewed the costs for determining the proposed account activation fee. Staff finds that the water is only turned off when a residence will be vacant and not when another customer will be moving in. The serviceman must still travel to and from the customer premises to read the meter. Staff finds the proposed charge of \$21 to be reasonable and recommends approval. However, Staff finds that the description of the Account Activation fee is lacking clarity of application and needs better definition. Staff recommends that the Applicant provide enhanced language prior to the submittal of a final tariff in this proceeding.

RATES AND REVENUE ANALYSIS

General guidelines or objectives are followed in Staff's review of rate schedules and designs. The applicable schedules should provide the utility the opportunity of recovering the authorized revenue. The various schedules should represent a reasonable distribution of revenue among the various customer groups. The particular schedule should be equitable and reasonable to all customers within a group. The schedules should provide for customer understanding, continuity of rates, and minimal customer impact.

The rate schedules should be designed to be equitable and reasonable to the customers served pursuant to their applicability. This criterion involves several considerations. The schedules should, to the extent practicable, be predicated upon the costs associated with the particular service rendered. Customers receiving like services should experience the same charges and provisions. Also, differences in the applicable charge should be representative of differences in costs.

From a practical rate design standpoint, absolute equality between costs and revenue may be difficult to achieve in the short term. While it may be viewed as equitable to set rates at costs, if there is a substantial divergence from the current rates, the resulting impact on individual customers may be viewed as unreasonable. While analyzing cost supported charges, Staff considers such items as the resulting typical customer billings and the resulting revenue increases. These tests help provide benchmarks with regard to the reasonableness of charges and rate forms. While it is Staff's position that rates should reflect costs, it is also important to consider the continuity associated with the current and proposed pricing structures. This may result in movement towards more closely aligning revenues with costs, rather than an absolute match at a particular time period.

When employing these standards to develop and design a rate, the results should be understandable to the customer billed under the schedule.

REVENUE ANALYSIS

Applicant is a small sized division of Aqua Ohio Water Company providing service to approximately 1,473 customers of which 1,387 are residential, 83 are commercial, and 3 are industrial. The 3 industrial customers are not large water users.

Cost of Service Analysis

Cost of service studies are used to approximate the costs incurred by the utility company in providing service and the appropriate level of cost responsibility for each distinct class of customer. This is accomplished in several steps as described below;

- (1) Functionalization is the separation of total costs of service into two broad categories of Operation and Maintenance (O&M) and Capital Cost and the further division of costs to identify the nature of the specific expense item. For example, individual O&M expense items related to the aspect of operations which directly cause those expenses (e.g. supply, treatment, transmission and distribution, or administrative in nature). Capital costs are commonly expressed as annual costs relating to the level of plant investment.
- (2) Classification is the distribution of the functionalized costs into the general cost categories of base-demand, extra-capacity demand, customer costs, and fire protection costs. The extra-capacity demand category is further divided into maximum-day demand and maximum-hour demand. The customer costs category is further divided into meters & services and billing & collecting.
- (3) Allocation is the assignment of cost responsibility to the various customer classes based on the number of customers and the relative demands imposed on the system by the customer classes.

Applicant submitted a cost of service study in this filing. While the Company is classified as "small" it is a subsidiary of a "large" water company, and has the resources and data available to perform a cost of service study. Staff recommends that because the rates are slowly being aligned towards cost of service, the Applicant file a cost of service study in its next rate filing in order to further monitor this movement.

Applicant's cost of service study used the Base-Extra Capacity method. This method follows the general procedures outlined above and recognizes the idea that costs are incurred by the Company in providing service at both average and above average rates of demand. This study distributes revenue responsibility among the various customer classes.

The previous "Other Utilities" category was bulk water sales to Trumbull County, Ohio. Trumbull County is no longer a customer and this category was deleted. There are no large water users among the 3 industrial customers, so all 86 non-residential customers were classified as commercial. The results of the cost of service study with SIC, late payment fees, and miscellaneous fees excluded, are as follows:

<u>Class of Service</u>	<u>Current Revenue Distribution</u>	<u>Cost of Service Study</u>
Residential	67.8%	62.95%
Commercial	16.8	13.52
Private Fire	3.3	6.24
Public Fire	<u>12.1</u>	<u>17.29</u>
Total	100.00%	100.00%

Revenue Distribution

The following is a comparison of Applicant's proposed revenue distribution with the current revenue distribution.

Applicant's Proposed Revenue Distribution Compared to Current Revenue Distribution

<u>Class of Service</u>	<u>Current</u>	<u>Proposed</u>	<u>Percent Change</u>
Residential	67.8%	67.5%	(0.3)%
Commercial	16.8	16.0	(0.8)
Private Fire	3.3	3.5	0.2
Public Fire	<u>12.1</u>	<u>13.0</u>	<u>0.9</u>
Total	100.00%	100.00%	0.00%

Staff finds this proposed revenue distribution to be reasonable.

The following tables examine the current revenue distribution, as compared to Applicant's proposed revenue distribution. These figures do not take into account any SIC, miscellaneous revenue or late payment fees.

**Applicant's Proposed Net Revenue and
Distribution of the Revenue Increase**

<u>Class of Service</u>	<u>Current Distribution Revenue</u>	<u>Proposed Revenue</u>	<u>Distribution of Revenue</u>	<u>Revenue Increase</u>	<u>Percent Increase</u>	<u>of Increase</u>
Residential	\$310,855	\$576,928	67.8%	\$266,073	85.59%	67.05%
Commercial	76,725	136,771	16.8	60,046	78.26	15.13
Private Fire	15,189	30,379	3.3	15,190	100.00	3.83
Public Fire	<u>55,524</u>	<u>111,048</u>	<u>12.1</u>	<u>55,524</u>	<u>100.00</u>	<u>13.99</u>
Total	\$458,293	\$855,126	100.0%	\$396,833	86.59%	100.00%

Customer Charge

Applicant's tariff contains a customer charge with no water entitlement for each meter size. Staff finds a customer charge without water entitlement provides for a more usage sensitive rate. Based from its cost of service study, the Applicant is proposing an approximate 112% increase to the customer charge for all meter sizes. The Applicant used the Staff's customer charge calculation, and is the method that has been accepted by the Commission in numerous other rate proceedings. Staff's customer charge is comprised of Company costs that are associated with providing customer service and metered service to the customer. As shown in the customer charge calculation, a portion of the customer charge is a fixed amount, regardless of the meter size. Customer costs, which include account billing and collection, are independent of meter size. Subsequently, other costs of providing metered service vary with the size of meter in service. The varied amount portion of the customer charge is based on meter size, because the larger the meter the higher the costs to purchase and maintain. The following chart illustrates Staff's calculation of the monthly customer charge for a 5/8" meter, which results in a \$10.93 monthly customer charge.

The following is the calculation of the customer charge using Staff's customer charge methodology as contained in the following chart. Should the Commission authorize a revenue different than that proposed by the Applicant, Staff recommends Staff proposed customer charge be approved as presented in this chart.

Calculation of Customer Charge for 5/8" Meter

<u>Account</u>	<u>Description</u>	<u>Company Values</u>
<u>Variable Expenses Per Meter Size Plant Account:</u>		
345	Services	\$ 511,800
346	Meters	198,280
347	Meter Installations	<u>15,151</u>
	Total Customer Plant	\$ 725,231
Less: Related Depreciation Reserve		
345	Services	\$ 183,716
346	Meters	26,240
347	Meter Installations	<u>594</u>
	Total Customer Depreciation Reserve	\$ 210,550
	Total Customer Rate Base	\$ 514,681
	Requested Rate of Return	8.59%
	Return on Customer Rate Base	\$ 44,211
<u>Operation and Maintenance Expense Accounts:</u>		
<u>Transmission and Distribution:</u>		
663	Operation of Meters	\$ -0-
675	Maintenance of Services	-0-
676	Maintenance of Meters	<u>-0-</u>
	Total Transmission & Distribution	\$ -0-
Customer Conversion Factor:	<u>Variable Taxes Per Meter Size:</u>	
Property	\$158,978 x .2319	\$ 36,867
PUCO & OCC Taxes	1,126 x .2319	261
Excise	40,050 x .2319	9,288
Federal Income Tax	64,286 x .2319	<u>14,908</u>
	Total Customer Variable Taxes	\$ 61,324
Customer Conversion Factor	Customer Rate Base =	\$ 499,251 .2319
	Total Net Plant	\$ 2,219,818

<u>Related Depreciation Expense (Plant):</u>		
345	Services	\$ 9,835
346	Meters	5,157
347	Meter Installations	<u>436</u>
Total Related Depreciation Expense		\$ 15,428
<u>Summary of Variable Expenses Per Meter Size:</u>		
Return on Customer Plant		\$ 44,211
Total O&M – Trans. & Dist. Expense		-0-
Total Customer Taxes		61,324
Depreciation Expenses		<u>15,428</u>
Total Customer Variable Costs		\$ 120,963
Total Monthly Equiv. 5/8" Meters		1,559
[(120,963/1,559)/12]		
Monthly Customer Variable Charge		\$ 6.4652
<u>Fixed Expenses Per Meter Size Cust. Acct:</u>		
901	Supervision	\$ -0-
902	Meter Reading Expenses	-0-
903	Customer Records & Collection Misc.	30,304
905	Miscellaneous Customer Expense	9,321
Total		<u>\$ 39,625</u>
Customer		
Conversion Factor	<u>Customer Labor Expense =</u> n/a	-0-
	Total Payroll Expense	n/a
Payroll Taxes		\$ -0-
Total Customer Fixed Expenses		\$39,625
Total Customer Bills		8,869
Monthly Customer Fixed Charge		\$ 4.4678
(\$39,625/8,869)		
Customer Variable per Meter Size		\$ 6.4652
Customer Fixed per Meter Size		<u>\$ 4.4678</u>
Staff Computed Monthly Customer Charge		\$ 10.93

<u>Staff Recommended Customer Charge for All Size Metered Customers</u>		
<u>Size of Meter</u>	<u>Equivalent Units</u>	<u>Customer Charge</u>
5/8"	1	\$ 10.93
3/4"	1.5	16.40
1"	2.5	27.33
1 1/2"	5	54.65
2"	8	87.44
3"	15	163.95
4"	25	273.25
6"	50	546.50

Rate Blocks

Applicant's current rate design consists of a customer charge with two declining block rates for the Residential, Commercial and Industrial classes, and a customer charge with one volumetric rate for the Other Utilities class. The Applicant has not proposed a change to this format. While there are no customers in the Other Utilities class, Trumbull County has requested that the Company maintain the meter pits should they ever need to take water service from Aqua Ohio. Staff finds the use of a separate and distinct volumetric rate for the Other Utility class to be appropriate and recommends its approval. Using Applicant's proposed revenue, Staff finds Applicant's proposed rates to be reasonable and recommends approval.

An analysis of the Company's rate structure is shown below:

RATE COMPARISON

<u>Customer Charge</u>				
<u>Meter Size</u>	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
5/8"	\$ 4.99	\$ 10.93	\$ 5.94	119%
3/4"	7.49	16.40	8.91	119
1"	12.49	27.33	14.84	119
1-1/2"	24.98	54.65	29.67	119
2"	39.97	87.44	47.47	119
3"	74.95	163.95	89.00	119
4"	124.92	273.25	148.33	119
6"	249.85	546.50	296.65	119

Consumption Charges: (\$/100 Gal.)

<u>Monthly (100 Gallons)</u>	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
0-18,700	\$ 0.3651	\$ 0.6330	\$ 0.2679	73.38%
Over 18,700	\$ 0.2707	\$ 0.4656	\$ 0.1949	72.00%

Consumption Charges: (\$/CCF)

The following proposed rate is applicable only to the Other Utilities class:

<u>Monthly (10 cf)</u>	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
All	\$ 0.2284	\$ 0.3928	\$ 0.1644	71.98%

Private Fire Protection

Applicant states that there is "wet" and "dry" private fire protection provided by the Company. Applicant indicates that a wet fire service does not contain air pressure in the line, and water may be used for purposes other than fighting fires (pull-down hoses, etc.). A dry fire protection service is a system employing automatic sprinklers attached to a piping system containing air under pressure. The cost of service study shows that there are no wet underground customers.

The following chart shows the current and proposed charges for private fire rates:

"Dry" Sprinkler System – Annual Rates

<u>Conn. Size</u>	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
4"	\$ 1,189.91	\$ 2,379.82	\$ 1,189.91	100.0%
6"	1,804.07	3,608.14	1,804.07	100.0
8"	3,603.33	7,206.66	3,603.33	100.0

"Wet" System – Annual Rates

<u>Conn. Size</u>	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
2"	\$ 580.56	\$ 1,161.12	\$ 580.56	100.0%
4"	2,096.74	4,193.48	2,096.74	100.0
6"	3,915.20	7,830.40	3,915.20	100.0
8"	5,728.85	11,457.70	5,728.85	100.0
Each Fire Hydrant	\$ 321.28	\$ 642.56	\$ 321.28	100.0%

Public Fire Protection

Applicant has a separate tariff charge for public fire protection service. Not all customers receive public fire protection service from the Company, thus the revenue is not included in base rates. The rate schedule, as shown below, is separate and applicable only to those customers who are accessible to public fire hydrants that are located in a fire district not contracting for public fire protection.

Public Fire Protection Cost Per Month

<u>Type</u>	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Residential	\$ 3.065	\$ 6.14	\$ 3.075	100.33%
Non-Residential	\$ 3.065	\$ 6.14	\$ 3.075	100.33%
2,000 Sq. ft. or less	.573	1.14	.567	98.95

SERVICE MONITORING AND ENFORCEMENT

WATER SERVICE QUALITY

Staff investigated Aqua Ohio, Masury District's physical facilities and operations to assess compliance with O.A.C. 4901:1-15, the Water and Wastewater Service Standards. The investigation also entailed a review of Company records, water quality tests, various inputs provided by customers including the results of a customer survey issued in July 2009 and a review of customer contacts received at the Commission.

PHYSICAL FACILITIES REVIEW

Water Supply and Treatment

Masury obtains its water from a division of Aqua Pennsylvania through several unmetered distribution connections.

Unaccounted for Water

The actual amount of water delivered to the Company cannot be determined; therefore, the combined system delivery and unaccounted-for-water (UFW) ratio are reported quarterly to satisfy O.A.C. 4901:1-15-20(C)(5) requirements. A review of the combined UFW reported by the Company reflected an average ratio of 9.9 percent for the 12 month period ending with the third quarter of 2009, which is under 15 percent specified by rule and therefore requires no remedial action.

Storage

The Company has a one million gallon ground storage tank (the Lincoln tank) and booster station. The tank was last inspected in 2008, in compliance with O.A.C. 4901:1-15-10(B)(6) and is tentatively scheduled to be painted inside and out by 2011.

Other Issues

Routine field inspections reflect the Company is in compliance with Ohio Administrative Rules in the following areas:

1. Annual Main Flushing Program including semi-annual dead-end main flushing as required pursuant to O.A.C. 4901-1-15-10(B)(4). Hydrants are being inspected and maintained pursuant to O.A.C. 4901:1-15-10(B)(5).
2. All valves are being operated as required pursuant to O.A.C. 4901:1-15-10(B)(5).
3. Random water pressure testing shows pressures well in excess of the 35 psi minimum required pursuant to O.A.C. 4901:1-15-20(C)(3).
3. Random chlorine testing shows that adequate chlorine residuals are being maintained pursuant to O.A.C. 4901:1-15-20(C)(1).

Facilities Review Recommendation

Staff believes Masury is in compliance with the Commission's Water and Wastewater Service Standards. Therefore, Staff has no recommendations at this time.

ADMINISTRATIVE REVIEW

Annual Meter Readings

O.A.C. 4901:1-15-19(A) states that:

Each company shall read customer meters at least once during a three-month period unless access to the meter is unobtainable. If access to a meter is unobtainable on a quarterly basis, then each company must read each customer's meter at least once per year. The reading of a generator-type or pulse-type remote meter device does not satisfy this requirement.

Staff found that all meters are being read at least quarterly and that all inside-meters with generator-type or pulse-type devices are being read at least once per year and pursuant to O.A.C 4901:1-15-19(A).

Customer Service Assessment

Staff reviewed the customer contacts to the PUCO's call center for the period of January 1, 2008 through November 30, 2009. In 2008, the PUCO received a total of 1,070 contacts regarding Aqua Ohio and 650 in 2009 to date. For the Masury area, 46 contacts were received in 2008 and 18 in 2009. Billing questions formed the largest category, with 23 contacts in 2008 and 6 in 2009. Concerns regarding non-payment disconnection accounted for 14 contacts in 2008 and seven in 2009. Two customers had issues with water quality or pressure in 2008 and three had such issues in 2009. The other nine contacts (seven and two respectively) were from customers seeking account information.

Customer Survey Analysis

A customer survey was issued to 500 of Masury Division customers in late 2005. A total of 85 surveys (17.0 percent) were returned reflecting that over 90 percent of the responding customers were generally satisfied with their water quality and service. The specific survey results can be verified on the Commission's web site.

Administrative Review Recommendation

Staff has no further recommendations in this area based on its review of the PUCO received complaints and the results of the direct survey of Masury's customers.

OTHER REPORTING REQUIREMENTS

Outage and Interruption of Service Notifications

Companies are required to notify the commission's director of the service monitoring and enforcement department or the director's designee, the outage coordinator of any planned outage (expected to last over two hours) or system flushing, at least three days prior to the event per O.A.C. 4901:1-15-10(C) (1). In the event of an unplanned service outage expected to last over two hours, the coordinator is to be notified as soon as possible, per O.A.C. 4901:1-15-12(E).

Quarterly operating reports submitted to Staff include records of 18 unplanned outages in Masury in the first three quarters of 2009; however, no boil alerts appear to have been issued. The quarterly reports also refer to the flushing of mains in Masury from April 12, 2009 through April 24, 2009. No record of any of the system outages or the main flushing was found in the commission outage coordinator's report for the same period.

Other Reporting Requirement Recommendations

Although apparently no unplanned outages requiring notification of the Commission's outage coordinator occurred, Staff finds that Masury failed to notify the coordinator of its main flushing in April 2009. Staff reminds the Company that under O.A.C. 4901:1-15-10(C)(1) and 4901:1-12(E) that reporting of system flushing's, as well as planned and unplanned outages must be reported to the Commission's outage coordinator.

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Revenue Requirements**

	<u>Applicant</u> (a)	<u>Lower</u> <u>Bound</u>	<u>Upper</u> <u>Bound</u>
(1) Rate Base (b)	\$ 2,188,763	\$ 2,179,641	\$ 2,179,641
(2) Adjusted Operating Income (c)	(43,263)	(25,637)	(25,637)
(3) Rate of Return Earned (2) / (1)	-1.98%	-1.18%	-1.18%
(4) Rate of Return Recommended (d)	8.69%	7.54%	8.05%
(5) Required Operating Income (1) x (4)	\$ 190,204	\$ 164,345	\$ 175,461
(6) Income Deficiency (5) - (2)	233,467	189,982	201,098
(7) Gross Revenue Conversion Factor (e)	1.6713	1.645924	1.645924
(8) Revenue Increase Required (6) x (7)	390,193	312,695	330,991
(9) Revenue Increase Recommended	389,957	312,695	330,991
(10) Adjusted Operating Revenue (c)	482,461	482,461	482,461
(11) Revenue Requirements (9) + (10)	\$ 872,418	\$ 795,156	\$ 813,452
(12) Increase Over Current Revenue (9) / (10)	80.83%	64.81%	68.60%

- (a) Applicant's Schedule A-1
- (b) Staff's Schedule B-1
- (c) Staff's Schedule C-2
- (d) Refer to Rate of Return Section
- (e) Staff's Schedule A-1.1

Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Calculation of Gross Revenue Conversion Factor

(1) Gross Revenue	100.000000
(2) Uncollectibles (1) x 3.3566% (a)	<u>3.356600</u>
(3) Net Revenue (1) - (2)	96.643400
(4) Ohio Gross Receipts Tax (3) x 4.748% (b)	<u>4.588629</u>
(5) Income Before Federal Income Taxes (3) - (4)	92.054771
(6) Federal Income Taxes (7) x 34.00% (c)	<u>31.298622</u>
(7) Operating Income Percentage (5) - (6)	80.756149
(8) Gross Revenue Conversion Factor (1) / (7)	<u>1.645924</u>

(a) Staff's Schedule C-3.6

(b) Derived From Staff's Schedule C-1.1 as Follows:

(1) Increase In Ohio Gross Receipts Tax	\$ 18,539
(2) Proposed Total Revenue Increase	404,030
(3) Uncollectibles	<u>13,562</u>
(4) Net Revenue Increase (2) - (3)	390,468
Effective Gross Receipts Tax Rate (1) / (4)	<u>\$ 4.748%</u>

(c) Derived From Staff's Schedule C-1.1 as Follows:

(1) Net Revenue Increase	\$ 390,468
(2) Increase In Ohio Gross Receipts Tax	<u>18,539</u>
(3) Net Revenue Increase (1) - (2)	371,929
(4) Increase in Federal Income Taxes	<u>\$127,017</u>
(5) Effective FIT Rate (4) / (3)	34.00%

SCHEDULE B-1

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Rate Base Summary
As of Date Certain, June 30, 2008**

	<u>Applicant</u> (a)	<u>Staff</u>
(1) Plant in Service	\$ 3,332,634	\$ 3,305,636 (b)
(2) Depreciation Reserve	<u>(880,445)</u>	<u>(856,766) (c)</u>
(3) Net Plant in Service	\$ 2,452,189	\$ 2,448,870
(4) Construction Work in Progress	0	0 (d)
(5) Working Capital Allowance	0	0 (e)
(6) Less: Other Rate Base Items	<u>263,426</u>	<u>269,229 (f)</u>
(7) Rate Base (3) Thru (6)	<u>\$ 2,188,763</u>	<u>\$ 2,179,641</u>

- (a) Applicant's Schedule B-1
- (b) Staff's Schedule B-2
- (c) Staff's Schedule B-3
- (d) Staff's Schedule B-4
- (e) Staff's Schedule B-5
- (f) Staff's Schedule B-6

SCHEDULE B-2

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Jurisdictional Plant in Service Summary**

<u>Major Property Groupings</u>		<u>Applicant</u> (a)	<u>Staff</u> (b)
(1)	Intangible Plant	\$ 3,060	\$ 3,060
(2)	Source of Supply Plant	0	0
(3)	Pumping Plant	182,538	182,538
(4)	Water Treatment Plant	0	0
(5)	Transmission & Distribution Plant	2,965,961	2,938,963
(6)	General Plant	<u>0</u>	<u>0</u>
(7)	Total District (1) Thru (6)	\$ <u>3,151,559</u>	\$ <u>3,124,561</u>
(8)	Corporate Office Intangible Plant	115,875	115,875
(9)	Corporate Office General Plant	<u>65,200</u>	<u>65,200</u>
(10)	Total Corporate Office (8) + (9)	<u>181,075</u>	<u>181,075</u>
(11)	Total District and Corporate Office (7) + (10)	\$ <u>3,332,634</u>	\$ <u>3,305,636</u>

(a) Applicant's Schedule B-2
(b) Staff's Schedule B-2.1

Aqua Ohio, Inc. Masury Division
Case No. 09-660-WW-AIR
Calculation of Jurisdictional Plant in Service

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<u>Intangible Plant:</u>						
301	Organization	\$ 3,060	\$	\$ 3,060	100.00%	3,060
302	Franchises & Consents	0		0	100.00%	0
303	Misc. Intangible Plant	0		0	100.00%	0
	Total Intangible Plant	3,060		3,060		3,060
<u>Source of Supply Plant:</u>						
310	Land & Land Rights	0		0	100.00%	0
311	Structures & Improvements	0		0	100.00%	0
312	Collecting & Impounding Res.	0		0	100.00%	0
313	Lake, River & Other Intakes	0		0	100.00%	0
314	Wells & Springs	0		0	100.00%	0
316	Supply Mains	0		0	100.00%	0
	Total Source of Supply Plant	0		0		0
<u>Pumping Plant:</u>						
320	Land and Land Rights	0		0	100.00%	0
321	Structures & Improvements	11,950		11,950	100.00%	11,950
323	Other Power Prod. Equip.	27,900		27,900	100.00%	27,900
325	Electric Pumping Equip.	142,688		142,688	100.00%	142,688
326	Diesel Pumping Equipment	0		0	100.00%	0
328	Other Pumping Equip.	0		0	100.00%	0
	Total Pumping Plant	182,538		182,538		182,538
<u>Water Treatment Plant:</u>						
330	Land and Land Rights	0		0	100.00%	0
331	Structures & Improvements	0		0	100.00%	0
332	Water Treatment Equip.	0		0	100.00%	0
	Total Water Treatment Plant	0		0		0
<u>Transmission & Distribution Plant:</u>						
340	Land & Land Rights	2,786		2,786	100.00%	2,786
341	Structures & Improvements	0		0	100.00%	0
342	Distr. Reser. & Standpipes	93,649		93,649	100.00%	93,649
343	Trans. and Distr. Mains	2,048,503		2,048,503	100.00%	2,048,503
345	Services	511,800		511,800	100.00%	511,800
346	Meters	198,280	(26,998)	171,282	100.00%	171,282
347	Meter Installations	15,151		15,151	100.00%	15,151
348	Hydrants	95,792		95,792	100.00%	95,792
	Total Transmission & Distribution Plant	\$ 2,965,961	\$ (26,998)	\$ 2,938,963		\$ 2,938,963

Aqua Ohio, Inc. Masury Division
Case No. 08-680-VW-AJR
Calculation of Jurisdictional Plant in Service

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<u>General Plant:</u>						
389	Land & Land Rights	\$ 0	\$ 0	0	100.00%	0
390	Structures & Improvements	0		0	100.00%	0
390	Limited Term Utility Plant	0		0	100.00%	0
391.1	Office Furniture	0		0	100.00%	0
391.2	Computer Equip. & Software	0		0	100.00%	0
391.3	Office Machines & Equip.	0		0	100.00%	0
392	Transportation Equip.	0		0	100.00%	0
393	Stores Equipment	0		0	100.00%	0
394	Tools, Shop, & Garage Equip.	0		0	100.00%	0
395	Laboratory Equip.	0		0	100.00%	0
396	Power Operated Equip.	0		0	100.00%	0
397	Communication Equipment	0		0	100.00%	0
398	Miscellaneous Equipment	0		0	100.00%	0
Total General Plant		0		0		0
Total District		\$ 3,151,559	\$ (26,998)	\$ 3,124,561		\$ 3,124,561
<u>Service Center Intangible Plant:</u>						
303	Misc. Intangible Plant Service Center	6,473,472		6,473,472	1.79%	115,875
Total Service Center Intangible Plant		\$ 6,473,472		\$ 6,473,472		\$ 115,875
<u>Service Center General Plant:</u>						
389	Land & Land Rights	693,797		693,797	1.79%	12,419
390	Structure & Improvements	748,095		748,095	1.79%	13,391
390-1	Leasehold Improvements	1,067,802		1,067,802	1.79%	19,114
391.1	Office Furniture and Equip.	203,472		203,472	1.79%	3,642
391.2	Data Processing Equip.	388,979		388,979	1.79%	6,569
391.3	Computer Equip.	313,637		313,637	1.79%	5,614
392	Transportation Equip.- Fully Depreciated	0		0	1.79%	0
392.1	Transportation Equip. - Depreciable	0		0	1.79%	0
394	Tools, Shop and Garage Equip.	106,552		106,552	1.79%	1,907
395	Laboratory Equipment	55,110		55,110	1.79%	986
397	Communication Equipment	75,880		75,880	1.79%	1,358
398	Miscellaneous Equipment	11,172		11,172	1.79%	200
Total Service Center General Plant		\$ 3,642,496		\$ 3,642,496		\$ 65,200
Total Corporate Office		10,115,968		10,115,968		181,075
Total District and Corporate Office		\$ 13,267,527	\$ (26,998)	\$ 13,240,529		\$ 3,305,636

- (a) Applicant's Schedule B-2.1
- (b) Staffs' Schedule B-2.2
- (c) Columns (a) + (b)
- (d) Applicant's Schedule B-2.1
- (e) Columns (c) x (d)

SCHEDULE B-2.2

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Account 346, Meters - Trumbull County Service Adjustment**

(1) Brookfield Water Service Vault/Lincoln St. Service Vault (a)	\$	(9,747)
(2) Brookfield Ave. & Yankee Run Rd. Precast Meter Vault (a)		(9,821)
(3) Miller St. @ South St. Precast Meter Vault (a)		<u>(7,430)</u>
(4) Total Adjustment (1) + (2) + (3)	\$	<u>(26,998)</u>

(a) Derived from Staff's Data Request #7

Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Calculation of Jurisdictional Depreciation Reserve

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<u>Intangible Plant:</u>						
301	Organization	\$ 0	\$	\$ 0	100.00%	\$ 0
302	Franchisees & Consents	0		0	100.00%	0
303	Misc. Intangible Plant	0		0	100.00%	0
	Total Intangible Plant	0		0		0
<u>Source of Supply Plant:</u>						
310	Land & Land Rights			0	100.00%	0
311	Structures & Improvements	0		0	100.00%	0
312	Collecting & Impounding Res.	0		0	100.00%	0
313	Lake, River & Other Intakes	0		0	100.00%	0
314	Wells & Springs	0		0	100.00%	0
316	Supply Mains	0		0	100.00%	0
	Total Source of Supply Plant	0		0		0
<u>Pumping Plant:</u>						
320	Land and Land Rights			0	100.00%	0
321	Structures & Improvements	4,889		4,889	100.00%	4,889
323	Other Power Prod. Equip.	1,268		1,268	100.00%	1,268
325	Electric Pumping Equip.	9,049		9,049	100.00%	9,049
326	Diesel Pumping Equipment			0	100.00%	0
328	Other Pumping Equip.	0		0	100.00%	0
	Total Pumping Plant	15,206		15,206		15,206
<u>Water Treatment Plant:</u>						
330	Land and Land Rights			0	100.00%	0
331	Structures & Improvements	0		0	100.00%	0
332	Water Treatment Equip.	0		0	100.00%	0
	Total Water Treatment Plant	0		0		0
<u>Transmission & Distribution Plant:</u>						
340	Land & Land Rights			0	100.00%	0
341	Structures & Improvements	0		0	100.00%	0
342	Distr. Reser. & Standpipes	33,264		33,264	100.00%	33,264
343	Trans. and Distr. Mains	533,111		533,111	100.00%	533,111
345	Services	183,839		183,839	100.00%	183,839
346	Meters	26,422	(23,679)	2,743	100.00%	2,743
347	Meter Installations	520		520	100.00%	520
348	Hydrants	26,741		26,741	100.00%	26,741
	Total Transmission & Distribution Plant	\$ 803,887	\$ (23,679)	\$ 780,208		\$ 780,208

Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Calculation of Jurisdictional Depreciation Reserve

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<u>General Plant:</u>						
389	Land & Land Rights	\$	\$	\$ 0	100.00%	\$ 0
390	Structures & Improvements	0		0	100.00%	0
390	Limited Term Utility Plant	0		0	100.00%	0
391.1	Office Furniture	0		0	100.00%	0
391.2	Computer Equip. & Software	0		0	100.00%	0
391.3	Office Machines & Equip.	0		0	100.00%	0
392	Transportation Equip.	0		0	100.00%	0
393	Stores Equipment	0		0	100.00%	0
394	Tools, Shop, & Garage Equip.	0		0	100.00%	0
395	Laboratory Equip.	0		0	100.00%	0
396	Power Operated Equip.	0		0	100.00%	0
397	Communication Equipment	0		0	100.00%	0
398	Miscellaneous Equipment	0		0	100.00%	0
Total General Plant		0		0		0
Total District		\$ 819,093	\$ (23,679)	\$ 795,414		\$ 795,414
<u>Service Center Intangible Plant:</u>						
303	Misc. Intangible Plant Service Center	1,805,237		1,805,237	1.79%	32,314
Total Service Center Intangible Plant		\$ 1,805,237		\$ 1,805,237		\$ 32,314
<u>Service Center General Plant:</u>						
389	Land & Land Rights			0	1.79%	0
390	Structure & Improvements	28,322		28,322	1.78%	507
390-1	Leasehold Improvements	963,404		963,404	1.79%	17,245
391-1	Office Furniture and Equip.	137,594		137,594	1.79%	2,463
391-2	Data Processing Equip.	93,666		93,666	1.78%	1,677
391-3	Computer Equip.	275,486		275,486	1.79%	4,931
392	Transportation Equip.- Fully Depreciated	0		0	1.79%	0
392-1	Transportation Equip. - Depreciable	1,816		1,816	1.79%	33
394	Tools, Shop and Garage Equip.	58,788		58,788	1.79%	1,052
395	Laboratory Equipment	48,114		48,114	1.79%	861
397	Communication Equipment	10,687		10,687	1.79%	191
398	Miscellaneous Equipment	4,339		4,339	1.79%	78
Total Service Center General Plant		\$ 1,622,214		\$ 1,622,214		\$ 29,038
Total Corporate Office		3,427,451		3,427,451		61,352
Total District and Corporate Office		\$ 4,246,544	\$ (23,679)	\$ 4,222,865		\$ 856,766

- (a) Applicant's Schedule B-3
(b) Staff's Schedule B-3.1
(c) Columns (a) + (b)
(d) Applicant's Schedule B-3
(e) Columns (c) x (d)

SCHEDULE B-3.1

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Account 346, Meters - Trumbull County Service Reserve Adjustment**

(1) Brookfield Water Service Vault/Lincoln St. Service Vault (a)	\$	(7,823)
(2) Brookfield Ave. & Yankee Run Rd. Precast Meter Vault (a)		(9,269)
(3) Miller St. @ South St. Precast Meter Vault (a)		<u>(6,587)</u>
(4) Total Adjustment (1) + (2) + (3)	\$	<u>(23,679)</u>

(a) Derived from Staff's Data Request #7

Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Calculation of Jurisdictional Depreciation Expense

Acct No. Description	Jurisdictional Plant In Service (a)	Accrual Rate (b)	Jurisdictional Depreciation Expense (c)
<u>Intangible Plant:</u>			
301 Organization	\$ 3,060		\$ 0
302 Franchises & Consents	0		0
303 Misc. Intangible Plant	0		0
Total Intangible Plant	3,060		0
<u>Source of Supply Plant:</u>			
310 Land & Land Rights	0		0
311 Structures & Improvements	0		0
312 Collecting & Impounding Res.	0		0
313 Lake, River & Other Intakes	0		0
314 Wells & Springs	0		0
316 Supply Mains	0		0
Total Source of Supply Plant	0		0
<u>Pumping Plant:</u>			
320 Land and Land Rights	0		
321 Structures & Improvements	11,950	2.00%	239
323 Other Power Prod. Equip.	27,900	3.03%	845
325 Electric Pumping Equip.	142,688	3.33%	4,752
326 Diesel Pumping Equipment	0		0
328 Other Pumping Equip.	0		0
Total Pumping Plant	182,538		5,836
<u>Water Treatment Plant:</u>			
330 Land and Land Rights	0		
331 Structures & Improvements	0		0
332 Water Treatment Equip.	0		0
Total Water Treatment Plant	0		0
<u>Transmission & Distribution Plant:</u>			
340 Land & Land Rights	2,786		0
341 Structures & Improvements	0		0
342 Distr. Reser. & Standpipes	93,649	2.00%	1,873
343 Trans. and Distr. Mains	2,048,503	1.44%	29,498
345 Services	611,800	2.08%	10,645
346 Meters	171,282	2.86%	4,899
347 Meter Installations	15,151	2.76%	417
348 Hydrants	95,792	1.92%	1,839
Total Transmission & Distribution Plant	\$ 2,938,963		\$ 49,171

Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Calculation of Jurisdictional Depreciation Expense

Acct. No. Description	Jurisdictional Plant In Service (a)	Accrual Rate (b)	Jurisdictional Depreciation Expense (c)
<u>General Plant:</u>			
389 Land & Land Rights	\$ 0		\$ 0
390 Structures & Improvements	0		0
390 Limited Term Utility Plant	0		0
391.1 Office Furniture	0		0
391.2 Computer Equip. & Software	0		0
391.3 Office Machines & Equip.	0		0
392 Transportation Equip.	0		0
393 Stores Equipment	0		0
394 Tools, Shop, & Garage Equip.	0		0
395 Laboratory Equip.	0		0
396 Power Operated Equip.	0		0
397 Communication Equipment	0		0
398 Miscellaneous Equipment	0		0
Total General Plant	0		0
Total District	\$ 3,124,861		\$ 55,007
<u>Service Center Intangible Plant:</u>			
303 Misc. Intangible Plant Service Center	115,875	(d)	9,858
Total Service Center Intangible Plant	\$ 115,875		\$ 9,858
<u>Service Center General Plant:</u>			
389 Land & Land Rights	\$ 12,419		\$ 0
390 Structure & Improvements	13,391	2.53%	339
390.1 Leasehold Improvements	19,114	(d)	49
391.1 Office Furniture and Equip.	3,642	4.95%	180
391.2 Data Processing Equip.	6,569	12.50%	821
391.3 Computer Equip.	6,814	20.00%	1,123
392 Transportation Equip.- Fully Depreciated	0	(e)	0
392.1 Transportation Equip. - Depreciable	0	(d)	0
394 Tools, Shop and Garage Equip.	1,907	5.94%	113
395 Laboratory Equipment	986	5.88%	58
397 Communication Equipment	1,358	10.00%	136
398 Miscellaneous Equipment	200	6.67%	13
Total Service Center General Plant	\$ 65,200		\$ 2,832
Total Corporate Office	\$ 181,075		\$ 12,691
Total	\$ 3,305,636		\$ 67,698
Less: Contributions In Aid to Construction (f)	107,086	1.44%	1,542
Total District and Corporate Office	\$ 3,198,550		\$ 66,156

- (a) Staff's Schedule B-2.1
(b) See Text
(c) Columns (a) x (b)
(d) Applicant's Schedule B-3.2
(e) Fully Depreciated
(f) Applicant's Schedule B-6

SCHEDULE B-4

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Construction Work In Progress Summary**

None

SCHEDULE B-5

Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Working Capital Allowance

None

SCHEDULE B-6

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Other Rate Base Items**

(1) Contributions in Aid of Construction (a)	\$ 107,086
(2) Customer Advances for Construction (a)	7,011
(3) Investment Tax Credit (a)	10,035
(4) Deferred Income Taxes (a)	139,293
(5) Deferred Income Taxes - Rate Case Expense(b)	3,264
(6) Deferred Income Taxes- Tank Painting Expense(c)	<u>2,539</u>
(7) Total (1) Thru (6)	<u>\$ 269,229</u>

- (a) Applicant's Schedule B-6**
- (b) Derived from Staff's Schedule C-4 (\$-6528/2)**
- (c) Derived from Staff's Schedule C-4 (\$-5078/2)**

Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Proforma Operating Income Statement
For The Twelve Months Ending December 31, 2008

	Staff		Applicant
	Adjusted Revenues & Expenses	Proforma Adjustments	Proforma Revenues & Expenses
	(a)	(b)	(c)
<u>Operating Revenues</u>			
Base	\$ 458,293	\$ 396,833	\$ 855,126
Other	24,168	7,197	31,365
Total Operating Revenues	482,461	404,030	886,491
<u>Operating Expenses</u>			
Operation and Maintenance	308,765	13,562	322,327
Depreciation	66,156		66,156
Taxes, Other Than Income	183,895	18,539	202,434
Federal Income Taxes	(50,718)	127,017	76,299
Total Operating Expenses	508,098	159,118	667,216
Net Operating Income	\$ (25,637)	\$ 244,912	\$ 219,275
Rate Base (e)	\$ 2,179,641		\$ 2,179,641
Rate of Return (f)	-1.18%		10.06%

- (a) Staff's Schedule C-2
 (b) Staff's Schedule C-1.1
 (c) Columns (a) + (b)
 (d) Applicant's Schedule C-1
 (e) Staff's Schedule B-1
 (f) Net Operating Income / Rate Base

SCHEDULE C-1.1

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Proforma Adjustments**

(1) Proposed Revenue Increase (a)	\$ 396,833
(2) Late Payment Revenue (1) x 1.813589% (b)	<u>7,197</u>
(3) Total Proposed Revenue Increase (1) + (2)	\$ <u>404,030</u>
(4) Uncollectible Accounts Expense (3) x 3.356600% (c)	\$ <u>13,562</u>
(5) Ohio Gross Receipts Tax (d)	\$ <u>18,539</u>
(6) Federal Income Tax (e)	\$ <u>127,017</u>

- (a) Derived from Applicant's Schedule E-4 \$326,119 + \$15,190 + \$55,524
(b) Derived from Applicant's Schedule E-4 \$6,873 / (\$326,119+\$15,190+\$55,524)
(c) Staff's Schedule C-3.6
(d) Staff's Schedule C-3.10b
(e) Staff's Schedule C-4

SCHEDULE C-2

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Adjusted Test Year Operating Income**

	<u>Applicant</u>			<u>Staff</u>	
	<u>Test Year Revenues & Expenses</u>	<u>Adjustments</u>	<u>Adjusted Revenues & Expenses</u>	<u>Incremental Adjustments</u>	<u>Adjusted Revenues & Expenses</u>
	(a)	(b)	(c)	(d)	(e)
<u>Operating Revenues</u>					
Water Sales	\$ 455,992	\$ 2,301	\$ 458,293	\$ 0	\$ 458,293
Other	11,691	12,477	24,168	0	24,168
Total Operating Revenues	467,683	14,778	482,461	0	482,461
<u>Operating Expenses</u>					
Operation & Maintenance	278,842	45,823	324,665	(15,900)	308,765
Depreciation & Amortization	63,192	3,350	66,542	(386)	66,156
Taxes, Other Than Income	198,340	(13,088)	185,252	(1,357)	183,895
Income Taxes	(51,635)	900	(50,735)	17	(50,718)
Total Operating Expenses	488,739	36,985	525,724	(17,626)	508,098
Net Operating Income	\$ (21,056)	\$ (22,207)	\$ (43,263)	\$ 17,626	\$ (25,637)

- (a) Applicant's Schedule C-2
- (b) Applicant's Schedule C-3
- (c) Columns (a) + (b)
- (d) Staff's Schedule C-3
- (e) Columns (c) + (d)

Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Summary of Staff's Adjustments

	<u>Staff's Adjustments</u> (a)	<u>Applicant's Adjustments</u> (b)	<u>Staff's Incremental Adjustments</u> (c)
<u>Operating Revenues</u>			
C-3.1 Metered Sales Revenue	\$ 8,648	\$ 8,648	\$ 0
C-3.2 Unmetered Sales Revenue	(6,347)	(6,347)	0
C-3.3 Forfeited Discount Revenue	<u>12,477</u>	<u>12,477</u>	<u>0</u>
Total Revenue Adjustments	\$ <u>14,778</u>	\$ <u>14,778</u>	\$ <u>0</u>
<u>Operating Expenses</u>			
C-3.4 Purchased Water	\$ 4,099	\$ 4,099	\$ 0
C-3.5 Lobbying Expense	(118)		(118)
C-3.6 Uncollectible Expense	3,410	3,410	0
C-3.7 Rate Case Expense	19,200	32,000	(12,800)
C-3.8 Tank Painting	3,332	3,332	0
Postage and Processing Fees	<u>0</u>	<u>2,982</u>	<u>(2,982)</u>
Total O & M Expenses	29,923	45,823	(15,900)
C-3.9 Depreciation & Amortization	2,964	3,350	(386)
C-3.10 Taxes Other Than Income	(14,445)	(13,088)	(1,357)
C-3.11 Federal Income Taxes	<u>917</u>	<u>900</u>	<u>17</u>
Total Expense Adjustments	\$ <u>19,359</u>	\$ <u>36,985</u>	\$ <u>(17,626)</u>

(a) Staff's Schedules C-3.1 Through C-3.11

(b) Applicant's Schedule C-3

(c) Columns (a) - (b)

SCHEDULE C-3.1

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Metered Sales Revenues**

(1) Adjusted Water Sales Revenues (a)	\$ 387,580
(2) Test Year Water Sales Revenues (b)	<u>378,932</u>
(3) Adjustment (1) - (2)	\$ <u>8,648</u>

- (a) Applicant's Schedule E-4**
(b) Applicant's Schedule C-2.1a

SCHEDULE C-3.2

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Unmetered Sales Revenues**

(1) Unmetered Sales Revenues (a)	\$ 70,713
(2) Test Year Unmetered Sales Revenues (b)	<u>77,060</u>
(3) Adjustment (1) - (2)	\$ <u>(6,347)</u>

- (a) Applicant's Schedule E-4**
- (b) Applicant's Schedule C-2.1a**

SCHEDULE C-3.3

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Other Operating Revenue Adjustment**

(1) Adjusted Other Operating Revenues (a)	\$	24,168
(2) Test Year Other Operating Revenues (b)		<u>11,691</u>
(3) Adjustment (1) - (2)	\$	<u>12,477</u>

- (a) Applicant's Schedule E-4**
(b) Applicant's Schedule C-2.1a

SCHEDULE C-3.4

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Purchased Water Adjustment**

(1) Purchased Water Expense (a)	\$ 148,936
(2) Test Year Purchased Water Expense (b)	<u>144,837</u>
(3) Adjustment (1) - (2)	<u>\$ 4,099</u>

- (a) Derived from Applicant's Schedule E-4 and Staff's DR #2**
(b) Applicant's Schedule C-2.1a

SCHEDULE C-3.5

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Lobbying Expense Adjustment**

(1) Elimination of Lobbying Expense (a)	\$ <u> (118)</u>
------------------------------------------------	----------------------------------

(a) Derived from Staff's DR #3

SCHEDULE C-3.6

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Uncollectible Expense Adjustment**

(1) Adjusted Operating Revenues (a)	\$ 482,461
(2) Uncollectible Expense Ratio (b)	<u>3.3566%</u>
(3) Adjusted Uncollectible Expense (1) x (2)	16,194
(4) Test Year Uncollectible Expense (c)	<u>12,784</u>
(5) Adjustment (3) - (4)	\$ <u>3,410</u>

- (a) Staff's Schedule C-2**
- (b) Applicant's Schedule WPC-10**
- (c) Applicant's Schedule C-2.1**

SCHEDULE C-3.7

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Rate Case Expense Adjustment**

(1) Estimated Rate Case Expense (a)	\$ 96,000
(2) Amortization Period (b)	<u>5</u>
(3) Annual Amortization (1) / (2)	<u>\$ 19,200</u>

- (a) Applicant's Schedule C-3.7**
(b) Refer to Text

SCHEDULE C-3.8

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Tank Painting Expense Adjustment**

(1) Tank Painting Cost (a)	\$ 14,936
(2) Test Year Tank Painting Cost (b)	<u>11,604</u>
(3) Adjustment (1) - (2)	\$ <u>3,332</u>

- (a) Derived from Applicant's Schedule WPC-3.8**
(b) Applicant's Schedule WPC-2.1

SCHEDULE C-3.9

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Depreciation Expense Adjustment**

(1) Adjusted Depreciation Expense (a)	\$ 66,156
(2) Test Year Depreciation Expense (b)	<u>63,192</u>
(3) Adjustment (1) - (2)	\$ <u>2,964</u>

- (a) Staff's Schedule B-3.2**
(b) Applicant's Schedule C-2

SCHEDULE C-3.10

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Summary of Taxes Other Than Income Adjustment**

	<u>Schedule Reference</u>	
(1) Property Tax	C-3.10a	\$ 157,690
(2) Excise Tax	C-3.10b	22,126
(3) PUCO & OCC Assessment	C-3.10c	1,079
(4) EPA License Fee	C-3.10d	<u>3,000</u>
(5) Total Taxes Other Than Income Taxes (1) thru (4)		\$ 183,895
(6) Test Year Taxes Other Than Income Taxes (a)		<u>198,340</u>
(7) Adjustment (5) - (6)		\$ <u>(14,445)</u>

(a) Applicant's Schedule C-2.1

SCHEDULE C-3.10a

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Calculation of Ohio Property Taxes**

(1) Jurisdictional Plant in Service at 6/30/08 (a)	\$ 3,305,638
(2) Assessment Valuation Percentage (b)	<u>57.00%</u>
(3) Assessed Property at 6/30/08 (1) x (2)	1,884,213
(4) Average Property Tax Rate - Per \$1,000 (b)	<u>83.89</u>
(5) Jurisdictional Property Tax (3) x (4)	\$ <u>157,690</u>

- (a) Staff's Schedule B-2.1**
(b) Applicant's Schedule WPC-3.10a

SCHEDULE C-3.10b

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Ohio Gross Receipts Taxes**

	Adjusted Operating Income	Proforma Operating Income
(1) Operating Revenues (a)	\$ 482,461	\$ 886,491
<u>Exemptions:</u>		
(2) Statutory Exemption (b)	269	269
(3) Uncollectible Accounts Expense (1) x 3.3586% (c)	18,194	29,756
(4) Non-Taxable Receipts (1) x 0.040522% (d)	196	359
(5) Total Exemptions (2) thru (4)	16,659	30,384
(6) Net Taxable Receipts (1) - (5)	465,802	856,107
(7) Tax Rate	4.75%	4.75%
(8) Ohio Gross Receipts Tax (6) x (7)	\$ 22,126	\$ 40,865

- (a) Staff's Schedule C-1
- (b) Derived from Staff's DR #6
- (c) Staff's Schedule C-3.6
- (d) Derived from Staff's DR #6 \$178.31 / \$440,032.61

SCHEDULE C-3.10c

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Calculation of PUCO Maintenance and OCC Fund**

(1) PUCO Maintenance Fee (a)	\$	51,928
(2) OCC Fund Assessment (a)		12,297
(3) Total (1) + (2)		64,225
(4) Masury Allocation (b)		1.68%
(5) Total (3) x (4)	\$	1,079

- (a) Latest Known Assessment**
(b) Applicant's Schedule C-3.12

SCHEDULE C-3.10d

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
EPA License to Operate Fee**

(1) 2008 EPA License to Operate Fee (a)

\$ 3,000

(a) Applicant's Schedule WPC-2.1a

SCHEDULE C-3.11

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Federal Income Tax Expense Adjustment**

(1) Adjusted Federal Income Taxes (a)	\$ (50,718)
(2) Test Year Federal Income Taxes (b)	<u>(51,635)</u>
(3) Adjustment (1) - (2)	\$ <u>917</u>

(a) Staff's Schedule C-4
(b) Applicant's Schedule C-2

SCHEDULE C-4

**Aqua Ohio, Inc. Masury Division
Case No. 09-560-WW-AIR
Calculation of Federal Income Taxes**

	<u>Adjusted Operating Income</u>	<u>Proforma Operating Income</u>
(1) Operating Income Before FIT (a)	\$ (76,355)	\$ 295,574
<u>Reconciling Items:</u>		
(2) Interest Charges (b)	(68,441)	(68,441)
(3) Book Depreciation (c)	66,156	66,156
(4) Tax Accelerated Depreciation (d)	<u>92,334</u>	<u>92,334</u>
(5) Excess of Tax Over Book Depreciation (3) - (4)	(26,178)	(26,178)
<u>Other Reconciling Items:</u>		
(6) Rate Case Expense (e)	19,200	19,200
(7) Tank Painting Expense (f)	<u>14,936</u>	<u>14,936</u>
(8) Total Other Reconciling Items (6) + (7)	34,136	34,136
(9) Total Reconciling Items (2) + (5) + (8)	(60,483)	(60,483)
(10) Federal Taxable Income (1) + (9)	(136,838)	235,091
<u>Federal Income Taxes:</u>		
(11) First \$895 x 15%	(134)	134
(12) Next \$448 x 25%	(112)	112
(13) Next \$448 x 34%	(152)	152
(14) Next \$4,207 x 39%	(1,641)	1,641
(15) Next \$173,004 x 34%	(44,486)	58,821
(16) Next \$89,500 x 35%	0	19,632
(17) Next \$59,667 x 38%	0	0
(18) Excess of Taxable Income Over \$328,167 x 35%	<u>0</u>	<u>0</u>
(19) Federal Income Taxes (11) Through (18)	(46,525)	80,492
<u>Deferred Income Taxes:</u>		
(20) Tax Accelerated Depreciation (d)	92,334	92,334
(21) Tax Straight Line Depreciation (d)	<u>66,156</u>	<u>66,156</u>
(22) Excess of Tax Accelerated over Tax S/L Deprec. (20) - (21)	26,178	26,178
(23) Deferred @34.00%	8,901	8,901
<u>Other Deferred Taxes:</u>		
(24) Amortization of Prior Years ITC (d)	(1,488)	(1,488)
(25) Rate Case Expense (e)	(6,528)	(6,528)
(26) Tank Painting Expense (f)	<u>\$ (5,078)</u>	<u>\$ (5,078)</u>
(27) Total Other Deferred Taxes (24) Thru (26)	\$ (13,094)	\$ (13,094)
(28) Total Deferred Taxes (23) + (27)	<u>(4,183)</u>	<u>(4,183)</u>
(29) Total Federal Income Taxes (19) + (28)	<u>\$ (50,718)</u>	<u>\$ 76,299</u>
(a) Staff's Schedule C-1		
(b) Staff's Schedule B-1, \$2,179,641 x 0.0314, Weighted Cost of Debt		
(c) Staff's Schedule B-3.2		
(d) Derived from Applicant's Schedule C-4 and Staff's Workpapers		
(e) Staff's Schedule C-3.7		
(f) Staff's Schedule C-3.8		

Rate of Return Summary
Capital Structure as of June 30, 2008

	Amount \$	% of Total	% Cost	Weighted Cost %
Long Term Debt	\$50,783,749	49.55%	6.33%	3.14%
Preferred Stock	\$0	0.00%	0.00%	0.00%
Common Equity	<u>\$51,700,944</u>	<u>50.45%</u>	8.73% -9.74%	<u>4.41% -4.91%</u>
Total Capital	\$102,484,693	100.00%		7.54% -8.05%

Schedule D-1.1

Equity Issuance Cost Adjustment
June 30, 2008

(1) Retained Earnings ¹	\$37,653,636
(2) Total Common Equity ²	\$51,700,944
(3) Ratio of (1) to (2)	0.72830
(4) Generic Issuance Cost, f	3.50%
(5) External Equity Ratio, w [1.0 - (3)]	0.27170
(6) Net Adjustment Factor, $(w/(1 - f)) + (1 - w)$	1.00985
(7) Low End Equity Cost [8.65% x (6)]	8.73%
(8) High End Equity Cost [9.65% x (6)]	9.74%

Sources:

- 1 Applicant's Workpaper WPD-1a
- 2 Applicant's Schedule D-1

Schedule D-1.2

Cost of Long Term Debt
June 30, 2008

	Interest Rate	Date Issued	Date Maturity	Face Amount Outstanding	Unamortized (Discount) or Premium	Unamortized Debt Expense	Unamortized Gain or (Loss)	Years To Maturity	Carrying Value	Interest Cost
Bonds:	9.50%	4/1/1988	4/1/2013	\$4,549,500	\$0	\$9,702	\$0	4.753	\$4,539,798	\$434,244
	9.80%	7/15/1990	7/15/2020	5,600,000	0	33,798	0	12.042	5,566,202	551,607
Debt Issued by OWDA:	5.00%	9/1/2001	9/1/2031	11,975,000	0	543,449	0	23.169	11,431,551	622,205
	5.00%	12/1/2002	12/1/2032	5,530,000	0	617,623	0	24.419	4,912,377	301,792
	4.90%	12/1/2002	12/1/2032	5,350,000	0	751,562	0	24.419	4,598,438	292,927
	4.50%	9/1/2005	9/1/2035	21,260,000	0	1,524,617	0	27.169	19,735,383	1,012,815
				<u>54,264,500</u>	<u>0</u>	<u>3,480,751</u>	<u>0</u>		<u>50,783,749</u>	<u>3,215,591</u>
										<u>5.33%</u>

Source: Applicant's Schedule D-3

CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close</u> <u>10Yr Yld</u> <u>(%)</u>	<u>Close</u> <u>30Yr Yld</u> <u>(%)</u>
1-Dec-08	2.7200	3.2400
2-Dec-08	2.6900	3.2000
3-Dec-08	2.6800	3.1800
4-Dec-08	2.5700	3.0800
5-Dec-08	2.6600	3.1100
8-Dec-08	2.7300	3.1500
9-Dec-08	2.6700	3.0800
10-Dec-08	2.6800	3.1000
11-Dec-08	2.6500	3.0900
12-Dec-08	2.5900	3.0600
15-Dec-08	2.5300	3.0000
16-Dec-08	2.3600	2.8700
17-Dec-08	2.1900	2.6600
18-Dec-08	2.0700	2.5500
19-Dec-08	2.1300	2.5600
22-Dec-08	2.1400	2.6000
23-Dec-08	2.1600	2.6300
24-Dec-08	2.1800	2.6300
26-Dec-08	2.1400	2.6100
29-Dec-08	2.1000	2.6200
30-Dec-08	2.0900	2.5800
31-Dec-08	2.2400	2.6900
2-Jan-09	2.4200	2.8200
5-Jan-09	2.4900	3.0400
6-Jan-09	2.5100	3.0700
7-Jan-09	2.4900	3.0700
8-Jan-09	2.4400	3.0500
9-Jan-09	2.4100	3.0600
12-Jan-09	2.3100	2.9900
13-Jan-09	2.3000	3.0200
14-Jan-09	2.2100	2.8900

CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close</u> <u>10Yr Yld</u> <u>(%)</u>	<u>Close</u> <u>30Yr Yld</u> <u>(%)</u>
15-Jan-09	2.2000	2.8600
16-Jan-09	2.3000	2.8900
20-Jan-09	2.3500	2.9500
21-Jan-09	2.5300	3.1400
22-Jan-09	2.5900	3.2500
23-Jan-09	2.6200	3.3300
26-Jan-09	2.6400	3.3800
27-Jan-09	2.5200	3.2300
28-Jan-09	2.6600	3.4300
29-Jan-09	2.8200	3.5600
30-Jan-09	2.8400	3.6000
2-Feb-09	2.7200	3.4700
3-Feb-09	2.8400	3.6200
4-Feb-09	2.9100	3.6700
5-Feb-09	2.9000	3.6300
6-Feb-09	2.9800	3.6800
9-Feb-09	3.0300	3.7100
10-Feb-09	2.8500	3.5300
11-Feb-09	2.7600	3.4500
12-Feb-09	2.7300	3.4600
13-Feb-09	2.8800	3.6800
17-Feb-09	2.6600	3.4900
18-Feb-09	2.7300	3.5300
19-Feb-09	2.8600	3.6900
20-Feb-09	2.7700	3.5700
23-Feb-09	2.7800	3.5300
24-Feb-09	2.8000	3.4900
25-Feb-09	2.9400	3.6000
26-Feb-09	2.9800	3.6500
27-Feb-09	3.0400	3.7200
2-Mar-09	2.9200	3.6500
3-Mar-09	2.9400	3.6800
4-Mar-09	3.0100	3.7000

CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close</u> <u>10Yr Yld</u> <u>(%)</u>	<u>Close</u> <u>30Yr Yld</u> <u>(%)</u>
5-Mar-09	2.8200	3.5100
6-Mar-09	2.8300	3.5000
9-Mar-09	2.8900	3.5900
10-Mar-09	2.9800	3.7100
11-Mar-09	2.9200	3.6600
12-Mar-09	2.8900	3.6300
13-Mar-09	2.8800	3.6700
16-Mar-09	2.9500	3.7700
17-Mar-09	3.0000	3.8000
18-Mar-09	2.5300	3.5700
19-Mar-09	2.6000	3.6100
20-Mar-09	2.6200	3.6500
23-Mar-09	2.6600	3.6900
24-Mar-09	2.6500	3.6100
25-Mar-09	2.7700	3.7200
26-Mar-09	2.7300	3.6500
27-Mar-09	2.7600	3.6200
30-Mar-09	2.7100	3.6000
31-Mar-09	2.6800	3.5600
1-Apr-09	2.6600	3.4900
2-Apr-09	2.7500	3.5800
3-Apr-09	2.9100	3.7200
6-Apr-09	2.9400	3.7600
7-Apr-09	2.9100	3.7300
8-Apr-09	2.8500	3.6600
9-Apr-09	2.9300	3.7600
13-Apr-09	2.8500	3.6900
14-Apr-09	2.7900	3.6600
15-Apr-09	2.7600	3.6500
16-Apr-09	2.8300	3.7100
17-Apr-09	2.9300	3.7900
20-Apr-09	2.8400	3.6900
21-Apr-09	2.9000	3.7500
22-Apr-09	2.9600	3.8300
23-Apr-09	2.9300	3.8000

CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close</u> <u>10Yr Yld</u> <u>(%)</u>	<u>Close</u> <u>30Yr Yld</u> <u>(%)</u>
24-Apr-09	3.0000	3.8800
27-Apr-09	2.9200	3.8400
28-Apr-09	3.0000	3.9500
29-Apr-09	3.1000	4.0300
30-Apr-09	3.1200	4.0400
1-May-09	3.1700	4.0900
4-May-09	3.1600	4.0700
5-May-09	3.1600	4.0500
6-May-09	3.1500	4.0800
7-May-09	3.3000	4.2600
8-May-09	3.2900	4.2700
11-May-09	3.1800	4.1800
12-May-09	3.1700	4.1600
13-May-09	3.1100	4.0900
14-May-09	3.1100	4.0700
15-May-09	3.1200	4.0800
18-May-09	3.2100	4.1800
19-May-09	3.2400	4.2100
20-May-09	3.2000	4.1600
21-May-09	3.3500	4.3100
22-May-09	3.4500	4.3900
26-May-09	3.4900	4.4500
27-May-09	3.6900	4.6100
28-May-09	3.6700	4.5300
29-May-09	3.4600	4.3400
1-Jun-09	3.7100	4.5700
2-Jun-09	3.6400	4.4900
3-Jun-09	3.5500	4.4500
4-Jun-09	3.7200	4.5900
5-Jun-09	3.8600	4.6600
8-Jun-09	3.8900	4.6400
9-Jun-09	3.8600	4.6500
10-Jun-09	3.9400	4.7500
11-Jun-09	3.8600	4.6900
12-Jun-09	3.7900	4.6300

CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close</u> <u>10Yr Yld</u> <u>(%)</u>	<u>Close</u> <u>30Yr Yld</u> <u>(%)</u>
15-Jun-09	3.7100	4.5500
16-Jun-09	3.6700	4.5000
17-Jun-09	3.6500	4.4700
18-Jun-09	3.8300	4.6200
19-Jun-09	3.7900	4.5200
22-Jun-09	3.6900	4.4300
23-Jun-09	3.6400	4.3700
24-Jun-09	3.6800	4.4300
25-Jun-09	3.5500	4.3300
26-Jun-09	3.5100	4.3000
29-Jun-09	3.4900	4.3100
30-Jun-09	3.5200	4.3100
1-Jul-09	3.5400	4.3500
2-Jul-09	3.4900	4.3200
6-Jul-09	3.5100	4.3500
7-Jul-09	3.4600	4.3100
8-Jul-09	3.2900	4.1600
9-Jul-09	3.4100	4.3200
10-Jul-09	3.3000	4.2000
13-Jul-09	3.3500	4.2300
14-Jul-09	3.4500	4.3500
15-Jul-09	3.6000	4.4900
16-Jul-09	3.5600	4.4500
17-Jul-09	3.6500	4.5300
20-Jul-09	3.5900	4.4700
21-Jul-09	3.4800	4.3700
22-Jul-09	3.5500	4.4700
23-Jul-09	3.7100	4.6000
24-Jul-09	3.6700	4.5500
27-Jul-09	3.7100	4.6100
28-Jul-09	3.6900	4.5600
29-Jul-09	3.6600	4.5000
30-Jul-09	3.6400	4.4500
31-Jul-09	3.5000	4.3100
3-Aug-09	3.6400	4.4200

CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close</u> <u>10Yr Yld</u> <u>(%)</u>	<u>Close</u> <u>30Yr Yld</u> <u>(%)</u>
4-Aug-09	3.6800	4.4600
5-Aug-09	3.7600	4.5600
6-Aug-09	3.7500	4.5200
7-Aug-09	3.8500	4.6000
10-Aug-09	3.7700	4.5300
11-Aug-09	3.6900	4.4500
12-Aug-09	3.7000	4.5200
13-Aug-09	3.5900	4.4200
14-Aug-09	3.5600	4.4100
17-Aug-09	3.4900	4.3500
18-Aug-09	3.5300	4.3600
19-Aug-09	3.4600	4.2900
20-Aug-09	3.4300	4.2400
21-Aug-09	3.5600	4.3600
24-Aug-09	3.4900	4.2900
25-Aug-09	3.4500	4.2300
26-Aug-09	3.4400	4.2000
27-Aug-09	3.4600	4.2300
28-Aug-09	3.4500	4.2100
31-Aug-09	3.4000	4.1800
1-Sep-09	3.3800	4.2000
2-Sep-09	3.3000	4.1000
3-Sep-09	3.3300	4.1500
4-Sep-09	3.4400	4.2700
8-Sep-09	3.4700	4.3100
9-Sep-09	3.4800	4.3400
10-Sep-09	3.3400	4.1800
11-Sep-09	3.3400	4.1800
14-Sep-09	3.4100	4.2200
15-Sep-09	3.4500	4.2600
16-Sep-09	3.4700	4.2700
17-Sep-09	3.4000	4.1800
18-Sep-09	3.4700	4.2300
21-Sep-09	3.4900	4.2400
22-Sep-09	3.4600	4.2100

CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close</u> <u>10Yr Yld</u> <u>(%)</u>	<u>Close</u> <u>30Yr Yld</u> <u>(%)</u>
23-Sep-09	3.4200	4.2000
24-Sep-09	3.3800	4.1700
25-Sep-09	3.3300	4.0900
28-Sep-09	3.3000	4.0500
29-Sep-09	3.2900	4.0200
30-Sep-09	3.3100	4.0500
1-Oct-09	3.1900	3.9600
2-Oct-09	3.2200	4.0100
5-Oct-09	3.2200	4.0200
6-Oct-09	3.2500	4.0600
7-Oct-09	3.1700	3.9900
8-Oct-09	3.2600	4.0900
9-Oct-09	3.3800	4.2300
12-Oct-09	3.3800	4.2300
13-Oct-09	3.3100	4.1500
14-Oct-09	3.4200	4.2800
15-Oct-09	3.4700	4.3100
16-Oct-09	3.4200	4.2500
19-Oct-09	3.3900	4.2200
20-Oct-09	3.3400	4.1600
21-Oct-09	3.4100	4.2300
22-Oct-09	3.4200	4.2500
23-Oct-09	3.4700	4.2900
26-Oct-09	3.5500	4.3700
27-Oct-09	3.4600	4.2900
28-Oct-09	3.4100	4.2400
29-Oct-09	3.5000	4.3400
30-Oct-09	3.3900	4.2400
2-Nov-09	3.4200	4.2700
3-Nov-09	3.4700	4.3400
4-Nov-09	3.5500	4.4300
5-Nov-09	3.5300	4.4100
6-Nov-09	3.5000	4.3900
9-Nov-09	3.4900	4.4000
10-Nov-09	3.4800	4.4100

CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close</u> <u>10Yr Yld</u> <u>(%)</u>	<u>Close</u> <u>30Yr Yld</u> <u>(%)</u>
11-Nov-09	3.4700	4.4100
12-Nov-09	3.4500	4.3900
13-Nov-09	3.4300	4.3600
16-Nov-09	3.3300	4.2600
17-Nov-09	3.3200	4.2500
18-Nov-09	3.3700	4.3000
19-Nov-09	3.3500	4.2900
20-Nov-09	3.3600	4.3000
23-Nov-09	3.3600	4.2900
24-Nov-09	3.3200	4.2600
25-Nov-09	3.2800	4.2400
27-Nov-09	3.2300	4.2200
30-Nov-09	3.2000	4.1900

Averages:

Last 64 days	3.3844	4.2300
Last 127 days	3.4961	4.3308
Last 190 days	3.3321	4.1825
Last 252 days	3.1460	3.9381
	3.3396	4.1703

3.7550

CAPM Cost of
Equity Estimate

7.8617

$$\begin{aligned}\text{CAPM} &= \text{risk free return} + \beta(\text{large company total return} - \text{risk free return}) \\ &= 3.7550\% + .7333(5.6\%) \end{aligned}$$

Source: Yahoo.com

DCF Cost of Equity Estimate

Stock Prices¹ (\$):

	<u>AWK</u>	<u>AWR</u>	<u>CWT</u>	<u>WTR</u>
12/01/08	19.0700	31.8800	39.6400	20.4800
12/02/08	18.9700	33.4900	41.0500	19.8500
12/03/08	20.2100	33.6300	41.2800	20.6600
12/04/08	20.2700	32.7500	40.3400	19.9100
12/05/08	20.4900	29.8000	41.3500	20.4900
12/08/08	20.9600	30.8100	40.9900	19.9500
12/09/08	20.7200	27.8900	39.5900	19.7200
12/10/08	20.6700	29.7600	39.7400	19.1900
12/11/08	20.7000	29.2500	38.5300	18.7600
12/12/08	20.4100	30.5400	40.5700	19.1800
12/15/08	20.6400	29.8800	40.4200	19.3200
12/16/08	20.9400	31.8000	42.5200	20.0000
12/17/08	21.8200	31.5400	42.8700	20.0600
12/18/08	20.7400	31.7500	43.9300	19.8400
12/19/08	21.0900	32.7600	45.2200	19.7700
12/22/08	22.0800	32.4600	45.0000	19.8700
12/23/08	22.1600	32.2400	44.7400	19.9700
12/24/08	21.9200	32.6500	44.6500	20.0800
12/26/08	21.7800	32.7100	45.2800	20.1300
12/29/08	20.9400	30.7800	43.7200	20.0000
12/30/08	19.7500	30.3000	45.9700	19.0000
12/31/08	20.8800	32.9800	46.4300	20.5900
01/02/09	21.1200	34.1800	45.8600	20.9800
01/05/09	20.4900	33.6600	45.2700	20.7400
01/06/09	20.4900	32.8600	42.8500	20.0800
01/07/09	20.0200	32.2900	42.1100	19.8100
01/08/09	20.1900	32.3400	42.3200	19.9300
01/09/09	20.7100	31.1000	41.3300	19.3700
01/12/09	19.8400	31.2500	41.3300	19.4300
01/13/09	20.0800	32.0700	42.2800	19.9100
01/14/09	19.9000	30.9900	40.7300	19.5100
01/15/09	20.3400	31.6700	42.5500	19.5800
01/16/09	20.4500	32.3600	42.8000	20.0200
01/20/09	20.3600	31.9400	41.4600	19.4000
01/21/09	20.7900	32.5600	42.3800	19.6400
01/22/09	20.7000	32.2600	42.2500	19.6500
01/23/09	20.7800	32.1600	42.5400	19.6600
01/26/09	20.8500	33.2000	43.8300	20.1200
01/27/09	21.2700	33.8500	44.3200	20.4000
01/28/09	21.3600	34.6400	44.2100	20.8100
01/29/09	21.1400	35.0000	44.4300	20.7500
01/30/09	21.1800	34.5700	43.5000	20.7400
02/02/09	20.7600	36.0600	45.2100	20.9100

DCF Cost of Equity Estimate

Stock Prices¹ (\$):

	<u>AWK</u>	<u>AWR</u>	<u>CWT</u>	<u>WTR</u>
02/03/09	21.0600	35.9000	45.2300	20.9500
02/04/09	20.7100	36.2200	45.1500	21.0300
02/05/09	20.9000	36.6000	45.1800	21.0500
02/06/09	21.0300	37.4000	45.8300	21.1900
02/09/09	21.4800	37.0300	44.8900	20.2600
02/10/09	21.2400	35.8200	43.8300	20.3500
02/11/09	21.1300	36.2300	43.7900	20.6900
02/12/09	21.0500	36.7200	44.2700	20.6900
02/13/09	20.6400	36.6600	43.6900	20.7300
02/17/09	20.8300	35.9700	43.0000	20.3000
02/18/09	20.5700	35.1400	41.8500	19.8300
02/19/09	20.7500	34.0300	41.1100	19.2000
02/20/09	20.7000	33.9100	40.3000	18.7900
02/23/09	20.2100	34.0000	40.5200	18.9400
02/24/09	19.7500	34.1700	40.7500	19.1300
02/25/09	19.2100	33.9800	40.8800	19.1500
02/26/09	18.5000	33.4500	38.0100	19.1200
02/27/09	18.5500	33.5500	39.2600	18.4000
03/02/09	17.8300	33.9300	39.9600	18.2700
03/03/09	16.8300	31.7500	38.3800	18.3500
03/04/09	17.1800	32.8000	39.7800	18.8800
03/05/09	16.9600	31.5400	37.8300	18.2500
03/06/09	16.8200	31.5400	39.0400	18.0600
03/09/09	16.6600	29.7800	37.9200	17.7400
03/10/09	16.5300	30.9100	38.8400	17.6300
03/11/09	16.7100	30.6000	38.2400	16.9100
03/12/09	16.6100	32.6700	39.6600	17.3600
03/13/09	18.1600	35.4600	40.4800	17.7200
03/16/09	19.0100	35.4800	39.4600	17.7100
03/17/09	18.2500	37.0800	40.5500	18.3000
03/18/09	18.6300	38.2100	41.8700	18.2600
03/19/09	18.3000	37.4500	43.2200	18.7400
03/20/09	18.3900	36.4300	42.2500	18.8700
03/23/09	18.0500	38.5400	43.7900	19.9300
03/24/09	18.0900	35.7800	40.3500	19.3800
03/25/09	18.3800	35.2600	40.6400	19.4200
03/26/09	18.5100	35.6600	41.7900	19.8400
03/27/09	18.5500	34.9300	40.5300	19.4100
03/30/09	18.5000	35.8800	41.8600	19.6900
03/31/09	19.2400	36.3200	41.8600	20.0000
04/01/09	18.2700	35.3600	40.8700	19.9100
04/02/09	18.1800	35.8100	40.4300	19.5300
04/03/09	18.3400	35.5800	40.2900	19.4700

DCF Cost of Equity Estimate

Stock Prices¹ (\$):

	<u>AWK</u>	<u>AWR</u>	<u>CWT</u>	<u>WTR</u>
04/06/09	18.2400	35.1400	40.2200	19.5400
04/07/09	18.1700	35.1200	39.2500	19.1200
04/08/09	18.4000	34.9900	39.0500	19.1400
04/09/09	18.2400	35.0600	38.4100	19.0400
04/13/09	17.6900	34.3900	37.4000	19.0400
04/14/09	17.6000	33.6200	36.3500	18.9300
04/15/09	17.8000	34.1600	36.9000	19.0300
04/16/09	18.6300	34.5900	37.2200	19.2300
04/17/09	18.7900	34.6400	37.2900	19.3700
04/20/09	18.4900	33.4000	36.4600	18.8800
04/21/09	18.4700	34.6100	38.0700	18.9100
04/22/09	18.1000	33.7900	37.2900	18.5400
04/23/09	18.0700	34.2000	37.4800	18.3100
04/24/09	18.0000	34.4900	37.8100	18.2900
04/27/09	18.4100	34.6900	38.7400	18.4100
04/28/09	18.2200	34.8600	39.3400	18.6400
04/29/09	18.4200	35.3800	39.9100	18.9000
04/30/09	18.0000	34.5300	39.0300	18.3500
05/01/09	17.5900	33.9000	38.2500	18.1500
05/04/09	17.6100	33.7800	37.5700	18.1000
05/05/09	17.6800	33.3400	37.5800	17.6700
05/06/09	18.1600	33.7600	36.8000	18.2400
05/07/09	18.3400	33.7000	37.0900	18.4300
05/08/09	18.5500	33.8800	37.3600	18.3600
05/11/09	18.4900	33.9600	37.2400	18.1400
05/12/09	18.1000	33.4700	36.8700	18.2100
05/13/09	17.9100	32.0500	35.8600	17.4500
05/14/09	17.6700	31.2100	35.5400	16.7800
05/15/09	17.1200	31.6100	34.9400	16.4600
05/18/09	17.2000	31.7300	35.0500	16.3800
05/19/09	17.2800	32.1100	35.0000	16.6800
05/20/09	17.2600	31.1600	34.4100	16.3000
05/21/09	17.1300	31.5100	34.0800	16.3600
05/22/09	17.0700	31.3200	33.5400	16.3700
05/26/09	17.4900	32.0600	35.1600	17.0000
05/27/09	16.9500	31.0900	34.4900	16.4500
05/28/09	17.2300	31.5500	34.4400	16.6500
05/29/09	17.2800	31.3500	34.8200	16.4900
06/01/09	16.8000	31.6900	35.2600	16.7100
06/02/09	17.0600	31.9300	35.8500	16.5600
06/03/09	17.2300	31.8100	35.2900	16.4800
06/04/09	17.4900	32.5000	35.9100	16.5100
06/05/09	17.4300	33.9500	36.2700	16.4700

DCF Cost of Equity Estimate

Stock Prices¹ (\$):

	<u>AWK</u>	<u>AWR</u>	<u>CWT</u>	<u>WTR</u>
06/08/09	17.7600	34.0100	36.1500	16.6000
06/09/09	18.0000	33.2900	35.8000	16.5800
06/10/09	18.3100	33.0400	35.5800	16.5900
06/11/09	18.6200	33.3000	36.0000	16.8400
06/12/09	18.6800	33.8100	36.3900	17.1600
06/15/09	18.4800	33.1200	35.6300	16.9600
06/16/09	18.3300	32.5900	35.3600	16.7900
06/17/09	18.3600	33.1500	35.4600	16.8600
06/18/09	18.5500	33.4300	35.9000	16.8300
06/19/09	18.5800	32.6400	35.2900	16.6900
06/22/09	18.6000	32.3500	35.7300	16.7600
06/23/09	18.6300	32.2100	35.5500	16.5700
06/24/09	18.5500	32.2000	35.3600	16.6200
06/25/09	18.7900	32.5000	35.4800	16.8900
06/26/09	19.0700	33.4200	36.3400	17.0300
06/29/09	19.2600	34.4300	36.8300	17.6900
06/30/09	19.1100	34.6400	36.8400	17.9000
07/01/09	19.1100	35.3500	37.6200	17.8000
07/02/09	18.7800	33.5900	36.5000	17.4700
07/06/09	18.6200	34.6900	36.7700	17.4500
07/07/09	18.3600	34.4400	36.4300	17.2300
07/08/09	18.3900	35.1500	36.1700	17.0700
07/09/09	18.2800	34.4800	35.5200	16.8000
07/10/09	18.4000	34.7600	35.9300	17.0300
07/13/09	18.6900	35.4900	36.5000	17.4300
07/14/09	18.9300	35.9300	36.2700	17.4700
07/15/09	18.4500	36.6300	36.9400	17.4800
07/16/09	18.5900	37.0700	37.4300	17.4700
07/17/09	18.7100	36.7300	36.7200	17.2500
07/20/09	18.8600	36.1400	36.3500	17.2400
07/21/09	18.8300	36.1600	36.1900	17.4100
07/22/09	18.8500	36.3800	36.3700	17.5200
07/23/09	19.2600	36.2400	36.7800	17.8200
07/24/09	19.3600	36.5300	37.6500	18.0400
07/27/09	19.5500	36.4800	37.2800	17.9600
07/28/09	19.8300	36.4400	37.9800	18.1600
07/29/09	19.7500	36.0900	37.5000	18.1200
07/30/09	19.5700	36.6800	38.1000	18.1300
07/31/09	19.7100	36.3500	37.8700	18.0600
08/03/09	19.9400	36.5700	38.4500	17.8200
08/04/09	19.9900	36.8400	37.9900	18.1200
08/05/09	20.0000	35.8900	37.2000	17.9600
08/06/09	19.8000	34.7400	36.3900	17.7800

DCF Cost of Equity Estimate

Stock Prices¹ (\$):

	<u>AWK</u>	<u>AWR</u>	<u>CWT</u>	<u>WTR</u>
08/07/09	20.1300	33.4100	36.9700	17.5500
08/10/09	20.3800	34.3800	37.8200	17.7300
08/11/09	20.2200	34.9700	38.1100	17.7300
08/12/09	19.5300	34.7100	39.0200	17.2200
08/13/09	19.3400	34.4600	37.9100	16.9200
08/14/09	19.1400	33.9700	37.6800	16.7800
08/17/09	19.2500	33.6900	37.5400	16.7900
08/18/09	19.3900	33.3300	37.5400	16.8600
08/19/09	19.8600	33.4800	38.0900	17.1300
08/20/09	20.0700	33.4700	38.1400	17.4200
08/21/09	20.0900	33.9500	38.3500	17.4700
08/24/09	19.9800	33.7600	38.0900	17.4300
08/25/09	20.2400	33.7100	37.8200	17.3700
08/26/09	20.4700	33.8500	37.9000	17.2800
08/27/09	20.3600	33.7600	37.8900	17.3100
08/28/09	20.2100	33.4100	37.6600	17.2100
08/31/09	20.1000	33.0200	37.2200	16.8500
09/01/09	19.9600	32.7900	36.9400	16.7000
09/02/09	19.8900	32.8200	36.6600	16.7300
09/03/09	19.7800	32.8900	36.5600	16.6900
09/04/09	19.8100	32.4500	36.2300	16.7600
09/08/09	19.9900	35.2300	36.7500	16.8500
09/09/09	19.9000	36.0200	37.1900	16.9100
09/10/09	19.9400	36.0500	37.2100	16.8400
09/11/09	19.8200	35.6600	36.5100	16.8000
09/14/09	19.9000	36.1500	37.0300	16.8600
09/15/09	20.1700	36.3500	38.0400	17.0000
09/16/09	20.4300	36.4800	38.3800	17.3200
09/17/09	20.4800	36.3800	38.6800	17.2500
09/18/09	20.2500	36.1800	38.9500	17.3100
09/21/09	20.2100	35.8400	38.4300	17.2400
09/22/09	20.0700	35.4100	38.4000	17.0400
09/23/09	20.1000	35.3600	38.4300	16.9500
09/24/09	19.8300	35.4400	38.4200	16.9400
09/25/09	19.7400	35.2000	38.1300	16.8000
09/28/09	20.1700	36.1300	39.1800	17.2100
09/29/09	20.1900	36.1700	39.2100	17.2000
09/30/09	19.9400	36.1800	38.9400	17.6400
10/01/09	19.7700	35.5600	38.6600	17.1100
10/02/09	19.5300	35.3200	38.6100	16.7700
10/05/09	19.4500	35.8300	38.7600	16.8900
10/06/09	19.5000	36.0600	38.6100	16.8500
10/07/09	19.5800	36.5100	38.7900	16.8600

DCF Cost of Equity Estimate

Stock Prices¹ (\$):

	<u>AWK</u>	<u>AWR</u>	<u>CWT</u>	<u>WTR</u>
10/08/09	19.6800	36.6500	39.1300	16.7000
10/09/09	19.7900	36.8000	39.5500	16.8100
10/12/09	20.1000	36.3900	39.4400	16.6300
10/13/09	20.0500	36.0400	39.5200	16.6500
10/14/09	19.8200	36.2900	39.5500	16.8100
10/15/09	19.7600	36.2600	39.6300	16.5900
10/16/09	19.9500	36.0800	39.5600	16.6500
10/19/09	19.9100	35.9300	40.1100	16.7000
10/20/09	19.8700	35.1500	40.0400	16.2500
10/21/09	19.7800	35.0300	39.8700	16.0800
10/22/09	19.9000	35.2600	39.7400	16.0800
10/23/09	19.4900	34.6600	38.8900	15.8900
10/26/09	19.2800	34.5300	38.4700	15.8700
10/27/09	19.0600	34.7500	38.5400	15.8600
10/28/09	19.0500	34.5800	38.1700	15.6400
10/29/09	19.2100	33.9100	37.7700	15.6400
10/30/09	18.9700	33.1500	36.5700	15.4500
11/02/09	19.0400	32.9500	36.5300	15.6800
11/03/09	19.3300	33.4200	36.5900	15.7400
11/04/09	19.2800	32.8400	35.7500	15.7100
11/05/09	19.5900	34.4600	36.6200	16.2400
11/06/09	19.5600	34.7100	36.3200	16.1600
11/09/09	20.5000	34.4100	36.2700	16.1700
11/10/09	20.1400	33.6200	35.5300	15.8300
11/11/09	19.9100	33.6500	35.7900	16.1300
11/12/09	20.2700	32.5900	35.1800	15.7300
11/13/09	20.2900	32.3300	35.2800	15.8400
11/16/09	20.4200	33.1700	36.2200	16.1000
11/17/09	21.6300	33.7600	36.6600	16.2400
11/18/09	21.4300	33.3000	36.4300	16.4100
11/19/09	21.4700	32.1300	35.8400	15.9800
11/20/09	21.2900	31.9400	35.7800	15.8800
11/23/09	21.2900	32.8400	36.5000	16.2100
11/24/09	21.8400	33.0400	36.9500	16.2300
11/25/09	22.0100	32.7900	36.7700	16.3500
11/27/09	22.0100	32.1200	36.2600	16.0900

AVERAGE (\$)	19.3960	34.0183	38.8338	17.9758
QUARTERLY DIV. ² (\$)	0.2000	0.2500	0.2925	0.1350
	0.2000	0.2500	0.2950	0.1350
	0.2100	0.2500	0.2950	0.1350
	0.2100	0.2600	0.2950	0.1350
ANNUAL DIVIDEND (\$)	0.8200	1.0100	1.1775	0.5400
YIELD	4.23%	2.97%	3.03%	3.00%
REUTERS ³	11.27%	4.00%	6.00%	8.60%
MSN ⁴	7.50%	4.00%	6.70%	7.70%
YAHOO ⁵	10.73%	4.00%	6.00%	8.33%
VALUE LINE ⁶ :	9.83%	4.00%	6.23%	8.21%
07 EARNINGS (\$)	1.30	1.90	2.10	0.82
11 EARNINGS (\$)	1.55	2.60	2.65	1.25
	4.40%	7.84%	5.82%	10.54%
VALUE LINE, "BOXED"	NA	9.50%	9.00%	10.00%
VALUE LINE	4.40%	8.67%	7.41%	10.27%
DCF GROWTH ESTIMATE	8.47%	5.17%	6.53%	8.72%
DCF COST OF EQUITY ESTIMATE	12.06%	9.37%	9.87%	10.66%
DCF AVERAGE				10.43%
CAPM COST OF EQUITY ESTIMATE				7.86%
COST OF EQUITY ESTIMATE				9.15%

Sources:

- 1 MSN Investor
- 2 MSN Investor & Value Line Investment Guide
- 3 investor.reuters.com
- 4 moneycentral.msn.com
- 5 finance.yahoo.com
- 6 Value Line Investment Guide

AWK Non-Constant DCF Calculation

g= 8.47% non const const
 dcf= 12.06% dcf= 13.06%

D= \$0.82 g(e)= 6.70%

P= -\$19.40

GROWTH		
<u>YEAR</u>	<u>RATE</u>	<u>DIVIDEND</u>
1	8.47%	\$0.89
2	8.47%	\$0.96
3	8.47%	\$1.05
4	8.47%	\$1.14
5	8.47%	\$1.23
6	8.39%	\$1.33
7	8.30%	\$1.45
8	8.21%	\$1.56
9	8.12%	\$1.69
10	8.03%	\$1.83
11	7.94%	\$1.97
12	7.85%	\$2.13
13	7.76%	\$2.29
14	7.68%	\$2.47
15	7.59%	\$2.66
16	7.50%	\$2.85
17	7.41%	\$3.07
18	7.32%	\$3.29
19	7.23%	\$3.53
20	7.14%	\$3.78
21	7.05%	\$4.05
22	6.97%	\$4.33
23	6.88%	\$4.63
24	6.79%	\$4.94
25	6.70%	\$5.27
26	6.70%	\$5.62
27	6.70%	\$6.00
28	6.70%	\$6.40
29	6.70%	\$6.83
30	6.70%	\$7.29

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4
g(e) is from Schedule D-1.9

AWR Non-Constant DCF Calculation

g=	5.17%	non const dcf=	9.37%	const dcf=	8.29%
D=	\$1.01			g(e)=	6.70%
		P=	-\$34.02		

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	5.17%	\$1.06
2	5.17%	\$1.12
3	5.17%	\$1.17
4	5.17%	\$1.24
5	5.17%	\$1.30
6	5.24%	\$1.37
7	5.32%	\$1.44
8	5.40%	\$1.52
9	5.47%	\$1.60
10	5.55%	\$1.69
11	5.63%	\$1.79
12	5.70%	\$1.89
13	5.78%	\$2.00
14	5.86%	\$2.11
15	5.93%	\$2.24
16	6.01%	\$2.37
17	6.09%	\$2.52
18	6.16%	\$2.67
19	6.24%	\$2.84
20	6.32%	\$3.02
21	6.39%	\$3.21
22	6.47%	\$3.42
23	6.55%	\$3.64
24	6.62%	\$3.88
25	6.70%	\$4.14
26	6.70%	\$4.42
27	6.70%	\$4.72
28	6.70%	\$5.03
29	6.70%	\$5.37
30	6.70%	\$5.73

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4
g(e) is from Schedule D-1.9

CWT Non-Constant DCF Calculation

non const const
g= 6.53% dcf= 9.87% dcf= 9.76%
D= \$1.18 g(e)= 6.70%
P= -\$38.83

GROWTH		
<u>YEAR</u>	<u>RATE</u>	<u>DIVIDEND</u>
1	6.53%	\$1.25
2	6.53%	\$1.34
3	6.53%	\$1.42
4	6.53%	\$1.52
5	6.53%	\$1.62
6	6.54%	\$1.72
7	6.54%	\$1.83
8	6.55%	\$1.95
9	6.56%	\$2.08
10	6.57%	\$2.22
11	6.58%	\$2.36
12	6.59%	\$2.52
13	6.60%	\$2.69
14	6.60%	\$2.86
15	6.61%	\$3.05
16	6.62%	\$3.26
17	6.63%	\$3.47
18	6.64%	\$3.70
19	6.65%	\$3.95
20	6.66%	\$4.21
21	6.66%	\$4.49
22	6.67%	\$4.79
23	6.68%	\$5.11
24	6.69%	\$5.45
25	6.70%	\$5.82
26	6.70%	\$6.21
27	6.70%	\$6.62
28	6.70%	\$7.07
29	6.70%	\$7.54
30	6.70%	\$8.05

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4
g(e) is from Schedule D-1.9

WTR Non-Constant DCF Calculation

non const const
g= 8.72% dcf= 10.66% dcf= 11.99%

D= \$0.54 g(e)= 6.70%
P= -\$17.98

GROWTH		
<u>YEAR</u>	<u>RATE</u>	<u>DIVIDEND</u>
1	8.72%	\$0.59
2	8.72%	\$0.64
3	8.72%	\$0.69
4	8.72%	\$0.75
5	8.72%	\$0.82
6	8.62%	\$0.89
7	8.52%	\$0.97
8	8.42%	\$1.05
9	8.32%	\$1.14
10	8.22%	\$1.23
11	8.12%	\$1.33
12	8.02%	\$1.44
13	7.91%	\$1.55
14	7.81%	\$1.67
15	7.71%	\$1.80
16	7.61%	\$1.94
17	7.51%	\$2.08
18	7.41%	\$2.24
19	7.31%	\$2.40
20	7.21%	\$2.57
21	7.10%	\$2.75
22	7.00%	\$2.95
23	6.90%	\$3.15
24	6.80%	\$3.36
25	6.70%	\$3.59
26	6.70%	\$3.83
27	6.70%	\$4.09
28	6.70%	\$4.36
29	6.70%	\$4.65
30	6.70%	\$4.96

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4
g(e) is from Schedule D-1.9

Growth in U.S. Gross National Product, 1929
to 2008

Year	GNP (\$billion)	Change (\$billion)	Growth%
1929	103.6		
1930	91.2	-12.4	-11.97%
1931	76.5	-14.7	-16.12%
1932	58.7	-17.8	-23.27%
1933	56.4	-2.3	-3.82%
1934	66	9.6	17.02%
1935	73.3	7.3	11.06%
1936	83.8	10.5	14.32%
1937	91.9	8.1	9.67%
1938	86.1	-5.8	-6.31%
1939	92.2	6.1	7.08%
1940	101.4	9.2	9.98%
1941	126.7	25.3	24.95%
1942	161.9	35.2	27.78%
1943	198.6	36.7	22.67%
1944	219.8	21.2	10.67%
1945	223	3.2	1.46%
1946	222.2	-0.8	-0.36%
1947	244.1	21.9	9.86%
1948	269.1	25	10.24%
1949	267.2	-1.9	-0.71%
1950	293.7	26.5	9.92%
1951	339.3	45.6	15.53%
1952	358.3	19	5.60%
1953	379.3	21	5.86%
1954	380.4	1.1	0.29%
1955	414.7	34.3	9.02%
1956	437.4	22.7	5.47%
1957	461.1	23.7	5.42%
1958	467.2	6.1	1.32%
1959	506.6	39.4	8.43%
1960	526.4	19.8	3.91%
1961	544.8	18.4	3.50%
1962	585.7	40.9	7.51%
1963	617.8	32.1	5.48%
1964	663.6	45.8	7.41%
1965	719.1	55.5	8.36%
1966	787.7	68.6	9.54%
1967	832.4	44.7	5.67%
1968	909.8	77.4	9.30%
1969	984.4	74.6	8.20%
1970	1038.3	53.9	5.48%
1971	1126.8	88.5	8.52%
1972	1237.9	111.1	9.86%
1973	1382.3	144.4	11.66%
1974	1499.5	117.2	8.48%

Growth in U.S. Gross National Product, 1929
to 2008

Year	GNP (\$billion)	Change (\$billion)	Growth%
1975	1637.7	138.2	9.22%
1976	1824.6	186.9	11.41%
1977	2030.1	205.5	11.26%
1978	2293.8	263.7	12.99%
1979	2562.2	268.4	11.70%
1980	2788.1	225.9	8.82%
1981	3126.8	338.7	12.15%
1982	3253.2	126.4	4.04%
1983	3534.6	281.4	8.65%
1984	3930.9	396.3	11.21%
1985	4217.5	286.6	7.29%
1986	4460.1	242.6	5.75%
1987	4736.4	276.3	6.19%
1988	5100.4	364	7.69%
1989	5482.1	381.7	7.48%
1990	5800.5	318.4	5.81%
1991	5992.1	191.6	3.30%
1992	6342.3	350.2	5.84%
1993	6667.4	325.1	5.13%
1994	7085.2	417.8	6.27%
1995	7414.7	329.5	4.65%
1996	7838.5	423.8	5.72%
1997	8332.4	493.9	6.30%
1998	8793.5	461.1	5.53%
1999	9353.5	560	6.37%
2000	9951.5	598	6.39%
2001	10286.2	334.7	3.36%
2002	10642.3	356.1	3.46%
2003	11142.1	499.8	4.70%
2004	11867.8	725.7	6.51%
2005	12638.4	770.6	6.49%
2006	13398.9	760.5	6.02%
2007	14077.6	678.7	5.07%
2008	14441.4	363.8	2.58%
Average			6.70%

Sources: (1) National Income and Product Accounts (NIPA) from the U. S. Bureau of Economic Analysis and Econostats; BEA Data; NIPA Index; Section 1. Domestic Product and Income Table 1.7.5 Relation of Gross Domestic Product, Gross National Product, Net National Product, National Income, and Personal Income. (2) U. S. Department of Commerce; Survey of Current of the United States Business and Historical Statistics

Typical Bill Comparison

The following charts show typical bills resulting from the proposed rates for customers served from 5/8", 1", and 2" meters.

The type of customer analyzed for each meter size is indicated in bold.

Note: Averages are not cumulative averages, but rather the average for that class per specific meter size.

Typical Monthly Bill Comparison 5/8" Meter

<u>Usage (Gal.)</u>	<u>Current Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
0	\$ 5.14	\$ 10.93	\$ 5.79	112.66%
500	7.02	14.10	7.08	100.86
1,000	8.90	17.26	8.36	93.94
2,000	12.66	23.59	10.93	86.34
3,000	16.42	29.92	13.50	82.22
3,700	19.05	34.35	15.30	80.32
4,000	20.18	36.25	16.07	79.64

Note: Bold line represents the average monthly **residential** water consumption.

Typical Monthly Bill Comparison 1" Meter

<u>Usage (Gal.)</u>	<u>Current Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
0	\$ 12.86	\$ 27.33	\$ 14.47	112.44%
3,000	24.14	46.32	22.18	91.84
6,000	35.42	65.31	29.89	84.36
12,000	57.99	103.29	45.30	78.10
13,200	62.50	110.89	48.39	77.41
15,000	69.27	122.28	53.01	76.51

Note: Bold line represents the average monthly **commercial** water consumption.

Typical Monthly Bill Comparison
2" Meter

<u>Usage (Gal.)</u>	<u>Current Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
0	\$ 41.17	\$ 87.44	\$ 46.27	112.39%
25,000	129.06	235.14	106.08	82.20
55,000	212.70	374.82	162.12	76.22
107,000	357.69	616.94	259.25	72.48
120,000	393.94	677.46	283.52	71.97

Note: Bold line represents the average monthly **industrial** water consumption.

