Exhibit No.:	103 NP
Issues:	Return on Equity, Capital Structure
Witness:	Pauline M. Ahern
Exhibit Type:	Surrebuttal PUBLIC
Sponsoring Party:	Missouri-American Water Company
Case No.:	WR-2010-0131 SR-2010-0135
Date:	May 6, 2010

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2010-0131
SR-2010-0135

SURREBUTTAL TESTIMONY

OF

PAULINE M. AHERN

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

MAWC Exhibit No 103 NP
Date 5-17-10 Reporter KF
File No WR-2010-0131

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

IN THE MATTER OF MISSOURI-AMERICAN WATER COMPANY FOR AUTHORITY TO FILE TARIFFS REFLECTING INCREASED RATES FOR WATER AND SEWER SERVICE	)))))	**CASE NO. WR-2010-0131** **CASE NO. SR-2010-0135**

AFFIDAVIT OF PAULINE M. AHERN

Pauline M. Ahern, being first duly sworn, deposes and says that she is the witness who sponsors the accompanying testimony entitled "Surrebuttal Testimony of Pauline M. Ahern"; that said testimony and schedules were prepared by her and/or under her direction and supervision; that if inquires were made as to the facts in said testimony and schedules, she would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of her knowledge.

Pauline M. Ahern

State of New Jersey
County of Burlington
SUBSCRIBED and sworn to
Before me this 26th day of April 2010.

Notary Public

My commission expires:

SHARON M. KEEFE
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES JULY 9, 2011

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I. INTRODUCTION

Q. Please state your name, occupation and business address.

A. My name is Pauline M. Ahern and I am a Principal of AUS Consultants. My business address is 155 Gaither Drive, Suite A, Mount Laurel, New Jersey 08054.

Q. Are you the same Pauline M. Ahern who previously submitted direct and rebuttal testimonies in this proceeding?

A. Yes, I am.

Q. What is the purpose of this testimony?

A. The purpose of this testimony is to respond to the rebuttal testimony of David Murray, witness for the Missouri Public Service Commission Staff (the Staff). I will respond his criticisms of my recommended common equity cost rate.

Q. Have you prepared schedules in support of your surrebuttal testimony?

A. Yes, I have. They have been marked for identification as Schedules PMA-24 and PMA-25.

II. SUMMARY

Q. Please briefly summarize your testimony.

A. This testimony focuses upon Mr. Murray's misplaced criticisms of my recommended common equity cost rate.

With regard to common equity cost rate, I will first clarify Mr. Murray's misstatement as to how I developed my recommended common equity cost rate. In addition, I will reiterate evidence from my direct testimony

which supports the difference in the results of the application of the Discounted Cash Flow Model (DCF), Risk Premium Model (RPM), Capital Asset Pricing Model (CAPM) and Comparable Earnings Model (CEM). I will also demonstrate why Mr. Murray's use of third party analyses to support his recommended overall rate of return and common equity is unfounded. I will show that his criticisms of my methodologies, specifically: 1) the use of multiple cost of common equity cost rate models; 2) the use of forecasted yields in the RPM and CAPM; 3) the use of the arithmetic mean equity risk premium in the RPM and CAPM; 4) the use of the income return on long-term U.S. Treasury securities in the CAPM; 5) the use of the Empirical CAPM (ECAPM); and 6) the use of the CEM, are misplaced. Consequently, Mr. Murray's common equity cost rate recommendation is contrary to regulatory consensus and common sense. The cost rate for common equity capital is not, and should not be, the result of a mechanical application of essentially one cost of equity model.

III. RESPONSE TO STAFF WITNESS DAVID MURRAY'S COMMENTS

Q. On page 11, lines 18 through 22, of his rebuttal testimony Mr. Murray claims that you "calculated a simple average of the cost of equity estimation methodologies" for both your water and natural gas utility proxy groups. Please comment.

A. Mr. Murray is incorrect. In arriving at an indicated common equity cost rate for each proxy group, I not only evaluated the "simple average" or mean, but

also the midpoint of the ranges of common equity cost rates as well as the median of the common equity cost rates developed by each methodology.

Q. On page 12, lines 2 through 8, of his rebuttal testimony, Mr. Murray makes the assertion that the difference in your indicated costs of common equity for the water utility proxy group relative to the natural gas utility proxy group is due to "inappropriate inputs . . . rather than actual cost of [common] equity differences in the capital markets." Please comment.

A. First, the inputs for each model were identical for each group so any bias in the results due to "inappropriate inputs" perceived by Mr. Murray affects the results of the application of the cost of common equity models to both proxy groups. The only difference was that I did not rely upon the CEM results of 21.00% for the natural gas utilities for reasons explained at page 65, lines 6 through 10 of my direct testimony, namely that 21.00% is an outlier when compared with the CEM results for the water utility proxy group and the results of the application of the DCF, the RPM and the CAPM.

Nevertheless, there is ample evidence in my direct testimony as to why the capital markets may require a higher cost of common equity for water utilities than for natural gas utilities. Water companies are approximately four times as capital intensive as natural gas distribution companies. At discussed on page 8 , line 34 through page 9, line 2 of my direct testimony, it took $3.44 of net utility plant on average for the water industry to produce $1.00 in operating revenues in 2008 or roughly four times

the $0.89 of net utility plant per $1.00 in operating revenues for the natural gas distribution industry. In addition, as discussed on page 11, lines 24 through 27 of my direct testimony, depreciation rates for the water utility industry as a whole of 2.5% in 2008 are approximately 63% those of the natural gas distribution industry as a whole of 4.0%. Consequently, the greater capital intensity and lower depreciation rates of water utilities presents significant challenges in obtaining needed capital to finance the replacement of aging infrastructure and to meet the demands of customer growth. The lower depreciation rates, as one of the principal sources of internal cash flows for all utilities, mean that water utility depreciation as a source of internally generated cash is far less than for the other utility industries. In view of the foregoing, water utilities face greater risk than do the energy utilities due to inflation which results in a higher replacement cost per dollar of net plant than for other types of utilities.

Also, the smaller size of water utilities, as represented by my water utility proxy group, relative to that of gas utilities, as represented by my natural gas distribution utility proxy group, indicates greater risk for water utilities, because, as discussed in detail in both my direct testimony at pages 14 through 18 and again in my rebuttal testimony at pages 27 through 28, all else equal, size has a bearing on risk and must be reflected in a recommended common equity cost rate. As shown in Table 3 on page 16 of my direct testimony the proxy group of gas distribution companies, at $1.464

billion in market capitalization, is nearly twice as large on average as the proxy group of water companies at $769.035 million.

The proxy group of water utilities also exhibits greater average systematic, i.e. market or non-diversifiable, risk than the proxy group of gas distribution companies as demonstrated by the water utility average / median beta of 0.78 / 0.80 compared with the average / median beta of the gas distribution proxy group of 0.66 / 0.65. Furthermore, as shown on Schedule PMA-11, page 2, the average Moody's bond rating of the water utility proxy group is A2 while that of the gas utility proxy group is A3 and the average Standard & Poor's (S&P) bond rating is A+ for the water group and A for the gas distribution group, indicating slightly greater bond default risk. In addition, while both groups share an average "Excellent' business risk profile as assigned by S&P, the water group's financial risk profile is "Intermediate", while that of the gas utility group is on average "Significant".

These factors all provide support for "actual cost of [common] equity differences in the capital markets and the differences in the indicated common equity cost rates resulting from my applications of the DCF, RPM, CAPM and CEM are not "a function of inappropriate inputs."

Q. On page 13, line 15 through page 17, line 5, of his direct testimony, Mr. Murray discusses your DCF application. Please comment.

A. Mr. Murray's discussion is based upon a criticism of the use of analysts' earnings per share (EPS) long-term growth forecasts which I utilized in my

DCF application. He reiterates the concerns discussed in his direct testimony relative to the sustainability of such growth rates by comparing them with average growth in the U. S. economy as measured by projected GDP growth. My rebuttal testimony already addressed the fact that U.S. GDP growth is an average of the growth of the U.S. economy as a whole, with some sectors / industries growing at a faster pace and some at a slower pace as discussed on page 12, line 12 through page 13, line 11 and demonstrated on Schedule PMA-15.

Also, as noted in my rebuttal testimony, at page 11, line 17 through page12, line 10, Staff did not voice such concerns about analysts' projected EPS growth rates in previous MAWC rate cases, when projected growth in GDP was also lower than the then current analysts' EPS growth rate projections.

Finally, Mr. Murray's rebuttal testimony is silent about the support provided in my direct testimony that earnings expectations based upon analysts' earnings growth forecasts have a significant influence on market prices and, therefore, appreciation of the "growth" experienced by investors. The accuracy or sustainability of such forecasts of EPS growth is irrelevant after the fact. What is relevant is that they reflect widely held expectations and are influential and consistent with current stock price levels. It is investor expectations which are being reflected in market prices.. As Morin notes[1] "it is the consensus forecast that is embedded in price and therefore in required

return, and not the future as it will turn out to be." In addition, my direct testimony on pages 38 through 41 presents academic / empirical support for the superiority of analysts' EPS growth forecasts.

Q. On page 16, lines 3 through 21, of his direct testimony, Mr. Murray discusses research reports he reviewed relative to "long-term expected sustainable growth rates for investments in regulated water utility companies." Please comment.

A. Given that the superiority of analysts' EPS long-term growth forecasts for use in a DCF analysis has been demonstrated academically and empirically as discussed above and my direct testimony relative to their influence on investors' pricing decisions, it is both interesting and relevant that the Macquarie Research (Macquarie) report provided in response to Staff Data Request No. 107-R97 and provided as Attachment B contradicts Mr. Murray's rebuttal testimony in distinct ways.

First, on Attachment B-1, Macquarie states that it "believe[s] that an 8-10% EPS CAGR [compound annual growth rate] is achievable longer term." Specifically, for American Water Works, Macquarie notes on Attachment B-14 that it expects a 14% EPS CAGR through 2012 and long-term EPR growth at 7-10%.

Second, stated on Attachment B-6 relative to the consolidation in the water utility industry which Mr. Murray "believes" is a "reason for near-term higher expected growth rates in both EPS and DPS for water utilities", as he

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[1] Roger A. Morin, New Regulatory Finance, (Public Utilities Reports, Inc., 2006) 298.

states on page 14, lines 13 – 17, Macquarie "warn[s] that historically large acquisitions proved detrimental to earnings growth and realized ROEs of US water utilities" due in large part to regulatory lag and the "serious drag" it places on earnings.

Third, the November 24, 2008 Society Generale equity research report provided in response to Staff Data Request No. 107-R104 provided by Mr. Murray as Attachment D-1, while providing a 7.5% cost of common equity estimate (without any discussion of the underlying assumptions or description of how it was derived) nevertheless, states on Attachment D-19, that after 2009, "we expect [dividend] payout to stabilize at around 70%, which should make possible a 12% increase in dividend p. a."' (emphasis added)

In view of all the foregoing, Mr. Murray's criticism of the use of analysts' EPS long-term growth forecasts in a DCF analysis is unfounded, unsupported and should be disregarded.

Q. At page 17, line 19 through page 19, line 17 of his rebuttal testimony Mr. Murray discusses MAWC's response to Staff Data Request No. 109. Please comment.

A. MAWC's response to Staff Data Request Nos. 109-R1 and 109-R2 were confidential valuation studies conducted by Duff & Phelps, LLC (D&P) as of November 30, 2008 and November 30, 2009. It is inappropriate to rely upon D&P's conclusions to test the reasonableness of either Mr. Murray's or my

recommended return rates on common equity for three reasons. **

[redacted]

[redacted]

[2] MSCI BARRA provides products and services supporting client's investment processes. www,mscibarra.com.

[redacted] .** Regarding fundamental betas, Morin[3] states:

> The fundamental beta of a security is the weighted average of its relative response coefficients, each weighted by the proportion of total variance in market returns due to that specific event. To compute fundamental beta, it is necessary to consider the sources of economic events, to project the reaction of the security to such moves, and to assign probabilities to the likelihood of each possible type of economic event.
>
> To forecast fundamental betas, Rosenberg uses a multiple regression equation similar to Equation 3-12, but with considerably more variables. A vast array of variables on market variability, earnings variability, financial risk, size growth, and a multitude of company and industry characteristics is used to capture differences between betas of various companies and industries. Fundamental betas, which are commercially available from the firm of BARRA, are of the form:
>
> $B = a_0 + a_1 Factor_1 + a_2 Factor_2 + a_3 Factor_3 + \ldots$ etc. (3-13)
>
> The weightings are based on historical estimates. The advantage of the approach is that it uses fundamental company data that are related to risk. *The disadvantage is that the final regression equation 3-13 is arbitrary.* (italics added for emphasis.)

Moreover, the BARRA betas used by D&P reflect market conditions of November 30, 2008 and November 30, 2009 and are therefore outdated. In

[3] Roger A. Morin, New Regulatory Finance, Public Utilities Reports, Inc., 2006, p.86.

addition, to the best of my knowledge and experience in regulatory ratemaking over the last twenty-plus years, I cannot recall ever seeing BARRA betas used for setting an authorized return rate on common equity for a regulated utility. In my opinion, the Value Line Investment Survey betas utilized by Mr. Murray and myself are more appropriate for a CAPM analysis for ratemaking and cost of capital purposes.

**[redacted]

[redacted]

Q. [redacted]?

A. [redacted]

[redacted]

[4] Id., at p. 175.
[5] Id., at p. 175.

[redacted]

However, these results are applicable to the large, less business risky D&P guideline companies and therefore do not reflect the greater business risk due to MAWC's smaller relative size. As discussed in detail in my direct testimony at pages 14 through 18 and again in my rebuttal testimony at pages 27 through 28, all else equal, size has a bearing risk and must be reflecting in a recommended common equity cost rate. **

[redacted]

[redacted]

[redacted]**

Q. At lines 3 through 22 on page 21 of his rebuttal testimony, Mr. Murray criticizes your testimony regarding the need to rely upon more than one cost of common equity model. Please comment.

A. He does so without responding to the substantial academic and regulatory support found on pages 25 through 35 of my direct testimony for the use of multiple cost of common equity models and ignoring the Efficient Market Hypothesis (EMH) upon which all cost of common equity models are premised[6] which confirms that investors rely upon multiple cost of common equity models in formulating their required rates of return as discussed in my direct testimony at page 24, lines 5 through 17. My direct testimony provides, at page 25, line 1 through page 27, line 31, academic support from Charles F. Phillips, Jr. and Roger A. Morin, who cites Eugene F. Brigham and Stewart Myers, that multiple cost of common equity cost rate models should be utilized when assessing investors' required returns. As stated in my direct testimony, at page 27, lines 28 through 31, "[i]n view of the foregoing, it is clear that investors are or should be aware of all of the models available for use in determining a common equity cost rate. The EMH requires the assumption that, collectively, investors consider them all."

Nevertheless, in disregard of this support for the use of multiple cost

[6] Mr. Murray, later in his rebuttal testimony, invokes the EMH relative to his concerns with the RPM.

of common equity models, Mr. Murray again relies upon "other available financial information to test the reasonableness of a recommendation, once again citing the Missouri State Employees' Retirement System's (MOSERS) report. My rebuttal testimony, on page 23, line 23 through page 25, line 1 has already addressed the MOSERS' expected return for large cap domestic studies, concluding that it has no relevance to the determination of a common equity cost rate relative to a single asset/security such as MAWC's rate base.

In addition, since Mr. Murray did not explain his "rule of thumb" test to determine if his cost of common equity estimate was within reason and since this surrebuttal testimony has demonstrated that the equity analysts' research reports studied by Mr. Murray and provided in his rebuttal exhibit do not support the reasonableness of his approach to the determination of a recommended common equity cost rate of 9.25%, his comments on page 21 should be rejected.

Q. On page 22, lines 3 through 14 and page 26, lines 20 through 22 of his rebuttal testimony, Mr. Murray discusses his disagreement with your use of forecasted yields in the RPM and the CAPM. Please comment.

A. As discussed in my rebuttal testimony and previously in this testimony, ratemaking and the cost of capital are both prospective. Therefore, the

appropriate yields to use in the RPM and CAPM are forecasted yields. In addition Roger A. Morin states[7]:

> Because of the dominance of institutional investors and their influence on individual investors, analysts' forecasts of long-run growth rates provide a sound basis for estimating required returns. Financial analysts exert a strong influence on the expectations of many investors who do not possess the resources to make their own forecasts, that is, they are a cause of g. The accuracy of these forecasts in the sense of whether they turn out to be correct is not at issue here, as long as they reflect widely held expectations. As long as the forecasts are typical and/or influential in that they are consistent with current stock price levels, they are relevant. The use of analysts' forecasts in the DCF model is sometimes denounced on the grounds that it is difficult to forecast earnings and dividends for only one year, let alone for longer time periods. This objection is unfounded, however, because it is present investors expectations that are being priced; it is the consensus forecast that is embedded in price and therefore in required return, and not the future as it will turn out to be.
>
> * * *
>
> Academic research confirms the superiority of analysts' earnings forecasts over univariate time-series forecasts that rely on history. This latter category includes many *ad hoc* forecasts from statistical models, ranging from the naïve methods of simple averages, moving averages, etc. to the sophisticated time-series techniques such as the Box-Jenkins modeling techniques. The literature suggests that analysts' earnings forecasts incorporate all the public information available to the analysts and the public at the time the forecasts are released. This finding implies that analysts have already factored historical growth trends into their forecast growth rates, making reliance on historical growth rates somewhat redundant and, at worst, potentially double counting growth rates which are irrelevant to future expectations. Furthermore, these forecasts are statistically more accurate than forecasts based solely on historical earnings, dividends, book value equity, and the like.

[7] Id., at pp. 298-299.

Although the foregoing quote by Morin is relative to analysts' growth rate projections, the principles apply equally to interest rate projections. Financial analysts do exert a strong influence on the expectations of investors, whether it be with forecasts of growth for use in the DCF or forecasts of interest rate levels. Not only do analysts' earnings forecasts incorporate all the public information available to them and the public at the time of the forecasts, so do analysts' forecasts of interest rate levels. Therefore, the use of current yields in the RPM and CAPM is not appropriate. Rather, forecasts of corporate, public utility and U.S. Treasury bond yields are appropriate.

Q. Mr. Murray states at lines 11 through 14 on page 22 of his rebuttal testimony that "[u]sing projected bond yield is akin to using projected stock prices when estimating the cost of [common] equity using the DCF methodology." Please comment.

A. Once again, Mr. Murray is incorrect. First, the theory underlying the DCF model is that the present value of an expected future stream of net cash flows during the investment holding period can be determined by discounting the cash flows at the cost of capital, at the investors' capitalization rate. DCF theory indicates that an investor buys a stock for an expected total return rate which is derived from cash flows received in the form of dividends plus appreciation in market price, i.e., a future stock price. Note however, in both

Mr. Murray's and my applications, the investment horizon is infinity and there is no terminal market price.

Second, the use of projected bond yields in both the RPM and CAPM is more akin to the use of a future dividend yield, i.e., $D_{1/2}$ or D_1 and the use of a growth rate, whether based upon historical and/or projected growth as a proxy for the investors' expected growth in dividends. Moreover, interest rate forecasts are available to investors. The use of projected bond yields therefore does not violate the underlying premise of the EMH. To the contrary, the use of projected bond yields is both consistent with and required by the EMH. Mr. Murray's comments should be disregarded.

Q. Mr. Murray criticizes your use of arithmetic means in your RPM and CAPM analyses on pages 22 and 24, respectively, of his rebuttal testimony. Please comment.

A. On pages 22 through 25 of his rebuttal testimony, Mr. Murray provides an example to support his contention that using the arithmetic mean is questionable. However, Mr. Murray's mathematical example is questionable because it does not take into account the probability of each outcome, i.e., an increase of 50% in one year and a decrease of 50% in another. As noted in my rebuttal testimony, at page 20, line 14 through page 21, line 11, the financial literature is quite clear that risk is measured by the variability of expected returns, i.e., the probability distribution of returns. The arithmetic mean return and not the geometric mean return provides insight into the

variance and standard deviation of returns, i.e., risk, without which investors cannot meaningfully evaluate prospective risk. An example, similar to Mr. Murray's, is given on page 2 of Schedule PMA-18 which demonstrates that the proper expected value is predicted by compounding the arithmetic mean and not the geometric mean. In other words, it is the arithmetic mean which must be compounded over a period of time in order to achieve the terminal wealth value which gives rise to the compound average or geometric return. As noted on page 3 of Schedule PMA-18, "[t]he arithmetic mean equates the expected future value with the present value; it is therefore the appropriate discount rate. "

Q. At page 28, line 14 through page 29, line 11 of his rebuttal testimony, Mr. Murray criticizes your use of the CEM. He states at page 28, lines 20 through 21, "if the allowed returns are set based on expected returns, then it is possible that these returns will be based on returns that are not consistent with the long-term required returns on common equity, i.e., required ROE.

A. This statement by Mr. Murray indicates a lack of understanding of the market prices paid by investors. The DCF model upon which he relies is based entirely upon investor expectations. Sometimes those expectations are met; sometimes returns are greater than expected; and sometimes returns are less than expected. However, it is the <u>expectations</u> of those returns that influence the market prices that investors pay.

Moreover, the CEM has a long, well-established history in utility ratemaking and is based upon the premise that regulation is a substitute for the competition of the marketplace consistent wit the "corresponding risk" standard set forth in the landmark U.S. Supreme Court cases and consistent with the Hope doctrine that the return to the equity investor should be commensurate with returns on investment in other firms having corresponding risks. Since the non-utility companies upon which I rely in my CEM analysis are selected based upon comparable total risk to my proxy groups, the selection bases make the non-price regulated companies comparable in both non-diversifiable, systematic, risk as well as diversifiable, unsystematic risk. Consequently, because they are comparable in total risk, the returns on their book values are relevant to the returns on book values of price regulated companies and hence appropriate for setting an authorized return rate on common equity. Mr. Murray's criticisms should be rejected.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

Exhibit No.:	
Issues:	Return on Equity
Witness:	Pauline M. Ahern
Exhibit Type:	Surrebuttal
Sponsoring Party:	Missouri-American Water Company
Case No.:	WR-2010-0131 SR-2010-0135
Date:	May 6, 2010

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2010-0131
SR-2010-0135

EXHIBIT

TO ACCOMPANY THE

SURREBUTTAL TESTIMONY

OF

PAULINE M. AHERN, CRRA

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

BARRA

Predicted Beta

http://www.barra.com/support/library/PredictedBeta.pdf

BARRA Predicted Beta

Beta is a gauge of the expected response of a stock, bond, or portfolio to the overall market. For example, a stock with a beta of 1.5 has an expected excess return of 1.5 times the market excess return. If the market is up 10% over the risk-free rate, then—other things held equal—the portfolio is expected to be up 15%. Beta is one of the most significant means of measuring portfolio risk and shows a strong relationship to expected return.

Historical Beta vs. Predicted Beta

Historical beta is calculated after the fact by running a regression (often over 60 months) on a stock's excess returns against the market's excess returns. There are two important problems with this simple historical approach:

- It does not recognize fundamental changes in the company's operations. For example, when RJR Nabisco spun off its tobacco holdings in 1999, the company's risk characteristics changed significantly. Historical beta would recognize this change only slowly, over time.

- It is influenced by events specific to the company that are unlikely to be repeated. For example, the December 1984 Union Carbide accident in Bhopal, India, took place in a bull market, causing the company's historical beta to be artificially low.

Predicted beta, the beta BARRA derives from its risk model, is a forecast of a stock's sensitivity to the market. It is also known as *fundamental beta*, because it is derived from fundamental risk factors. In the BARRA model these risk factors include 13 attributes—such as size, yield, and price/earnings ratio—plus industry exposure allocated across a maximum of 6 of 55 industry groups. Because we reestimate these risk factors monthly, the predicted beta reflects changes in the company's underlying risk structure in a timely manner.

BARRA programs use predicted beta rather than historical beta because it is a better forecast of market sensitivity.

Computing Predicted Beta

Below we show how the predicted beta of a portfolio is computed.

The beta of a portfolio p with respect to the market m is defined as the covariance of the portfolio return with the market return divided by the variance of the market:

$$(1) \quad \beta_p = \frac{\mathrm{COV}(r_p, r_m)}{\mathrm{VAR}_m}$$

The covariance between two portfolios is decomposed into two parts: a) the part explained by factors, called *common factor covariance*; and b) the part unexplained by factors, called *specific covariance*.

The factor covariance between portfolio p and the return on the market m is the product of the transposed vector of the factor exposures for the portfolio, the factor covariance matrix, and the vector of the factor exposures for the market:

$$(2) \quad \mathrm{CF\ COV}(r_p, r_m) = X_p^T F X_m$$

The specific covariance is:

$$(3) \quad \mathrm{SP\ COV}(r_p, r_m) = \sum_{i=1}^{N} h_{pi} h_{mi} \sigma_i^2$$

Now, combining equations (1) and

$$(4) \quad \mathrm{COV}(r,r) = \mathrm{VAR}(r)$$

we have the formula for the BARRA predicted beta of a portfolio:

$$(5) \quad \beta_p = \frac{\mathrm{COV}(r_p, r_m)}{\mathrm{VAR}_m}$$

$$= \frac{\mathrm{CF\ COV}(r_p, r_m) + \mathrm{SP\ COV}(r_p, r_m)}{\mathrm{CF\ COV}(r_m, r_m) + \mathrm{SP\ COV}(r_m, r_m)}$$

$$= \frac{\sum_{j=1}^{NFAC} \sum_{k=1}^{NFAC} X_{pj} Fjk\, X_{mk} + \sum_{i=1}^{N} h_{pi} h_{mi} \sigma_i^2}{\sum_{j=1}^{NFAC} \sum_{k=1}^{NFAC} X_{mj} Fjk\, X_{mk} + \sum_{i=1}^{N} h_{mi}^2 \sigma_i^2}$$

where

$NFAC$	is the number of factors (68 in U.S. E2)
N	is the number of assets in the market portfolio
X_{pj}	is the portfolio's exposure to factor j
F_{jk}	is the covariance between factors k and j
X_{mj}	is the market's exposure to factor j
h_{pi}	is the holding of the portfolio in asset i
h_{mi}	is the holding of the market in asset i
σ_i^2	is the specific variance of asset i
VAR_m	is the variance of the market

Missouri-American Water Company
Capital Asset Pricing Model (CAPM) Cost-Of-Common-Equity Estimates
for Duff & Phelps' Guideline Companies Corrected
to Reflect a Prospective Risk-Free Rate, Value Line Adjusted Betas,
the Average Historical and Forecasted Market Equity Risk Premium and the
Empirical Capital Asset Pricing Model (ECAPM)

	1	2	3	4	5	6
	Traditional Capital Asset Pricing Model					
Company Name	Risk-Free Rate (1)	Company's Beta (2)	Market Risk Premium (3)	Beta Adjusted Market Risk Premium (4)	Cost of Common Equity (5)	Market-to-Book Ratio (6)
American States Water Co.	4.97%	0.80	7.31%	5.85%	10.82%	184%
Aqua America, Inc.	4.97%	0.65	7.31%	4.75%	9.72%	208%
Artesian Resources, Inc.	4.97%	NA	7.31%	NA	NA	150%
California Water Service Group	4.97%	0.75	7.31%	5.48%	10.45%	181%
Middlesex Water Co.	4.97%	0.75	7.31%	5.48%	10.45%	173%
SJW Corp.	4.97%	0.95	7.31%	6.94%	11.91%	176%
Southwest Water Co.	4.97%	1.10	7.31%	8.04%	13.01%	217%
York Water Co.	4.97%	0.65	7.31%	4.75%	9.72%	203%
Average	4.97%	0.81	7.31%	5.90%	10.87%	187%

	Empirical Capital Asset Pricing Model					
Company Name	Risk-Free Rate (1)	Company's Beta (2)	Market Risk Premium (3)	Beta Adjusted Market Risk Premium (7)	Cost of Common Equity (5)	Market-to-Book Ratio (6)
American States Water Co.	4.97%	0.80	7.31%	6.21%	11.18%	184%
Aqua America, Inc.	4.97%	0.65	7.31%	5.39%	10.36%	208%
Artesian Resources, Inc.	4.97%	NA	7.31%	NA	NA	150%
California Water Service Group	4.97%	0.75	7.31%	5.94%	10.91%	181%
Middlesex Water Co.	4.97%	0.75	7.31%	5.94%	10.91%	173%
SJW Corp.	4.97%	0.95	7.31%	7.04%	12.01%	176%
Southwest Water Co.	4.97%	1.10	7.31%	7.86%	12.83%	217%
York Water Co.	4.97%	0.65	7.31%	5.39%	10.36%	203%
Average	4.97%	0.81	7.31%	6.25%	11.22%	187%

Average of Traditional and Empirical CAPM	11.05%

Notes:
(1) From note 2 on page 3 of Schedule PMA-12 (Updated) in Schedule PMA-23.
(2) From pages 2 through 8 of this Schedule.
(3) Derived in note 1 on page 3 of Schedule PMA-12 (Updated) in Schedule PMA-23.
(4) Column 2 * Column 3.
(5) Column 1 + Column 4.
(6) From AUS Utility Reports, April 2010.
(7) The empirical CAPM is applied using the formula found in note 4 on page 3 of Schedule PMA-12 (Updated) in Schedule PMA-23.

AMER. STATES WATER NYSE-AWR

RECENT PRICE 37.04 | P/E RATIO 23.6 (Trailing: 22.9 Median: 22.0) | RELATIVE P/E RATIO 1.30 | DIV'D YLD 2.8% | VALUE LINE

TIMELINESS 4 Lowered 3/19/10
SAFETY 3 New 2/400
TECHNICAL 3 Lowered 4/23/10
BETA .80 (1.00 = Market)

2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	55	(+50%)	13%
Low	35	(-5%)	2%

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	0	0	0	0	0	0	1	1	0
Options	0	0	0	0	0	0	0	4	0
to Sell	0	0	0	1	0	0	0	4	0

Institutional Decisions

	2Q2009	3Q2009	4Q2009
to Buy	66	54	57
to Sell	53	53	39
Hld's(000)	10578	10647	11007

Percent shares traded 12 8 4

LEGENDS
1.25 x Dividends p sh divided by Interest Rate
Relative Price Strength
3-for-2 split 6/02
Options: No
Shaded area: prior recession
Latest recession began 12/07

Target Price Range 2013 | 2014 | 2015

% TOT. RETURN 3/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	-1.5	91.1
3 yr.	2.3	7.8
5 yr.	67.5	42.8

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
10.43	11.03	11.37	11.44	11.02	12.91	12.17	13.06	13.78	13.96	13.81	14.06	15.76	17.49	18.42	19.48	19.75	20.25	Revenues per sh	22.10
1.68	1.75	1.75	1.85	2.04	2.28	2.20	2.53	2.54	2.08	2.23	2.84	2.89	3.31	3.37	3.40	3.50	3.70	"Cash Flow" per sh	4.15
.85	1.03	1.13	1.04	1.08	1.19	1.28	1.35	1.34	.78	1.05	1.32	1.33	1.62	1.55	1.62	1.75	1.90	Earnings per sh A	2.35
.80	.81	.82	.83	.84	.85	.86	.87	.87	.88	.89	.90	.91	.96	1.00	1.01	1.04	1.08	Div'd Decl'd per sh B■	1.18
2.43	2.19	2.40	2.58	3.11	4.30	3.03	3.19	2.66	3.76	5.83	4.24	3.91	2.69	4.45	4.16	4.15	4.10	Cap'l Spending per sh	4.30
10.07	10.29	11.01	11.24	11.48	11.82	12.74	13.22	14.05	13.97	15.01	15.72	16.84	17.53	17.95	19.39	20.25	21.00	Book Value per sh	22.35
11.77	11.77	13.33	13.44	13.44	13.44	15.12	15.12	15.18	15.21	16.75	16.80	17.05	17.23	17.30	16.53	19.25	20.00	Common Shs Outst'g C	21.50
12.8	11.6	12.6	14.5	15.5	17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	22.6	21.2	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	19.0
.84	.73	.79	.84	.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.38	1.42			Relative P/E Ratio	1.25
6.6%	6.7%	5.8%	5.5%	5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.8%	2.5%	2.9%	2.9%			Avg Ann'l Div'd Yield	2.6%
184.0	197.5	209.2	212.7	228.0	236.2	288.6	301.4	318.7	361.0	380	405	Revenues ($mill)	475
18.8	20.4	20.3	11.9	16.5	22.5	23.1	28.0	26.8	29.3	33.0	38.0	Net Profit ($mill)	50.0
45.7%	43.0%	38.9%	43.5%	37.4%	47.0%	40.5%	42.6%	37.8%	38.9%	38.5%	38.5%	Income Tax Rate	38.5%
--	--	--	--	--	--	12.2%	8.5%	6.9%	3.2%	5.0%	5.0%	AFUDC % to Net Profit	5.0%
47.5%	54.9%	52.0%	52.0%	47.7%	50.4%	48.6%	46.9%	46.2%	45.9%	47.0%	47.0%	Long-Term Debt Ratio	49.0%
51.9%	44.7%	48.0%	48.0%	52.3%	49.6%	51.4%	53.1%	53.8%	54.1%	53.0%	53.0%	Common Equity Ratio	51.0%
371.1	447.8	444.4	442.3	480.4	532.5	551.6	569.4	577.0	665.0	735	795	Total Capital ($mill)	940
509.1	539.8	563.3	602.3	664.2	713.2	750.8	776.4	825.3	868.4	910	955	Net Plant ($mill)	1100
6.4%	6.1%	6.5%	4.6%	5.2%	5.4%	6.0%	6.1%	6.4%	5.9%	6.0%	6.5%	Return on Total Cap'l	7.5%
9.2%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	8.5%	9.0%	Return on Shr. Equity	10.5%
9.3%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	8.5%	9.0%	Return on Com Equity	10.5%
3.0%	3.6%	3.3%	NMF	1.0%	2.8%	2.7%	3.9%	3.1%	3.2%	3.5%	4.0%	Retained to Com Eq	5.0%
68%	65%	65%	113%	84%	67%	67%	58%	64%	61%	61%	57%	All Div'ds to Net Prof	56%

CAPITAL STRUCTURE as of 12/31/09
Total Debt $306.3 mill. Due in 5 Yrs $12.3 mill.
LT Debt $305.6 mill. LT Interest $22.3 mill.
(LT interest earned: 3.4x; total interest coverage: 3.2x) (56% of Cap'l)

Leases, Uncapitalized: Annual rentals $3.2 mill.

Pension Assets-12/09 $74.0 mill.
Oblig. $103.1 mill.

Pfd Stock None.

Common Stock 18,554,364 shs.
as of 3/10/10
MARKET CAP: $700 million (Small Cap)

CURRENT POSITION ($MILL.)	2007	2008	12/31/09
Cash Assets	1.7	7.3	1.7
Other	61.4	83.3	94.3
Current Assets	63.1	90.6	96.0
Accts Payable	29.1	36.6	33.9
Debt Due	37.6	75.3	.7
Other	27.4	25.5	65.1
Current Liab.	94.3	137.4	99.7
Fix. Chg. Cov.	314%	293%	352%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09 to '13-'15
Revenues	4.5%	6.0%	3.0%
"Cash Flow"	5.0%	8.0%	3.5%
Earnings	4.0%	8.5%	6.5%
Dividends	1.5%	2.5%	3.0%
Book Value	4.5%	5.0%	3.5%

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	72.3	79.3	75.8	74.0	301.4
2008	68.9	80.3	85.3	84.2	318.7
2009	79.8	93.6	101.5	86.3	361.0
2010	83.0	98.0	107	92.0	380
2011	89.0	105	114	97.0	405

Calendar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2007	.40	.42	.44	.35	1.62
2008	.30	.53	.28	.43	1.55
2009	.28	.64	.52	.18	1.62
2010	.27	.59	.54	.36	1.75
2011	.28	.64	.57	.41	1.90

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.225	.225	.225	.235	.91
2007	.235	.235	.235	.250	.96
2008	.250	.250	.250	.250	1.00
2009	.250	.250	.250	.260	1.01
2010	.260				

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Acquired Chaparral City Water of Arizona (10/00). Has 703 employees. Officers & directors own 2.5% of common stock (4/10 Proxy). Chairman: Lloyd Ross. President & CEO: Robert J. Sprowls. Inc: CA. Addr: 630 East Foothill Boulevard, San Dimas, CA 91773. Tel: 909-394-3600. Internet: www.aswater.com.

The costs of doing business continue to add up for American States Water. Indeed, the water utility saw earnings cut by more than half in the fourth quarter of 2009, despite posting a 3% top-line advance. Higher maintenance and SG&A expenses were the problem, dragging down operating margins a full basis point. Meanwhile, a higher share count shaved a couple of pennies off share earnings.

Operating expenses ought to continue mounting going forward . . . Water infrastructures are growing older and, in many cases, outdated. They require significant repairs and sometimes, complete overhauls. As a result, maintenance costs are expected to remain on an upward trajectory for the foreseeable future. Although the cost structure is likely to benefit from the absence of a $2-plus million legal charge incurred last year, margins will probably show modest improvement in 2010 before stalling in 2011 and eroding thereafter.

. . . and the financial burden remains worrisome. With a fairly leveraged balance sheet and negligible reserve, American is strapped for cash and will need to tap debt and equity markets in order to keep up with the burgeoning infrastructure costs we envision persisting in the years to come. Such endeavors come at a price, however, and the higher interest rate and loftier share count will limit shareholder gains. Against this backdrop, we now look for the company to earn $1.75 a share in 2010 and $1.90 next year.

Prospective investors will probably want to look elsewhere. These shares are ranked 4 (Below Average) for Timeliness, and are likely to trail the broader market for the coming six to 12 months. The issue's longer-term prospects are not any better, with rising costs likely to limit gains over the next 3 to 5 years. The stock is already trading within the 2013-2015 Target Price Range based on our projections. The income component may seem tempting at first blush, but its appeal fades when compared to those of some other stocks in our *Survey*, particularly in the utility space. Although the company has a longstanding history of dividend increases, its financial constraints may well keep growth in check.

Andre J. Costanza — *April 23, 2010*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 14¢; '05, 25¢; '06, 6¢; '08, (27¢). Next earnings report due early May. Quarterly egs. may not add due to rounding.

(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.

(C) In millions, adjusted for split.

Company's Financial Strength	B++
Stock's Price Stability	85
Price Growth Persistence	70
Earnings Predictability	70

AQUA AMERICA NYSE-WTR

RECENT PRICE 17.97 | P/E RATIO 21.9 (Trailing: 23.3 Median: 25.0) | RELATIVE P/E RATIO 1.21 | DIV'D YLD 3.2% | VALUE LINE

TIMELINESS 3 Lowered 6/26/09
SAFETY 3 Lowered 8/1/08
TECHNICAL 3 Lowered 4/23/10
BETA .65 (1.00 = Market)

2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	35	(+95%)	20%
Low	25	(+40%)	11%

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	0	0	0	0	0	2	0	0	
Options	0	0	0	0	0	0	0	1	0
to Sell	0	0	0	0	0	0	0	1	0

Institutional Decisions

	2Q2009	3Q2009	4Q2009
to Buy	117	88	127
to Sell	138	118	104
Hld's(000)	61341	60196	60166

High: 11.5 12.0 14.8 15.0 16.8 18.5 29.2 29.8 28.6 22.0 21.5 18.1
Low: 7.6 8.3 9.4 9.8 11.8 14.2 17.5 20.1 18.9 12.2 15.4 16.5

LEGENDS
1.60 x Dividends p sh divided by Interest Rate
Relative Price Strength
4-for-1 split 1994
3-for-2 split 12/00
3-for-1 split 12/01
5-for-4 split 12/03
4-for-3 split 12/05
Options: Yes
Shaded area: prior recession
Latest recession began 12/07

Target Price Range 2013 | 2014 | 2015

% TOT. RETURN 3/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	-9.1	91.1
3 yr.	-14.9	7.6
5 yr.	8.2	42.8

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
1.82	1.84	1.86	2.02	2.09	2.16	2.46	2.70	2.85	2.97	3.16	3.65	4.03	4.52	4.63	4.91	5.30	5.70	Revenues per sh	6.95
.42	.47	.50	.56	.61	.72	.78	.88	.94	.96	1.09	1.21	1.26	1.37	1.42	1.61	1.75	1.90	"Cash Flow" per sh	2.60
.26	.29	.30	.34	.40	.42	.47	.51	.54	.57	.64	.71	.70	.71	.73	.77	.85	.95	Earnings per sh A	1.40
.21	.22	.23	.24	.26	.27	.28	.30	.32	.35	.37	.40	.44	.48	.51	.55	.60	.65	Div'd Decl'd per sh B■	.70
.46	.52	.46	.58	.62	.90	1.16	1.09	1.20	1.32	1.54	1.84	2.05	1.79	1.98	2.08	2.15	2.25	Cap'l Spending per sh	2.50
2.41	2.46	2.68	2.84	3.21	3.42	3.85	4.15	4.36	5.34	5.89	6.30	6.96	7.32	7.82	8.12	8.30	8.60	Book Value per sh	10.15
59.77	63.74	65.75	67.47	72.29	106.80	111.82	113.97	113.19	123.45	127.18	128.97	132.39	133.40	135.37	136.49	137.50	138.00	Common Shs Outst'g C	140.00
13.5	12.0	15.6	17.8	22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	32.0	24.9	23.1	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	21.0
.89	.80	.98	1.03	1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	1.50	1.54			Relative P/E Ratio	1.40
6.0%	6.2%	4.9%	3.9%	2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%	3.1%			Avg Ann'l Div'd Yield	2.0%
275.5	307.3	322.0	367.2	442.0	495.8	533.5	602.5	627.0	670.5	730	785	Revenues ($mill)	975
50.7	58.5	62.7	67.3	80.9	91.2	92.0	95.0	97.9	104.4	125	135	Net Profit ($mill)	195
38.9%	39.3%	38.6%	39.3%	39.4%	38.4%	39.6%	38.9%	39.7%	39.4%	39.0%	39.0%	Income Tax Rate	39.0%
--	--	--	--	--	--	--	--	2.9%	3.1%	2.8%	2.5%	AFUDC % to Net Profit	1.7%
52.0%	52.2%	54.2%	51.4%	50.0%	52.0%	51.6%	55.4%	54.1%	55.6%	55.0%	54.0%	Long-Term Debt Ratio	49.5%
47.8%	47.7%	45.8%	48.6%	50.0%	48.0%	48.4%	44.6%	45.9%	44.4%	45.0%	46.0%	Common Equity Ratio	50.5%
901.1	990.4	1076.2	1355.7	1497.3	1690.4	1904.4	2191.4	2306.6	2495.5	2530	2575	Total Capital ($mill)	2805
1251.4	1358.1	1490.8	1824.3	2069.8	2260.0	2508.0	2792.8	2997.4	3227.3	3300	3350	Net Plant ($mill)	3600
7.4%	7.6%	7.6%	6.4%	6.7%	6.9%	6.4%	5.9%	5.7%	5.8%	6.0%	6.5%	Return on Total Cap'l	8.0%
11.7%	12.3%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	9.4%	10.0%	11.0%	Return on Shr. Equity	14.0%
11.7%	12.4%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	9.4%	10.0%	11.0%	Return on Com Equity	14.0%
4.7%	5.1%	5.2%	4.2%	4.6%	4.9%	3.7%	3.3%	2.8%	2.7%	3.0%	3.5%	Retained to Com Eq D	7.0%
60%	59%	59%	59%	57%	56%	63%	67%	70%	72%	70%	67%	All Div'ds to Net Prof	51%

CAPITAL STRUCTURE as of 12/31/09
Total Debt $1473.6 mill. Due in 5 Yrs $276.5 mill.
LT Debt $1386.8 mill. LT Interest $70.0 mill.
(LT Interest earned: 3.5x; total interest coverage: 3.5x) (58% of Cap'l)

Pension Assets-12/09 $135.6 mill. Oblig. $217.8 mill.

Pfd Stock None
Common Stock 139,679,644 shares as of 2/12/10

MARKET CAP: $2.4 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	12/31/09
Cash Assets	14.5	14.9	21.9
Receivables	82.9	84.5	78.7
Inventory (AvgCst)	8.8	9.8	9.5
Other	9.3	11.8	11.5
Current Assets	115.5	121.0	121.6
Accts Payable	45.8	50.0	57.9
Debt Due	80.8	87.9	87.0
Other	56.6	55.3	56.1
Current Liab.	183.2	193.2	201.0
Fix. Chg. Cov.	323%	329%	346%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09 to '13-'15
Revenues	8.0%	9.0%	7.0%
"Cash Flow"	9.5%	8.0%	10.0%
Earnings	7.5%	5.5%	11.5%
Dividends	7.0%	8.0%	5.5%
Book Value	9.5%	10.0%	4.5%

Calendar	QUARTERLY REVENUES ($ mill) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	137.3	150.6	165.5	149.1	602.5
2008	139.3	151.0	177.1	159.6	627.0
2009	154.5	167.3	180.8	167.9	670.5
2010	165	185	195	185	730
2011	175	195	210	205	785

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	.13	.17	.22	.19	.71
2008	.11	.17	.26	.19	.73
2009	.14	.19	.25	.20	.77
2010	.15	.20	.27	.23	.85
2011	.17	.22	.30	.26	.95

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.107	.107	.115	.115	.44
2007	.115	.115	.125	.125	.48
2008	.125	.125	.125	.135	.51
2009	.135	.135	.135	.145	.55
2010	.145				

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately three million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Divested three of four non-water businesses in '91; telemarketing group in '93; and others. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '09: residential, 58.5%; commercial, 14%; industrial & other, 27.5%. Officers and directors own 1.5% of the common stock (4/10 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

Aqua America managed to increase its profits in 2009 despite the weakened economic backdrop. For the full year, revenues advanced 7%, mostly due to benefits from rate-relief cases and gains from acquisitions. This offset unfavorable weather conditions that hurt the top line. The bottom line benefited from cost-cutting efforts, but this was discounted by a 6% increase in capital spending.

The company's customer growth over the next few years will most likely be gained through acquisitions. Toward this end, Aqua America's New Jersey subsidiary completed the purchase of the water system assets of Bloomsbury Borough. This added about 1,000 residential and commercial customers. More acquisitions of smaller water and wastewater companies will be one of the main points of focus for WTR's management.

Earnings gains over the next few years should be bolstered through rate relief cases. During the first two months of 2010, Aqua America has won rate relief cases that should add $6 million per annum to the top line. An additional $65 million in lawsuits should be resolved in the latter half of this year, and management plans to petition for $25 million–$30 million in rate increases and surcharges by yearend.

The dividend payout should continue to be a bright spot for Aqua America. The historical trend of management raising its dividend every year will most likely continue going forward.

This stock is ranked to mirror the broader market over the coming year. Although share earnings were flat year over year in the second half of 2009, we estimate that the top and bottom lines will advance over the next few quarters.

These shares hold above-average appreciation potential over the coming 3 to 5 years. The aforementioned gains from acquisitions should enable revenues and earnings to continue to rise over the pull to 2013–2015. Other points of interest for this equity include its high scores for Stock Price Stability and Earnings Predictability. All told, this stock is best suited for long-term conservative investors.

John D. Burke *April 23, 2010*

(A) Diluted shares. Excl. nonrec. gains (losses): '99, (11¢); '00, 2¢; '01, 2¢; '02, 6¢; '03, 4¢. Excl. gain from disc. operations: '96, 2¢. Earnings may not add due to rounding.

Next earnings report due late April.
(B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount).

(C) In millions, adjusted for stock splits.

Company's Financial Strength	B+
Stock's Price Stability	85
Price Growth Persistence	70
Earnings Predictability	100

CALIFORNIA WATER NYSE-CWT

RECENT PRICE 38.51 | P/E RATIO 19.2 (Trailing: 19.7 Median: 22.0) | RELATIVE P/E RATIO 1.06 | DIV'D YLD 3.1% | VALUE LINE

TIMELINESS 4 Lowered 11/6/09
SAFETY 3 Lowered 7/27/01
TECHNICAL 3 Lowered 4/23/10
BETA .75 (1.00 = Market)

2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	60	(+55%)	14%
Low	40	(+5%)	4%

Insider Decisions

	J	J	A	S	O	N	D	J
to Buy	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	2	0	0
to Sell	0	0	0	0	0	0	0	0

Institutional Decisions

	3Q2008	1Q2009	4Q2009
to Buy	78	58	51
to Sell	85	75	55
Hld's(000)	10018	9635	10204

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	©VALUE LINE PUB., INC.	13-15
	12.69	13.17	14.48	15.48	14.76	15.96	16.16	16.26	17.33	16.37	17.18	17.44	16.20	17.76	19.80	21.64	22.40	23.70	Revenues per sh	25.45
	2.02	2.07	2.50	2.92	2.60	2.75	2.52	2.20	2.65	2.51	2.83	3.03	2.71	3.12	3.72	3.87	3.95	4.15	"Cash Flow" per sh	4.50
	1.22	1.17	1.51	1.83	1.45	1.53	1.31	.94	1.25	1.21	1.46	1.47	1.34	1.50	1.90	1.95	2.05	2.25	Earnings per sh A	2.60
	.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.12	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	Div'd Decl'd per sh B ■	1.25
	2.26	2.13	2.83	2.61	2.74	3.44	2.45	4.09	5.62	4.39	3.73	4.01	4.26	3.68	4.82	5.33	5.35	5.35	Cap'l Spending per sh	5.40
	11.56	11.72	12.22	13.00	13.38	13.43	12.90	12.95	13.12	14.44	15.66	15.79	16.15	16.50	18.44	20.26	20.70	21.40	Book Value per sh C	23.25
	12.49	12.84	12.62	12.62	12.62	12.94	15.15	15.18	15.18	16.93	18.37	18.39	20.66	20.67	20.72	20.77	21.60	21.50	Common Shs Outst'g D	23.00
	14.1	13.7	11.9	12.6	17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	28.1	19.8	19.7	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	19.0
	.92	.92	.75	.73	.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.19	1.32			Relative P/E Ratio	1.25
	5.8%	6.4%	5.8%	4.6%	4.2%	4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%	3.1%			Avg Ann'l Div'd Yield	2.5%
							244.8	248.8	263.2	277.1	315.6	320.7	334.7	367.1	410.3	449.4	470	510	Revenues ($mill) E	585
							20.0	14.4	19.1	19.4	26.0	27.2	25.8	31.2	39.8	40.6	43.0	49.0	Net Profit ($mill)	60.0
							42.3%	39.4%	39.7%	35.9%	39.6%	42.4%	37.4%	39.9%	37.7%	40.3%	39.0%	39.0%	Income Tax Rate	39.0%
							--	--	--	10.3%	3.2%	3.3%	10.6%	8.3%	8.6%	7.6%	8.5%	10.0%	AFUDC % to Net Profit	10.0%
							48.9%	50.3%	55.3%	50.2%	48.6%	48.3%	43.5%	42.9%	41.6%	47.1%	47.0%	46.5%	Long-Term Debt Ratio	49.0%
							50.2%	48.5%	44.0%	49.1%	50.8%	51.1%	55.9%	56.6%	58.4%	52.9%	53.0%	53.5%	Common Equity Ratio	51.0%
							388.8	402.7	453.1	498.4	585.9	568.1	670.1	674.9	690.4	794.9	853	905	Total Capital ($mill)	1035
							582.0	624.3	697.0	758.5	800.3	862.7	941.5	1010.2	1112.4	1198.1	1265	1325	Net Plant ($mill)	1475
							6.8%	5.3%	5.9%	5.6%	6.1%	6.3%	5.2%	5.9%	7.1%	6.5%	6.5%	7.0%	Return on Total Cap'l	7.0%
							10.0%	7.2%	9.4%	7.8%	8.9%	9.3%	6.8%	8.1%	9.9%	9.6%	10.0%	10.5%	Return on Shr. Equity	11.0%
							10.1%	7.2%	9.5%	7.9%	9.0%	9.3%	6.8%	8.1%	9.9%	9.6%	10.0%	10.5%	Return on Com Equity	11.0%
							1.8%	NMF	1.0%	.7%	2.1%	2.1%	1.9%	1.8%	3.8%	3.8%	4.0%	5.0%	Retained to Com Eq	6.0%
							82%	119%	90%	91%	77%	78%	86%	77%	61%	60%	58%	53%	All Div'ds to Net Prof	48%

TIMELINESS 4 Lowered 11/6/09
SAFETY 3 Lowered 7/27/01
TECHNICAL 3 Lowered 4/23/10
BETA .75 (1.00 = Market)

High: 32.0 31.4 28.6 28.9 31.4 37.9 42.1 45.8 45.4 46.6 48.3 39.6
Low: 22.6 21.5 22.9 20.5 23.7 28.1 31.2 32.8 34.2 27.7 33.5 35.3

LEGEND
1.33 x Dividends p sh divided by Interest Rate
Relative Price Strength
2-for-1 split 1/08
Options: Yes
Shaded area: prior recession
Latest recession began 12/07

Target Price Range 2013 | 2014 | 2015
128
96
80
64
48
40
32
24
16
12

% TOT. RETURN 3/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	-7.2	91.1
3 yr.	7.5	7.5
5 yr.	30.4	42.8

CAPITAL STRUCTURE as of 12/31/09
Total Debt $399.3 mill. Due in 5 Yrs $55.2 mill.
LT Debt $374.3 mill. LT Interest $24.4 mill.
(LT interest earned: 4.1x; total int. cov.: 3.8x)
Pension Assets-12/09 $105.6 mill. Oblig. $219.7 mill.
Pfd Stock None
Common Stock 20,765,422 shs. as of 2/24/10
MARKET CAP: $800 million (Small Cap)

CURRENT POSITION ($MILL.)	2007	2008	12/31/09
Cash Assets	6.7	13.9	9.9
Other	53.3	65.9	82.3
Current Assets	60.0	79.8	92.2
Accts Payable	36.7	45.1	43.7
Debt Due	2.7	42.8	25.0
Other	30.3	35.3	41.7
Current Liab.	69.7	123.2	110.4
Fix. Chg. Cov.	333%	398%	430%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09 to '13-'15
Revenues	2.5%	3.0%	4.5%
"Cash Flow"	2.5%	6.0%	4.0%
Earnings	1.0%	8.5%	6.5%
Dividends	1.0%	1.0%	1.0%
Book Value	4.0%	6.0%	3.0%

Calendar	QUARTERLY REVENUES ($ mill.) E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	71.6	95.8	113.8	85.9	367.1
2008	72.9	105.6	131.7	100.1	410.3
2009	86.6	116.7	139.2	106.9	449.4
2010	93.0	122	145	110	470
2011	100	131	157	122	510

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	.07	.37	.67	.39	1.50
2008	.01	.48	1.06	.35	1.90
2009	.12	.58	.94	.31	1.95
2010	.11	.61	.98	.35	2.05
2011	.14	.67	1.03	.41	2.25

Calendar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.2875	.2875	.2875	.2875	1.15
2007	.290	.290	.290	.290	1.16
2008	.293	.293	.293	.293	1.17
2009	.295	.295	.295	.295	1.18
2010	.2975				

BUSINESS: California Water Service Group provides regulated and nonregulated water service to roughly 463,600 customers in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '08: residential, 69%; business, 16%; public authorities, 5%; industrial, 5%; other, 3%. '08 reported depreciation rate: 2.4%. Has roughly 929 employees. Chairman: Robert W. Foy. President & CEO: Peter C. Nelson (4/09 Proxy). Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

Increased expenses sank California Water Service Group's bottom line in the fourth quarter. The water utility posted share earnings of $0.31, 11% below both last year's mark and our estimate. The top line rose a better-than-anticipated 7%, to roughly $107 million, but expenses grew faster, due to increased water production and SG&A costs, specifically for higher pension and benefit commitments.

We have tempered our 2010 earnings expectations accordingly. Operating costs are likely to continue to rise, as aging infrastructures require greater maintenance and repairs. The company will get little in the way of relief from rate hikes this year, however, because other than potential modest inflationary increases, there is not expected to be any rate increases implemented until 2011. Most of the company's subsidiaries have not been up for general rate case reviews in more than three years, owing to the changeover to a consolidated filing system. As a result, we suspect that earnings growth will be lucky to top 5% this year.

Growth rates ought to pick up next year, however. As mentioned above, the company has filed a rate relief request with the California Public Utilities Commission (CPUC) for more than $70 million. A ruling is likely to be handed down by yearend, with the new rates effective January 1, 2011. Although the proposal may be a bit lofty, we expect a favorable ruling, given the recent regulatory landscape and necessity to maintain current water standards. Therefore, we've pegged CWT to earn $2.25 a share, on revenues of more than $500 million next year.

That said, we think the stock is fully valued at this time. It is ranked 4 (Below Average) for Timeliness and trails the *Value Line* median in terms of 3- to 5-year appreciation potential. Although a more constructive regulatory climate looks to be in place, the greater stock and debt offerings that are likely to be needed to keep up the burgeoning infrastructure costs will probably dilute shareholder gains to 2013-2015. The issue's steady dividend growth adds some appeal for those seeking total return, but investors have better pure-growth and/or income vehicles to choose from elsewhere.

Andre J. Costanza *April 23, 2010*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (7¢); '01, 4¢; '02, 8¢. Next earnings report due late July.
(B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. deferred charges. In '09: $2.6 mill., $.13/sh.
(D) In millions, adjusted for split.
(E) Excludes non-rec. rev.

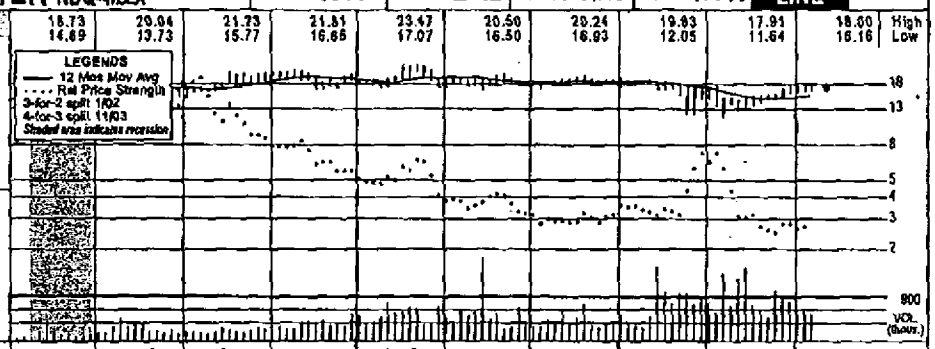
Company's Financial Strength	B++
Stock's Price Stability	85
Price Growth Persistence	75
Earnings Predictability	80

MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 17.44 | TRAILING P/E RATIO 24.2 | RELATIVE P/E RATIO 1.28 | DIV'D YLD 4.1% | VALUE LINE

RANKS
PERFORMANCE 2 (Above Average)
Technical 2 (Above Average)
SAFETY 2 (Above Average)
BETA .75 (1.00 = Market)

Financial Strength B+
Price Stability 95
Price Growth Persistence 40
Earnings Predictability 90



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	5.87	5.98	6.12	6.26	6.44	6.16	6.50	6.79	6.75	
"CASH FLOW" PER SH	1.18	1.20	1.15	1.28	1.33	1.33	1.49	1.53	1.40	
EARNINGS PER SH	.66	.73	.61	.73	.71	.82	.87	.89	.72	NA/NA
DIV'DS DECL'D PER SH	.62	.63	.65	.66	.67	.68	.69	.70	.71	
CAP'L SPENDING PER SH	1.25	1.59	1.87	2.54	2.18	2.31	1.66	2.12	1.49	
BOOK VALUE PER SH	7.11	7.39	7.80	8.38	8.60	9.82	10.05	10.28	10.33	
COMMON SHS OUTST'G (MILL)	10.17	10.36	10.46	11.36	11.58	13.17	13.25	13.40	13.52	
AVG ANN'L P/E RATIO	24.6	23.5	30.0	26.4	27.4	22.7	21.6	19.8	21.0	NA/NA
RELATIVE P/E RATIO	1.26	1.28	1.71	1.39	1.45	1.23	1.16	1.19	1.40	
AVG ANN'L DIV'D YIELD	3.8%	3.7%	3.5%	3.4%	3.5%	3.7%	3.7%	4.0%	4.7%	
SALES ($MILL)	59.6	61.9	64.1	71.0	74.6	81.1	86.1	91.0	91.2	
OPERATING MARGIN	47.2%	47.1%	44.0%	44.4%	44.4%	47.4%	47.0%	46.9%	42.6%	
DEPRECIATION ($MILL)	5.3	5.0	5.6	6.4	7.2	7.8	8.2	8.5	9.2	
NET PROFIT ($MILL)	7.0	7.8	6.6	8.4	8.5	10.0	11.8	12.2	10.0	
INCOME TAX RATE	34.8%	33.3%	32.8%	31.1%	27.6%	33.4%	32.5%	33.2%	34.1%	
NET PROFIT MARGIN	11.7%	12.5%	10.3%	11.9%	11.4%	12.4%	13.8%	13.4%	10.9%	
WORKING CAP'L ($MILL)	d.9	d9.3	d13.3	d11.6	d4.5	2.6	d9.6	d40.9	d38.6	
LONG-TERM DEBT ($MILL)	88.1	87.5	97.4	115.3	128.2	130.7	131.6	118.2	124.9	
SHR. EQUITY ($MILL)	76.4	80.6	83.7	99.2	103.6	133.3	137.1	141.2	143.0	
RETURN ON TOTAL CAP'L	5.6%	6.0%	5.0%	5.1%	5.0%	5.1%	5.6%	5.8%	5.0%	
RETURN ON SHR. EQUITY	9.1%	9.5%	7.9%	8.5%	8.2%	7.5%	8.6%	8.6%	7.0%	
RETAINED TO COM EQ	.5%	1.3%	NMF	.9%	.5%	1.2%	1.8%	1.9%	.1%	
ALL DIV'DS TO NET PROF	94%	87%	106%	90%	94%	84%	79%	78%	98%	

Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.

Note: No analyst estimates available.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	2.0%	-0.6%
"Cash Flow"	4.0%	-6.5%
Earnings	3.5%	-19.0%
Dividends	1.5%	1.5%
Book Value	5.5%	0.5%

Fiscal Year	QUARTERLY SALES ($mil.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	19.0	21.8	24.1	21.2	86.1
12/31/08	20.8	23.0	25.7	21.5	91.0
12/31/09	20.8	23.1	25.5	22.0	91.2
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/08	.15	.25	.28	.14	.82
12/31/07	.13	.24	.31	.19	.87
12/31/08	.15	.26	.35	.13	.89
12/31/09	.10	.21	.29	.12	.72
12/31/10					

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2007	.173	.173	.173	.175	.69
2008	.175	.175	.175	.176	.70
2009	.176	.176	.176	.18	.71
2010	.18				

INSTITUTIONAL DECISIONS

	2Q'09	3Q'09	4Q'09
to Buy	41	30	32
to Sell	33	28	20
Hld's(000)	4902	4958	4846

ASSETS ($mil.)	2007	2008	12/31/09
Cash Assets	2.0	3.3	4.3
Receivables	12.8	14.3	10.6
Inventory (Avg cost)	1.2	1.5	1.8
Other	1.4	1.5	5.5
Current Assets	17.4	20.6	22.0
Property, Plant & Equip. at cost	398.6	436.8	453.6
Accum Depreciation	64.7	70.5	77.1
Net Property	333.9	366.3	376.5
Other	41.4	53.1	59.6
Total Assets	392.7	440.0	458.1
LIABILITIES ($mil.)			
Accts Payable	8.5	5.7	4.3
Debt Due	9.0	43.9	46.8
Other	11.5	11.9	9.8
Current Liab	27.9	61.5	60.7

LONG-TERM DEBT AND EQUITY as of 12/31/09

Total Debt $171.5 mil. Due in 5 Yrs. $63.0 mil.
LT Debt $124.9 mil. (47% of Cap'l)
Including Cap. Leases None
Leases, Uncapitalized Annual rentals None

Pension Liability $25.7 mil. in '09 vs. $25.5 mil. in '08

Pfd Stock $3.4 mil. Pfd Div'd Paid $.2 mil. (1% of Cap'l)

Common Stock 13,519,000 shares (52% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey (NJ) and Delaware, and a regulated wastewater utility in NJ. It offers contract operations services and a service line maintenance program through its nonregulated subsidiary, Utility Service Affiliates, Inc. Its water utility system treats, stores, and distributes water for residential, commercial, industrial, and fire prevention purposes. It also provides water treatment and pumping services to the Township of East Brunswick. Its other NJ subsidiaries offer water and wastewater services to residents in Southampton Township. Its Delaware subsidiaries provide water services to retail customers in New Castle, Kent, and Sussex counties. In March, the company entered into an agreement to purchase Montague Water Company, Inc. and Montague Sewer Company, Inc. Has 285 employees. Chairman: J. Richard Tompkins. Address: 1500 Ronson Rd, P.O. BOX 1500, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: http://www.middlesexwater.com.

W.T.

April 23, 2010

TOTAL SHAREHOLDER RETURN
Dividends plus appreciation as of 3/31/2010

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
-2.18%	15.58%	24.13%	5.05%	13.25%

SJW CORP. NYSE-SJW

RECENT PRICE 27.27 | TRAILING P/E RATIO 33.7 | RELATIVE P/E RATIO 1.77 | DIV'D YLD 2.5% | VALUE LINE

RANKS	
PERFORMANCE	3 Average
Technical	3 Average
SAFETY	3 Average
BETA .95	(1.00 = Market)
Financial Strength	B+
Price Stability	65
Price Growth Persistence	75
Earnings Predictability	85

	17.83 11.58	15.07 12.67	14.85 12.57	19.64 14.80	27.80 18.07	45.33 21.16	43.00 27.65	35.11 20.05	30.44 18.22	27.80 21.60	High Low
© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011	
SALES PER SH	7.45	7.97	8.20	9.14	9.86	10.35	11.25	12.12	11.68		
"CASH FLOW" PER SH	1.49	1.55	1.75	1.89	2.21	2.38	2.30	2.44	2.21		
EARNINGS PER SH	.77	.78	.91	.87	1.12	1.19	1.04	1.08	.81	1.04[A,B]/1.13[C]	
DIV'DS DECL'D PER SH	.43	.46	.49	.51	.53	.57	.61	.65	.66		
CAP'L SPENDING PER SH	2.63	2.08	3.41	2.31	2.83	3.87	6.62	3.79	3.17		
BOOK VALUE PER SH	8.17	8.40	9.11	10.11	10.72	12.48	12.80	13.99	13.66		
COMMON SHS OUTST'G (MILL.)	18.27	18.27	18.27	18.27	18.27	18.28	18.38	18.18	18.50		
AVG ANN'L P/E RATIO	18.5	17.3	15.4	19.6	19.7	23.5	33.4	28.2	28.7	26.2/24.1	
RELATIVE P/E RATIO	.95	.94	.88	1.04	1.04	1.27	1.77	1.58	1.92		
AVG ANN'L DIV'D YIELD	3.0%	3.4%	3.5%	3.0%	2.4%	2.0%	1.7%	2.3%	2.6%		
SALES ($MILL)	136.1	145.7	149.7	166.9	180.1	189.2	206.6	220.3	216.1		
OPERATING MARGIN	64.4%	63.7%	56.0%	56.4%	55.9%	57.0%	41.8%	42.4%	42.5%		
DEPRECIATION ($MILL)	13.2	14.0	15.2	16.5	19.7	21.3	22.9	24.0	25.6		
NET PROFIT ($MILL)	14.0	14.2	16.7	16.0	20.7	22.2	19.3	20.2	15.2		
INCOME TAX RATE	34.5%	40.4%	38.2%	42.1%	41.6%	40.8%	39.4%	38.5%	40.4%		
NET PROFIT MARGIN	10.3%	9.8%	11.2%	9.6%	11.5%	11.7%	9.4%	9.2%	7.0%		
WORKING CAP'L ($MILL)	d3.8	d4.9	12.0	13.0	10.8	22.2	d1.4	d11.3	d4.0		
LONG-TERM DEBT ($MILL)	110.0	110.0	139.6	143.6	146.3	163.6	216.3	216.6	246.9		
SHR. EQUITY ($MILL)	149.4	153.5	166.4	184.7	195.9	228.2	238.9	254.3	252.8		
RETURN ON TOTAL CAP'L	6.7%	6.9%	6.9%	6.5%	7.6%	7.0%	5.7%	5.8%	4.4%		
RETURN ON SHR. EQUITY	9.4%	9.3%	10.0%	8.7%	10.6%	9.7%	8.2%	8.0%	6.0%		
RETAINED TO COM EQ	4.1%	3.8%	4.7%	3.6%	5.6%	5.2%	3.5%	3.3%	1.2%		
ALL DIV'DS TO NET PROF	56%	59%	53%	58%	47%	46%	57%	59%	80%		

LEGENDS
12 Mos Mov Avg
Rel Price Strength
3-for-1 split 3/04
2-for-1 split 3/08
Shaded area indicates recession

45 30 22.5 13 9 6 4 3 2100 VOL. (thous.)

Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.

[A] No. of analysts changing earn. est. in last 10 days: 0 up, 0 down, consensus 5-year earnings growth not available. [B] Based upon 2 analysts' estimates. [C] Based upon 2 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	6.5%	-3.5%
"Cash Flow"	5.0%	-9.5%
Earnings	3.0%	-25.5%
Dividends	5.5%	2.5%
Book Value	8.0%	-2.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	39.0	55.1	64.9	47.6	206.6
12/31/08	41.3	60.0	69.5	49.5	220.3
12/31/09	40.0	58.2	69.3	48.6	216.1
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.14	.35	.48	.22	1.19
12/31/07	.12	.29	.43	.20	1.04
12/31/08	.15	.34	.44	.15	1.08
12/31/09	.01	.23	.43	.14	.81
12/31/10	.05	.26	.48		

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2007	.151	.151	.151	.151	.60
2008	.161	.161	.161	.161	.64
2009	.165	.165	.165	.165	.66
2010	.17				

INSTITUTIONAL DECISIONS

	2Q'09	3Q'09	4Q'09
to Buy	43	34	43
to Sell	40	28	24
Hld's(000)	8694	8607	8827

ASSETS ($mill.)	2007	2008	12/31/09
Cash Assets	2.4	3.4	1.4
Receivables	23.0	24.5	23.3
Inventory	.8	.9	1.0
Other	5.4	3.2	2.3
Current Assets	31.6	32.0	28.0
Property, Plant & Equip. at cost	934.3	958.7	1020.7
Accum Depreciation	268.8	274.5	302.2
Net Property	645.5	684.2	718.5
Other	90.2	134.7	132.0
Total Assets	767.3	850.9	878.5
LIABILITIES ($mill.)			
Accts Payable	9.3	5.8	6.6
Debt Due	5.8	18.1	8.9
Other	18.1	18.4	18.5
Current Liab	33.0	43.3	32.0

LONG-TERM DEBT AND EQUITY as of 12/31/09

Total Debt $253.8 mill. Due in 5 Yrs. $21.5 mill.
LT Debt $246.9 mill.
Including Cap. Leases None (49% of Cap'l)

Leases, Uncapitalized Annual rentals None

Pension Liability $47.5 mill. in '09 vs. $42.3 mill. in '08

Pfd Stock None Pfd Div'd Paid None

Common Stock 18,499,602 shares (51% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: SJW Corporation, through its subsidiaries, engages in the production, purchase, storage, purification, distribution, and retail sale of water. The company offers nonregulated water-related services, including water system operations, cash remittances, and maintenance contract services. SJW also owns undeveloped land; a 70% limited partnership interest in 444 West Santa Clara Street, L.P.; and operates commercial buildings in Arizona, California, Connecticut, Florida, Tennessee, and Texas. As of September 30, 2009, SJW provided water service to approximately 226,000 connections that served a population of approximately one million people in the San Jose area. It also provides water service to approximately 8,700 connections that serve approximately 36,000 residents in a service area in the region between San Antonio and Austin, Texas. Has 375 employees. Chairman: Charles J. Toeniskoetter. Inc.: CA. Address: 110 W. Taylor Street, San Jose, CA 95110. Tel.: (408) 279-7800. Internet: http://www.sjwater.com.

W.T.

April 23, 2010

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 3/31/2010

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
13.50%	12.94%	3.07%	-32.38%	62.58%

SOUTHWEST WATER NDQ-SWWC

RECENT PRICE 10.48 | P/E RATIO 45.6 (Trailing: 87.3 Median: 23.0) | RELATIVE P/E RATIO 2.52 | DIV'D YLD 1.9% | VALUE LINE

TIMELINESS — Suspended 3/12/10
SAFETY 4 New 10/23/09
TECHNICAL — Suspended 3/12/10
BETA 1.10 (1.00 = Market)

2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	18	70%	17%
Low	11	5%	4%

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	2Q2009	3Q2009	4Q2009
to Buy	42	42	36
to Sell	39	31	54
Hld's(000)	11107	10401	10872

LEGENDS
2.50 x Dividends p sh divided by Interest Rate
Relative Price Strength
5-for-4 split: 10/98
3-for-2 split: 10/99
5-for-4 split: 1/01
4-for-3 split: 1/04
Options: No
Shaded area: prior recession
Latest recession began 12/07

Target Price Range 2013 | 2014 | 2015

% TOT. RETURN 3/10

	THIS STOCK	VS. ARITH. INDEX
1 yr.	148.4	91.1
3 yr.	-23.2	7.8
5 yr.	9.8	42.8

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
4.20	4.84	5.31	5.61	5.83	6.16	7.49	8.15	9.12	10.70	9.23	9.10	9.42	8.96	8.87	8.58	8.85	9.40	Revenues per sh	12.00
.38	.44	.48	.53	.59	.65	.76	.87	.88	.91	.87	.78	.85	.69	.66	.77	.85	1.00	"Cash Flow" per sh	1.50
.09	.12	.15	.21	.25	.31	.38	.42	.39	.44	.23	.34	.40	.31	.04	.17	.25	.35	Earnings per sh A	.70
.08	.08	.09	.09	.10	.11	.13	.14	.15	.16	.18	.20	.21	.23	.24	.13	.20	.20	Div'd Decl'd per sh B	.20
.72	.64	.95	.74	.79	.53	.55	1.06	1.76	1.14	1.26	1.56	1.67	1.70	1.35	1.71	1.76	1.85	Cap'l Spending per sh	2.00
2.31	2.45	2.40	2.52	2.70	3.05	3.44	3.84	4.27	4.99	6.17	6.49	6.98	6.54	6.55	4.66	4.70	4.80	Book Value per sh D	5.95
12.13	11.74	12.45	12.65	12.83	13.12	13.99	14.17	14.35	16.17	20.36	22.33	23.80	24.27	24.90	24.60	24.80	25.60	Common Shs Outst'g C	25.60
22.3	14.6	16.5	18.9	17.2	19.6	17.0	19.8	24.8	21.2	NMF	35.5	34.8	42.1	NMF	30.1	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	20.0
1.48	.98	1.03	.97	.89	1.12	1.11	1.01	1.35	1.21	NMF	1.89	1.88	2.23	NMF	2.01			Relative P/E Ratio	1.35
4.2%	4.7%	3.4%	2.7%	2.3%	1.8%	2.0%	1.7%	1.5%	1.7%	1.5%	1.6%	1.5%	1.6%	2.4%	2.5%			Avg Ann'l Div'd Yield	2.0%
						104.7	115.5	130.8	173.0	188.0	203.2	224.2	217.3	220.9	211.1	220	235	Revenues ($mill)	300
						5.4	6.2	6.0	7.2	4.5	7.3	9.3	6.1	1.0	5.3	6.2	8.8	Net Profit ($mill)	17.5
						37.0%	36.0%	34.9%	35.9%	36.1%	38.0%	35.0%	56.0%	56.0%	NMF	NMF	39.0%	Income Tax Rate	39.0%
						--	14.4%	3.2%	--	11.0%	9.5%	--	--	12.5%	12.7%	9.7%	7.9%	AFUDC % to Net Profit	5.8%
						48.8%	51.4%	56.1%	47.9%	47.9%	44.7%	43.6%	47.7%	62.6%	61.1%	59.5%	57.2%	Long-Term Debt Ratio	50.1%
						50.7%	48.2%	42.9%	51.6%	52.0%	55.1%	56.3%	52.1%	37.2%	38.9%	40.5%	42.6%	Common Equity Ratio	49.9%
						95.0	113.0	142.8	152.8	242.0	262.9	295.2	304.5	304.4	294.7	285	280	Total Capital ($mill)	300
						157.8	171.1	203.9	219.5	302.6	344.8	389.6	417.9	429.3	409.0	402	400	Net Plant ($mill)	450
						7.8%	7.8%	5.8%	8.2%	3.1%	4.1%	4.5%	2.9%	1.8%	3.1%	4.0%	5.0%	Return on Total Cap'l	7.5%
						11.1%	11.4%	9.7%	9.0%	3.6%	5.0%	6.6%	3.2%	.9%	3.6%	5.5%	7.5%	Return on Shr. Equity	11.5%
						11.1%	11.4%	9.7%	9.1%	3.6%	5.0%	5.8%	3.2%	.8%	.8%	1.0%	3.0%	Return on Com Equity	8.5%
						7.8%	7.8%	6.3%	5.6%	.6%	2.1%	2.6%	NMF	NMF	.8%	1.0%	3.0%	Retained to Com Eq	8.5%
						31%	32%	36%	36%	78%	58%	54%	112%	NMF	78%	80%	57%	All Div'ds to Net Prof	29%

CAPITAL STRUCTURE as of 12/31/09
Total Debt $155.0 mill. Due in 5 Yrs $155.0 mill.
LT Debt $152.8 mill. LT Interest $9.0 mill.
(Total interest coverage: 2.7x) (49% of Cap'l)

Leases, Uncapitalized: Annual rentals $5.5 mill.
Pension Liability None

Pfd Stock $.458 mill. Pfd Div'd $.020 mill.
Common Stock 24,794,218 shs.
as of 2/28/10

MARKET CAP: $250 million (Small Cap)

CURRENT POSITION ($MILL.)	2007	2008	12/31/09
Cash Assets	2.9	1.1	2.9
Receivables	26.0	29.7	27.0
Inventory (Avg Cst)	--	--	--
Other	32.7	26.9	12.9
Current Assets	61.6	57.7	42.8
Accts Payable	14.9	16.1	14.1
Debt Due	1.9	2.2	2.2
Other	29.4	28.4	21.2
Current Liab.	46.2	46.7	37.5

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09 to '13-'15
Revenues	5.0%	-0.6%	4.0%
"Cash Flow"	3.5%	-3.5%	11.0%
Earnings	2.0%	-10.0%	16.0%
Dividends	9.5%	9.5%	-2.0%
Book Value	9.0%	7.0%	NIL

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2007	48.1	55.0	57.4	56.8	217.3
2008	49.6	56.8	60.4	54.0	220.9
2009	50.1	52.4	59.0	49.6	211.1
2010	52.0	54.0	62.0	52.0	220
2011	55.0	58.0	66.0	56.0	235

Calendar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2007	.03	.09	.09	.11	.31E
2008	d.04	.03	d.02	.07	.04
2009	.03	.03	.05	.06	.17
2010	.05	.05	.07	.08	.25
2011	.07	.08	.10	.10	.35

Calendar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.052	.052	.052	.058	.21
2007	.058	.058	.058	.058	.23
2008	.06	.06	.06	.06	.24
2009	.025	.025	.025	.05	.13
2010	.05	.05			

BUSINESS: SouthWest Water Company provides a broad range of services including water production, treatment and distribution; wastewater collection and treatment; utility billing and collection; and utility infrastructure. It operates four groups, Utility, 32% of 2008 revenues; Texas Utility, 16%; O&M Services, 15%; Texas MUD Services, 34%. Utility and Texas Utility own and manage rate-regulated public water utilities in California, Alabama, Oklahoma, and Texas. O&M and Texas MUD Services maintain projects on a contract and fee basis. Officers and directors own 4.2% of common shares (4/09 proxy). CEO/Chmn: Mark Swatek. Inc.: DE. Addr.: One Wilshire Building, 624 S. Grand Ave. Ste. 2900, Los Angeles, CA 90017. Tel.: 213-929-1800. Internet: www.swwc.com.

SouthWest Water Company has entered into an agreement to be acquired. On March 2nd, the board of directors approved the purchase by a group of independent investors for $11 a share, plus the assumption of $152 million in debt. Upon approval of stockholders and regulatory agencies, the company would be run as a privately owned business. However, a number of legal entities are investigating if the board of directors breached their fiduciary duties and/or violated state laws in their attempts to sell the company, citing uncertainties as to whether the current offer is a fair reflection of the stock's value after a number of financial statements had to be restated due to accounting errors. Investors should note that the stock is currently trading near the purchase price, which would probably drop considerably if the deal falls through (the current price represents a nearly 70% rise since our January report).

Meanwhile, the company showed an overall year-over-year earnings improvement in 2009, but it has not fully recovered from the sharp drop in 2008. Revenues declined nearly 5% in 2009 versus 2008. Bottom-line improvement was weighed down by the weakened economy, reduced consumption because of water conservation efforts in California, and elevated fixed costs. The Utilities segment was also hurt by the sale of operations in New Mexico (as per a settlement made under threat of condemnation in May, 2009). Looking ahead, we expect a moderate top-and bottom-line recovery out to 2013-2015.

The Timeliness rank of these shares has been suspended due to the possible sale of the company. But our earnings presentation reflects the continuing operation of SouthWest as a publicly traded entity. The aforementioned possibility of a price decline if the deal is rejected, coupled with the uncertainty of Southwest's business prospects because of the weakened housing market, adds considerable risk.

John D. Burke *April 23, 2010*

CASH POSITION	5-Year Av'g	12/31/09
Current Assets to Current Liabilities:	125%	114%
Cash & Equiv's to Current Liabilities:	10%	8%
Working Capital to Sales:	5%	3%

Company's Financial Strength	C++
Stock's Price Stability	45
Price Growth Persistence	35
Earnings Predictability	45

(A) Diluted earnings. Excludes nonrecurring gains (losses): '00, (3¢); '01, (5¢); '02, 1¢; '05, (23¢); '07, (54¢); '08, ($1.35); '09, (74¢). Next earnings report mid-May. Excludes discontinued operations: '09, (7¢).
(B) Dividends historically paid in late January, April, July, and October.
(C) In millions, adjusted for splits.
(D) Includes intangibles. In 2009: $19.4 million, $0.79/share.
(E) Earnings may not sum to total due to rounding.

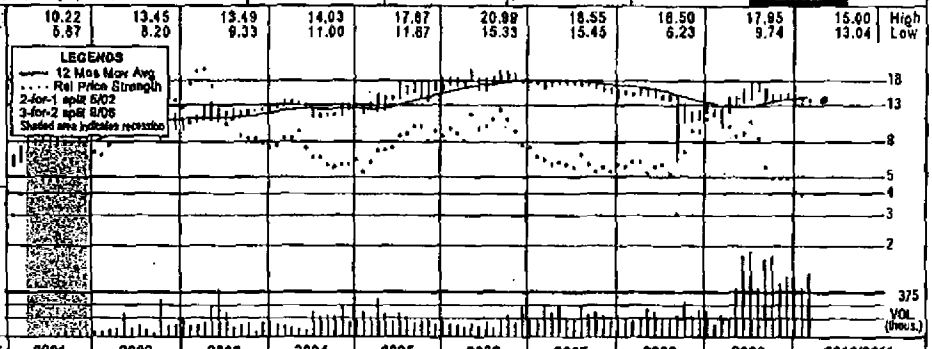
YORK WATER CO NDQ--YORW

RECENT PRICE 13.96 | TRAILING P/E RATIO 21.8 | RELATIVE P/E RATIO 1.15 | DIV'D YLD 3.7% | VALUE LINE

RANKS

PERFORMANCE 3 Average
Technical 3 Average
SAFETY 3 Average
BETA .65 (1.00 = Market)

Financial Strength B+
Price Stability 85
Price Growth Persistence 55
Earnings Predictability 95



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
REVENUES PER SH	2.05	2.05	2.17	2.18	2.58	2.56	2.79	2.89	2.95	
"CASH FLOW" PER SH	.59	.57	.65	.65	.79	.77	.86	.88	.95	
EARNINGS PER SH	.43	.40	.47	.49	.58	.58	.57	.57	.64	.68[A,B]/.72[C]
DIV'D DECL'D PER SH	.34	.35	.37	.39	.42	.45	.48	.49	.51	
CAP'L SPENDING PER SH	.76	.66	1.07	2.50	1.69	1.85	1.69	2.17	1.18	
BOOK VALUE PER SH	3.79	3.90	4.06	4.65	4.85	5.84	5.97	6.14	6.92	
COMMON SHS OUTST'G (MILL)	9.46	9.55	9.83	10.33	10.40	11.20	11.27	11.37	12.56	
AVG ANN'L P/E RATIO	17.9	26.9	24.6	25.7	26.3	31.2	30.3	24.6	21.9	20.5/19.4
RELATIVE P/E RATIO	.92	1.47	1.40	1.36	1.39	1.68	1.61	1.48	1.46	
AVG ANN'L DIV'D YIELD	4.3%	3.3%	3.2%	3.1%	2.9%	2.5%	2.8%	3.5%	3.6%	
REVENUES ($MILL)	19.4	19.6	20.9	22.5	26.8	28.7	31.4	32.8	37.0	
NET PROFIT ($MILL)	4.0	3.8	4.4	4.8	5.8	6.1	6.4	6.4	7.5	
INCOME TAX RATE	35.8%	34.9%	34.8%	36.7%	36.7%	34.4%	36.5%	36.1%	37.9%	
AFUDC % TO NET PROFIT	2.2%	3.7%	—	—	—	7.2%	3.6%	10.1%	--	
LONG-TERM DEBT RATIO	47.7%	46.7%	43.4%	42.5%	44.1%	48.3%	46.5%	54.5%	45.7%	
COMMON EQUITY RATIO	52.3%	53.3%	56.6%	57.5%	55.9%	51.7%	53.5%	45.5%	54.3%	
TOTAL CAPITAL ($MILL)	66.8	69.9	69.0	83.6	90.3	126.5	125.7	153.4	160.1	
NET PLANT ($MILL)	102.3	106.7	116.5	140.0	155.3	174.4	191.6	211.4	222.0	
RETURN ON TOTAL CAP'L	7.9%	7.4%	8.5%	7.6%	8.4%	6.2%	6.7%	5.7%	6.2%	
RETURN ON SHR. EQUITY	11.2%	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	
RETURN ON COM EQUITY	11.2%	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	
RETAINED TO COM EQ	2.5%	1.3%	2.6%	2.1%	3.0%	2.2%	1.7%	1.4%	1.9%	
ALL DIV'DS TO NET PROF	78%	88%	77%	79%	74%	77%	82%	85%	78%	

Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.

[A] No. of analysts changing earn. est. in last 10 days: 0 up, 0 down, consensus 5-year earnings growth 8.0% per year. [B] Based upon 4 analysts' estimates. [C] Based upon 4 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Revenues	6.0%	2.0%
"Cash Flow"	7.5%	7.5%
Earnings	5.5%	12.5%
Dividends	6.0%	3.5%
Book Value	6.5%	13.0%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	7.4	7.9	8.3	7.8	31.4
12/31/08	7.5	7.8	8.6	8.9	32.8
12/31/09	8.8	9.2	9.8	9.2	37.0
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.12	.14	.17	.15	.58
12/31/07	.12	.15	.15	.15	.57
12/31/08	.11	.13	.15	.18	.57
12/31/09	.13	.17	.18	.16	.64
12/31/10	*.14*	*.18*	*.19*		

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2007	.118	.118	.118	.118	.47
2008	.121	.121	.121	.121	.48
2009	.126	.126	.126	.126	.50
2010	.128	.128			

INSTITUTIONAL DECISIONS

	2Q'09	3Q'09	4Q'09
to Buy	30	35	28
to Sell	12	16	15
Hld's(000)	2477	2941	2961

ASSETS ($mill.)	2007	2008	12/31/09
Cash Assets	.0	.0	.0
Receivables	5.2	5.9	5.4
Inventory (Avg cost)	.8	.7	.7
Other	.8	.7	1.0
Current Assets	6.8	7.3	7.1
Property, Plant & Equip. at cost	223.1	248.0	260.4
Accum Depreciation	31.5	34.6	38.4
Net Property	191.6	211.4	222.0
Other	12.6	21.7	19.7
Total Assets	211.0	240.4	248.8
LIABILITIES ($mill.)			
Accts Payable	3.2	2.9	1.4
Debt Due	15.0	8.7	9.3
Other	3.2	3.5	3.9
Current Liab	21.4	14.2	14.6

LONG-TERM DEBT AND EQUITY as of 12/31/09

Total Debt $82.6 mill. Due in 5 Yrs. $24.6 mill.
LT Debt $73.2 mill. Including Cap. Leases None (46% of Cap'l)
Leases, Uncapitalized Annual rentals None

Pension Liability $8.8 mill. in '09 vs. $9.6 mill. in '08

Pfd Stock None Pfd Div'd Paid None

Common Stock 12,558,724 shares (54% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: The York Water Company engages in the impounding, purification, and distribution of water in York County and Adams County, Pennsylvania. The company supplies water for residential, commercial, industrial, and other customers. It has two reservoirs, Lake Williams, which is 700 feet long and 58 feet high, and creates a reservoir covering approximately 165 acres containing about 870 million gallons of water; and Lake Redman, which is 1,000 feet long and 52 feet high and creates a reservoir covering approximately 290 acres containing about 1.3 billion gallons of water. In addition, the company possesses a 15-mile pipeline from the Susquehanna River to Lake Redman that provides access to an additional supply of water. As of December 31, 2009, the company served approximately 180,000 residential, commercial, industrial, and other customers in 39 municipalities in York County and seven municipalities in Adams County. Has 111 employees. C.E.O. & President: Jeffrey R. Hines. Inc.: PA. Address: 130 East Market Street, York, PA 17401. Tel.: (717) 845-3601. Internet: http://www.yorkwater.com.

W.T.

April 23, 2010

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 3/31/2010

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
-4.36%	1.00%	15.19%	-10.47%	26.22%