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2011 AUG -3 PM 1:52
IDAHO PUBLIC
UTILITIES COMMISSION

Attorneys for Applicant

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION
OF UNITED WATER IDAHO INC. FOR
AUTHORITY TO INCREASE ITS RATES
AND CHARGES FOR WATER SERVICE IN
THE STATE OF IDAHO

Case No. UWI-W-11-02

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

DIRECT TESTIMONY OF PAULINE M. AHERN, CRRA
PRINCIPAL
AUS CONSULTANTS

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Appendix A – Professional Qualifications of Pauline M. Ahern

1 **Introduction**

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

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

5 **Q. Please summarize your professional experience and educational background.**

6 A. I have offered expert testimony on behalf of investor-owned utilities before twenty-six
7 state regulatory commissions on rate of return issues, including but not limited to
8 common equity cost rate, fair rate of return, capital structure issues, credit quality issues
9 and the like. I am a graduate of Clark University, Worcester, MA, where I received a
10 Bachelor of Arts degree with honors in Economics in 1973. In 1991, I received a Master
11 of Business Administration with high honors and a concentration in finance from Rutgers
12 University. The details of these appearances, my educational background, presentations I
13 have given and articles I have co-authored are shown in Appendix A supplementing this
14 testimony.

15 On a monthly basis, I also calculate and maintain the American Gas Association
16 (A.G.A.) Gas Index under contract with the A.G.A., which serves as the benchmark
17 against which the performance of the American Gas Index Fund (AGIF) is measured.
18 The A.G.A. Gas Index and AGIF are a market capitalization weighted index and fund,
19 respectively, comprised of the common stocks of the publicly traded corporate members
20 of the A.G.A.

21 I am also the Publisher of AUS Utility Reports, responsible for supervising the
22 production, publication, distribution and marketing of its various reports.

23 I am a member of the Society of Utility and Regulatory Financial Analysts

1 (SURFA) where I serve on its Board of Directors, having served two terms as President,
2 from 2006 – 2008 and 2008 – 2010. Previously, I held the position of Secretary/Treasurer
3 from 2004 – 2006. In 1992, I was awarded the professional designation "Certified Rate
4 of Return Analyst" (CRRRA) by SURFA, which is based upon education, experience and
5 the successful completion of a comprehensive written examination.

6 I am also an associate member of the National Association of Water Companies,
7 serving on its Finance/Accounting/Taxation Committee; a member of the Energy
8 Association of Pennsylvania, formerly the Pennsylvania Gas Association; and a member
9 of the American Finance and Financial Management Associations.

10 **Q. What is the purpose of your testimony in this proceeding?**

11 A. The purpose of my Direct Testimony is to provide testimony on behalf of United Water
12 Idaho, Inc. (UWID) relative to the overall rate of return including common equity cost
13 rate which it should be afforded the opportunity to earn on its jurisdictional rate base.

14 **Q. Have you prepared an exhibit which supports your recommended common equity
15 cost rate?**

16 A. Yes. It has been marked for identification as Exhibit No. 1 and consists of Schedules 1
17 through 14.

18 **Summary**

19 **Q. What is your recommended common equity cost rate?**

20 A. I recommend that the Idaho Public Utilities Commission (IDPUC) or the Commission)
21 authorize the Company the opportunity to earn a common equity cost rate of 11.05%.
22 However, the Company is requesting that the Commission authorize UWID the
23 opportunity to earn a conservatively reasonable common equity cost rate of 10.50%. A

1 common equity cost rate of 10.50% results in an overall rate of return of 8.43% based
2 upon the consolidated capital structure at April 30, 2011 of United Waterworks, Inc.
3 (UWW or the Parent) which consisted of 47.49% long-term debt at a cost rate of 6.15%
4 an 52.15% common equity. The overall rate of return is summarized in Table 1 below:

5 Table 1

6 <u>Type of Capital</u>	7 <u>Ratios</u>	8 <u>Cost Rate</u>	9 <u>Weighted Cost Rate</u>
10 Long-Term Debt	47.49%	6.15%	2.92%
11 Common Equity	<u>52.51</u>	10.50	<u>5.51</u>
12 Total	<u>100.00%</u>		<u>8.43%</u>

13 **Q. Please summarize your recommended common equity cost rate.**

14 **A.** My recommended common equity cost rate of 11.05% is summarized on Schedule 1,
15 page 2. As a wholly-owned subsidiary of UWW, UWID's common stock is not publicly
16 traded. Thus, a market-based common equity cost rate cannot be determined directly for
17 the Company. Consequently, in arriving at my recommended common equity cost rate of
18 11.05%, I have assessed the market-based common equity cost rates of companies of
19 relatively similar, but not necessarily identical risk, i.e., proxy group(s) for insight into a
20 recommended common equity cost rate applicable to UWID and suitable for cost of
21 capital purposes. Using companies of relatively comparable similar risk as proxies is
22 consistent with the principles of fair rate of return established in the *Hope*¹ and *Bluefield*²
23 cases, adding reliability to the informed expert judgment necessary to arrive at a
24 recommended common equity cost rate. However, no proxy group(s) can be selected to

¹ Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944).

² Bluefield Water Works Improvement Co. v. Public Serv. Comm'n, 262 U.S. 679 (1922).

1 be identical in risk to UWID. Therefore, the proxy group(s)' results must be adjusted, if
2 necessary, to reflect the unique relative financial and/or business risk of the Company, as
3 will be discussed in detail subsequently.

4 Consistent with the Efficient Market Hypothesis (EMH), which will be discussed
5 in more detail below, my recommendation results from the application of market-based
6 cost of common equity models, the Discounted Cash Flow (DCF) approach, the Risk
7 Premium Model (RPM) and the Capital Asset Pricing Model (CAPM) for the proxy
8 group of nine water companies whose selection will be discussed subsequently. In
9 addition, I also selected a group of domestic, non-price regulated companies comparable
10 in total risk to the nine water companies, applying the DCF, RPM and CAPM to them as
11 well as assessing projected returns on book common equity or partner's capital in
12 accordance with the opportunity cost standards encapsulated in *Hope* and *Bluefield*.

13 The results derived from each are as follows:

Table 2

Proxy Group
of Nine
Water
Companies

Discounted Cash Flow Model	9.54%
Risk Premium Model	10.33
Capital Asset Pricing Model	10.42
Cost of Equity Models Applied to Comparable Risk, Non-Price Regulated Companies	13.45
Indicated Common Equity Cost Rate Before Adjustment for Financial Risk, Flotation Costs and Business Risks	10.90
Financial Risk Adjustment	(0.23)
Business Risk Adjustment	<u>0.40</u>
Indicated Common Equity Cost Rate	<u>11.07%</u>
Recommended Common Equity Cost Rate	<u>11.05%</u>

After reviewing the cost rates based upon these models, I conclude that a common equity cost rate of 10.90% is indicated before any adjustment for financial and business risks related to UWID's lower financial risk and its smaller size relative to the proxy group of nine water companies. The indicated common equity cost rate based upon the nine water companies was adjusted downward by 23 basis points (a negative 0.23%) to reflect UWID's slightly lower financial risk relative to the nine water companies, and upward by 40 basis points (0.40%) to reflect UWID's increased business risk as noted above. These adjustments will be discussed subsequently. After adjustment, the financial and business risk-adjusted common equity cost rate is 11.07% which, rounded to 11.05%,

1 is my recommended common equity cost rate.

2 **General Principles**

3 **Q. What general principles have you considered in arriving at your recommended**
4 **common equity cost rate of 11.05%.**

5 A. In unregulated industries, the competition of the marketplace is the principal determinant
6 of the price of products or services. For regulated public utilities, regulation must act as a
7 substitute for marketplace competition. Assuring that the utility can fulfill its obligations
8 to the public while providing safe and adequate service at all times requires a level of
9 earnings sufficient to maintain the integrity of presently invested capital as well as
10 permitting the attraction of needed new capital at a reasonable cost in competition with
11 other firms of comparable risk, consistent with the fair rate of return standards established
12 by the U.S. Supreme Court in the previously cited *Hope* and *Bluefield* cases.
13 Consequently, marketplace data must be relied upon in assessing a common equity cost
14 rate appropriate for ratemaking purposes. Therefore, my recommended common equity
15 cost rate is based upon marketplace data for a proxy group of utilities as similar in risk as
16 possible to UWID, based upon selection criteria which will be discussed subsequently.
17 Just as the use of the market data for the proxy group(s) adds reliability to the informed
18 expert judgment used in arriving at a recommended common equity cost rate, the ability
19 to use multiple common equity cost rate models also adds reliability when arriving at a
20 company-specific common equity cost rate.

1 **Business Risk**

2 **Q. Please define business risk and explain why it is important to the determination of a**
3 **fair rate of return.**

4 A. Business risk is the riskiness of a company's common stock without the use of debt
5 and/or preferred capital. Examples of such general business risk to all utilities, i.e., water,
6 electric and natural gas distribution, include the quality of management, the regulatory
7 environment, customer mix and concentration of customers, service territory growth,
8 capital intensity, size, and the like, which have a direct bearing on earnings.

9 Business risk is important to the determination of a fair rate of return because the
10 greater the level of risk, the greater the rate of return investors demand, consistent with
11 the basic financial precept of risk and return.

12 **Q. Please discuss the business risks facing the water industry in general.**

13 A. Water is essential to life and unlike electricity or natural gas, water is the only utility
14 product which is ingested. Consequently, water quality is of paramount importance to the
15 health and well-being of customers and subject to additional health and safety regulations.
16 In addition, unlike many electric and natural gas utilities, water companies serve a
17 production function in addition to the delivery functions served by electric and gas
18 utilities.

19 Water utilities obtain supply from wells, aquifers, surface water reservoirs,
20 streams and rivers, or through water rights. Throughout the years, well supplies and
21 aquifers have been environmentally threatened, with historically minor purification
22 treatment having given way to major well rehabilitation, treatment or replacement.
23 Simultaneously, environmental water quality standards have tightened considerably,

1 requiring multiple treatments. In addition, drought, water source overuse, runoff,
2 threatened species/habitat protection and other factors are limiting supply availability. As
3 for water rights, their lives are typically finite with renewability uncertain. In the course
4 of procuring water supplies and treating water so that it meets Safe Drinking Water Act
5 standards, water utilities have an ever-increasing responsibility to be stewards of the
6 environment from which supplies are drawn, in order to preserve and protect the natural
7 resources of the United States.

8 Moreover, electric and natural gas companies, where transmission and distribution
9 is separate from generation, generally do not produce the electricity or natural gas which
10 they transmit and distribute. In contrast, water utilities are typically vertically engaged in
11 the entire process of acquiring supply, production (treatment) and distribution of water.
12 Hence, water utilities require significant capital investment in sources of supply and
13 production (wells and treatment facilities), in addition to transmission and distribution
14 systems, both to serve additional customers and to replace aging systems, creating a major
15 risk facing the water and wastewater utility industry.

16 Value Line Investment Survey³ (Value Line) observes the following about the
17 water utility industry:

18 Water utility stocks have been met with some resistance since our January
19 review. Indeed, all but a single issue covered in our *Survey* gave back
20 some ground. And the exception advanced less than 10% in price. As a
21 result, the group, as a whole, has slipped into the bottom half of the pack
22 for Timeliness after residing in the top quartile last time around.

23 Wall Street's apprehension is not surprising, given that most of the
24

³ Value Line Investment Survey, April 22, 2011.

1 companies reported disappointing earnings in the fourth-quarter. (First-
2 quarter results were not released as of the day of this report). Indeed,
3 revenue growth, although healthy thanks to continued progress on the
4 regulatory front, seemed to fall short of expectations. Earnings,
5 meanwhile, were further frustrated by the increasing costs of doing
6 business.

7
8 The group's growth prospects going forward are not overly impressive
9 either. With the exception of *American Water Works*, not a single stock in
10 this industry stands out for Timeliness or 3- to 5-year price appreciation
11 potential. The companies here face stiff headwinds on the cost front, as
12 many of the country's water systems are aging and increasing in the need
13 for repairs and maintenance. Financial constraints are of further concern,
14 with the financial moves that are likely to be made in order to maintain
15 infrastructures dilutive to share-net growth.

16
17 * * *

18
19 Despite a more favorable regulatory climate, providers still have troubles
20 facing them. Infrastructures are decaying rapidly and, in many cases, need
21 complete overhauls. The costs to make the repairs are exorbitant many
22 operating in this space do not have the funds on hand to foot the bill.
23 Indeed, most are strapped for cash and will have to look to outside
24 financiers to keep up. Although consolidation trends present unique
25 opportunities for those with the financial capabilities to throw their hat in
26 the ring, such as *Aqua America*, others are just trying to stay afloat.
27 Unfortunately, the financing costs to stay in business, whether it be
28 additional share or debt offerings, will probably drown most and dilute
29 shareholder gains moving ahead.

30
31 * * *

32
33 The bulk of the stocks in this group have lost any luster they had from a
34 growth perspective. Although the share-price weakness makes for more
35 attractive entry points, only *American States Water* stands out for
36 appreciation potential. That said, the dividends of many help make for
37 worthwhile total return appeal in some cases. Again *American States*
38 *Water*, along with the *American Water Works*, and newcomer *SJW Corp.*,
39 top the list on this account.That said, we do think that there are better
40 options out there for investors looking to add an income producing stock
41 to the portfolios.

42
43 In addition, because the water and wastewater industry is much more capital-intensive
44 than the electric, natural gas or telephone industries, the investment required to produce a

1 dollar of revenue is greater. For example, as shown on page 1 of Schedule 2, it took
2 \$3.82 of net utility plant on average to produce \$1.00 in operating revenues in 2010 for
3 the water utility industry as a whole. For UWID specifically, it took \$6.50 of net utility
4 plant to produce \$1.00 in operating revenues in 2010. In contrast, for the electric,
5 combination electric and gas and natural gas utility industries, on average it took only
6 \$2.16, \$1.70 and \$1.27, respectively, to produce \$1.00 in operating revenues in 2010.
7 The greater capital intensity of water utilities is not a new phenomenon as water utilities
8 have exhibited a consistently and significantly greater capital intensity relative to electric,
9 combination electric and gas and natural gas utilities during the ten years ended 2010, as
10 shown on page 2 of Schedule 2. As financing needs have increased over the last decade,
11 the competition for capital from traditional sources has increased, making the need to
12 maintain financial integrity and the ability to attract needed new capital increasingly
13 important. Because investor-owned water utilities typically do not receive federal funds
14 for infrastructure replacement, the challenge to investor-owned water utilities is
15 exacerbated and their access to financing is restricted, thus increasing risk.

16 The National Association of Regulatory Commissioners (NARUC) has also
17 highlighted the challenges facing the water and wastewater industry stemming from its
18 capital intensity. NARUC's Board of Directors adopted the following resolution in July
19 2006:⁴

20 WHEREAS, To meet the challenges of the water and wastewater industry which
21 may face a combined capital investment requirement nearing one trillion dollars over a
22 20-year period, the following policies and mechanisms were identified to help ensure
23 sustainable practices in promoting needed capital investment and cost-effective rates: a)

⁴ "Resolution Supporting Consideration of Regulatory Policies Deemed as 'Best Practices'", Sponsored by the Committee on Water. Adopted by the NARUC Board of Directors, July 27, 2006.

1 the use of prospectively relevant test years; b) the distribution system improvement
2 charge; c) construction work in progress; d) pass-through adjustments; e) staff-assisted
3 rate cases; f) consolidation to achieve economies of scale; g) acquisition adjustment
4 policies to promote consolidation and elimination of non-viable systems; h) a streamlined
5 rate case process; i) mediation and settlement procedures; j) defined timeframes for rate
6 cases; k) integrated water resource management; l) a fair return on capital investment;
7 *and* m) improved communications with ratepayers and stakeholders; *and*
8

9 WHEREAS, Due to the massive capital investment required to meet current and
10 future water quality and infrastructure requirements, adequately adjusting allowed equity
11 returns to recognize industry risk in order to provide a fair return on invested capital was
12 recognized as crucial...
13

14 RESOLVED, That the National Association of Regulatory Utility Commissions
15 (NARUC), convened in its July 2006 Summer Meetings in Austin, Texas, conceptually
16 supports review and consideration of the innovative regulatory policies and practices
17 identified herein as "best practices;" *and be it further*
18

19 RESOLVED, That NARUC recommends that economic regulators consider and
20 adopt as many as appropriate of the regulatory mechanisms identified herein as best
21 practices...
22

23 UWID itself is facing expected significant capital investment as it projects net
24 capital expenditures of \$66,501,000 for the remainder of 2011 through 2016, representing
25 an increase of approximately 27% over 2010 net utility plant of \$246,007,714.

26 The water utility industry also experiences lower relative depreciation rates.
27 Lower depreciation rates, as one of the principal sources of internal cash flows for all
28 utilities, mean that water utility depreciation as a source of internally-generated cash is far
29 less than for electric, natural gas or telephone utilities. Water utilities' assets have longer
30 lives and, hence, longer capital recovery periods. As such, water utilities face greater risk
31 due to inflation which results in a higher replacement cost per dollar of net plant than for
32 other types of utilities. As shown on page 3 of Schedule 2, water utilities experienced an
33 average depreciation rate of 3.0% for 2010 with UWID experiencing an identical
34 depreciation rate of 3.0%. In contrast, in 2010, the electric, combination electric and gas,

1 and natural gas, experienced average depreciation rates of 3.7%, 3.7% and 3.4%,
2 respectively.

3 As with capital intensity, the lower relative depreciation rates of water and
4 wastewater utilities is not a new phenomenon. As shown on page 4 of Schedule 2, water
5 utility depreciation rates have been consistently and much lower than those of the electric,
6 combination electric and gas and natural gas utilities. Such low depreciation rates signify
7 that the pressure on cash flows remains significantly greater for water utilities than for
8 other types of utilities.

9 In addition, not only is the water utility industry historically capital intensive, it is
10 expected to incur significant capital expenditure needs over the next 20 years. Prior to
11 the recent economic and capital market turmoil, Standard & Poor's (S&P) noted⁵:

12 Standard & Poor's expects the already capital-intensive water utility
13 industry to become even more so over the next several years. Due to the
14 aging pipeline infrastructure and more stringent quality standards, the U.S.
15 Environmental Protection Agency's (EPA) foresees a need for \$277 billion
16 to upgrade and maintain U.S. water utilities through 2022, with about
17 \$185 billion going toward infrastructure improvements. In addition, about
18 \$200 billion will be needed for wastewater applications, which suggests
19 increased capital spending to be a long-term trend in this industry.

20
21 In line with these trends, many companies have announced aggressive
22 capital spending programs. Forecast capital spending primarily focuses on
23 infrastructure replacements and growth initiatives. Over the past five
24 years, capital spending has been equivalent to about three times its
25 depreciation expense. However, companies are now forecasting spending
26 to be at or above four times depreciation expense over the intermediate
27 term. For companies in regulatory jurisdictions that provide timely cost
28 recovery for capital expenditures, the increased spending is likely to have a
29 minimal effect on financial metrics and ratings. However, companies in
30 areas without these mechanisms, earnings, and cash flow could be

⁵ Standard & Poor's, Credit Outlook For U.S. Investor-Owned Water Utilities Should Remain Stable in 2008 (January 31, 2008) 2, 4.

1 negatively affected by the increased spending levels, which over the longer
2 term could harm a company's overall credit profile.

3
4 Due to the high level of capital spending, U.S. investor-owned water
5 utilities do not generate positive free cash flow. This, coupled with the
6 forecast increase in capital spending over the intermediate term, will
7 require additional access to capital markets. We expect rated water
8 companies to have enough financial flexibility to gain that access. Ratings
9 actions shouldn't result from this increased market activity because we
10 expect companies to use a balanced financing approach, which should
11 maintain debt near existing levels.

12
13 Specifically, the EPA states the following⁶:

14 The survey found that the total nationwide infrastructure need is \$334.8
15 billion for the 20-year period from January 2007 through December 2026.
16 With \$200.8 billion in needs over the next 20 years, transmission and
17 distribution projects represent the largest category of need. This result is
18 consistent with the fact that transmission and distribution mains account
19 for most of the nation's water infrastructure. The other categories, in
20 descending order of need are: treatment, storage, source and a
21 miscellaneous category of needs called "other". The large magnitude of the
22 national need reflects the challenges confronting water systems as they
23 deal with an infrastructure network that has aged considerably since these
24 systems were constructed, in many cases, 50 to 100 years ago.

25
26 In its 2009 infrastructure Fact Sheet⁷ published by the American Society of Civil

27 Engineers (ASCE) they state:

28 America's drinking water systems face an annual shortfall of at least \$11
29 billion to replace aging facilities that are near the end of their useful lives
30 and to comply with existing and future federal water regulations. This does
31 not account for growth in the demand for drinking water over the next 20
32 years. Leaking pipes lose an estimated 7 billion gallons of clean drinking
33 water a day.

34
35 Exacerbating the impact on the risk of water utilities relative to energy utilities

⁶ "Fact Sheet: "EPA's 2007 Drinking Water Infrastructure Needs Survey and Assessment", United States Environmental Protection Agency, Office of Water, February 2009, 1.

⁷ 2009 American Society of Civil Engineers, Report Card for America's Infrastructure 2009.

1 related to their increased capital intensity and projected large capital expenditure needs is
2 the declining consumption of water by their ratepayers. Declining water usage results in
3 declining revenues at the same time that various fixed costs such as capital needs
4 continue to increase as previously discussed, but also operating costs are increasing. As
5 Company Witness Gregory P. Wyatt notes in his direct testimony, UWID has been unable
6 to achieve its authorized return on common equity (ROE) for the six years ending 2010,
7 earning an average ROE of 7.21% relative to authorized ROEs in the range of 10.30% -
8 10.40%. Mr. Wyatt attributes this inability of UWID to earn its authorized ROE to a
9 continuing decline in water consumption per customer of approximately 23% from 2003
10 through 2010. Additionally, Company Witness Paul Herbert shows that, on average,
11 UWID experienced an annual decline in consumption of 4.7% from 2001 through 2011.
12 Mr. Wyatt also notes that the continuing decline in water consumption results in a
13 significant shortfall in annual revenues, because approximately 71% of UWID's annual
14 revenue requirement is derived from the variable volumetric portion of customer bills,
15 thus increasing the risk that UWID will continue to not achieve its authorized ROE.

16 Water utility capital expenditures as large as projected by the EPA and ASCE will
17 require significant financing. The three sources typically used for financing are debt,
18 equity (common and preferred) and cash flow. All three are intricately linked to the
19 opportunity to earn a sufficient rate of return as well as the ability to achieve that return.
20 Consistent with the *Bluefield* and *Hope* decisions discussed previously, the return must be
21 sufficient enough to maintain credit quality as well as enable the attraction of necessary
22 new capital, be it debt or equity capital. If unable to raise debt or equity capital, the utility
23 must turn to either retained earnings or free cash flow, both of which are directly linked to

1 earning a sufficient rate of return. If either is inadequate, it will be nearly impossible for
2 the utility to invest in needed infrastructure. Since all utilities typically experience
3 negative free cash flows, it is clear that an insufficient rate of return can be financially
4 devastating for utilities and for its customers, the ratepayers. Page 5 of Schedule 2
5 demonstrates that the free cash flows (funds from operations minus capital expenditures)
6 of water utilities as a percent of total operating revenues has been consistently more
7 negative than that of the electric, combination electric and gas and natural gas utilities for
8 the ten years ended 2010. Magnifying the impact of water utilities' negative free cash
9 flow position is a continued inability to achieve what may already be an insufficient
10 authorized rate of return on common equity, as will be discussed subsequently.

11 Consequently, as with the previously discussed capital intensity and depreciation
12 rates, significant capital expenditures relative to net plant as well as the consistently and
13 more significantly negative free cash flow relative to operating revenues of water utilities
14 indicates greater investment risk for water utilities relative to electric, combination
15 electric and gas and natural gas utilities.

16 In view of the foregoing, it is clear that the water utility industry's high degree of
17 capital intensity, low depreciation rates and significant negative free cash flow, coupled
18 with the need for substantial infrastructure capital spending, requires regulatory support in
19 the form of adequate and timely rate relief, as recognized by NARUC, so water utilities
20 will be able to successfully meet the challenges they face.

21 In addition, the Water Research Foundation reports:

22 Pricing that recovers the costs of building, operating and maintaining the
23 systems is absolutely essential to achieving sustainability. Drinking water
24 and wastewater utilities must be able to price water to reflect the full costs

1 of treatment and delivery.⁸

2
3 **Q. Are there other indications that the water utility industry exhibits more investment**
4 **risk than the electric, combination electric and gas and natural gas utility**
5 **industries?**

6 A. Yes. Schedule 3 presents several such indications: total debt / earnings before interest,
7 taxes, depreciation and amortization (EBITDA); funds from operations (FFO) / total debt;
8 funds from operations / interest coverage; before-income tax / interest coverage; earned
9 ROEs and earned v. authorized ROEs for each utility industry for the ten years ended
10 2010. The increasing proportion of total debt to EBITDA for the water utilities indicates
11 significantly increasing and greater financial risk for water utilities, which began the most
12 recent ten years below that of electric, combination electric and gas and natural gas
13 utilities.

14 As noted previously, S&P evaluates total debt as a percentage of EBITDA and
15 FFO as a percentage of debt in the bond / credit rating process. Page 1 of Schedule 3
16 shows that total debt / EBITDA has risen steadily for water utilities for the ten years
17 ended 2010, dropping only slightly for 2010. Notwithstanding the decline in 2010, total
18 debt / EBITDA is now higher than that for electric, combination electric and gas and
19 natural gas utilities. Page 2 shows that FFO / total debt has steadily declined for water
20 utilities over the decade ending 2010, while rising for the other utility groups. The
21 consistently low level of FFO / total debt for the water utilities, is a further indication of
22 the pressures upon water utility cash flows and the increased relative investment risk
23 which the water utility industry faces.

⁸ Coomes et al. *North American Water Usage Trends Since 1992*, Water Research Foundation, 2010.

1 Pages 3 and 4 of Schedule 3 confirm the pressures upon both cash flows and
2 income faced by water utilities. Page 3 shows that FFO / interest coverage for water,
3 electric, combination electric and gas and natural gas utilities followed a similar pattern to
4 FFO interest coverage for the ten years ended 2010. FFO interest coverage remained
5 relative consistent for water utilities, rising and falling between 2.0 and 3.0 times during
6 the period. A similar pattern was exhibited by electric utilities. However, FFO / total debt
7 for combination electric and gas as well as natural gas utilities rose during the ten years,
8 exceeding that of water utilities significantly in 2009 and dropping back somewhat in
9 2010. Page 4 shows that before-income tax coverage interest coverage for water utilities
10 also remained relatively stable, falling below that of gas utilities in 2002 and below that
11 of electric and combination electric and gas utilities between 2005 and 2006, where it
12 remained for the remainder of the ten years. In 2010, in all likelihood due to the “Great
13 Recession” and the economy’s currently nascent, fragile recovery from it, before-income
14 tax interest coverage for water, electric and combination electric and gas utilities has
15 converged at slightly lower than 3.0 times, while natural gas utilities continue to enjoy a
16 significantly greater before-income tax interest coverage of approximately 4.25 times in
17 2010. Once again, the consistency and relatively low level of interest coverage ratios for
18 water utilities are further indications of the pressures upon cash flow which water utilities
19 face, confirming greater investment risk for water utilities relative to electric,
20 combination electric and gas and natural gas utilities.

21 A final indication of the relative investment risk of water utilities compared with
22 electric, combination electric and gas and natural gas utilities, are trends in earned and
23 authorized ROEs. As shown on page 5 of Schedule 3, earned ROEs, on average, for water

1 utilities have generally been below those of electric, combination electric and gas and
2 natural gas utilities during the ten years ended 2010. They have consistently been lower
3 for the last five years. However, such a comparison would not be complete without a
4 comparison of earned ROEs with authorized ROEs, as shown on pages 6 and 7 of
5 Schedule 3. The authorized ROEs are those reported in AUS Utility Reports for the last
6 month of each year representing the authorized ROEs in effect during the previous year,
7 rather than the outcomes of rate cases decided during the year. Hence, these authorized
8 ROEs represent the revenue requirements of each year which give rise to the earned
9 ROEs in each year. Water utilities generally, consistently and dramatically earned far
10 below their authorized ROEs, while electric and combination electric and gas utilities
11 earned above their authorized ROEs in some years and below in others. In contrast,
12 natural gas utilities generally, consistently and dramatically earned above their authorized
13 ROEs. Notwithstanding the closing of the gap between the average authorized ROEs for
14 the various utility groups over the ten year period, for the majority of the period, water
15 utilities have failed to earn their average authorized ROE with earned ROEs significantly
16 lower than authorized, a likely contributing factor to the greater risk indicated by the
17 previously discussed coverage metrics.

18 In view of all of the foregoing, it is clear that the investment risk of water utilities
19 has increased over the most recent ten years and that water utilities currently face greater
20 investment risk relative to electric, combination electric and gas and natural gas utilities.

21 **Q. Does UWID face additional extraordinary business risk?**

22 **A.** Yes. In addition to the risk due to continuing declining per customer consumption and
23 thus increased pressure on UWID's ability to earn its authorized ROE, UWID faces

1 additional extraordinary business risk due to its smaller size relative to the proxy group.
2 As discussed above, the greater the level of risk, the greater the rate of return demanded /
3 required by investors, consistent with the basic financial precept of risk and return.
4 Therefore an upward adjustment to the indicated common equity cost rate is necessary to
5 reflect the smaller size of UWID.

6 **Q. Please explain how UWID's smaller size increases its business risk relative to the**
7 **proxy groups.**

8 A. As will be discussed subsequently, UWID's smaller size, \$142.597 million in estimated
9 market capitalization relative to the average market capitalization of \$1.195 billion for the
10 nine water companies, shown on page 1 of Schedule 14, indicates greater relative
11 business risk because all else equal, size has a bearing on risk. It is clear, too, that on a
12 relative basis, water utilities on average are smaller in terms of market capitalization than
13 electric, combination electric and gas and natural gas utilities, as demonstrated on page 5
14 of Schedule 3, which shows the market capitalization of each utility for the ten years
15 ended 2010.

16 **Q. Please explain why size has a bearing on business risk.**

17 A. It is conventional wisdom, supported by actual returns over time, that smaller companies
18 tend to be more risky causing investors to expect greater returns as compensation for that
19 risk. Smaller companies are simply less able to cope with significant events which affect
20 sales, revenues and earnings. For example, in general, the loss of revenues from a few
21 larger customers would have a greater effect on a small company than on a much larger
22 company with a larger, more diverse, customer base. Moreover, smaller companies are
23 generally less diverse in their operations as well as experiencing less financial flexibility.

1 In addition, the effect of extreme weather conditions, i.e., prolonged droughts or
2 extremely wet weather, will have a greater affect upon a small operating water utility than
3 upon the much larger, more geographically diverse holding companies.

4 Further evidence of the risk effects of size include the fact that investors demand
5 greater returns to compensate for the lack of marketability and liquidity of the securities
6 of smaller firms. That it is the use of funds invested and not the source of those funds
7 which gives rise to the risk of any investment is a basic financial principle⁹. Therefore,
8 because UWID is the regulated utility to whose jurisdictional rate base the overall cost of
9 capital allowed by the Commission will be applied, the relevant risk reflected in the cost
10 of capital must be that of UWID, including the impact of its small size on common equity
11 cost rate. As noted previously, UWID is smaller than the average proxy group company
12 based upon the results of a study of the market capitalization of the nine water companies
13 as shown on Schedule 14.

14 In addition, Brigham¹⁰ states:

15 A number of researchers have observed that portfolios of small-firms have
16 earned consistently higher average returns than those of large-firms stocks;
17 this is called "small-firm effect." On the surface, it would seem to be
18 advantageous to the small firms to provide average returns in a stock
19 market that are higher than those of larger firms. In reality, it is bad news
20 for the small firm; what *the small-firm effect means is that the capital*
21 *market demands higher returns on stocks of small firms than on otherwise*
22 *similar stocks of the large firms.* (italics added)
23

⁹ Brealey, Richard A. and Myers, Stewart C., Principles of Corporate Finance (McGraw-Hill Book Company, 1988) 173 198.

¹⁰ Brigham, Eugene F., Fundamentals of Financial Management, Fifth Edition (The Dryden Press, 1989) 623.

1 **Financial Risk**

2 **Q. Please define financial risk and explain why it is important to the determination of a**
3 **fair rate of return.**

4 **A.** Financial risk is the additional risk created by the introduction of senior capital, i.e., debt
5 and preferred stock, into the capital structure. The higher the proportion of senior capital
6 in the capital structure, the higher the financial risk which must be factored into the
7 common equity cost rate, consistent with the previously mentioned basic financial
8 principle of risk and return, i.e., investors demand a higher common equity return as
9 compensation for bearing higher investment risk.

10 In May 2009, S&P expanded its Business Risk / Financial Risk Matrix in an effort
11 to augment its independence, strengthen the rating process and increase S&P's
12 transparency to better serve its markets (see page 4 of Schedule 4). S&P initially
13 published its electric, gas, and water utility ratings rankings in a framework consistent
14 with the manner in which it presents its rating conclusions across all other corporate
15 sectors in November 2007. S&P then stated¹¹:

16 Incorporating utility ratings into a shared framework to communicate the
17 fundamental credit analysis of a company furthers the goals of
18 transparency and comparability in the ratings process.

19 * * *

20
21
22 The utilities rating methodology remains unchanged, and the use of the
23 corporate risk matrix has not resulted in any changes to ratings or
24 outlooks. The same five factors that we analyzed to produce a business
25 risk score in the familiar 10-point scale are used in determining whether a
26 utility possesses an "Excellent," "Strong," "Satisfactory," "Weak," or
27 "Vulnerable" business risk profile.
28

¹¹ Standard & Poor's – Ratings Direct – "U.S. Utilities Ratings Analysis Now Portrayed In The S&P Corporate Ratings Matrix" (November, 30, 2007) 2.

1 In May 2009, S&P revised its Business Risk / Financial Risk Matrix with the new
2 business risk/financial risk matrix shown in Table 1 on page 2 of Schedule 4 and financial
3 risk indicative ratios for utilities shown in Table 2 on page 4. Notwithstanding the
4 metrics published in Table 2, S&P stated:

5 The rating matrix indicative outcomes are what we typically observe – but
6 are not meant to be precise indications or guarantees of future rating
7 opinions. Positive and negative nuances in our analysis may lead to a
8 notch higher or lower than the outcomes indicated in the various cells of
9 the matrix.

10
11 As shown on Schedule 8, page 2, the average S&P bond rating (issuer credit
12 rating), business risk profile and financial risk profile of the nine water companies are
13 split A+ (A), Excellent and Intermediate.

14 **Q. Please describe UWID's degree of financial risk relative to the proxy group of nine**
15 **water companies.**

16 **A.** Although UWID's ratemaking capital structure ratios and hence, financial risk are similar
17 to the nine water companies on average, UWID's ratemaking long-term debt ratio at April
18 30, 2011 of 47.49% is lower than the average long-term debt ratio of the nine water
19 companies, 50.97%, at December 31, 2010. Therefore, UWID's financial risk, although
20 similar, is somewhat lower than that of the nine water companies. Consistent with the
21 previously mentioned financial principle of risk and return, the lower financial risk of
22 UWID must be reflected in the recommended common equity cost rate. Consequently, a
23 downward adjustment of 23 basis points (a negative 0.23%) was made to the indicated
24 common equity cost rate of 10.90% based upon the nine water companies before
25 adjustment for financial risk and business risk. The derivation of this adjustment will be
26 discussed subsequently.

1 Q. Nevertheless, can the combined business risks, i.e., investment risk of an enterprise,
2 be proxied by bond and credit ratings?

3 A. Yes, similar bond ratings/issuer credit (bond/credit) ratings reflect and are representative
4 of similar combined business and financial risks, i.e., total risk faced by bond investors.
5 Although specific business or financial risks may differ between companies, the same
6 bond/credit rating indicates that the combined risks are similar, albeit not necessarily
7 equal, as the purpose of the bond/credit rating process is to assess credit quality or credit
8 risk and not common equity risk. Risk distinctions within S&P's bond rating categories
9 are recognized by a plus or minus, i.e., within the A category, an S&P rating can be at
10 A+, A, or A-. Similarly, risk distinctions for Moody's ratings are distinguished by
11 numerical rating gradations, i.e., within the A category, a Moody's rating can be A1, A2
12 and A3. For S&P, additional risk distinctions are reflected in the assignment of one of
13 the six business risk profiles and six financial risk profiles, shown in Tables 1 and 2 on
14 pages 2 and 4 of Schedule 4.

15 In summary, it is clear that S&P's bond/credit rating process encompasses a
16 qualitative analysis of business and financial risks (see page 3 of Schedule 4). While not
17 a means by which one can specifically quantify the differential in common equity risk
18 between companies, bond/credit ratings provide a useful means with which to
19 compare/differentiate investment risk between companies because they are the result of a
20 thorough and comprehensive analysis of all diversifiable business risks, i.e., investment
21 risk.

1 **United Water Idaho, Inc.**

2 **Q. Have you reviewed the rate filing of UWID?**

3 A. Yes. UWID provides service to approximately 85,000 customers in Ada County, which
4 includes Boise and Eagle, ID. UWID is a wholly-owned subsidiary of UWW, which in
5 turn is a wholly-owned subsidiary of United Water Resources, Inc. (UWR).
6 Consequently, the Company's common stock is not publicly traded.

7 **Proxy Group**

8 **Q. Please explain how you chose the proxy group of nine water companies.**

9 A. The basis of selection for the proxy group was to select those companies which meet the
10 following criteria: 1) they are included in the Water Company Group of AUS Utility
11 Reports (July 2011); 2) they have Value Line, Reuters, Zacks or Yahoo! Finance,
12 consensus five-year earnings per share (EPS) growth rate projections; 3) they have a
13 positive Value Line five-year dividends per share (DPS) growth rate projection; 4) they
14 have a Value Line adjusted beta; 5) they have not cut or omitted their common dividends
15 during the five years ending 2010 or through the time of the preparation of this testimony;
16 6) they have 60% or greater of 2010 total operating income derived from and 60% or
17 greater of 2010 total assets devoted to regulated water operations; and 7) at the time of
18 the preparation of this testimony, they had not publicly announced that they were
19 involved in any major merger or acquisition activity.

20 The following companies met these criteria: American States Water Co.,
21 American Water Works Co., Inc., Aqua America, Inc., Artesian Resources Corp.,
22 California Water Service Corp., Connecticut Water Service, Inc., Middlesex Water
23 Company, SJW Corporation and York Water Company.

1 **Q. Please describe Schedule 5.**

2 A. Schedule 5 contains comparative capitalization and financial statistics for the nine water
3 companies for the years 2006-2010.

4 During the five-year period ending 2010, the historically achieved average
5 earnings rate on book common equity for the group averaged 7.51%. The average
6 common equity ratio based upon total permanent capital (excluding short-term debt) was
7 49.71%, and the average dividend payout ratio was 63.57%.

8 Total debt as a percent of EBITDA for the years 2006-2010 ranged between 4.56
9 and 9.07 times, averaging 5.90 times, while funds from operations relative to total debt
10 ranged from 15.04% to 17.10%, averaging 16.25%.

11 **Common Equity Cost Rate Models**

12 **The Efficient Market Hypothesis (EMH)**

13 **Q. Please describe the conceptual basis of the EMH.**

14 A. The EMH, which is the foundation of modern investment theory, was pioneered by
15 Eugene F. Fama¹² in 1970. An efficient market is one in which security prices reflect all
16 relevant information all the time, with the implication that prices adjust instantaneously to
17 new information, thus reflecting the intrinsic fundamental economic value of a security.¹³

18 The generally-accepted “semistrong” form of the EMH asserts that all publicly
19 available information is fully reflected in securities prices, i.e., that fundamental analysis
20 cannot enable an investor to “out-perform the market” in the long-run as noted by Brealey

¹² Fama, Eugene F., “Efficient Capital Markets: A Review of Theory and Empirical Work” (Journal of Finance, May 1970) 383-417.

¹³ Morin, Roger A., New Regulatory Finance (Public Utility Reports, Inc., 2006) 279-281.

1 and Myers¹⁴. The “semistrong” form of the EMH is generally held to be true because the
2 use of insider information often enables investors to earn excessive returns by
3 “outperforming the market” in the short-run. This means that all perceived risks and
4 publicly-available information are taken into account by investors in the prices they pay
5 for securities, such as bond/credit ratings, discussions about companies by bond/credit
6 rating agencies and investment analysts as well as the discussions of the various common
7 equity cost rate methodologies (models) in the financial literature. In an attempt to
8 emulate investor behavior, no single common equity cost rate model should be relied
9 upon exclusively in determining a cost rate of common equity and the results of multiple
10 costs of common equity models should be taken into account. In addition, the academic
11 literature provides substantial support for the need to rely upon more than one cost of
12 common equity model in arriving at a recommended common equity cost rate.¹⁵

13 **Q. Are the cost of common equity models you use market-based models, and hence**
14 **based upon the EMH?**

15 **A.** Yes. The DCF model is market-based in that market prices are utilized in developing the
16 dividend yield component of the model. The RPM is market-based in that the bond
17 ratings and expected bond yields used in the application of the RPM reflect the market’s
18 assessment of bond/credit risk. In addition, the use of betas to determine the equity risk
19 premium also reflects the market’s assessment of market/systematic risk as betas are

¹⁴ Brealey, Richard A. and Myers, Stewart C., Principles of Corporate Finance First Edition, (McGraw-Hill, 1996) 329.

¹⁵ Morin 428-431.
Brigham, Eugene F. and Gapenski, Louis C., Financial Management – Theory and Practice Fourth Edition, (The Dryden Press, 1985) 256.
Brigham, Eugene F. and Daves, Phillip R., Intermediate Financial Management, (Thomson-Southwestern, 2007) 332-333.

1 derived from regression analyses of market prices. The CAPM is market-based for many
2 of the same reasons that the RPM is market-based i.e., the use of expected bond (Treasury
3 bond) yields and betas. The process of selecting the comparable risk non-utility
4 companies is market-based in that it is based upon statistics which result from regression
5 analyses of market prices and reflect the market's assessment of total risk. Therefore, all
6 the cost of common equity models I utilize are market-based models, and hence based
7 upon the EMH.

8 **Discounted Cash Flow Model (DCF)**

9 **Q. What is the theoretical basis of the DCF model?**

10 A. The theory underlying the DCF model is that the present value of an expected future
11 stream of net cash flows during the investment holding period can be determined by
12 discounting those cash flows at the cost of capital, or the investors' capitalization rate.
13 DCF theory indicates that an investor buys a stock for an expected total return rate which
14 is derived from cash flows received in the form of dividends plus appreciation in market
15 price (the expected growth rate). Mathematically, the dividend yield on market price plus
16 a growth rate equals the capitalization rate, i.e., the total common equity return rate
17 expected by investors.

18 **Q. Which version of the DCF model do you use?**

19 A. I utilize the single-stage constant growth DCF model because, in my experience, it is the
20 most widely utilized version of the DCF used in public utility rate regulation. In my
21 opinion, it is widely utilized because utilities are generally in the mature stage of their
22 lifecycles and not transitioning from one growth stage to another. This is especially true
23 for water utilities.

1 All companies, including utilities, go through typical life cycles in their
2 development, initially progressing through a growth stage, moving onto a transition stage
3 and finally assuming a steady-state or constant growth state. However, the U.S. public
4 utility industry is a long-standing industry, dating back to approximately 1882. The
5 standards of rate of return regulation of public utilities date back to the previously
6 discussed principles of fair rate of return established in the *Hope* and *Bluefield* decisions
7 of 1944 and 1923, respectively. Hence, the public utility industry in the U.S. is a stable
8 and mature industry characterized by the steady-state or constant-growth stage of a multi-
9 stage DCF model. The regulated economics of the utility industry further reflect the
10 features of this relative stability and demand maturity. Their returns on capital
11 investment, i.e., rate base, are set through a ratemaking process and not determined in the
12 competitive markets. This characteristic, taken together with the longevity of the public
13 utility industry at large, all contribute to the stability and maturity of the industry,
14 including the water utility industry.

15 Since there is no basis for applying multi-stage growth versions of the DCF model
16 to determine the common equity cost rates of mature public utility companies, the
17 constant growth model is most appropriate.

18 **Q. Please describe the dividend yield you used in your application of the DCF model.**

19 A. The unadjusted dividend yields are based upon a recent (July 6, 2011) indicated dividend
20 divided by the average of closing market prices for the 60 days ending July 6, 2011 as
21 shown in Column 1 on page 1 of Schedule 6.

22 **Q. Please explain the adjusted dividend yield shown on page 1 of Schedule 6, Column 7.**

23 A. Because dividends are paid quarterly, or periodically, as opposed to continuously (daily),

1 an adjustment must be made to the dividend yield. This is often referred to as the
2 discrete, or the Gordon Periodic, version of the DCF model.

3 DCF theory calls for the use of the full growth rate, or D_1 , in calculating the
4 dividend yield component of the model. However, since the various companies in the
5 proxy group increase their quarterly dividend at various times during the year, a
6 reasonable assumption is to reflect one-half the annual dividend growth rate in the
7 dividend yield component, or $D_{1/2}$. This is a conservative approach which does not
8 overstate the dividend yield which should be representative of the next twelve-month
9 period. Therefore, the actual average dividend yields in Column 1 on page 1 of Schedule
10 6 have been adjusted upward to reflect one-half the average projected growth rate shown
11 in Column 6.

12 **Q. Please explain the basis of the growth rates of the proxy group which you use in**
13 **your application of the DCF model.**

14 A. Schedule 7 shows that approximately 54% of the common shares of the nine water
15 companies are held by individuals as opposed to institutional investors. Institutional
16 investors tend to have more extensive informational resources than most individual
17 investors. Individual investors, with more limited resources, are therefore likely to place
18 great significance on the opinions expressed by financial information services, such as
19 Value Line, Reuters, Zacks and Yahoo! Finance, which are easily accessible and/or
20 available on the Internet and through public libraries. Investors realize that analysts have
21 significant insight into the dynamics of the industries and individual companies they
22 analyze, as well as company's abilities to effectively manage the effects of changing laws
23 and regulations and ever changing economic and market conditions.

1 Over the long run, there can be no growth in DPS without growth in EPS.
2 Security analysts' earnings expectations have a more significant, but not sole, influence
3 on market prices than dividend expectations. Thus, the use of earnings growth rates in a
4 DCF analysis provides a better matching between investors' market price appreciation
5 expectations and the growth rate component of the DCF. Earnings expectations have a
6 significant influence on market prices and their appreciation or "growth" experienced by
7 investors.¹⁶ This should be evident even to relatively unsophisticated investors just by
8 listening to financial new reports on radio, TV or reading the newspapers.

9 In addition, Myron Gordon, the "father" of the standard regulatory version of the
10 DCF model widely utilized throughout the United States in rate base/rate of return
11 regulation has recognized the significance of analysts' forecasts of growth in EPS in a
12 speech he gave in March 1990 before the Institute for Quantitative Research and Finance.

13 He said:

14 We have seen that earnings and growth estimates by security analysts were
15 found by Malkiel and Cragg to be superior to data obtained from financial
16 statements for the explanation of variation in price among common stocks.
17 . . . estimates by security analysts available from sources such as IBES are
18 far superior to the data available to Malkiel and Cragg. Eq (7) is not as
19 elegant as Eq (4), but it has a good deal more intuitive appeal. It says that
20 investors buy earnings, but what they will pay for a dollar of earnings
21 increases with the extent to which the earnings are reflected in the
22 dividend or in appreciation through growth.

23
24 Professor Gordon recognized that total return is largely affected by the terminal price
25 which is mostly affected by earnings (hence price / earnings multiples). However, while
26 EPS is the most significant factor influencing market prices, it is by no means the only

¹⁶ Morin 298 - 303.

1 factor that affects market prices, as recognized by Bonbright¹⁷:

2 In the first place, commissions cannot forecast, except within wide limits,
3 the effect their rate orders will have on the market prices of the stocks of
4 the companies they regulate. In the second place, *whatever the initial*
5 *market prices may be, they are sure to change not only with the changing*
6 *prospects for earnings, but with the changing outlook of an inherently*
7 *volatile stock market. In short, market prices are beyond the control,*
8 *though not beyond the influence of rate regulation. Moreover, even if a*
9 *commission did possess the power of control, any attempt to exercise it ...*
10 *would result in harmful, uneconomic shifts in public utility rate levels.*
11 (italics added)

12
13 Studies performed by Cragg and Malkiel¹⁸ demonstrate that analysts' forecasts are
14 superior to historical growth rate extrapolations. Some question the accuracy of analysts'
15 forecast of EPS growth, however, it does not really matter what the level of accuracy of
16 those analysts' forecasts is well after the fact. What is important is that they reflect
17 widely held expectations influencing investors at the time they make their pricing
18 decisions and hence the market prices they pay. Moreover, there is no empirical evidence
19 that investors, consistent with the EMH, would disregard analysts' estimates of growth in
20 earnings per share.¹⁹ As stated previously, the "semistrong" form of the EMH, which is
21 generally held to be true, indicates investors are aware of all publicly-available
22 information, including the many security analysts' earnings growth rate forecasts
23 available. Investors are also aware of the accuracy of past forecasts, whether for EPS or
24 DPS growth or for interest rates levels. Investors have no prior knowledge of the

¹⁷ Bonbright, James C., Danielsen, Albert L., Kamerschen, David R., Principles of Public Utility Rates (Public Utilities Reports, Inc., 1988) 334.

¹⁸ Cragg, John G. and Malkiel, Burton G., Expectations and the Structure of Share Prices (University of Chicago Press, 1982) Chapter 4.

¹⁹ Agrawal, Anup and Chen, Mark A., "Do Analysts' Conflicts Matter? Evidence from Stock Recommendations", (Journal of Law and Economics, August 2008), Vol. 51.

1 accuracy of any forecasts available at the time they make their investment decisions, as
2 that accuracy only becomes known after some future period of time has elapsed.
3 Therefore, given the overwhelming academic/empirical support regarding the superiority
4 of security analysts' EPS growth rate forecasts, such EPS growth rate projections should
5 be relied upon in a cost of common equity analysis.

6 In response to recent concern about the use of security analysts' EPS growth rate
7 forecasts, Malkiel²⁰ affirmed his belief in the superiority of analysts' earnings forecasts
8 when he testified before the Public Service Commission of South Carolina, in November
9 2002:

10 With all the publicity given to tainted analysts' forecasts and
11 investigations instituted by the New York Attorney General, the National
12 Association of Securities Dealers, and the Securities & Exchange
13 Commission, I believe the upward bias that existed in the late 1990s has
14 indeed diminished. In summary, I believe that current analysts' forecasts
15 are more reliable than they were during the late 1990s. Therefore,
16 analysts' forecasts remain the proper tool to use in performing a Gordon
17 Model DCF analysis.

18 Consequently, I have reviewed security analysts' projected growth rates in EPS, as
19 well as Value Line's projected five-year compound growth rates in EPS for each
20 company in the proxy group as shown in Columns 2 through 5, on page 1 of Schedule 6.

21 **Q. Please summarize the DCF model results.**

22 **A.** As shown on page 1 of Schedule 6, the median result of the application of the single-stage
23 DCF model is 9.54% for the nine water companies. In arriving at a conclusion of a DCF-
24 indicated common equity cost rate for the proxy group, I have relied upon the median of

²⁰ Burton A. Malkiel, the Chemical Bank Chairman's Professor of Economics at Princeton University and author of the widely-read national bestselling book on investing entitled, "A Random Walk Down Wall Street: The Time-Tested Strategy for Successful Investing (Completely Revised and Updated)" (W.W. Norton & Co. 2011).

1 the results of the DCF, due to the wide range of DCF results as well as the continuing
2 volatile capital market conditions and to not give undue weight to outliers on either the
3 high or the low side. In my opinion, the median is a more accurate and reliable measure
4 of central tendency, and provides recognition of all the DCF results.

5 **The Risk Premium Model (RPM)**

6 **Q. Please describe the theoretical basis of the RPM.**

7 A. The RPM is based upon the basic financial principle of risk and return, namely, that
8 investors require greater returns for bearing greater risk. The RPM recognizes that
9 common equity capital has greater investment risk than debt capital, as common equity
10 shareholders are last in line in any claim on a company's assets and earnings, with debt
11 holders being first in line. Therefore, investors require higher returns from common
12 stocks than from investment in bonds, to compensate them for bearing the additional risk.

13 While the investors' required common equity return cannot be directly determined
14 or observed, it is possible to directly observe bond returns and yields. According to RPM
15 theory, one can assess a common equity risk premium over bonds, either historically or
16 prospectively, and then use that premium to derive a cost rate of common equity.

17 In summary, according to RPM theory, the cost of common equity equals the
18 expected cost rate for long-term debt capital plus a risk premium over that cost rate to
19 compensate common shareholders for the added risk of being unsecured and last-in-line
20 for any claim on the corporation's assets and earnings.

21 **Q. Some analysts state that the RPM is another form of the CAPM. Do you agree?**

22 A. While there are some similarities, there is a very significant distinction between the two
23 models. The RPM and CAPM both add a "risk premium" to an interest rate. However,

1 the beta approach to the determination of an equity risk premium in the RPM should not
2 be confused with the CAPM. Beta is a measure of systematic, or market, risk, a relatively
3 small percentage of total risk (the sum of both non-diversifiable systematic and
4 diversifiable unsystematic risk). Unsystematic risk is fully captured in the RPM through
5 the use of the long-term public utility bond yield as can be shown by reference to page 3
6 of Schedule 4 which confirms that the bond/credit rating process involves a
7 comprehensive assessment of both business and financial risks. In contrast, the use of a
8 risk-free rate of return in the CAPM does not, and by definition cannot, reflect a
9 company's specific, i.e., unsystematic, risk. Consequently, a much larger portion of the
10 total common equity cost rate is reflected in the company- or proxy group-specific bond
11 yield (a product of the bond rating) than is reflected in the risk-free rate in the CAPM, or
12 even by the dividend yield employed in the DCF model. Moreover, the financial
13 literature recognizes the RPM and CAPM as two separate and distinct cost of common
14 equity models.

15 **Q. Please explain the basis of the expected bond yield of 5.83% applicable to the proxy**
16 **group of nine water companies shown on page 1 of Schedule 8.**

17 **A.** The first step in the RPM analysis is to determine the expected bond yield. Because both
18 ratemaking and the cost of capital, including common equity cost rate, are prospective in
19 nature, a prospective yield on similarly-rated long-term debt is essential. Since both
20 ratemaking and the cost of capital are prospective in nature, I rely upon a consensus
21 forecast of about 50 economists of the expected yield on Aaa rated corporate bonds for
22 the six calendar quarters ending with the fourth calendar quarter of 2012 as derived from
23 the July 1, 2011 Blue Chip Financial Forecasts (shown on page 7 of Schedule 8). As

1 shown on Line No. 1 of page 1 of Schedule 8, the average expected yield on Moody's
2 Aaa rated corporate bonds is 5.35%. An adjustment of 34 basis points (0.34%) is
3 necessary to adjust that average Aaa corporate bond yield to be equivalent to a Moody's
4 A2 rated public utility bond as shown on Line No. 2 and explained in Note 2 resulting in
5 an expected bond yield applicable to a Moody's A rated public utility bond of 5.69% as
6 shown on Line No. 3.

7 Since the nine water companies average Moody's bond rating is A3, an
8 adjustment of 14 basis points (0.14%) is necessary to make the prospective bond yield
9 applicable to an A3 public utility bond, as detailed in Note 3 on page 1 of Schedule 8.
10 Therefore, the expected specific bond yield is 5.83% for the nine water companies as
11 shown on Line No. 5.

12 **Q. Please explain the method utilized to estimate the equity risk premium.**

13 A. I evaluated the results of two different historical equity risk premium studies, as well as
14 Value Line's forecasted total annual market return in excess of the prospective yield on
15 Moody's Aaa corporate bonds, as detailed on pages 5, 6 and 8 of Schedule 8. As shown
16 on Line No. 3, page 5, the mean equity risk premium is 4.50% applicable to the nine
17 water companies. This estimate is the result of an average of a beta-derived equity risk
18 premium as well as the mean historical equity risk premium applicable to public utilities
19 with bonds rated A based upon holding period returns. The basis of the beta-derived
20 equity risk premium applicable to the proxy group is shown on page 6 of Schedule 8. The
21 beta-determined equity risk premium should receive substantial weight because betas are
22 derived from the market prices of common stocks over a recent five-year period. Beta is
23 a meaningful measure of prospective relative risk to the market as a whole and a logical

1 means by which to allocate a company's/proxy group's share of the market's total equity
2 risk premium relative to corporate bond yields.

3 The total market equity risk premium utilized is 6.95% and is based upon an
4 average of the long-term historical market risk premium and forecasted market risk
5 premium. To derive the historical market equity risk premium, I used the most recent
6 Morningstar²¹ data on holding period returns for the S&P 500 Composite Index from the
7 Ibbotson® SBBI® – 2011 Valuation Yearbook – Market Results for Stocks, Bonds, Bills
8 and Inflation – 1926-2010 (SBBI – 2011) and the average historical yield on Moody's
9 Aaa and Aa rated corporate bonds for the period 1926-2010. The use of holding period
10 returns over a very long period of time is useful because it is consistent with the long-
11 term investment horizon presumed by the DCF model. As the SBBI – 2011 states²²:

12 The estimate of the equity risk premium depends on the length of the data
13 series studied. A proper estimate of the equity risk premium requires a
14 data series long enough to give a reliable average without being unduly
15 influenced by very good and very poor short-term returns. When
16 calculated using a long data series, the historical equity risk premium is
17 relatively stable.⁵ Furthermore, because an average of the realized equity
18 risk premium is quite volatile when calculated using a short history, using
19 a long series makes it less likely that the analyst can justify any number he
20 or she wants. The magnitude of how shorter periods can affect the result
21 will be explored later in this chapter.

22 Some analysts estimate the expected equity risk premium using a shorter,
23 more recent time period on the basis that recent events are more likely to
24 be repeated in the near future; furthermore, they believe that the 1920s,
25 1930s and 1940s contain too many unusual events. This view is suspect
26 because all periods contain "unusual" events. Some of the most unusual
27 events of the last hundred years took place quite recently, including the
28 inflation of the late 1970s and early 1980s, the October 1987 stock market
29

²¹ Morningstar, Inc. acquired Ibbotson Associates in 2006.

²² Ibbotson® SBBI® – 2011 Valuation Yearbook – Market Results for Stocks, Bonds, Bills and Inflation – 1926 – 2010 (SBBI 2011) (Morningstar, Inc., 2010) 59.

1 crash, the collapse of the high-yield bond market, the major contraction
2 and consolidation of the thrift industry, the collapse of the Soviet Union,
3 the development of the European Economic Community, and the attacks
4 of September 11, 2001 and the more recent liquidity crisis of 2008 and
5 2009.

6
7 It is even difficult for economists to predict the economic environment of
8 the future. For example, if one were analyzing the stock market in 1987
9 before the crash, it would be statistically improbable to predict the
10 impending short-term volatility without considering the stock market crash
11 and market volatility of the 1929-1931 period.

12
13 Without an appreciation of the 1920s and 1930s, no one would believe that
14 such events could happen. The 85-year period starting with 1926 is
15 representative of what can happen: it includes high and low returns,
16 volatile and quiet markets, war and peace, inflation and deflation, and
17 prosperity and depression. Restricting attention to a shorter historical
18 period underestimates the amount of change that could occur in a long
19 future period. Finally, because historical event-types (not specific events)
20 tend to repeat themselves, long-run capital market return studies can reveal
21 a great deal about the future. Investors probably expect "unusual" events
22 to occur from time to time, and their return expectations reflect this.
23 (footnote omitted)

24
25 Consequently, the long-term arithmetic mean total return rates on the market as a whole
26 of 11.90% and the long-term arithmetic mean yield on corporate bonds of 6.10% were
27 used, as shown at Line Nos. 1 and 2 of page 6 of Schedule 8. As shown on Line No. 3,
28 the resultant long-term historical equity risk premium on the market as a whole is 5.80%.

29 I used arithmetic mean return rates and yields (income returns) because they are
30 appropriate for cost of capital purposes as noted in the SBBI – 2011. Arithmetic mean
31 return rates and yields are appropriate because ex-post (historical) total returns and equity
32 risk premiums differ in size and direction over time, providing insight into the variance
33 and standard deviation of returns. Because the arithmetic mean captures the prospect for
34 variance in returns and equity risk premiums, it provides the valuable insight needed by
35 investors in estimating future risk when making a current investment. Absent such

1 valuable insight into the potential variance of returns, investors cannot meaningfully
2 evaluate prospective risk. If investors alternatively relied upon the geometric mean of ex-
3 post equity risk premiums, they would have no insight into the potential variance of
4 future returns because the geometric mean relates the change over many periods to a
5 constant rate of change, thereby obviating the year-to-year fluctuations, or variance,
6 *critical to risk analysis.*

7 The financial literature is quite clear on this point, that risk is measured by the
8 variability of expected returns, i.e., the probability distribution of returns.²³ In addition,
9 Weston and Brigham²⁴ provide the standard financial textbook definition of the riskiness
10 of an asset when they state:

11 The riskiness of an asset is defined in terms of the *likely variability of*
12 *future returns from the asset.* (emphasis added)
13

14 And Morin states²⁵:

15 The geometric mean answers the question of *what constant return* you
16 would have to achieve in each year to have your investment growth match
17 the return achieved by the stock market. The arithmetic mean answers the
18 question of what growth rate is the best estimate of the future amount of
19 money that will be produced by continually reinvesting in the stock
20 market. It is the rate of return which, compounded over multiple periods,
21 gives the mean of the probability distribution of ending wealth. (emphasis
22 added)
23

24 In addition, Brealey and Myers²⁶ note:

25 The proper uses of arithmetic and compound rates of return from past
26 investments are often misunderstood. . . Thus the arithmetic average of

²³ Brigham (1989) 639.

²⁴ Weston, J. Fred and Brigham, Eugene F., Essentials of Managerial Finance Third Edition (The Dryden Press, 1974) 272.

²⁵ Morin 133.

²⁶ Brealey and Myers 146-147.

1 the returns correctly measures the opportunity cost of capital for
2 investments. . . *Moral*: If the cost of capital is estimated from historical
3 returns or risk premiums, use arithmetic averages, not compound annual
4 rates of return. (italics in original)

5
6 Also, Giaacchino and Lesser²⁷ state:

7 The appropriateness of using either a geometric or arithmetic mean
8 depends on the context.¹²(footnote omitted) If you are evaluating the past
9 performance of a stock, the geometric mean is appropriate: it represents
10 the compound average return over time.

11 * * *

12
13 If, instead, you wish to estimate future growth, you need to use an
14 arithmetic mean . . . compounding the stock at the arithmetic mean . . .
15 gives us the expected (average) stock price . . . compounding at the
16 geometric mean leads to the median stock price.

17
18 As previously discussed, investors gain insight into relative riskiness by analyzing
19 expected future variability. This is accomplished by the use of the arithmetic mean of a
20 distribution of returns / premiums. Only the arithmetic mean takes into account all of the
21 returns / premiums, hence, providing meaningful insight into the variance and standard
22 deviation of those returns / premiums.

23 **Q. Can it be demonstrated that the arithmetic mean takes into account all of the**
24 **returns and therefore, that the arithmetic mean is appropriate to use when**
25 **estimating the opportunity cost of capital in contrast to the geometric mean?**

26 **A.** Yes. Pages 1 through 3 of Schedule 9 graphically demonstrate this premise. It is clear
27 from observing the year-to-year variation (the returns on large company stocks for each
28 and every year, 1926 through 2010 on page 1), that stock market returns, and hence,
29 equity risk premiums, vary.

²⁷ Giaacchino, Leonardo R. and Lesser, Jonathan A., Principles of Utility Corporate Finance (Public Utilities Reports, Inc., 2011) 38-41 and 233-234.

1 There is a clear bell-shaped pattern to the probability distribution of these returns
2 shown on page 2, an indication that they are randomly generated and not serially
3 correlated. The arithmetic mean of this distribution of returns considers each and every
4 return in the distribution, taking into account the standard deviation or likely variance
5 which may be experienced in the future when estimating the rate of return based upon
6 such historical returns. In contrast, page 3 demonstrates that when the geometric mean is
7 calculated, only two of the returns are considered, namely the initial and terminal years,
8 i.e., 1926 and 2010. Based upon only those two years, a constant rate of return is
9 calculated by the geometric average. That constant return is graphically represented by a
10 flat line, showing no year-to-year variation, over the entire 1926 to 2010 time period,
11 which is obviously far different from reality, based upon the probability distribution of
12 returns shown on page 2 and demonstrated on page 1.

13 Consequently, only the arithmetic mean takes into account the standard deviation
14 of returns which is critical to risk analysis. The geometric mean is appropriate only when
15 measuring historical performance and should not be used to estimate the investors
16 required rate of return.

17 **Q. How did you incorporate Value Line's forecasted total annual market return in**
18 **excess of the prospective yield on high rated corporate bonds in your development**
19 **of an equity risk premium for your RPM analysis?**

20 **A.** Once again, because both ratemaking and the cost of capital, including the cost rate of
21 common equity are prospective, a prospective market equity risk premium is essential.
22 The basis of the forecasted or prospective market equity risk premium can be found on
23 Line Nos. 4 through 6 on page 6 of Schedule 8. Consistent with the development of the

1 dividend yield component of my DCF analysis, it is derived from an average of the most
2 recent thirteen weeks ending July 8, 2011 3-5 year median market price appreciation
3 potentials by Value Line plus an average of the median estimated dividend yield for the
4 common stocks of the 1,700 firms covered in Value Line's Standard Edition as explained
5 in detail in Note 1 on page 2 of Schedule 10.

6 The average median expected price appreciation is 55% which translates to an
7 11.51% annual appreciation and, when added to the average (similarly calculated) median
8 dividend yield of 1.93% equates to a forecasted annual total return rate on the market as a
9 whole of 13.44%. The forecasted total market equity risk premium of 8.09% is derived by
10 deducting the July 1, 2011 Blue Chip Financial Forecasts consensus estimate of about 50
11 economists of the expected yield on Moody's Aaa rated corporate bonds for the six
12 calendar quarters ending with the fourth calendar quarter 2012 of 5.35% shown on
13 Schedule 8, page 6, Line No. 6 ($8.09\% = 13.44\% - 5.35\%$).

14 In arriving at my conclusion of equity risk premium of 6.95% on Line No. 7 on
15 page 6, I have given equal weight to the historical equity risk premium of 5.80% and the
16 forecasted equity risk premium of 8.09% shown on Line Nos. 3 and 6, respectively
17 ($6.95\% = (5.80\% + 8.09\%)/2$).

18 **Q. What is your conclusion of an equity risk premium for use in your RPM analysis?**

19 A. On page 1 of Schedule 10, the most current Value Line betas for the companies in the
20 proxy group are shown. Applying the median beta of the proxy group of 0.70 (consistent
21 with my reliance upon the median DCF results as previously discussed), to the market
22 equity risk premium of 6.95% results in a beta adjusted equity risk premium of 4.87% for
23 the proxy group of nine water companies.

1 As Morin²⁸ states with respect to the DCF model:

2 It is not necessary that g be constant year after year to make the model
3 valid. *The growth rate may vary randomly around some average expected*
4 *value. Random variations around trend are perfectly acceptable, as long*
5 *as the mean expected growth is constant.* The growth rate must be
6 'expectationally constant' to use formal statistical jargon. (italics added)
7

8 The foregoing confirms that the RPM is similar to the DCF model. Both assume
9 an "expectationally constant" risk premium and growth rate, respectively, but in reality
10 both vary (change) randomly around an arithmetic mean. Consequently, the use of the
11 arithmetic mean, and not the geometric mean is confirmed as appropriate in the
12 determination of an equity risk premium as discussed previously.

13 **The Capital Asset Pricing Model (CAPM)**

14 **Q. Please explain the theoretical basis of the CAPM.**

15 A. CAPM theory defines risk as the covariability of a security's returns with the market's
16 returns as measured by beta (" β "). A beta less than 1.0 indicates lower variability while a
17 beta greater than 1.0 indicates greater variability than the market.

18 The CAPM assumes that all other risk, i.e., all non-market or unsystematic risk,
19 can be eliminated through diversification. The risk that cannot be eliminated through
20 diversification is called market, or systematic, risk. In addition, the CAPM presumes that
21 investors require compensation only for these systematic risks which are the result of
22 macroeconomic and other events that affect the returns on all assets. The model is applied
23 by adding a risk-free rate of return to a market risk premium, which is adjusted
24 proportionately to reflect the systematic risk of the individual security relative to the total

²⁸ Morin 256.

1 market as measured by beta. The traditional CAPM model is expressed as:

2 $R_s = R_f + \beta(R_m - R_f)$

3
4 Where: $R_s =$ Return rate on the common stock

5
6 $R_f =$ Risk-free rate of return

7
8 $R_m =$ Return rate on the market as a whole

9
10 $\beta =$ Adjusted beta (volatility of the security
11 relative to the market as a whole)

12
13 Numerous tests of the CAPM have measured the extent to which security returns
14 and betas are related as predicted by the CAPM confirming its validity. The empirical
15 CAPM (ECAPM) reflects the reality that while the results of these tests support the
16 notion that beta is related to security returns, the empirical Security Market Line (SML)
17 described by the CAPM formula is not as steeply sloped as the predicted SML. Morin²⁹
18 states:

19 With few exceptions, the empirical studies agree that ... low-beta
20 securities earn returns somewhat higher than the CAPM would predict,
21 and high-beta securities earn less than predicted.

22 * * *

23
24
25 Therefore, the empirical evidence suggests that the expected return on a
26 security is related to its risk by the following approximation:

27
28 $K = R_F + x \beta(R_M - R_F) + (1-x) \beta(R_M - R_F)$

29
30 where x is a fraction to be determined empirically. The value of x that
31 best explains the observed relationship $\text{Return} = 0.0829 + 0.0520 \beta$ is
32 between 0.25 and 0.30. If $x = 0.25$, the equation becomes:

33
34 $K = R_F + 0.25(R_M - R_F) + 0.75 \beta(R_M - R_F)$ ³⁰

²⁹ Morin 175.

³⁰ Morin 190.

1
2 In view of theory and practical research, I have applied both the traditional CAPM and
3 the ECAPM to the companies in the proxy group and averaged the results.

4 **Q. Please describe your selection of a risk-free rate of return.**

5 A. As shown in column 3 on page 1 of Schedule 10, the risk-free rate adopted for both
6 applications of the CAPM is 4.73%. Again, because both ratemaking and the cost of
7 capital, including common equity, are prospective, the risk-free rate for my CAPM
8 analysis is based upon the average consensus forecast of the reporting economists in the
9 July 1, 2011 Blue Chip Financial Forecasts as shown in Note 2, page 2, of the expected
10 yields on 30-year U.S. Treasury bonds for the six quarters ending with the fourth calendar
11 quarter 2012.

12 **Q. Why is the prospective yield on long-term U.S. Treasury Bonds appropriate for use
13 as the risk-free rate?**

14 A. The yield on long-term U.S. Treasury T-Bonds is almost risk-free and its term is
15 consistent with the long-term cost of capital to public utilities measured by the yields on
16 A rated public utility bonds, the long-term investment horizon inherent in utilities'
17 common stocks, the long-term investment horizon presumed in the standard DCF model
18 employed in regulatory ratemaking, and the long-term life of the jurisdictional rate base
19 to which the allowed fair rate of return, i.e., cost of capital will be applied. In contrast,
20 short-term U.S. Treasury yields are more volatile and largely a function of Federal
21 Reserve monetary policy.

22 In addition, noted in the SBBI - 2011³¹:

³¹ SBBI 2011 55.

1 Although the equity risk premia of several horizons are available, the long-
2 horizon equity risk premium is preferable for use in most business-
3 valuation settings, even if an investor has a shorter time horizon.
4 Companies are entities that generally have no defined life span; when
5 determining a company's value, it is important to use a long-term discount
6 rate because the life of the company is assumed to be infinite. For this
7 reason, it is appropriate in most cases to use the long-horizon equity risk
8 premium for business valuation.
9

10 **Q. Please explain the estimation of the expected equity risk premium for the market.**

11 A. The basis of the market equity risk premium is explained in detail in Note 1 on page 2 of
12 Schedule 10. It is derived from an average of the most recent thirteen weeks ending July
13 8, 2011 3-5 year median total market price appreciation projects from Value Line,
14 resulting in a total annual return of 13.44% as discussed previously, and the long-term
15 historical arithmetic mean total returns for the years 1926 – 2010 on large company
16 stocks from the SBBI - 2011 of 11.90%. From these returns, the appropriate projected
17 and historical risk-free rates are subtracted to arrive at a projected and historical equity
18 risk premium for the market.

19 For example, the forecasted total market equity risk premium is derived by
20 deducting the July 1, 2011 Blue Chip Financial Forecasts consensus estimate of about 50
21 economists of the expected yield on U.S. Treasury Notes of 4.73% from the Value Line
22 projected total annual market return of 13.44%, resulting in a forecasted total market
23 equity risk premium of 8.71%. From SBBI – 2011 historical total market return of
24 11.90%, the long-term income return on U.S. Government Securities of 5.20% was
25 deducted resulting in an historical equity risk premium of 6.70% which results in an
26 average total market equity risk premium of 7.71% ($7.71\% = (8.71\% + 6.70\%)/2$).

27 **Q. What are the results of your application of the traditional and empirical CAPM to**

1 **the proxy group?**

2 A. As shown on Schedule 10, page 1, the median traditional CAPM cost rate is 10.13% for
3 the nine water companies and the median ECAPM cost rate is 10.71%. Consistent with
4 my reliance upon the median DCF results discussed previously, I rely upon the median
5 results of the traditional CAPM and ECAPM for the proxy group. Thus, as shown on
6 column 6 on page 1, the CAPM cost rate applicable to the proxy group of nine water
7 companies is 10.42% based upon an average of the traditional CAPM and ECAPM
8 results for the proxy group.

9 **Q. Some critics of the ECAPM model claim that using adjusted betas in a traditional**
10 **CAPM amounts to using an ECAPM. Is such a claim valid?**

11 A. No. Using adjusted betas in a CAPM analysis is not equivalent to the ECAPM. Betas are
12 adjusted because of the general regression tendency of betas to converge toward 1.0 over
13 time, i.e., over successive calculations of beta. As noted above, numerous studies have
14 determined that the SML described by the CAPM formula at any given moment in time is
15 not as steeply sloped as the predicted SML. Morin³² states:

16 Some have argued that the use of the ECAPM is inconsistent with the use
17 of adjusted betas, such as those supplied by Value Line and Bloomberg.
18 This is because the reason for using the ECAPM is to allow for the
19 tendency of betas to regress toward the mean value of 1.00 over time, and,
20 since Value Line betas are already adjusted for such trend [sic], an
21 ECAPM analysis results in double-counting. This argument is erroneous.
22 Fundamentally, the ECAPM is not an adjustment, increase or decrease, in
23 beta. This is obvious from the fact that the expected return on high beta
24 securities is actually lower than that produced by the CAPM estimate. The
25 ECAPM is a formal recognition that the observed risk-return tradeoff is
26 flatter than predicted by the CAPM based on myriad empirical evidence.
27 The ECAPM and the use of adjusted betas comprised two separate
28 features of asset pricing. Even if a company's beta is estimated accurately,

³² Morin 191.

1 the CAPM still understates the return for low-beta stocks. Even if the
2 ECAPM is used, the return for low-beta securities is understated if the
3 betas are understated. Referring back to Figure 6-1, the ECAPM is a
4 return (vertical axis) adjustment and not a beta (horizontal axis)
5 adjustment. Both adjustments are necessary.
6

7 Moreover, the slope of the SML should not be confused with beta. As Brigham

8 states³³ :

9 The slope of the SML reflects the degree of risk aversion in the economy –
10 the greater the average investor's aversion to risk, then (1) the steeper is
11 the slope of the line, (2) the greater is the risk premium for any risky asset,
12 and (3) the higher is the required rate of return on risky assets.¹²
13

14 ¹²Students sometimes confuse beta with the slope of the SML. This is a
15 mistake. As we saw earlier in connection with Figure 6-8, and as is
16 developed further in Appendix 6A, beta does represent the slope of a line,
17 but *not* the Security Market Line. This confusion arises partly because the
18 SML equation is generally written, in this book and throughout the finance
19 literature, as $k_i = R_F + b_i(k_M - R_F)$, and in this form b_i looks like the slope
20 coefficient and $(k_M - R_F)$ the variable. It would perhaps be less confusing
21 if the second term were written $(k_M - R_F)b_i$, but this is not generally done.
22

23 Regulatory support for the ECAPM can be found in the New York Public Service
24 Commission's Generic Financing Docket, Case 91-M-0509. Also, the Regulatory
25 Commission of Alaska has stated³⁴:

26 Although we primarily rely upon Tesoro's recommendation, we are
27 concerned, however, about Tesoro's CAPM analysis. Tesoro averaged the
28 results it obtained from CAPM and ECAPM while at the same time
29 providing empirical testimony⁶⁰⁴ that the ECAPM results are more
30 accurate than [sic] traditional CAPM results. The reasonable investor
31 would be aware of these empirical results. Therefore, we adjust Tesoro's
32 recommendation to reflect only the ECAPM result. (footnote omitted)
33

34 Thus, using adjusted betas in an ECAPM analysis is not incorrect nor inconsistent

³³ Brigham and Gapenski 203.

³⁴ In the Matter of the Correct Calculation and Use of Acceptable Input Data to Calculate the 1997, 1998, 1999, 2000, 2001 and 2002 Tariff Rates for the Intrastate Transportation of Petroleum over the TransAlaska Pipeline System, Docket No P-97-4, Order No. 151, p. 146 (Reg. Comm'n AK 11/27/02).

1 with either their financial literature or regulatory precedent. Notwithstanding empirical
2 and regulatory support for the use of only the ECAPM, my CAPM analysis, which
3 includes both the traditional CAPM and the ECAPM, is a conservative approach resulting
4 in a reasonable estimate of the cost of common equity.

5 **Cost of Common Equity Models Applied to Comparable, Domestic, Non-Price Regulated**
6 **Companies**

7 **Q. Please describe the basis of applying cost of common equity models to comparable**
8 **risk, non-price regulated companies?**

9 A. Applying cost of equity models to non-price regulated companies, comparable in total
10 risk, is derived from the "*corresponding risk*" standard of the landmark cases of the U.S.
11 Supreme Court, i.e., *Hope* and *Bluefield*, previously discussed. Therefore, it is consistent
12 with the *Hope* doctrine that the return to the equity investor should be commensurate with
13 returns on investments in other firms having corresponding risks based upon the
14 fundamental economic concept of opportunity cost which maintains that the true cost of
15 an investment is equal to the cost of the best available alternative use of the funds to be
16 invested. The opportunity cost principle is also consistent with one of the fundamental
17 principles upon which regulation rests: that regulation is intended to act as a surrogate for
18 competition and to provide a fair rate of return to investors.

19 The first step in determining such an opportunity cost of common equity based
20 upon the non-price regulated companies comparable in total risk to the nine water
21 companies is to choose an appropriate proxy group(s) of non-price regulated firms
22 comparable in total risk to the proxy group(s) of price-regulated utilities. The proxy
23 group(s) should be broad-based in order to obviate any company-specific aberrations and

1 should exclude utilities to avoid circularity since the achieved returns on book common
2 equity of utilities, being a function of the regulatory process, are substantially influenced
3 by regulatory awards.

4 As stated previously, my selection criteria for the non-price regulated firms of
5 comparable risk are based upon statistics derived from the market prices paid by
6 investors. Value Line betas were used as a measure of systematic risk. The standard
7 error of the regression was used as a measure of each firm's unsystematic or specific risk
8 with the standard error of the regression reflecting the extent to which events specific to a
9 company's operations affect its stock price. In essence, companies which have similar
10 betas and standard errors of the regressions, have similar total investment risk, i.e., the
11 sum of systematic (market) risk as reflected by beta and unsystematic (business and
12 financial) risk, as reflected by the standard error of the regression. These statistics are
13 derived from regression analyses using market prices which, under the EMH, reflect all
14 relevant risks. An additional criterion used in the selection of these proxy companies
15 were that they be domestic non-utility companies. The application of these criteria results
16 in a proxy group of non-price regulated firms comparable in total risk to the average
17 utility in the proxy group of water companies. The proxy group of thirty-nine non-utility
18 companies comparable in total investment risk to the nine water companies is listed on
19 page 3 of Schedule 11.

20 Using a Value Line, Inc. proprietary database dated June 15, 2011, a proxy group
21 of thirty-nine non-price regulated companies was chosen based upon ranges of unadjusted
22 beta and standard error of the regression shown on page 2 of Schedule 11. The ranges
23 were based upon the standard deviations of the unadjusted beta and the average standard

1 error of the regression for the proxy group of nine water companies as explained on page
2 4 of Schedule 11.

3 This selection criteria are meaningful and effectively respond to the criticisms
4 normally associated with the selection of non-regulated firms presumed to be comparable
5 in total risk. The criteria do so because the selection of non-price regulated companies
6 comparable in total risk is based upon regression analyses of market prices which reflect
7 investors' assessment of all risks, diversifiable and non-diversifiable, and is thus market-
8 based.

9 The first method of measuring such an opportunity cost is shown in Schedule 12.
10 It measures the returns expected to be earned on the book common equity, net worth, or
11 partner's capital of non-price regulated enterprises of comparable total risk as the nine
12 water companies. The second method is to apply the DCF, RPM and CAPM to the same
13 non-price regulated companies comparable in total risk to the nine water companies as
14 shown on Schedule 13.

15 **Expected Return On Book Equity For The Proxy Group Of Domestic, Non-Price Regulated**
16 **Companies**

17 **Q. Did you evaluate the expected return on book common equity, net worth, or**
18 **partner's capital for the proxy group of domestic, non-price regulated companies**
19 **that are comparable in total risk to the utility proxy group?**

20 **A. Yes. Measuring the expected return on book common equity, net worth, or partner's**
21 **capital provides a direct measure of return, since it translates into practice the competitive**
22 **principle upon which regulation rests. In my opinion, it is inappropriate to use the**
23 **achieved returns of regulated utilities of similar risk because to do so would be circular, as**

1 achieved returns are a function of authorized ROEs, i.e., the regulatory process itself, and
2 inconsistent with the principle of equality of risk with non-price regulated firms. As
3 shown on Schedule 12, the expected rate of return on book equity, net worth, or partner's
4 capital was gathered from Value Line's Standard Edition (various issues). After applying a
5 test of significance (Student's t-statistic) to determine whether any of the projected returns
6 are significantly different from the mean at the 95% confidence level, the projected return
7 of one company has been excluded. After excluding this outlier, my conclusion of the
8 expected return on book common equity net worth or partner's capital is 15.50%.

9 **Cost Rates For The Proxy Group Of Domestic, Non-Price Regulated Companies Based**
10 **Upon the DCF, RPM and CAPM**

11 **Q. Did you calculate common equity cost rates using the DCF, RPM and CAPM for the**
12 **proxy group of domestic, non-price regulated companies that are comparable in total**
13 **risk to the utility proxy group?**

14 **A. Yes.** Because the DCF, RPM and CAPM have been applied in an identical manner as
15 described previously relative to the market data of the nine water companies, I will not
16 repeat the details of the rationale and application of each model shown in Schedule 13.
17 The only exception is that, in the application of the RPM, I did not use public utility-
18 specific equity risk premiums.

19 Page 1 of Schedule 13 contains the derivation of the DCF cost rates. As shown, the
20 median DCF cost rate for the proxy group of thirty-nine non-price regulated companies
21 comparable in total risk to the proxy group of nine water companies, is 12.05%.

22 Pages 2 through 4 contain information relating to the 11.38% RPM cost rate for the
23 proxy group of thirty-nine non-price regulated companies summarized on page 2. As

1 shown on Line 1 of page 2 of Schedule 13, the consensus prospective yield on Moody's
2 Baa rated corporate bonds for the six quarters ending with the fourth quarter of 2012 from
3 the July 1, 2011 Blue Chip Financial Forecasts is 6.17%, which is appropriate since the
4 average Moody's bond rating of the proxy group of thirty-nine non-price regulated
5 companies is Baa2 as shown on page 3 of Schedule 13. When the risk premium of 5.21%
6 derived on page 4 is added to the prospective Baa rated corporate bond yield of 6.17%, the
7 indicated RPM cost rate is 11.38%. The average estimated equity risk premium is based
8 upon the average of the historical and projected market risk premiums of 6.95%, adjusted
9 by the group's median beta of 0.75, resulting in an equity risk premium of 5.21% as shown
10 on Line 9, page 4 of Schedule 13.

11 Page 5 contains the details of the application of the traditional CAPM and ECAPM
12 to the thirty-nine non-price regulated companies comparable in total risk to the nine water
13 companies. As shown, the median cost rates are 10.51% and 10.99%, respectively which,
14 when averaged, results in an indicated CAPM cost rate of 10.75%.

15 **Q. What are the cost rates, based upon the DCF, RPM and CAPM, related to the**
16 **domestic, non-price regulated proxy group comparable in total risk to the utility**
17 **proxy group?**

18 **A.** The cost rates based upon application of the DCF, RPM and CAPM/ECAPM models to
19 the non-utility group are 12.05%, 11.38% and 10.75%, respectively, averaging 11.39% as
20 summarized on page 1 of Schedule 11.

21 **Q. What is your conclusion of the cost rate of common equity based upon the proxy**
22 **group of thirty-nine non-price regulated companies comparable in total risk to the**
23 **nine water companies?**

1 A. As shown on page 1 of Schedule 11, my conclusion of the projected return on book
2 equity, partner's capital or net worth of the comparable group is 15.50% and my
3 conclusion is 11.39% for the results of the DCF, RPM and CAPM applied to the
4 comparable group. Based upon these results, I conclude a cost of common equity of
5 13.45% for the non-price regulated companies.

6 **Conclusion of Common Equity Cost Rate**

7
8 **Q. What is your recommended common equity cost rate?**

9 A. It is 11.05% based upon the common equity cost rates resulting from the application of
10 cost of common equity models to the nine water companies as well as a proxy group of
11 non-utility companies comparable in total risk to the nine water companies, as adjusted
12 for financial and business risks due to UWID's lower financial risk and smaller relative
13 size.

14 As discussed previously, reliance upon multiple models is consistent with the
15 EMH, upon which all of my models are premised. I employ all of my cost of common
16 equity models as primary tools in arriving at my recommended common equity cost rate
17 because; 1) no single model is so inherently precise that it can be relied upon solely to the
18 exclusion of other theoretically sound models; 2) all of my models have application
19 problems associated with them; 3) all of my models are based upon the Efficient Market
20 Hypothesis (EMH); and 4) as demonstrated previously, the prudence of using multiple
21 cost of common equity models is supported in both the financial literature and regulatory
22 precedent. Therefore, none should be relied upon exclusively to estimate investors'
23 required rate of return on common equity.

24 The results of my cost of common equity models applied to the nine water

1 companies are shown on Schedule 1, page 2 and summarized below:

2 Table 3

3 Proxy Group
4 of Nine
5 Water
6 Companies

8 Discounted Cash Flow Model	9.54%
9 Risk Premium Model	10.33
10 Capital Asset Pricing Model	10.42
11 Cost of Equity Models Applied to	
12 Comparable Risk, Non-Price	
13 Regulated Companies	13.45
14	
15 Indicated Common Equity Cost	
16 Rate Before Adjustment for	
17 Financial Risk, Flotation Costs	
18 and Business Risks	10.90
19	
20 Financial Risk Adjustment	(0.23)
21	
22 Business Risk Adjustment	<u>0.40</u>
23	
24 Indicated Common Equity Cost Rate	<u>11.07%</u>
25	
26 Recommended Common Equity	
27 Cost Rate	<u>11.05%</u>
28	

29 Based upon these common equity cost rate results, I conclude that a common equity cost
30 rate of 10.90% is indicated for the nine water companies before the financial and business
31 risk adjustments previously discussed, shown on Line Nos. 6 and 7 on page 2 of Schedule
32 1.

33 **Financial Risk Adjustment**

34 **Q. Is there a way to quantify a financial risk adjustment due to UWID's previously**
35 **discussed lower financial risk relative to the proxy group?**

36 **A. Yes. As shown on page 1 of Schedule 1, the Company's ratemaking common equity ratio**

1 at April 30, 2011 (there is no preferred stock) is 52.51% which is somewhat higher than
2 the average 2010 total equity ratio maintained, on average, by the nine water companies,
3 49.03%. Conversely, UWID's ratemaking long-term debt ratio at April 30, 2011,
4 47.49%, is somewhat lower than the average 2010 long-term debt ratio of the proxy
5 group, 50.97%. Thus, UWID has somewhat lower financial risk than the companies in
6 the proxy group. Because investors require a higher return in exchange for bearing higher
7 risk, a downward adjustment to the common equity cost rate derived from the market data
8 of the proxy group companies which have a somewhat higher degree of financial risk than
9 UWID is necessary.

10 An indication of the magnitude of the necessary financial risk adjustment is given
11 by the Hamada equation³⁵, which un-levers and then re-levers betas based upon changes
12 in capital structure.

13 The Hamada equation un-levers the median beta of the proxy group of nine water
14 companies of 0.70 with an average December 31, 2010 common equity ratio of 49.03% to
15 0.42 when applied to a 100% common equity ratio and then levers the beta to 0.67 using
16 UWID's ratemaking common equity ratio of 52.51% at April 30, 2011. The re-levered
17 beta, applied to a 7.71% market risk premium and a 4.73% risk-free rate translates to a
18 9.90%³⁶ common equity cost rate. The difference between the 9.90% relevered beta
19 common equity cost rate and the result of the traditional CAPM for the proxy group with
20 a median beta of 0.70, 10.13%³⁷ is a negative 23 basis points (-0.23%). A downward

³⁵ Brigham and Daves 533.

³⁶ $9.90\% = (0.67 \times 7.71\%) + 4.73\%$.

³⁷ $10.13\% = (0.70 \times 7.71\%) + 4.73\%$.

1 financial adjustment of 23 basis points (0.23%), reflects the somewhat lower financial
2 risk of UWID attributable to its higher ratemaking common equity ratio of 52.51%
3 compared with the proxy group's average total equity ratio of 49.03% at December 31,
4 2010. The Hamada Equation and calculations are as follows:

$$b_l = b_u [1 + (1 - T)(D / S)]$$

5
6
7 Where b_l = Levered beta

8 b_u = Un-levered beta

9 T = Tax Rate

10 (D / S) = Debt to Common Equity Ratio

11
12 To un-lever the beta from a 49.03% average proxy group total equity ratio, the following
13 equation is used:

$$0.70 = b_u [1 + (1 - 0.35) (50.97\%/49.03\%)]$$

14
15
16 When solved for b_u , $b_u = 0.42$, indicating that the beta for the proxy group of nine water
17 companies would be 0.42 if their average capital structure contained 100% total equity.

18 To re-lever the beta relative to UWID's 52.51% for April 30, 2011 ratemaking
19 common equity ratio, the following equation is used:

$$b_l = 0.42 [1 + (1 - 0.35) (47.49\%/52.51\%)]$$

20
21
22 When solved for b_l , $b_l = 0.67$, indicating that the beta for the proxy group of nine water
23 companies would be 0.67, if their average capital structure contained 52.51% total equity.

24 **Business Risk Adjustment**

25 **Q. Is there a way to quantify a business risk adjustment due to UWID's small size**
26 **relative to the proxy group?**

27 **A. Yes. As discussed previously, the Company has greater business risk than the average**

1 company in the proxy group because of its smaller size relative to the group, measured by
2 either book capitalization or the market capitalization of common equity (estimated
3 market capitalization for UWID, whose common stock is not traded).

4 Table 4

5	6	7	8	9
		Market	Times	
		<u>Capitalization(1)</u>	<u>Greater than</u>	
		(\$ Millions)	<u>the Company</u>	
10				
11	UWID	\$142.597		
12				
13	Proxy Group of Nine			
14	Water Companies	1,194.619	8.4x	

15
16 (1) From page 1 of Schedule 14.

17
18 Because the Company's common stock is not publicly traded, I have assumed that
19 if it were, the common shares would be selling at the same market-to-book ratio as the
20 average market-to-book ratio for the proxy group, 175.8%, on July 6, 2011 as shown on
21 page 2 of Schedule 14. Since my recommended common equity cost rate is based upon
22 the market data of the proxy group, it is reasonable to use the market-to-book ratios of the
23 proxy group to estimate UWID's market capitalization. Hence, the Company's market
24 capitalization is estimated at \$142.597 million based upon the average market-to-book
25 ratio of the proxy group. In contrast, the market capitalization of the average water
26 company was \$1.195 billion on July 6, 2011, or 8.4 times the size of UWID's estimated
27 market capitalization.

28 Therefore, it is necessary to upwardly adjust the common equity cost rate of
29 10.90% based upon the nine water companies to reflect UWID's greater risk due to its
30 smaller relative size. The determination is based upon the size premiums for decile

1 portfolios of New York Stock Exchange (NYSE), American Stock Exchange (AMEX)
2 and NASDAQ listed companies for the 1926-2010 period and related data from SBBI-
3 2011. The average size premium for the decile in which the proxy group falls has been
4 compared with the average size premium for the decile in which the market capitalization
5 of UWID would fall if its stock were traded and sold at the July 6, 2011 average
6 market/book ratio of 175.84% experienced by the proxy group. As shown on page 1,
7 because UWID falls in the 10th decile and the nine water companies fall between the 6th
8 and 7th deciles, the size premium spread between the Company and the nine water
9 companies is 451 basis points (4.51%).

10 In view of the foregoing, an upward adjustment of 40 basis points (0.40%) to
11 reflect UWID's greater relative business risk due to its smaller size. A business risk
12 adjustment of 40 basis points (0.40%), coupled with the previously discussed financial
13 risk adjustment of a negative 23 basis points (a negative 0.23%), when added to the
14 10.90% indicated common equity cost rate based upon the nine water companies before
15 adjustment, results in a financial and business risk-adjusted common equity cost rate of
16 11.07%³⁸ which, when rounded to 11.05%, is my recommendation.

17 However, as discussed previously, the Company is requesting a conservatively
18 reasonable common equity cost rate of 10.50%. A common equity cost rate of 10.50%,
19 when applied to the consolidated common equity ratio of 52.51% at April 30, 2011,
20 results in an overall rate of return of 8.43%. In my opinion, this overall rate of return is
21 both reasonable and conservative, given UWID's small size and increased risk due to

³⁸ 11.07% = 10.90% - 0.23% + 0.40%.

1 increased pressure on UWID's ability to earn its authorized ROE due to declining per
2 customer usage, providing UWID with sufficient earnings to enable it to attract necessary
3 new capital.

4 **Q. Does that conclude your direct testimony?**

5 **A. Yes.**

APPENDIX A

PROFESSIONAL QUALIFICATIONS

OF

**PAULINE M. AHERN, CRRA
PRINCIPAL**

AUS CONSULTANTS

**PROFESSIONAL QUALIFICATIONS
OF
PAULINE M. AHERN, CRRA
PRINCIPAL
AUS CONSULTANTS**

PROFESSIONAL EXPERIENCE

1994-Present

In 1996, I became a Principal of AUS Consultants, continuing to offer testimony as an expert witness on the subjects of fair rate of return, cost of capital and related issues before state public utility commissions. I provide assistance and support to clients throughout the entire ratemaking litigation process. In addition, I supervise the financial analyst and administrative staff in the preparation of fair rate of return and cost of capital exhibits which are filed along with expert testimony before various state and federal public utility regulatory bodies. The team also assists in the preparation of interrogatory responses, as well as rebuttal exhibits.

As the Publisher of AUS Utility Reports (formerly C. A. Turner Utility Reports), I am responsible for the production, publishing, and distribution of the reports. AUS Utility Reports provides financial data and related ratios for about 120 public utilities, i.e., electric, combination gas and electric, natural gas distribution, natural gas transmission, telephone, and water utilities, on a monthly, quarterly and annual basis. Among the subscribers of AUS Utility Reports are utilities, many state regulatory commissions, federal agencies, individuals, brokerage firms, attorneys, as well as public and academic libraries. The publication has continuously provided financial statistics on the utility industry since 1930.

As the Publisher of AUS Utility Reports, I also supervise the production, publishing, and distribution of the AGA Rate Service publications under license from the American Gas Association. I am also responsible for maintaining and calculating the performance of the AGA Index, a market capitalization weighted index of the common stocks of the approximately 70 corporate members of the AGA, which serves as the benchmark for the AGA Gas Index Fund.

As an Assistant Vice President from 1994 - 1996, I prepared fair rate of return and cost of capital exhibits which were filed along with expert testimony before various state and federal public utility regulatory bodies. These supporting exhibits include the determination of an appropriate ratemaking capital structure and the development of embedded cost rates of senior capital. The exhibits also support the determination of a recommended return on common equity through the use of various market models, such as, but not limited to, Discounted Cash Flow analysis, Capital Asset Pricing Model and Risk Premium Methodology, as well as an assessment of the risk characteristics of the client utility. I also assisted in the preparation of responses to any interrogatories received regarding such testimonies filed on behalf of client utilities. Following the filing of fair rate of return testimonies, I assisted in the evaluation of opposition testimony in order to prepare interrogatory questions, areas of cross-examination, and rebuttal testimony. I also evaluated and assisted in the preparation of briefs and exceptions following the hearing process. I also submitted testimony before state public utility commissions regarding appropriate capital structure ratios and fixed capital cost rates.

1990-1994

As a Senior Financial Analyst, I supervised two analysts and assisted in the preparation of fair rate of return and cost of capital exhibits which are filed along with expert testimony before various state and federal public utility regulatory bodies. The team also assisted in the preparation of interrogatory responses.

I evaluated the final orders and decisions of various commissions to determine whether further actions were warranted and to gain insight which assisted in the preparation of future rate of return studies.

I assisted in the preparation of an article authored by Frank J. Hanley and A. Gerald Harris entitled "Does Diversification Increase the Cost of Equity Capital?" published in the July 15, 1991 issue of Public Utilities Fortnightly.

In 1992, I was awarded the professional designation "Certified Rate of Return Analyst" (CRRA) by the National Society of Rate of Return Analysts (now the Society of Utility and Regulatory Financial Analysts

(SURFA)). This designation is based upon education, experience and the successful completion of a comprehensive examination.

As Administrator of Financial Analysis for AUS Utility Reports, which then reported financial data for over 200 utility companies with approximately 1,000 subscribers, I oversaw the preparation of this monthly publication, as well as the accompanying annual publication, Financial Statistics - Public Utilities.

1988-1990

As a Financial Analyst, I assisted in the preparation of fair rate of return studies including capital structure determination, development of senior capital cost rates, as well as the determination of an appropriate rate of return on equity. I also assisted in the preparation of interrogatory responses, interrogatory questions of the opposition, areas of cross-examination and rebuttal testimony. I also assisted in the preparation of the annual publication C. A. Turner Utility Reports - Financial Statistics - Public Utilities.

1973-1975

As a Research Assistant in the Research Department of the Regional Economics Division of the Federal Reserve Bank of Boston, I was involved in the development and maintenance of econometric models to simulate regional economic conditions in New England in order to study the effects of, among other things, the energy crisis of the early 1970's and property tax revaluations on the economy of New England. I was also involved in the statistical analysis and preparation of articles for the New England Economic Review. Also, I was Assistant Editor of New England Business Indicators.

1972

As a Research Assistant in the Office of the Assistant Secretary for International Affairs, U.S. Treasury Department, Washington, D.C., I developed and maintained econometric models which simulated the economy of the United States in order to study the results of various alternate foreign trade policies so that national trade policy could be formulated and recommended.

Clients Served

I have offered expert testimony before the following commissions:

Arkansas	Maryland
California	Michigan
Connecticut	Missouri
Delaware	Nevada
Florida	New Jersey
Hawaii	New York
Idaho	North Carolina
Illinois	Ohio
Indiana	Pennsylvania
Iowa	South Carolina
Kentucky	Virginia
Louisiana	Washington
Maine	

I have sponsored testimony on generic/uniform methodologies for determining the return on common equity for:

Aquarion Water Company
The Connecticut Water Company

United Water Connecticut, Inc.
Utilities, Inc.

I have sponsored testimony on the rate of return and capital structure effects of merger and acquisition issues for:

California-American Water Company

New Jersey-American Water Company

I have sponsored testimony on fair rate of return and related issues for:

Alpena Power Company
Apple Canyon Utility Company
Applied Wastewater Management, Inc.
Aqua Illinois, Inc.
Aqua New Jersey, Inc.
Aqua North Carolina, Inc.
Aqua Virginia, Inc.
Aquarion Water Company
Artesian Water Company
The Atlantic City Sewerage Company
Audubon Water Company
The Borough of Hanover, PA
Carolina Pines Utilities, Inc.
Carolina Water Service, Inc. of NC
Carolina Water Service, Inc. of SC
The Columbia Water Company
The Connecticut Water Company
Consumers Illinois Water Company
Consumers Maine Water Company
Consumers New Jersey Water Company
City of DuBois, Pennsylvania
Elizabethtown Water Company
Emporium Water Company
GTE Hawaiian Telephone Inc.
Greenridge Utilities, Inc.
Illinois American Water Company
Iowa American Water Company
Water Services Corp. of Kentucky
Lake Wildwood Utilities Corp.
Land'Or Utility Company
Long Island American Water Company
Long Neck Water Company
Louisiana Water Service, Inc.
Massanutten Public Service Company
Middlesex Water Company
Missouri-American Water Company
Mt. Holly Water Company
Nero Utility Services, Inc.
New Jersey-American Water Company
Ohio-American Water Company
The Newtown Artesian Water Company
NRG Energy Center Pittsburgh LLC
NRG Energy Center Harrisburg LLC

United Water Idaho, Inc.
Penn Estates Utilities
Pinelands Water Company
Pinelands Waste Water Company
Pittsburgh Thermal
San Jose Water Company
Southland Utilities, Inc.
Spring Creek Utilities, Inc.
Sussex Shores Water Company
Tega Cay Water Service, Inc.
Total Environmental Services, Inc. –
Treasure Lake Water & Sewer Divisions
Thames Water Americas
Tidewater Utilities, Inc.
Transylvania Utilities, Inc.
Trigen – Philadelphia Energy Corporation
Twin Lakes Utilities, Inc.
United Utility Companies
United Water Arkansas, Inc.
United Water Arlington Hills Sewerage, Inc.
United Water Connecticut, Inc.
United Water Delaware, Inc.
United Water Great Gorge Inc. / United Water
Vernon Transmission, Inc.
United Water Idaho, Inc.
United Water Indiana, Inc.
United Water New Jersey, Inc.
United Water New Rochelle, Inc.
United Water New York, Inc.
United Water Owego / Nichols, Inc.
United Water Pennsylvania, Inc.
United Water Rhode Island, Inc.
United Water South County, Inc.
United Water Toms River, Inc.
United Water Vernon Sewage Inc.
United Water Virginia, Inc.
United Water Westchester, Inc.
United Water West Lafayette, Inc.
United Water West Milford, Inc.
Utilities, Inc.
Utilities Inc. of Central Nevada
Utilities, Inc. of Florida
Utilities, Inc. of Louisiana

(Testimony on Rate of Return Clients Continued)

Utilities, Inc. of Nevada
Utilities, Inc. of Pennsylvania
Utilities, Inc. - Westgate
Utilities Services of South Carolina

Utility Center, Inc.
Valley Energy, Inc.
Wellsboro Electric Company
Western Utilities, Inc.

I have sponsored testimony on capital structure and senior capital cost rates for the following clients:

Alpena Power Company
Arkansas-Western Gas Company
Associated Natural Gas Company

PG Energy Inc.
United Water Delaware, Inc.
Washington Natural Gas Company

I have assisted in the preparation of rate of return studies on behalf of the following clients:

Algonquin Gas Transmission Company
Anadarko Petroleum Corporation
Arkansas-Louisiana Gas Company
Arkansas Western Gas Company
Artesian Water Company
Associated Natural Gas Company
Atlantic City Electric Company
Bridgeport-Hydraulic Company
Cambridge Electric Light Company
Carolina Power & Light Company
Citizens Gas and Coke Utility
City of Vernon, CA
Columbia Gas/Gulf Transmission Cos.
Commonwealth Electric Company
Commonwealth Telephone Company
Conestoga Telephone & Telegraph Co.
Connecticut Natural Gas Corporation
Consolidated Gas Transmission Company
Consumers Power Company
CWS Systems, Inc.
Delmarva Power & Light Company
East Honolulu Community Services, Inc.
Equitable Gas Company
Equitrans, Inc.
Florida Power & Light Company
Gary Hobart Water Company
Gasco, Inc.
GTE Arkansas, Inc.
GTE California, Inc.
GTE Florida, Inc.
GTE Hawaiian Telephone
GTE North, Inc.
GTE Northwest, Inc.
GTE Southwest, Inc.
Great Lakes Gas Transmission L.P.
Hawaiian Electric Company
Hawaiian Electric Light Company
IES Utilities Inc.

Illinois Power Company
Interstate Power Company
Interstate Power & Light Co.
Iowa Electric Light and Power Company
Iowa Southern Utilities Company
Kentucky-West Virginia Gas Company
Lockhart Power Company
Middlesex Water Company
Milwaukee Metropolitan Sewer District
Mountaineer Gas Company
National Fuel Gas Distribution Corp.
National Fuel Gas Supply Corp.
Newco Waste Systems of NJ, Inc.
New Jersey Natural Gas Company
New Jersey-American Water Company
New York-American Water Company
North Carolina Natural Gas Corp.
Northumbrian Water Company
United Water Idaho, Inc.
Oklahoma Natural Gas Company
Orange and Rockland Utilities
Paiute Pipeline Company
PECO Energy Company
Penn Estates Utilities, Inc.
Penn-York Energy Corporation
Pennsylvania-American Water Co.
PG Energy Inc.
Philadelphia Electric Company
Providence Gas Company
South Carolina Pipeline Company
Southwest Gas Corporation
Stamford Water Company
Tesoro Alaska Petroleum Company
Tesoro Refining & Marketing Co.
United Telephone of New Jersey
United Utility Companies
United Water Arkansas, Inc.
United Water Delaware, Inc.

(Rate of Return Study Clients Continued)

United Water Idaho, Inc.	Washington Gas Light Company
United Water Indiana, Inc.	Washington Natural Gas Company
United Water New Jersey, Inc.	Washington Water Power Corporation
United Water New York, Inc.	Waste Management of New Jersey –
United Water Pennsylvania, Inc.	Transfer Station A
United Water Virginia, Inc.	Wellsboro Electric Company
United Water West Lafayette, Inc.	Western Reserve Telephone Company
Utilities, Inc. of Pennsylvania	Western Utilities, Inc.
Utilities, Inc. - Westgate	Wisconsin Power and Light Company
Vista-United Telecommunications Corp.	

EDUCATION:

1973 – Clark University – B.A. – Honors in Economics (Concentration: Econometrics and Regional/International Economics)
1991 – Rutgers University – M.B.A. – High Honors (Concentration: Corporate Finance)

PROFESSIONAL AFFILIATIONS:

American Finance Association
Financial Management Association
Society of Utility and Regulatory Financial Analysts
Member, Board of Directors – 2010-2012
President – 2006-2008 and 2008-2010
Secretary/Treasurer – 2004-2006
Energy Association of Pennsylvania
National Association of Water Companies – Member of the Finance/Accounting/Taxation Committee

SPEAKING ENGAGEMENTS:

“Public Utility Betas and the Cost of Capital”, (co-presenter with Richard A. Michelfelder, Ph.D.) – Advanced Workshop in Regulation and Competition, 30th Annual Eastern Conference of the Center for Research in Regulated Industries (CRRRI), May 20, 2011, Rutgers University, Skytop, PA.

Moderator: Society of Utility and Regulatory Financial Analysts: 43rd Financial Forum – “Impact of Cost Recovery Mechanisms on the Perception of Public Utility Risk”, April 14-15, 2011, Washington, DC.

“A New Approach for Estimating the Equity Risk Premium for Public Utilities”, (co-presenter with Richard A. Michelfelder, Ph.D.) – Hot Topic Hotline Webinar, December 3, 2010, Financial Research Institute of the University of Missouri.

“A New Approach for Estimating the Equity Risk Premium for Public Utilities”, (co-presenter with Richard A. Michelfelder, Ph.D.) before the Indiana Utility Regulatory Commission Cost of Capital Task Force, September 28, 2010, Indianapolis, IN

Tomorrow’s Cost of Capital: Cost of Capital Issues 2010, Deloitte Center for Energy Solutions, 2010 Deloitte Energy Conference, “Changing the Great Game: Climate, Customers and Capital”, June 7-8, 2010, Washington, DC.

“Cost of Capital Issues – 2010” – Deloitte Center for Energy Solutions 2010 Energy Conference: Changing the Great Game: Climate, Consumers and Capital, June 7-8, 2010, Washington, DC

“A New Approach for Estimating the Equity Risk Premium for Public Utilities”, (co-presenter with Richard A.

Michelfelder, Ph.D.) – Advanced Workshop in Regulation and Competition, 29th Annual Eastern Conference of the Center for Research in Regulated Industries (CRRRI), May 20, 2010, Rutgers University, Skytop, PA

Moderator: Society of Utility and Regulatory Financial Analysts: 42nd Financial Forum – “The Changing Economic and Capital Market Environment and the Utility Industry”, April 29-30, 2010, Washington, DC

“A New Model for Estimating the Equity Risk Premium for Public Utilities” (co-presenter with Richard A. Michelfelder, Ph.D.) – Spring 2010 Meeting of the Staff Subcommittee on Accounting and Finance of the National Association of Regulatory Utility Commissioners, March 17, 2010, Charleston, SC

“New Approach to Estimating the Cost of Common Equity Capital for Public Utilities” (co-presenter with Richard A. Michelfelder, Ph.D.) - Advanced Workshop in Regulation and Competition, 28th Annual Eastern Conference of the Center for Research in Regulated Industries (CRRRI), May 14, 2009, Rutgers University, Skytop, PA

Moderator: Society of Utility and Regulatory Financial Analysts: 41st Financial Forum – “Estimating the Cost of Capital in Today’s Economic and Capital Market Environment”, April 16-17, 2009, Washington, DC

“Water Utility Financing: Where Does All That Cash Come From?”, AWWA Pre-Conference Workshop: Water Utility Ratemaking, March 25, 2008, Atlantic City, NJ

PAPERS:

“Public Utility Beta Adjustment and the Cost of Capital”, co-authored with Richard A. Michelfelder, Ph.D. and Panayiotis Theodossiou, Ph.D.

“A New Approach for Estimating the Equity Risk Premium for Public Utilities”, co-authored with Frank J. Hanley and Richard A. Michelfelder, Ph.D. (forthcoming in The Journal of Regulatory Economics).

“Comparable Earnings: New Life for an Old Precept” co-authored with Frank J. Hanley, Financial Quarterly Review, (American Gas Association), Summer 1994.



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IDAHO PUBLIC
UTILITIES COMMISSION

Attorneys for Applicant

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION
OF UNITED WATER IDAHO INC. FOR
AUTHORITY TO INCREASE ITS RATES
AND CHARGES FOR WATER SERVICE IN
THE STATE OF IDAHO

Case No. UWI-W-11-02

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

EXHIBIT TO ACCOMPANY THE DIRECT TESTIMONY OF PAULINE M. AHERN, CRRA
PRINCIPAL
AUS CONSULTANTS

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to the Financial Supporting Exhibit
of Pauline M. Ahern, CRRA

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United Water Idaho, Inc.
 Summary of Cost of Capital and Fair Rate of Return
 Based upon the Pro Forma Consolidated Capital Structure
 of United Waterworks, Inc. at April 30, 2011

<u>Type of Capital</u>	<u>Ratios (1)</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	47.49%	6.15% (1)	2.92%
Common Equity	<u>52.51%</u>	10.50% (2)	<u>5.51%</u>
Total	<u><u>100.00%</u></u>		<u><u>8.43%</u></u>

Notes:

(1) Company-provided.

(2) Although Ms. Ahern's recommended common equity cost rate is 11.05%, the company is requesting a 10.50% return rate on common equity.

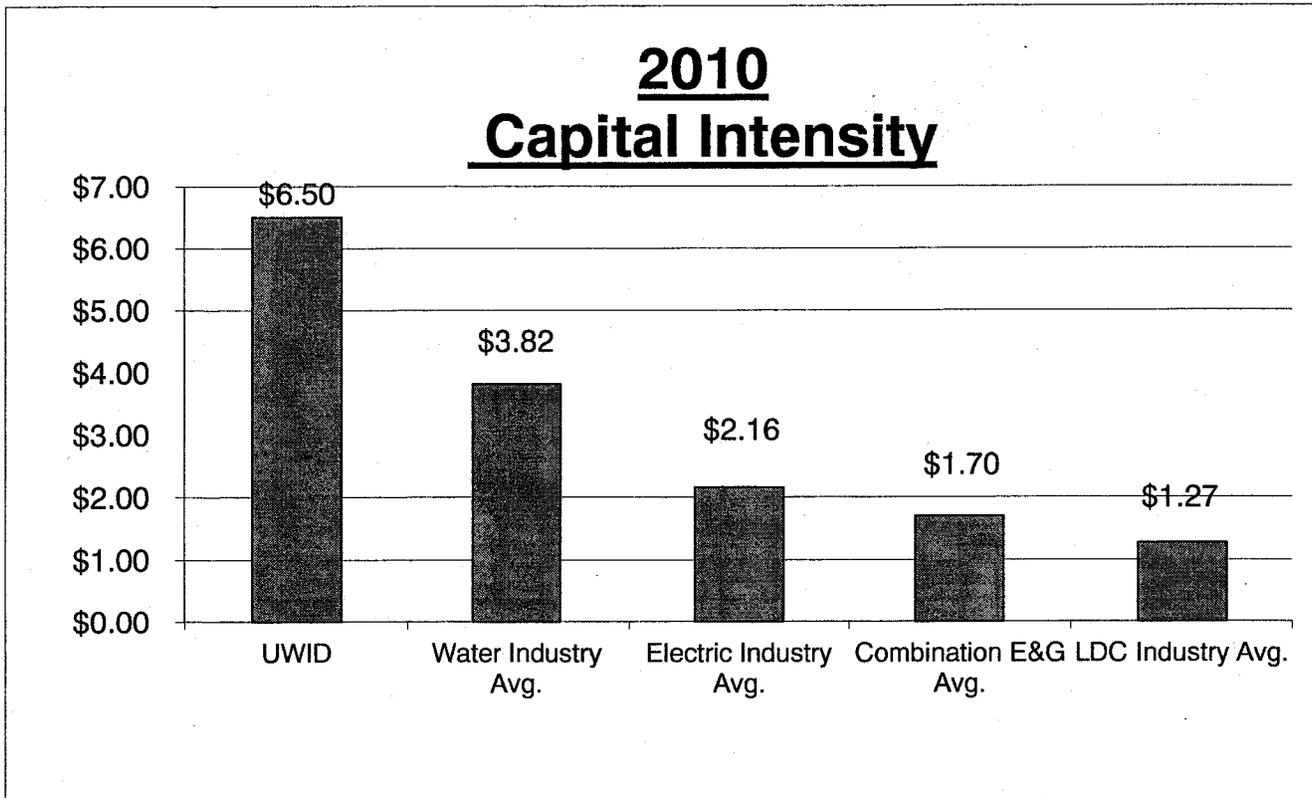
United Water Idaho, Inc.
Brief Summary of Common Equity Cost Rate

<u>No.</u>	<u>Principal Methods</u>	<u>Proxy Group of Nine Water Companies</u>
1.	Discounted Cash Flow Model (DCF) (1)	9.54 %
2.	Risk Premium Model (RPM) (2)	10.33
3.	Capital Asset Pricing Model (CAPM) (3)	10.42
4.	Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4)	13.45
5.	Indicated Common Equity Cost Rate before Adjustment for Business Risks	10.90 %
6.	Financial Risk Adjustment (5)	(0.23)
7.	Business Risk Adjustment (6)	<u>0.40</u>
8.	Indicated Common Equity Cost Rate	<u><u>11.07 %</u></u>
9.	Recommended Common Equity Cost Rate	<u><u>11.05 %</u></u>

- Notes:
- (1) From Schedule 6.
 - (2) From page 1 of Schedule 8.
 - (3) From page 1 of Schedule 10.
 - (4) From page 2 of Schedule 11.
 - (5) Financial risk adjustment to reflect the financial risk of the capital structure employed by United Water Idaho for ratemaking purposes relative to the proxy group as detailed in Ms. Ahern's accompanying direct testimony.
 - (6) Business risk adjustment to reflect 's greater business risk due to its small size relative to the proxy group as detailed in Ms. Ahern's accompanying direct testimony.

United Water Idaho, Inc.
 2010 Capital Intensity of United Water Idaho, Inc. and
 AUS Utility Reports Utility Companies Industry Averages

	Average Net Plant (\$ mill)	Average Operating Revenue (\$ mill)	Capital Intensity (\$)	Capital Intensity of UWID v. Other Industries (times)
United Water Idaho, Inc.	\$ 243.15	\$ 37.39	\$ 6.50	--
Water Industry Average	\$ 1,841.97	\$ 482.13	\$ 3.82	170.16%
Electric Industry Average	\$ 11,841.00	\$ 5,481.47	\$ 2.16	300.93%
Combination Elec. & Gas Industry Average	\$ 10,561.90	\$ 6,210.80	\$ 1.70	382.35%
Gas Distribution Average	\$ 2,909.36	\$ 2,295.93	\$ 1.27	511.81%



Notes:

Capital Intensity is equal to Net Plant divided by Total Operating Revenue.

Source of Information:

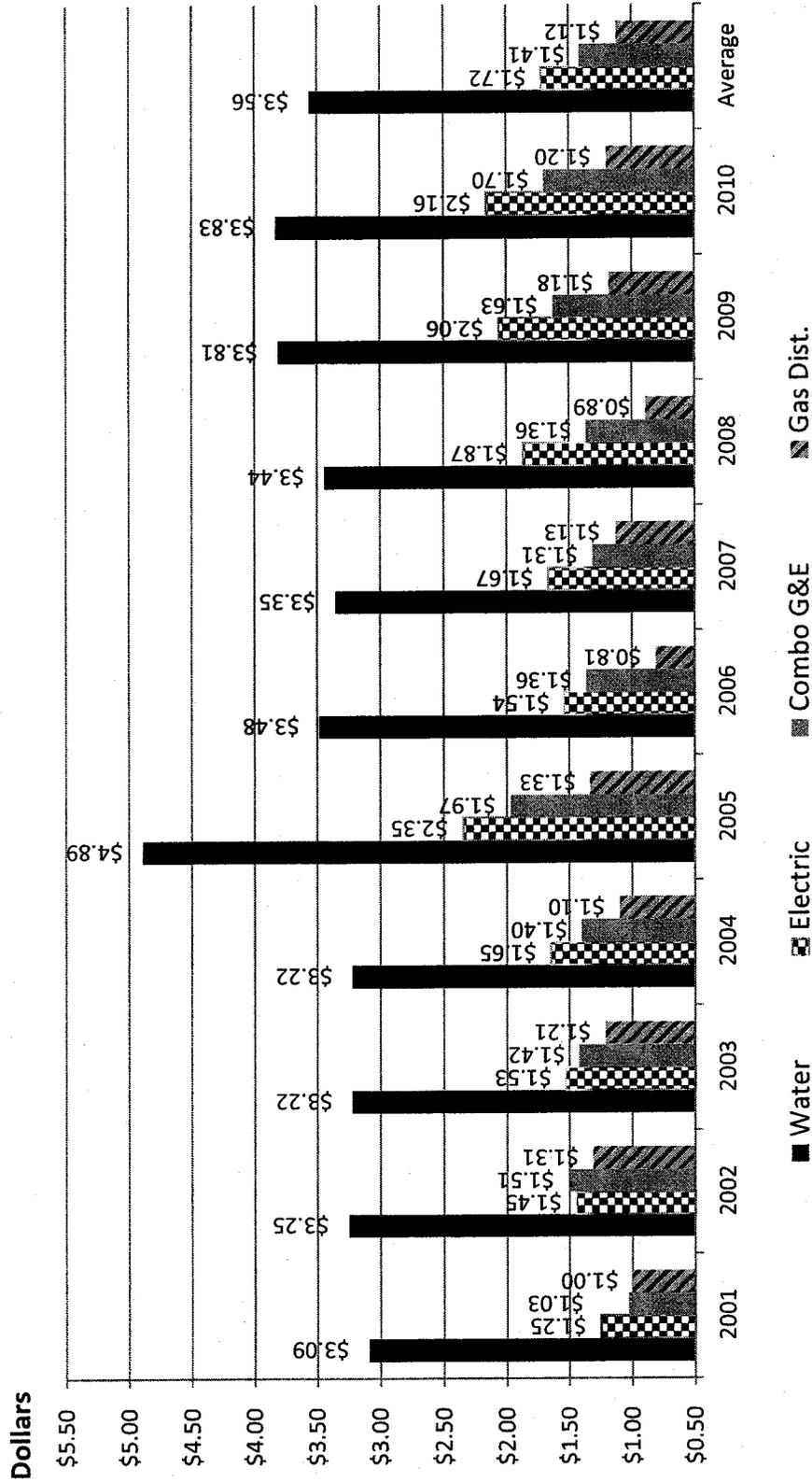
EDGAR Online's I-Matrix Database
 Company Annual Forms 10-K

AUS Utility Reports - May 2011

Published By AUS Consultants

Company Provided Information

Capital Intensity of the AUS Utility Reports Companies 2001 - 2010

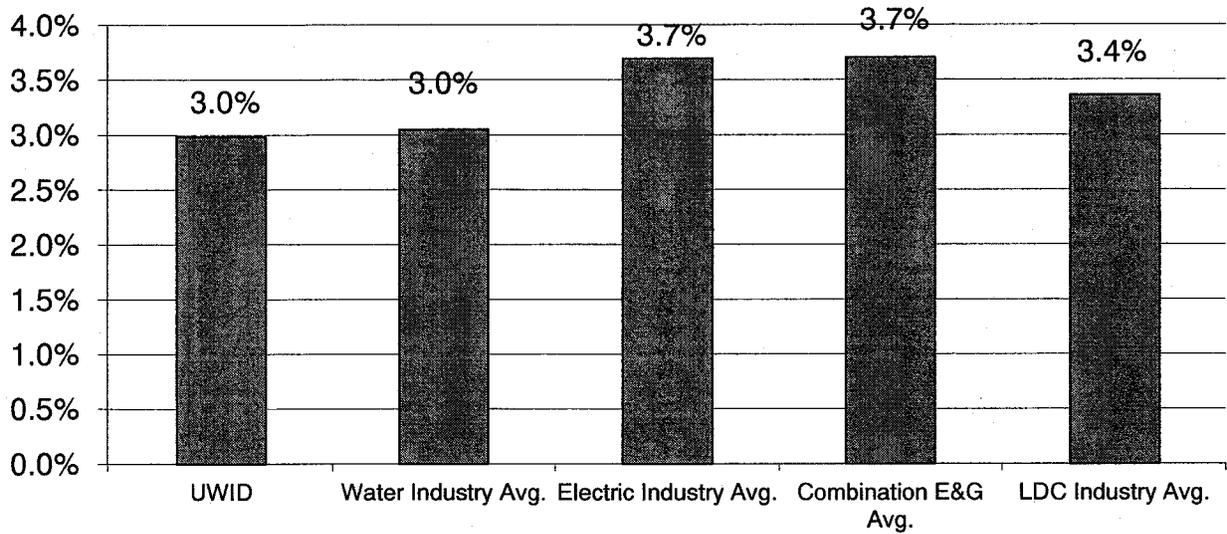


Source of Information: SEC Edgar I-Metrix Online Database

United Water Idaho, Inc.
 2010 Depreciation Rate of United Water Idaho, Inc. and
 AUS Utility Reports Utility Companies Industry Averages

	Depreciation & Amort. Expense (\$ mill)	Average Total Gross Plant Less CWIP (\$ mill)	Depreciation Rate (%)	Depreciation Rate of UWID v. Other Industries (times)
United Water Idaho, Inc.	\$ 7.32	\$ 245.43	3.0%	--
Water Industry Average	\$ 61.69	\$ 2,024.85	3.0%	100.00%
Electric Industry Average	\$ 581.88	\$ 15,770.71	3.7%	81.08%
Combination Elec. & Gas Industry Average	\$ 541.78	\$ 14,632.55	3.7%	81.08%
LDC Gas Distribution Industry Average	\$ 132.79	\$ 3,952.97	3.4%	88.24%

2010 Effective Depreciation Rate



Notes:

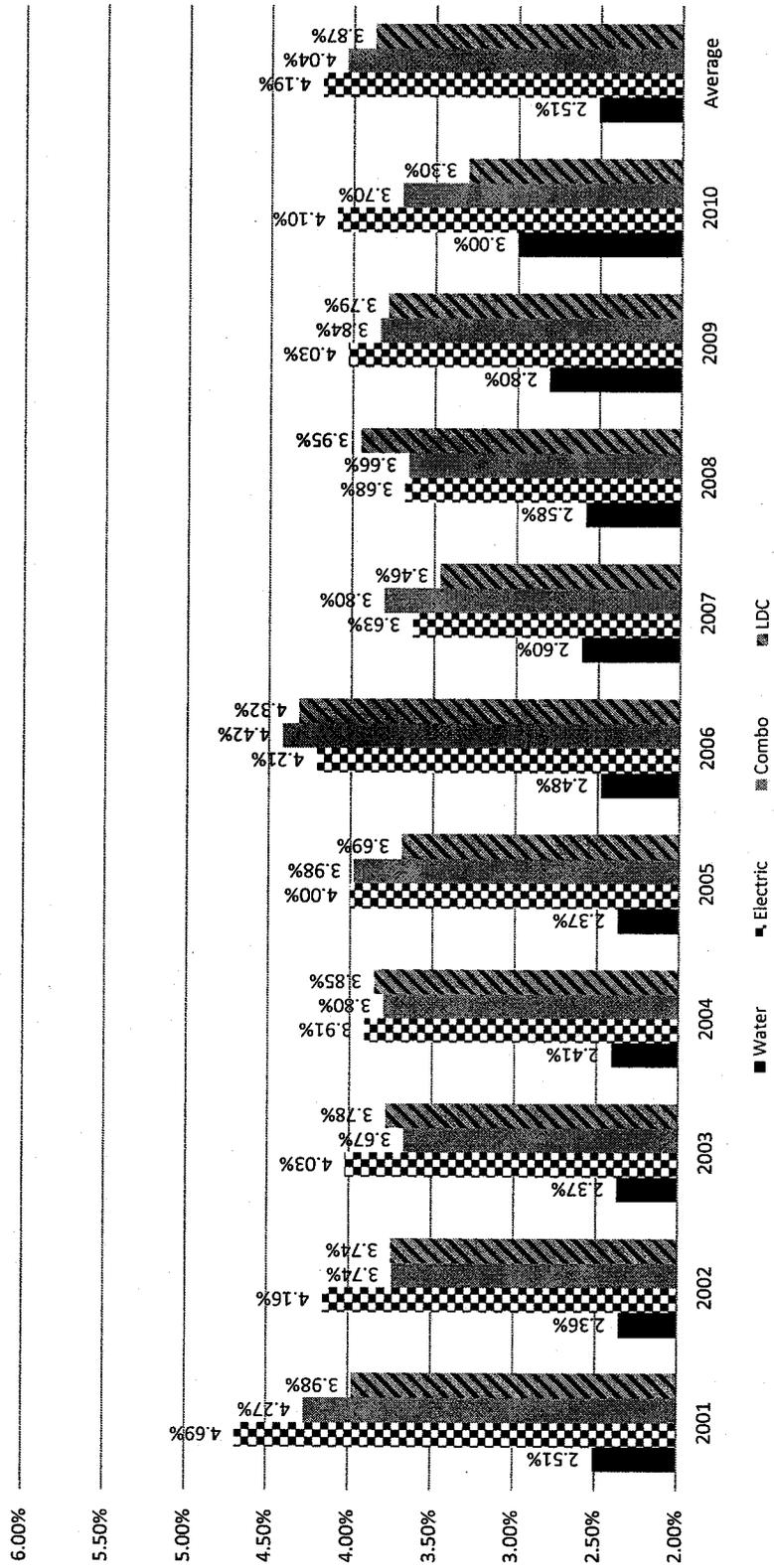
Effective Depreciation Rate is equal to Depreciation, Depletion and Amortization Expense divided by average beginning and ending year's Gross Plant minus Construction Work in Progress.

Source of Information:
 EDGAR Online's I-Metrix Database
 Company Annual Forms 10-K

AUS Utility Report - May 2011
 Published by AUS Consultants

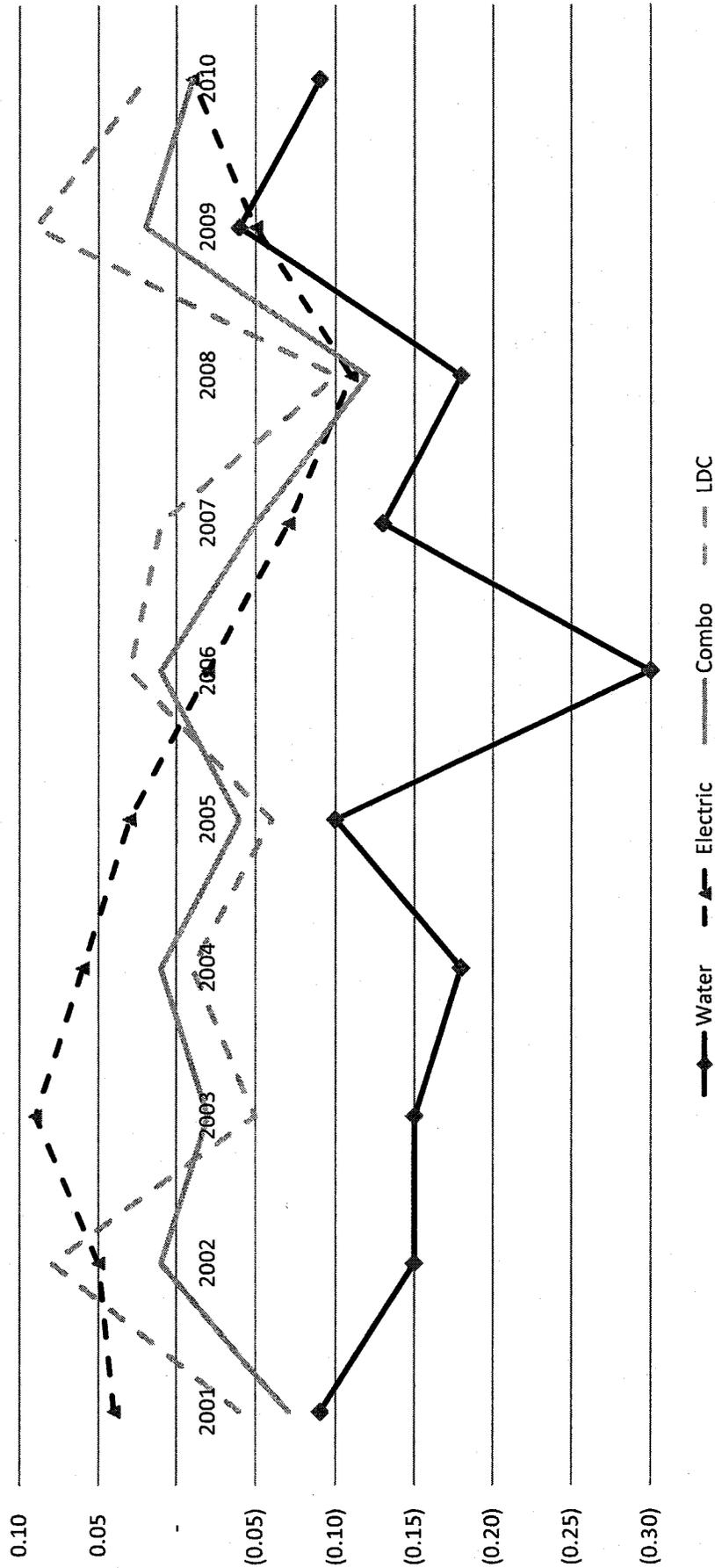
Company Provided Information

Depreciation Rates for the AUS Utility Reports Companies 2001-2010



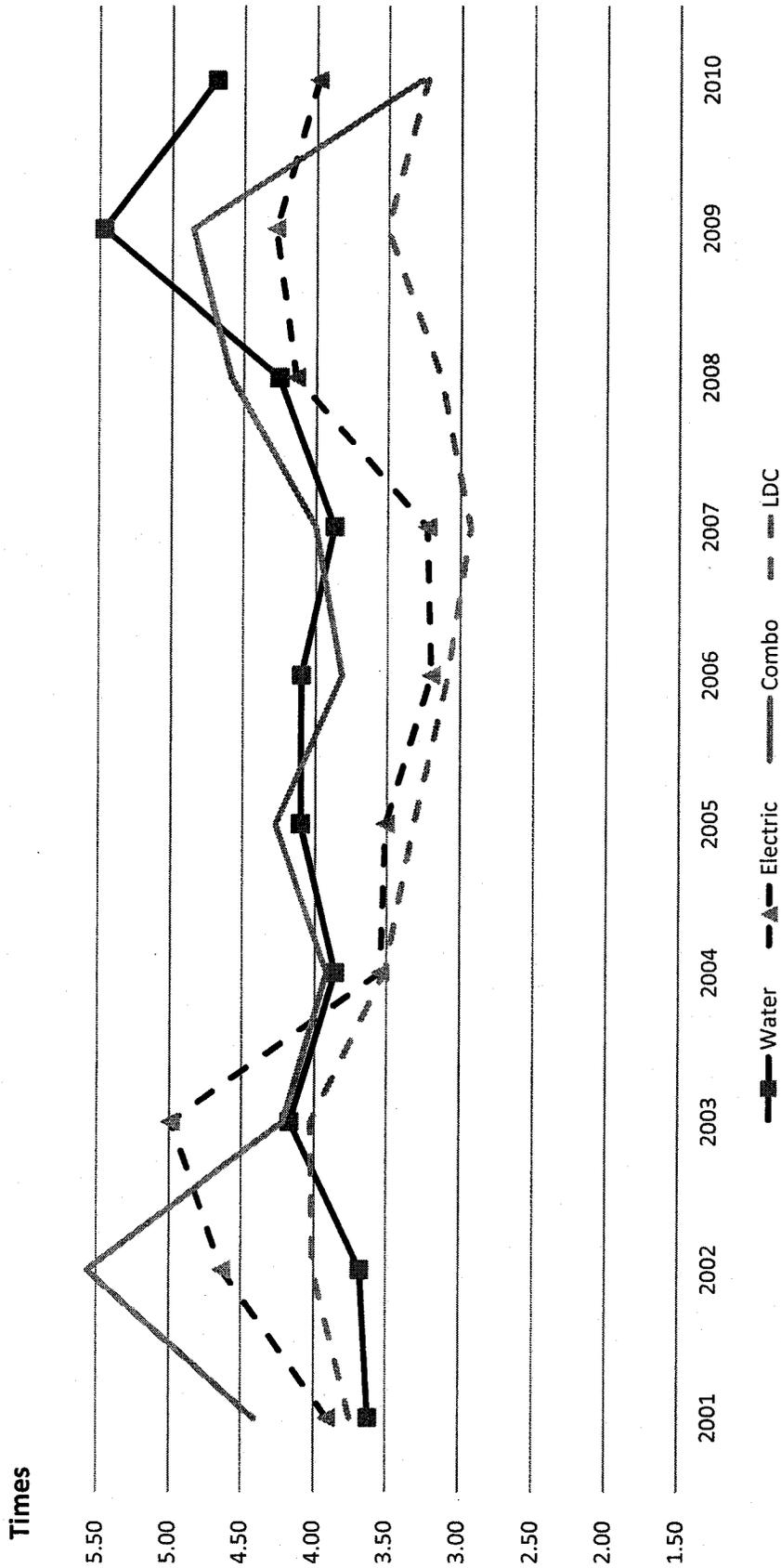
Source of Information: SEC Edgar | Metrix Online Database

Free Cash Flow / Operating Revenues for the AUS Utility Reports Companies 2001 - 2010



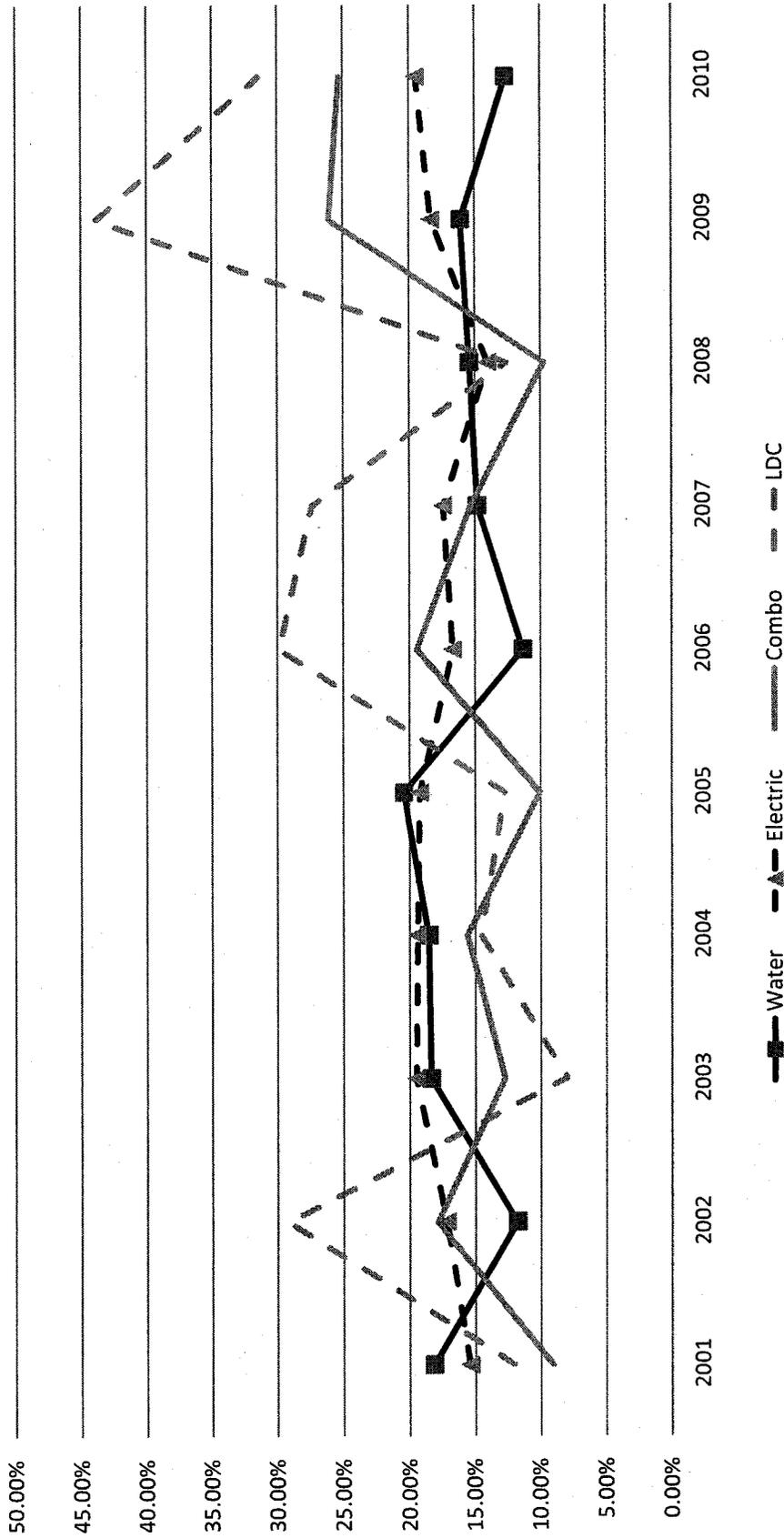
Source of Information: SEC Edgar I-Metrix Online Database

Total Debt / EBITDA for the AUS Utility Reports Companies 2001 - 2010



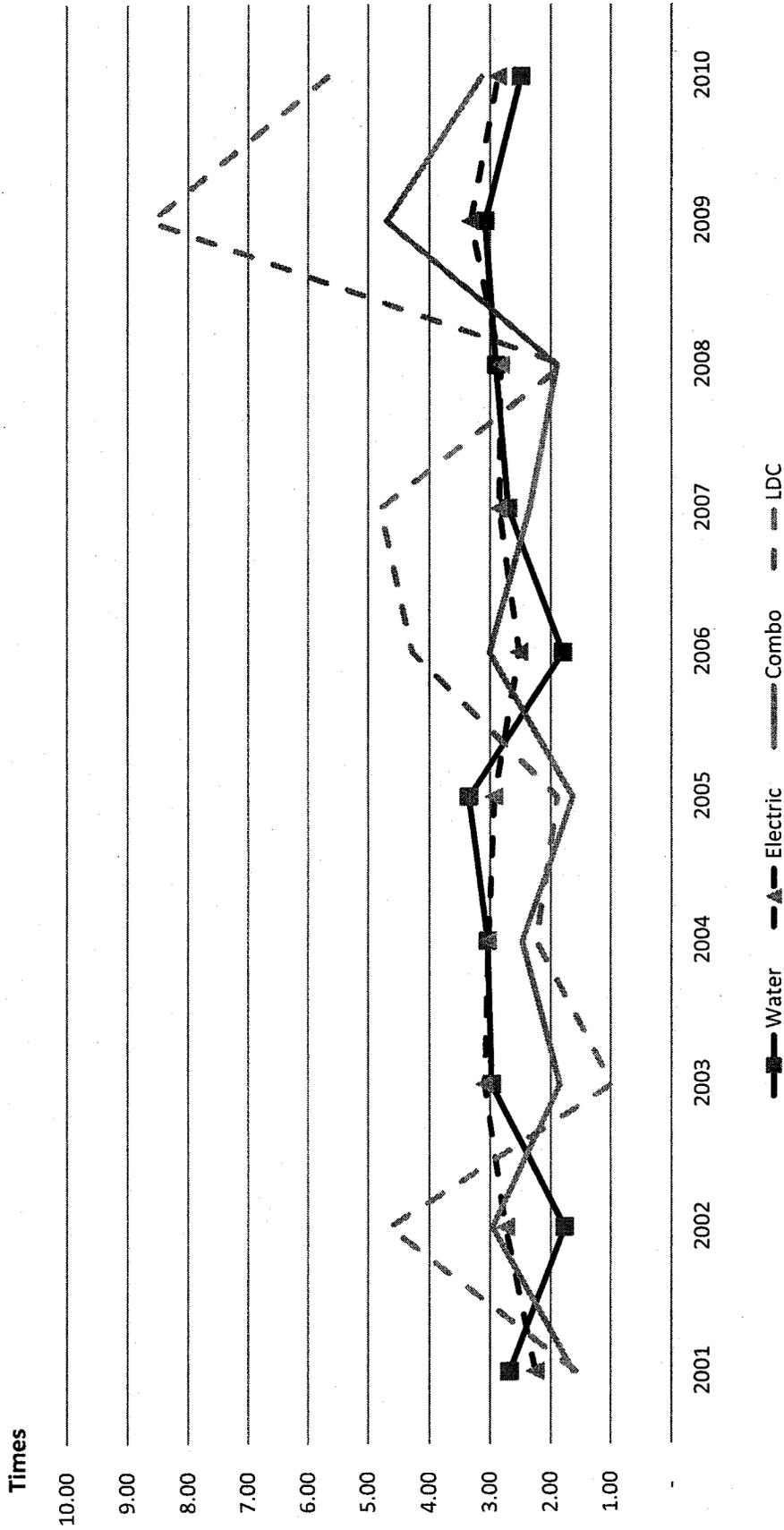
Source of Information: SEC Edgar I-Matrix Online Database

Funds From Ops / Total Debt for the AUS Utility Reports Cos. 2001- 2010



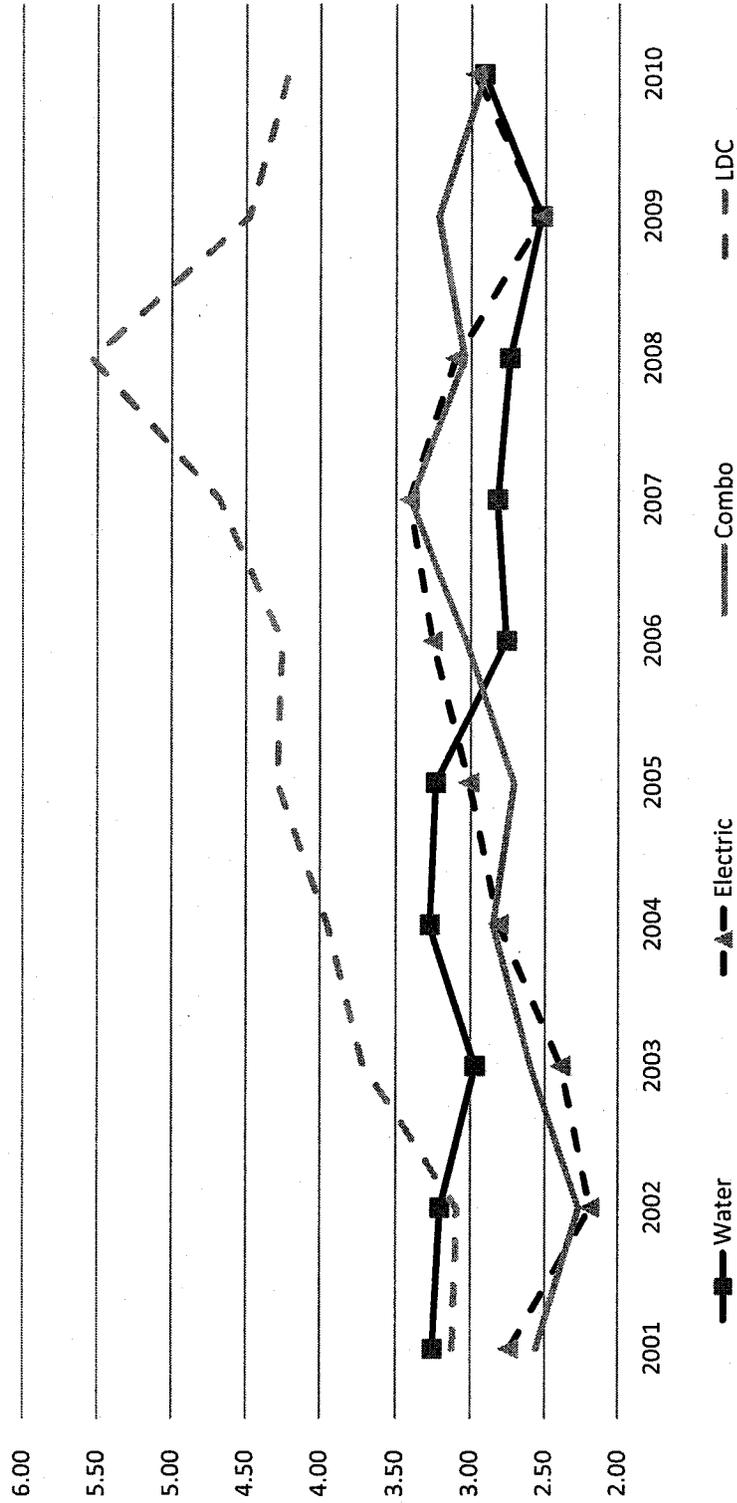
Source of Information: SEC Edgar I-Metrix Online Database

Funds From Ops / Interest Cov. for the AUS Utility Reports Cos. 2001 - 2010



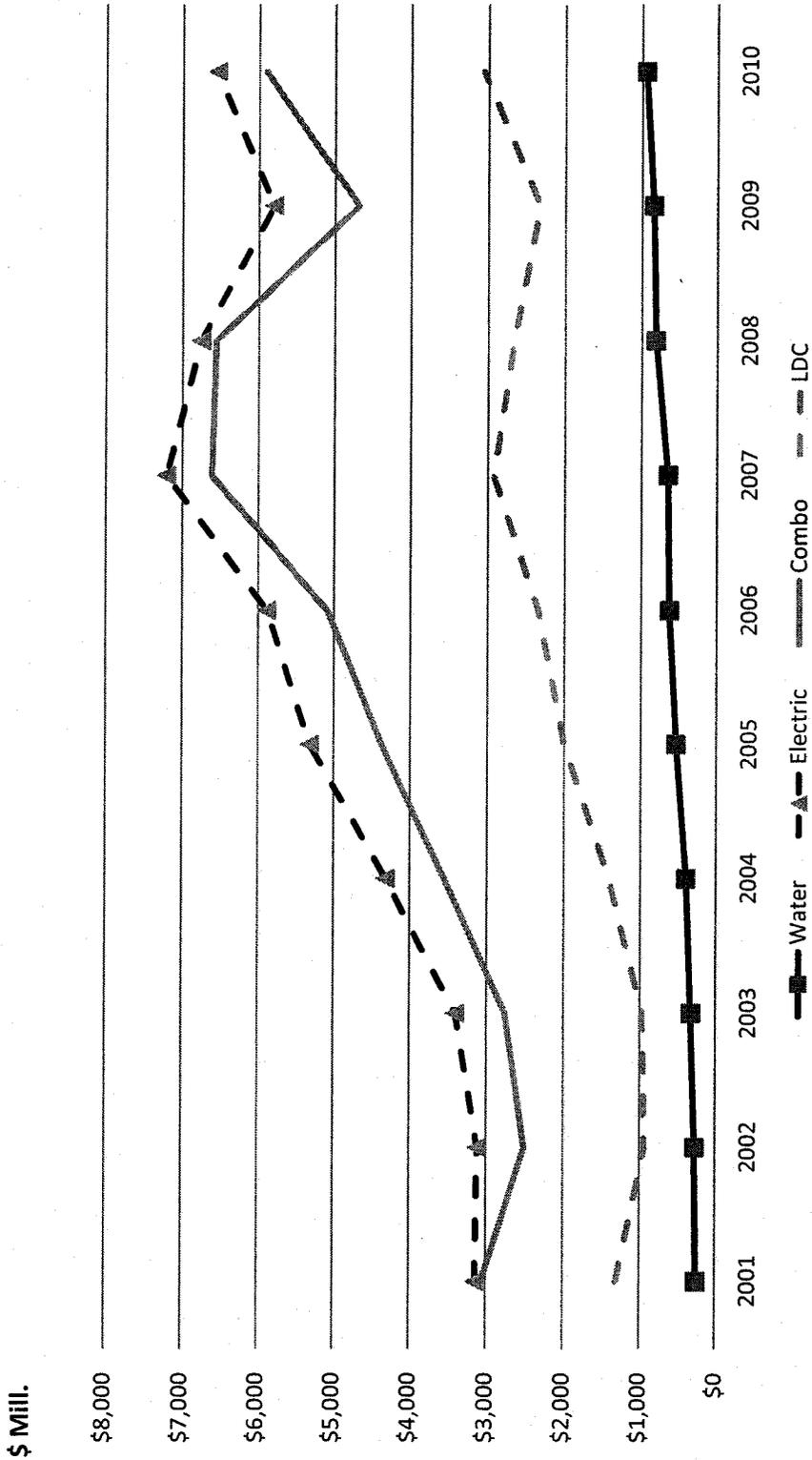
Source of Information: SEC Edgar I-Matrix Online Database

Before-Inc. Tax / Interest Cov. for the AUS Utility Reports Cos. 2001 - 2010



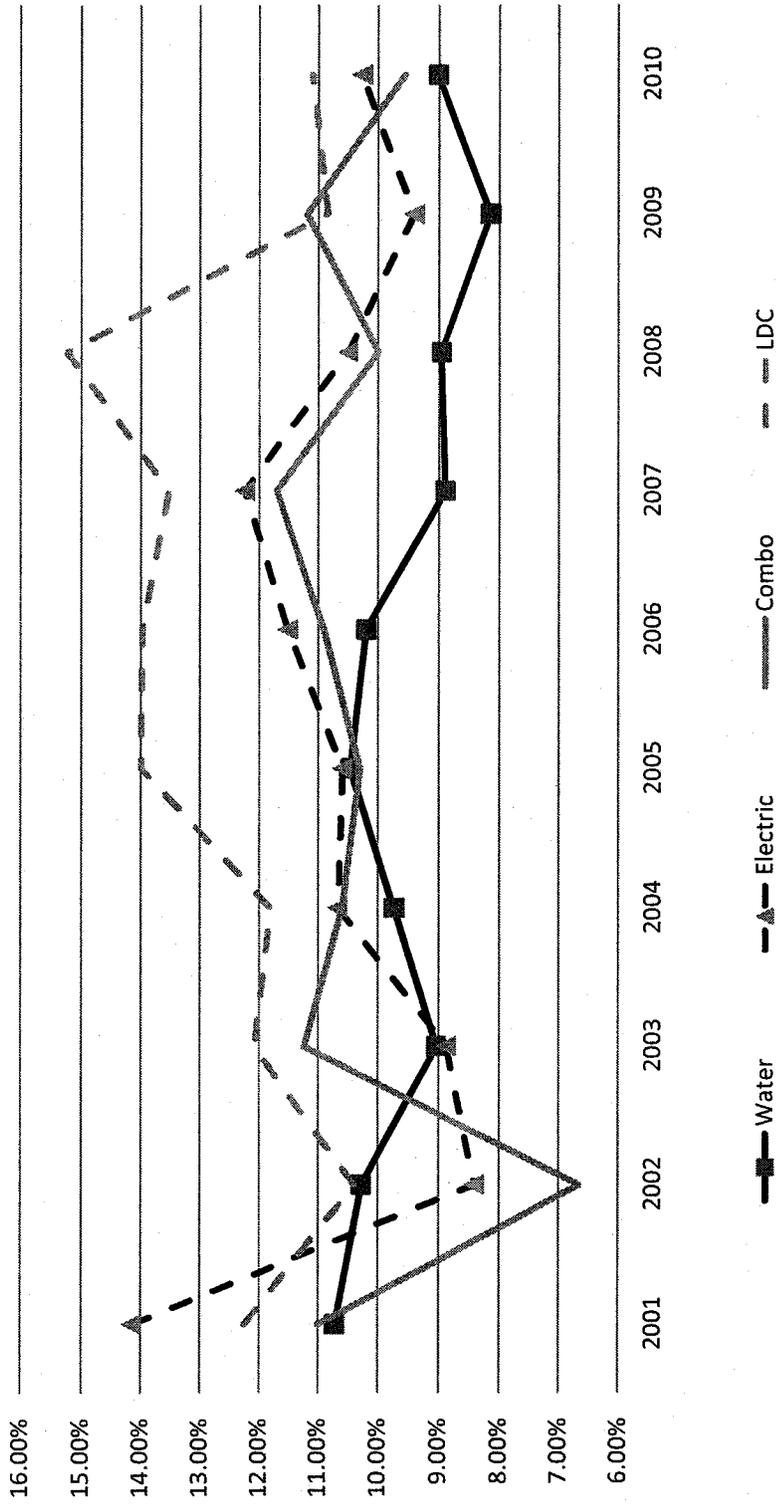
Source of Information: SEC Edgar I-Metrix Online Database

Market Capitalization for the AUS Utility Reports Companies 2001 - 2010



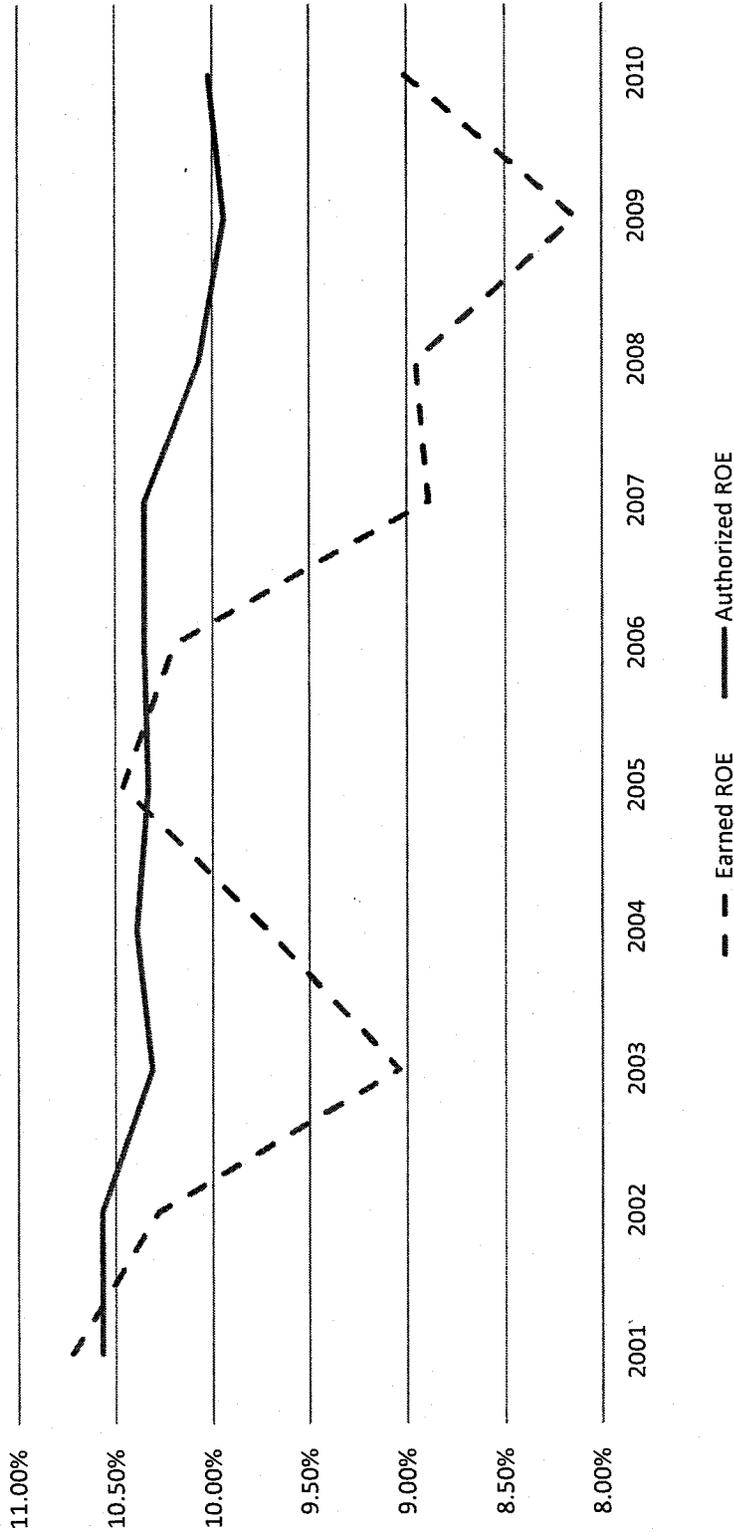
Source of Information: SEC Edgar I-Metrix Online Database

Earned Returns on Common Equity for the AUS Utility Reports Cos. 2001 - 2010



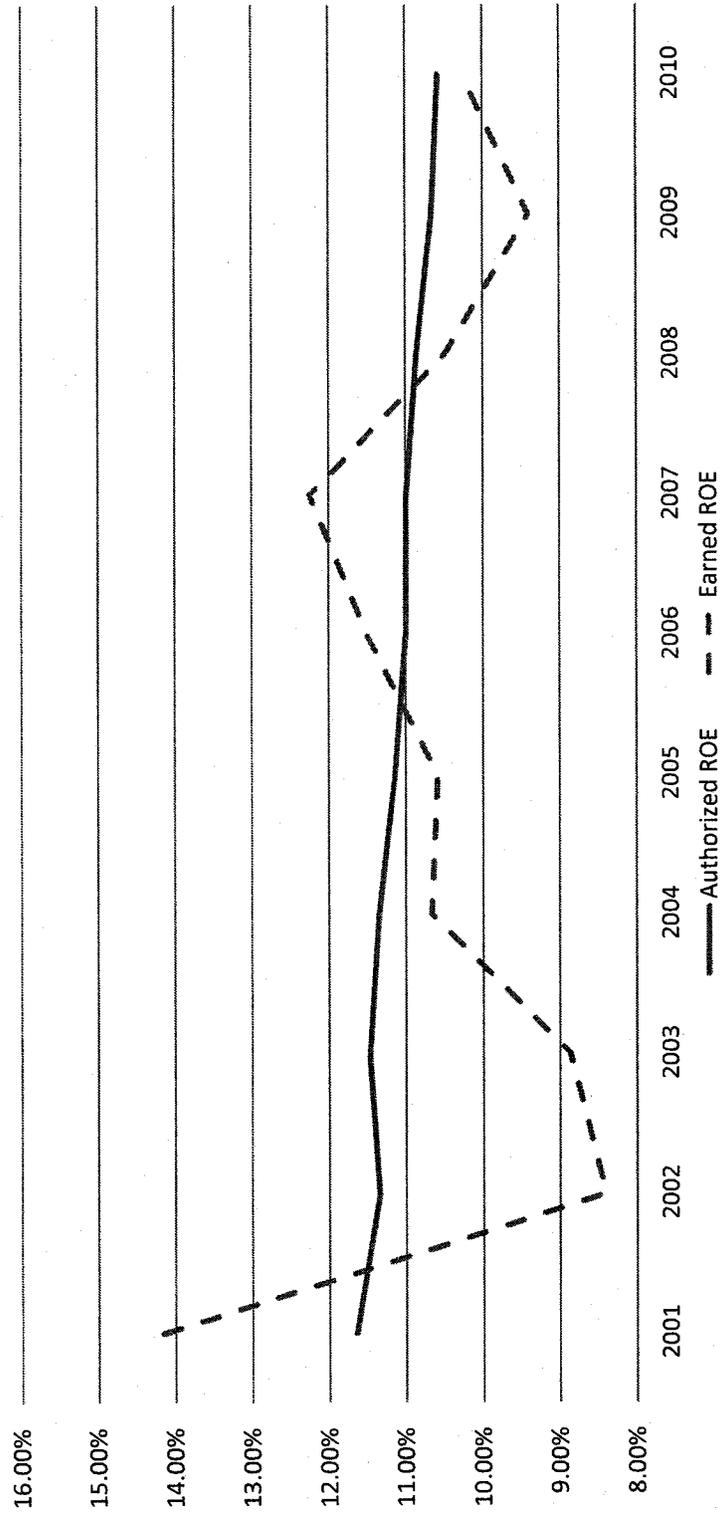
Source of Information: SEC Edgar I-Matrix Online Database

Earned ROE v Authorized ROE for the AUS Utility Reports Water Companies 2001 - 2010



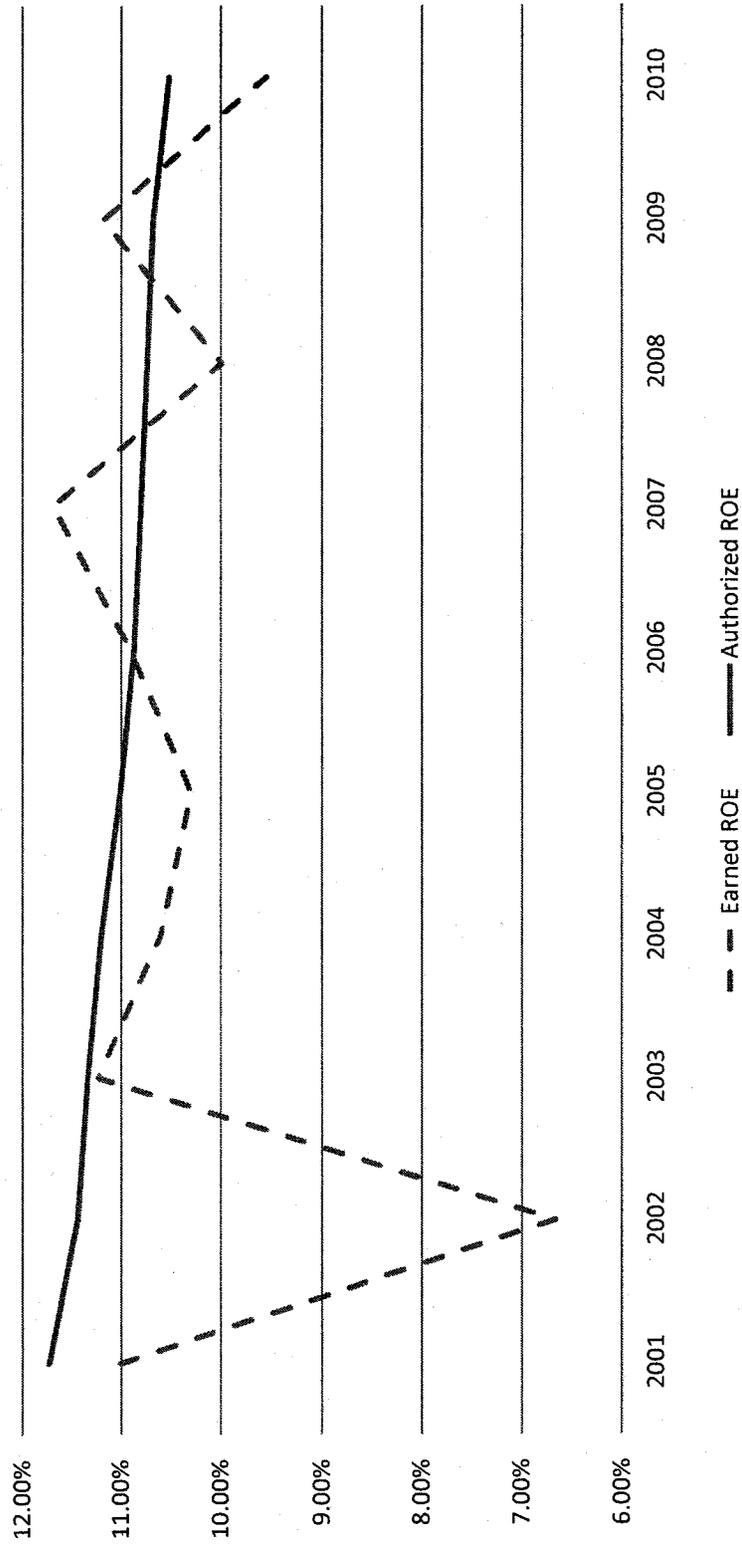
Source of Information: SEC Edgar I-Matrix Online Database & AUS Utility Reports

Earned ROE v Authorized ROE for the AUS Utility Reports Electric Companies 2001 - 2010



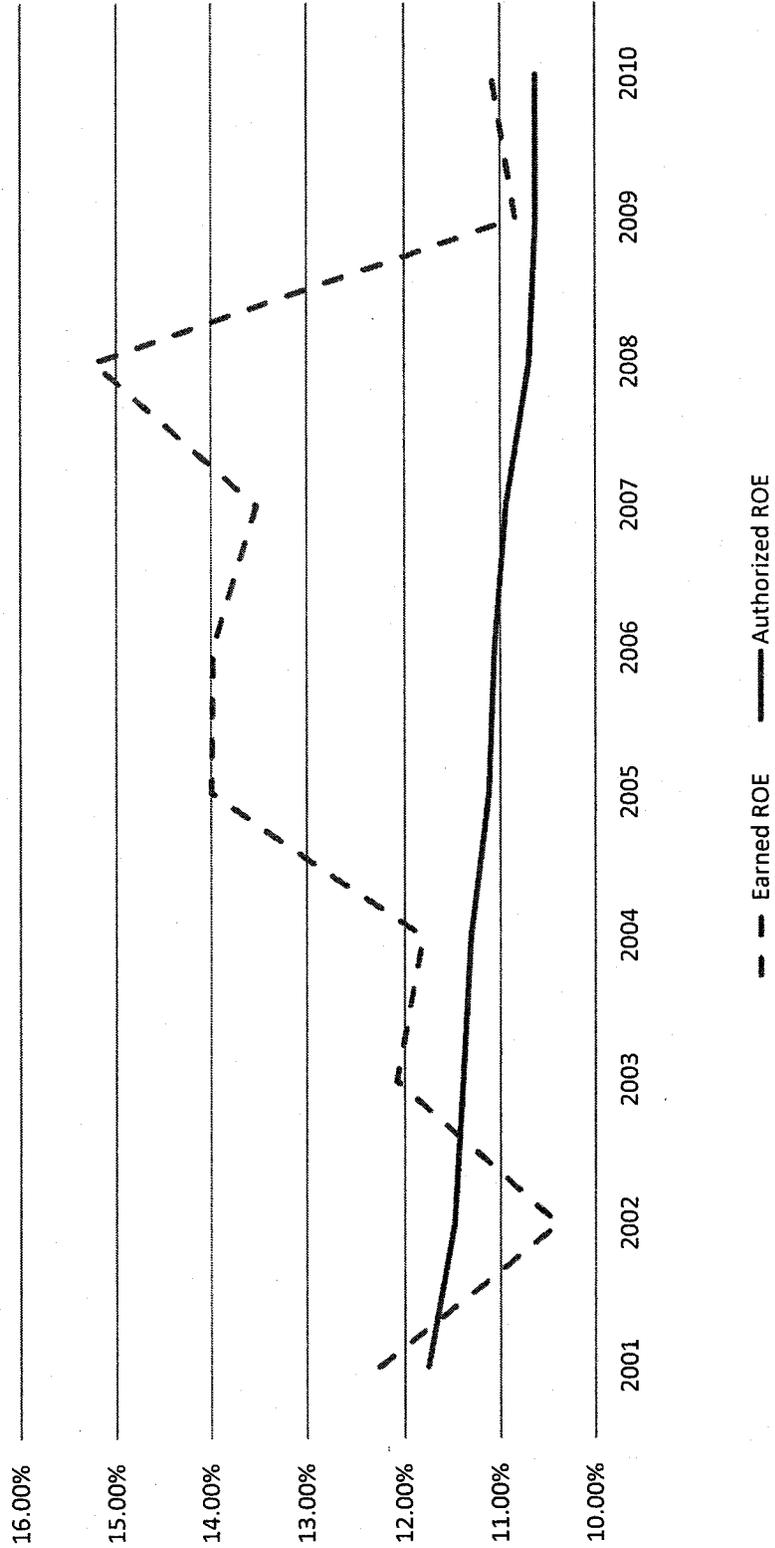
Source of Information: SEC Edgar I-Metrix Online Database & AUS Utility Reports

Earned ROE v Authorized ROE for the AUS Utility Reports Combination Companies 2001 - 2010



Source of Information: SEC Edgar I-Metrix Online Database & AUS Utility Reports

Earned ROE v Authorized ROE for the AUS Utility Reports LDC Companies 2001 - 2010



Source of Information: SEC Edgar I-Metrix Online Database & AUS Utility Reports

May 27, 2009

Criteria | Corporates | General:
**Criteria Methodology: Business
Risk/Financial Risk Matrix
Expanded**

Primary Credit Analysts:

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Criteria | Corporates | General:

Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

(Editor's Note: In the previous version of this article published on May 26, certain of the rating outcomes in the table 1 matrix were misspelled. A corrected version follows.)

Standard & Poor's Ratings Services is refining its methodology for corporate ratings related to its business risk/financial risk matrix, which we published as part of 2008 Corporate Ratings Criteria on April 15, 2008, on RatingsDirect at www.ratingsdirect.com and Standard & Poor's Web site at www.standardandpoors.com.

This article amends and supersedes the criteria as published in Corporate Ratings Criteria, page 21, and the articles listed in the "Related Articles" section at the end of this report.

This article is part of a broad series of measures announced last year to enhance our governance, analytics, dissemination of information, and investor education initiatives. These initiatives are aimed at augmenting our independence, strengthening the rating process, and increasing our transparency to better serve the global markets.

We introduced the business risk/financial risk matrix four years ago. The relationships depicted in the matrix represent an essential element of our corporate analytical methodology.

We are now expanding the matrix, by adding one category to both business and financial risks (see table 1). As a result, the matrix allows for greater differentiation regarding companies rated lower than investment grade (i.e., 'BB' and below).

Table 1

Business And Financial Risk Profile Matrix						
Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	AAA	AA	A	A-	BBB	--
Strong	AA	A	A-	BBB	BB	BB-
Satisfactory	A-	BBB+	BBB	BB+	BB-	B+
Fair	--	BBB-	BB+	BB	BB-	B
Weak	--	--	BB	BB-	B+	B-
Vulnerable	--	--	--	B+	B	CCC+

These rating outcomes are shown for guidance purposes only. Actual rating should be within one notch of indicated rating outcomes.

The rating outcomes refer to issuer credit ratings. The ratings indicated in each cell of the matrix are the midpoints of a range of likely rating possibilities. This range would ordinarily span one notch above and below the indicated rating.

Business Risk/Financial Risk Framework

Our corporate analytical methodology organizes the analytical process according to a common framework, and it divides the task into several categories so that all salient issues are considered. The first categories involve fundamental business analysis; the financial analysis categories follow.

Our ratings analysis starts with the assessment of the business and competitive profile of the company. Two companies with identical financial metrics can be rated very differently, to the extent that their business challenges and prospects differ. The categories underlying our business and financial risk assessments are:

Business risk

- Country risk
- Industry risk
- Competitive position
- Profitability/Peer group comparisons

Financial risk

- Accounting
- Financial governance and policies/risk tolerance
- Cash flow adequacy
- Capital structure/asset protection
- Liquidity/short-term factors

We do not have any predetermined weights for these categories. The significance of specific factors varies from situation to situation.

Updated Matrix

We developed the matrix to make explicit the rating outcomes that are typical for various business risk/financial risk combinations. It illustrates the relationship of business and financial risk profiles to the issuer credit rating.

We tend to weight business risk slightly more than financial risk when differentiating among investment-grade ratings. Conversely, we place slightly more weight on financial risk for speculative-grade issuers (see table 1, again). There also is a subtle compounding effect when both business risk and financial risk are aligned at extremes (i.e., excellent/minimal and vulnerable/highly leveraged.)

The new, more granular version of the matrix represents a refinement--not any change in rating criteria or standards--and, consequently, holds no implications for any changes to existing ratings. However, the expanded matrix should enhance the transparency of the analytical process.

Financial Benchmarks

Table 2

Financial Risk Indicative Ratios (Corporates)			
	FFO/Debt (%)	Debt/EBITDA (x)	Debt/Capital (%)
Minimal	greater than 60	less than 1.5	less than 25
Modest	45-60	1.5-2	25-35
Intermediate	30-45	2-3	35-45
Significant	20-30	3-4	45-50
Aggressive	12-20	4-5	50-60
Highly Leveraged	less than 12	greater than 5	greater than 60

How To Use The Matrix--And Its Limitations

The rating matrix indicative outcomes are what we typically observe--but are not meant to be precise indications or guarantees of future rating opinions. Positive and negative nuances in our analysis may lead to a notch higher or lower than the outcomes indicated in the various cells of the matrix.

In certain situations there may be specific, overarching risks that are outside the standard framework, e.g., a liquidity crisis, major litigation, or large acquisition. This often is the case regarding credits at the lowest end of the credit spectrum--i.e., the 'CCC' category and lower. These ratings, by definition, reflect some impending crisis or acute vulnerability, and the balanced approach that underlies the matrix framework just does not lend itself to such situations.

Similarly, some matrix cells are blank because the underlying combinations are highly unusual--and presumably would involve complicated factors and analysis.

The following hypothetical example illustrates how the tables can be used to better understand our rating process (see tables 1 and 2).

We believe that Company ABC has a satisfactory business risk profile, typical of a low investment-grade industrial issuer. If we believed its financial risk were intermediate, the expected rating outcome should be within one notch of 'BBB'. ABC's ratios of cash flow to debt (35%) and debt leverage (total debt to EBITDA of 2.5x) are indeed characteristic of intermediate financial risk.

It might be possible for Company ABC to be upgraded to the 'A' category by, for example, reducing its debt burden to the point that financial risk is viewed as minimal. Funds from operations (FFO) to debt of more than 60% and debt to EBITDA of only 1.5x would, in most cases, indicate minimal.

Conversely, ABC may choose to become more financially aggressive--perhaps it decides to reward shareholders by borrowing to repurchase its stock. It is possible that the company may fall into the 'BB' category if we view its financial risk as significant. FFO to debt of 20% and debt to EBITDA 4x would, in our view, typify the significant financial risk category.

Still, it is essential to realize that the financial benchmarks are guidelines, neither gospel nor guarantees. They can vary in nonstandard cases: For example, if a company's financial measures exhibit very little volatility, benchmarks may be somewhat more relaxed.

Moreover, our assessment of financial risk is not as simplistic as looking at a few ratios. It encompasses:

- a view of accounting and disclosure practices;
- a view of corporate governance, financial policies, and risk tolerance;
- the degree of capital intensity, flexibility regarding capital expenditures and other cash needs, including acquisitions and shareholder distributions; and
- various aspects of liquidity--including the risk of refinancing near-term maturities.

The matrix addresses a company's standalone credit profile, and does not take account of external influences, which would pertain in the case of government-related entities or subsidiaries that in our view may benefit or suffer from affiliation with a stronger or weaker group. The matrix refers only to local-currency ratings, rather than foreign-currency ratings, which incorporate additional transfer and convertibility risks. Finally, the matrix does not apply to project finance or corporate securitizations.

Related Articles

Industrials' Business Risk/Financial Risk Matrix--A Fundamental Perspective On Corporate Ratings, published April 7, 2005, on RatingsDirect.

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Standard & Poor's **RatingsDirect** | May 27, 2009

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Case No. UWI-W-11-02
Exhibit No. 1
Schedule 4
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Proxy Group of Nine Water Companies
CAPITALIZATION AND FINANCIAL STATISTICS (1)
2006 - 2010, Inclusive

	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	
	(MILLIONS OF DOLLARS)					
<u>CAPITALIZATION STATISTICS</u>						
<u>AMOUNT OF CAPITAL EMPLOYED</u>						
TOTAL PERMANENT CAPITAL	\$1,712.951	\$1,641.561	\$1,537.371	\$1,561.064	\$1,274.261	
SHORT-TERM DEBT	<u>\$53.463</u>	<u>\$31.243</u>	<u>\$84.104</u>	<u>\$37.360</u>	<u>\$100.228</u>	
TOTAL CAPITAL EMPLOYED	<u>\$1,766.414</u>	<u>\$1,672.804</u>	<u>\$1,621.475</u>	<u>\$1,598.424</u>	<u>\$1,374.489</u>	
<u>INDICATED AVERAGE CAPITAL COST RATES (2)</u>						
TOTAL DEBT	5.37 %	5.31 %	5.58 %	6.08 %	7.61 %	
PREFERRED STOCK	1.85	1.85	2.88	2.18	2.04	
<u>CAPITAL STRUCTURE RATIOS</u>						
						<u>5 YEAR</u>
						<u>AVERAGE</u>
BASED ON TOTAL PERMANENT CAPITAL:						
LONG-TERM DEBT	50.97 %	50.80 %	50.35 %	49.46 %	48.48 %	50.01 %
PREFERRED STOCK	0.19	0.21	0.22	0.31	0.46	0.28
COMMON EQUITY	<u>48.84</u>	<u>48.99</u>	<u>49.43</u>	<u>50.23</u>	<u>51.06</u>	<u>49.71</u>
TOTAL	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
BASED ON TOTAL CAPITAL:						
TOTAL DEBT, INCLUDING SHORT-TERM	53.49 %	53.33 %	53.43 %	50.59 %	50.32 %	52.23 %
PREFERRED STOCK	0.18	0.19	0.21	0.31	0.45	0.27
COMMON EQUITY	<u>46.33</u>	<u>46.48</u>	<u>46.36</u>	<u>49.10</u>	<u>49.23</u>	<u>47.50</u>
TOTAL	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>FINANCIAL STATISTICS</u>						
<u>FINANCIAL RATIOS - MARKET BASED</u>						
EARNINGS / PRICE RATIO	5.92 %	4.33 %	2.90 %	4.95 %	5.29 %	4.68 %
MARKET / AVERAGE BOOK RATIO	161.43	147.98	156.27	198.82	206.08	174.12
DIVIDEND YIELD	3.62	4.03	3.84	3.31	3.31	3.62
DIVIDEND PAYOUT RATIO	66.67	60.06	64.23	63.89	63.02	63.57
<u>RATE OF RETURN ON AVERAGE BOOK COMMON EQUITY</u>	8.98 %	6.99 %	6.39 %	7.09 %	8.09 %	7.51 %
<u>TOTAL DEBT / EBITDA (3)</u>	4.75 X	5.53 X	9.07 X	5.59 X	4.56 X	5.90 X
<u>FUNDS FROM OPERATIONS / TOTAL DEBT (4)</u>	17.10 %	16.41 %	16.14 %	15.04 %	16.58 %	16.25 %
<u>TOTAL DEBT / TOTAL CAPITAL</u>	53.49 %	53.33 %	53.43 %	50.59 %	50.32 %	52.23 %

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group, and are based upon financial statements as originally reported in each year.
- (2) Computed by relating actual total debt interest or preferred stock dividends booked to average of beginning and ending total debt or preferred stock reported to be outstanding.
- (3) Total debt as a percentage of EBITDA (Earnings before Interest, Income Taxes, Depreciation and Amortization).
- (4) Funds from operations (sum of net income, depreciation, amortization, net deferred income tax and investment tax credits, less total AFUDC) plus interest charges as a percentage of total debt.

Source of Information: I-Metrix Database
Company SEC Form 10-K

Capital Structure Based upon Total Permanent Capital for the
Proxy Group of Nine Water Companies
2006 - 2010, Inclusive

	2010	2009	2008	2007	2006	5 YEAR AVERAGE
<u>American States Water Co.</u>						
Long-Term Debt	44.30 %	46.95 %	46.25 %	46.99 %	48.61 %	46.62 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	55.70	53.05	53.75	53.01	51.39	53.38
Total Capital	<u>100.00 %</u>					
<u>American Water Works Co., Inc.</u>						
Long-Term Debt	56.73 %	56.98 %	53.75 %	51.05 %	46.93 %	53.08 %
Preferred Stock	0.29	0.30	0.32	0.31	0.06	0.26
Common Equity	42.98	42.72	45.93	48.64	53.01	46.66
Total Capital	<u>100.00 %</u>					
<u>Aqua America, Inc.</u>						
Long-Term Debt	57.05 %	56.59 %	54.21 %	55.88 %	51.55 %	55.06 %
Preferred Stock	0.02	0.02	0.09	0.09	0.10	0.06
Common Equity	42.93	43.39	45.70	44.03	48.35	44.88
Total Capital	<u>100.00 %</u>					
<u>Artesian Resources Corp.</u>						
Long-Term Debt	52.84 %	54.12 %	59.57 %	52.20 %	61.87 %	56.12 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	47.16	45.88	40.43	47.80	38.13	43.88
Total Capital	<u>100.00 %</u>					
<u>California Water Service Group</u>						
Long-Term Debt	52.51 %	47.93 %	41.88 %	42.86 %	43.47 %	45.73 %
Preferred Stock	0.00	0.00	0.00	0.51	0.51	0.20
Common Equity	47.49	52.07	58.12	56.63	56.02	54.07
Total Capital	<u>100.00 %</u>					
<u>Connecticut Water Service, Inc.</u>						
Long-Term Debt	49.32 %	50.59 %	46.94 %	47.76 %	44.42 %	47.81 %
Preferred Stock	0.34	0.35	0.39	0.44	0.49	0.40
Common Equity	50.34	49.06	52.67	51.80	55.09	51.79
Total Capital	<u>100.00 %</u>					
<u>Middlesex Water Company</u>						
Long-Term Debt	43.91 %	47.35 %	49.10 %	49.48 %	48.78 %	47.72 %
Preferred Stock	1.07	1.24	1.22	1.46	2.95	1.59
Common Equity	55.02	51.41	49.68	49.06	48.27	50.69
Total Capital	<u>100.00 %</u>					
<u>SJW Corporation</u>						
Long-Term Debt	53.79 %	49.52 %	46.08 %	47.79 %	41.83 %	47.80 %
Preferred Stock	0.00	0.00	0.00	0.01	0.01	0.00
Common Equity	46.21	50.48	53.92	52.20	58.16	52.20
Total Capital	<u>100.00 %</u>					
<u>York Water Company</u>						
Long-Term Debt	48.28 %	47.16 %	55.31 %	51.17 %	48.82 %	50.15 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	51.72	52.84	44.69	48.83	51.18	49.85
Total Capital	<u>100.00 %</u>					
<u>Proxy Group of Nine Water Companies</u>						
Long-Term Debt	50.97 %	50.80 %	50.35 %	49.46 %	48.48 %	50.01 %
Preferred Stock	0.19	0.21	0.22	0.31	0.46	0.28
Common Equity	48.84	48.99	49.43	50.23	51.06	49.71
Total Capital	<u>100.00 %</u>					

Source of Information
EDGAR Online's I-Metrix Database
Annual Forms 10-K

United Water Idaho, Inc.
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for
the Proxy Group of Nine Water Companies

	1	2	3	4	5	6	7	8
<u>Proxy Group of Nine Water Companies</u>	Average Dividend Yield (1)	Value Line Projected Five Year Growth in EPS (2)	Reuters Mean Consensus Projected Five Year Growth Rate in EPS	Zack's Five Year Projected Growth Rate in EPS	Yahoo! Finance Projected Five Year Growth in EPS	Average Projected Five Year Growth in EPS (3)	Adjusted Dividend Yield (4)	Indicated Common Equity Cost Rate (5)
American States Water Co.	3.29 %	8.00 %	5.50 %	-	5.50 %	6.33 %	3.39 %	9.72 %
American Water Works Co., Inc.	3.02	8.50	11.00	8.70	8.70	9.23	3.16	12.39
Aqua America, Inc.	2.81	10.00	7.20	6.50	6.00	7.43	2.91	10.34
Artesian Resources Corp.	3.99	3.60	4.50	3.60	4.53	4.06	4.07	8.13
California Water Service Group	3.34	3.00	6.30	-	9.00	6.10	3.44	9.54
Connecticut Water Service, Inc.	3.72	4.00	5.50	4.00	3.00	4.13	3.80	7.93
Middlesex Water Company	3.99	3.00	(1.00)	3.00	3.00	2.00	4.03	6.03
SJW Corporation	3.02	9.00	14.00	-	14.00	12.33	3.21	15.54
York Water Company	3.10	6.00	6.00	6.00	6.00	6.00	3.19	9.19
Average								<u>9.87 %</u>
Median								<u>9.54 %</u>

NA= Not Available
NMF = Not Meaningful Figure

Notes:

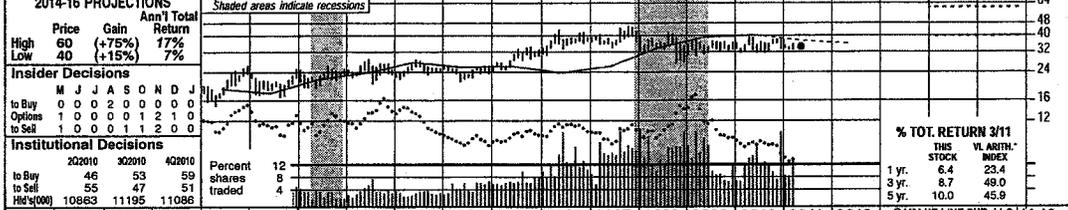
- (1) Indicated dividend at 7/6/2011 divided by the average closing price of the last 60 trading days ending 7/6/2011 for each company.
- (2) From pages 2 through 10 of this Schedule.
- (3) Average of columns 2 through 5 excluding negative growth rates.
- (4) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 6) x column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for American States Water Co., $3.29\% \times (1 + (1/2 \times 6.33\%)) = 3.39\%$.
- (5) Column 6 + column 7.

Source of Information:

Value Line Investment Survey: April 22, 2011
www.reuters.com Downloaded on 07/06/2011
www.zacks.com Downloaded on 07/06/2011
www.yahoo.com Downloaded on 07/06/2011

AMER. STATES WATER NYSE-AWR

RECENT PRICE	34.33	P/E RATIO	14.5 (Trailing: 18.0 Median: 22.6)	RELATIVE P/E RATIO	0.87	DIVID YLD	3.0%	VALUE LINE							
TIMELINESS	3	Raised 11/19/10	High: 25.3	26.4	29.0	29.0	26.8	34.6	43.8	46.1	42.0	38.8	39.6	36.4	Target Price Range
SAFETY	3	New 2/4/00	Low: 16.7	19.0	20.3	21.6	20.8	24.3	30.3	33.6	27.0	29.8	31.2	32.7	2014 2015 2016
TECHNICAL	2	Raised 4/8/11	LEGENDS - 1.25 x Dividends p sh divided by Interest Rate - Relative Price Strength - 34x2 split 6/02 - Options: No Shaded areas indicate recessions												
BETA	.75	(1.00 = Market)	2014-16 PROJECTIONS Price Gain Return High 60 (+75%) 17% Low 40 (+15%) 7%												



Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Revenue per sh	11.03	11.37	11.44	11.02	12.91	12.17	13.06	13.78	13.98	13.61	14.06	15.76	17.49	18.42	19.48	21.41	21.05	22.05	21.41	21.05	21.41	21.05	21.41
"Cash Flow" per sh	1.75	1.75	1.85	2.04	2.26	2.20	2.53	2.54	2.08	2.23	2.64	2.89	3.31	3.37	3.40	4.34	4.15	4.35	4.35	4.35	4.35	4.35	4.35
Earnings per sh	1.03	1.13	1.04	1.08	1.19	1.28	1.35	1.34	1.78	1.05	1.32	1.33	1.62	1.55	1.62	2.25	2.10	2.20	2.20	2.20	2.20	2.20	2.20
Div'd Decl'd per sh	.81	.82	.83	.84	.85	.86	.87	.87	.88	.89	.90	.91	.96	1.00	1.01	1.04	1.08	1.12	1.12	1.12	1.12	1.12	1.12
Cap'l Spending per sh	2.19	2.40	2.58	3.11	4.30	3.03	3.18	2.68	3.76	5.03	4.24	3.91	2.89	4.45	4.18	4.24	4.15	4.35	4.35	4.35	4.35	4.35	4.35
Book Value per sh	10.29	11.01	11.24	11.48	11.82	12.74	13.22	14.05	13.97	15.01	15.72	16.64	17.53	17.95	19.39	20.26	20.80	20.80	20.80	20.80	20.80	20.80	20.80
Common Shs Outst'g	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	18.53	18.63	19.25	19.50	19.50	19.50	19.50	19.50	19.50
Avg Ann'l P/E Ratio	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	22.8	21.2	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Relative P/E Ratio	.78	.79	.84	.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.36	1.41	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Avg Ann'l Div'd Yield	6.7%	5.8%	5.5%	5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.9%	2.9%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Revenue (\$mil)	197.5	209.2	212.7	226.0	236.2	268.6	301.4	318.7	361.0	398.9	405	430	430	430	430	430	430	430	430	430	430	430	430
Net Profit (\$mil)	20.4	20.3	11.9	16.5	22.5	23.1	28.0	26.8	29.5	42.7	40.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
Income Tax Rate	43.0%	38.9%	43.5%	37.4%	47.0%	40.5%	42.6%	37.8%	38.9%	42.6%	42.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
AFUDC % to Net Profit	44.7%	48.0%	48.0%	52.3%	49.6%	51.4%	53.1%	53.8%	54.1%	55.7%	57.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Long-Term Debt Ratio	54.9%	52.0%	52.0%	47.7%	50.4%	48.6%	46.9%	46.2%	45.9%	44.3%	43.0%	43.0%	43.0%	43.0%	43.0%	43.0%	43.0%	43.0%	43.0%	43.0%	43.0%	43.0%	43.0%
Common Equity Ratio	44.7%	48.0%	48.0%	52.3%	49.6%	51.4%	53.1%	53.8%	54.1%	55.7%	57.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Total Capital (\$mil)	447.6	444.4	442.3	480.4	532.5	551.6	569.4	577.0	665.0	677.4	700	725	725	725	725	725	725	725	725	725	725	725	725
Net Plant (\$mil)	539.8	563.3	602.3	664.2	713.2	750.6	776.4	825.3	866.4	905.2	950	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Return on Total Cap'l	6.1%	6.5%	4.6%	5.2%	5.4%	6.0%	6.7%	6.4%	5.9%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Return on Shr. Equity	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	11.3%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Return on Com Equity	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	11.3%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Retained to Com Eq	3.6%	3.3%	NMF	1.0%	2.8%	2.7%	3.9%	3.1%	3.2%	6.2%	5.0%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
All Div'ds to Net Prof	65%	65%	113%	84%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%

CAPITAL STRUCTURE as of 12/31/10
 Total Debt \$361.2 mil. Due in 5 Yrs \$296.9 mil.
 LT Debt \$299.8 mil. LT Interest \$21.6 mil.
 (LT interest earned: 4.9x total interest coverage: 4.4x)

Leases, Uncapitalized: Annual rentals \$3.3 mil.

Pension Assets-12/10 \$90.2 mil. Oblig. \$118.8 mil.

Pfd Stock None.

Common Stock 18,654,106 shs. as of 3/9/11

MARKET CAP: \$650 million (Small Cap)

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 2.6% 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.

Favorable regulatory backing enabled American States Water to have a blowout fourth quarter. Indeed, the water utility posted earnings of \$0.71 a share, nearly four times the year-before tally. Revenues jumped 20%, to \$103.7 million, thanks to the recognition of retroactive revenues from earlier in the year associated with rate increases handed down by the California Public Utilities Commission (CPUC) in regard to general rate cases for Regions II and III.

Growth will be tough to come by this year due to the stiffer comparisons ... Although the benefits were all realized in the final quarter of the year, the CPUC's ruling added \$0.30 a share to the bottom line for the full-year 2010. AWR is subject to regulatory rulings so the gain is considered typical and not looked at as a nonrecurring. But we do not expect a similar occurrence this year.

... as well as the continued escalation of infrastructure costs. AWR's operating costs remain on the rise and are not likely to slow anytime soon, given that its water systems are growing older and require attention. Its pockets are all but empty, however, and the company will have to continue to seek outside financiers to stay afloat. Debt and equity issuances have become commonplace, and will likely remain a drag on earnings growth going forward. As a result, we look for share earnings to take a step back this year and to show modest improvement in 2012. That said, the company is slated to file a general rate case for all three regions in July of this year. A ruling is expected to take 18 months. A favorable verdict could prove our 2012 estimate conservative.

Capital projects are likely to remain a longer-term concern too. There is no end in sight to the infrastructure investment that is necessary. This industry is capital intensive, but unfortunately AWR is cash-strapped. As a result, the stock does not stand out for price appreciation potential for the coming six to 12 months or the 3 to 5 years ahead. The financial constraints lead to concerns about the company's dividend, which despite being above the average offering in our Survey, loses some luster when compared to other utilities.

Andre J. Costanza April 22, 2011

Year	2007	2008	2009	2010	2011	2012
Quarterly Revenues (\$mil)	235	235	235	250	250	250
Earnings per Share	.28	.64	.52	.18	1.62	2.25
Quarterly Dividends Paid	.47	.58	.69	.46	2.20	2.20

(A) Primary earnings. Excludes nonrecurring gains/losses: '04, 14¢; '05, 25¢; '06, 6¢; '06, (27¢); '10, (55¢). 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.

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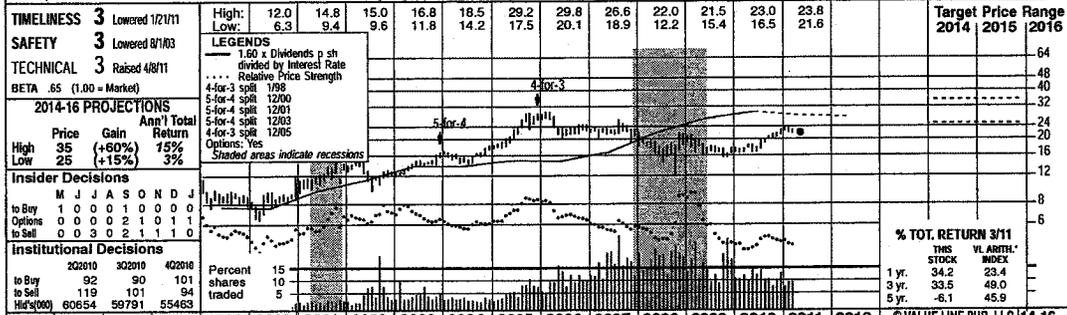
AMERICAN WATER NYSE-AWK		RECENT PRICE	P/E RATIO	Trailing: 18.1 Median: NMF	RELATIVE P/E RATIO	DIVD YLD	VALUE LINE				
TIMELINESS 1 New 10/22/10 SAFETY 3 New 7/25/08 TECHNICAL 4 Lowered 3/11/11 BETA .65 (1.00 = Market)		LEGENDS Relative Price Strength Options: Yes Shaded areas indicate recessions		High: 23.7 Low: 16.5		23.0 16.2 25.8 19.4 28.9 25.2	Target Price 2014 2015 2016 80 60 50 40 30 25 20 15 10 7.5				
2014-16 PROJECTIONS Price Gain Ann'l Total High 50 (+80%) 18% Low 35 (+25%) 9%		Insider Decisions M J A S O N D J to Buy 0 0 0 0 0 0 0 0 Options 0 0 0 0 0 0 0 0 to Sell 0 0 0 0 0 0 0 0		Institutional Decisions 2020 3020 4020 to Buy 134 146 145 to Sell 107 89 119 Hdr's(%) 154379 149349 145430		% TOT. RETURN 3/11 THIS STOCK vs. AMER. INDEX 1 yr. 33.7 23.4 3 yr. --- 49.0 5 yr. --- 45.9		VALUE LINE PUB. LLC 14-16			
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012		REVENUES (\$MILL) 13.08 13.84 14.61 13.98 15.49 16.10 16.35 .65 d.47 2.87 2.89 3.56 3.50 3.80 d.97 d2.14 1.10 1.25 1.53 1.70 1.80 --- --- --- --- --- --- --- 4.31 4.74 6.31 4.50 4.38 4.30 4.25 23.86 28.39 25.64 22.91 23.59 23.60 23.40 160.00 160.00 160.00 174.63 175.00 180.00 185.00		PER SHARE 18.9 15.6 14.6 1.14 1.04 .94 1.9% 4.2% 3.8%		MARKET CAP: \$4.9 billion (Mid Cap) CURRENT POSITION 2008 2009 12/31/10 (\$MILL.) Cash Assets 9.5 22.3 13.1 Other 406.2 476.8 521.2 Current Assets 417.7 496.1 534.3 Accts Payable 149.8 199.6 199.2 Debt Due 654.8 173.6 44.8 Other 300.2 295.2 530.5 Current Liab. 1104.8 607.4 774.5 Fix. Chg. Cov. 197% 210% 237%		FINANCIAL RATIOS 2006 2007 2008 2009 2010 2011 2012 13.08 13.84 14.61 13.98 15.49 16.10 16.35 .65 d.47 2.87 2.89 3.56 3.50 3.80 d.97 d2.14 1.10 1.25 1.53 1.70 1.80 --- --- --- --- --- --- --- 4.31 4.74 6.31 4.50 4.38 4.30 4.25 23.86 28.39 25.64 22.91 23.59 23.60 23.40 160.00 160.00 160.00 174.63 175.00 180.00 185.00		MARKET CAP: \$4.9 billion (Mid Cap) CURRENT POSITION 2008 2009 12/31/10 (\$MILL.) Cash Assets 9.5 22.3 13.1 Other 406.2 476.8 521.2 Current Assets 417.7 496.1 534.3 Accts Payable 149.8 199.6 199.2 Debt Due 654.8 173.6 44.8 Other 300.2 295.2 530.5 Current Liab. 1104.8 607.4 774.5 Fix. Chg. Cov. 197% 210% 237%	
CAPITAL STRUCTURE as of 12/31/10 Total Debt \$5478.3 mill. Due in 5 Yrs \$201.9 mill. LT Debt \$5433.5 mill. LT Interest \$315.0 mill. (Total interest coverage: 2.4x) (57% of Cap'l)		Leases, Uncapitalized: Annual rentals \$25.7 mill. Pension Assets-\$1210 \$861.0 mill Oblig. \$1285.5 mill. Pfd Stock \$23.9 mill.		Common Stock 175,211,592 shs. as of 2/22/11		Business Description: American Water Works Company, Inc. is the largest investor-owned water and wastewater utility in the U.S., providing services to over 15 million people in over 30 states and Canada. Its nonregulated business assists municipalities and military bases with the maintenance and upkeep as well. Regulated operations made up over 89% of 2010 revenues. New Jersey is its biggest market accounting for over 19% of revenues. Has roughly 7,000 employees. Depreciation rate, 2.5% in '10. BlackRock, Inc., owns 6.9% of the common stock outstanding. Off. & dir. own less than 1%. President & CEO, Jeffrey Steba. Chairman, George Mackenzie. Address: 1025 Laurel Oak Road, Voorhees, NJ 08043. Telephone: 856-346-8200. Internet: www.amwater.com.		AMERICAN WATER WORKS CLOSED OUT A HEALTHY 2010 CAMPAIGN IN SOLID, ALBEIT NOT AS STRONG AS WE PREDICTED, FASHION. The country's biggest water utility posted share earnings of \$0.23, 10% better than the year before, but half of what we were anticipating. Revenues advanced a slower-than-expected 11%, to roughly \$665 million, benefiting from new rate awards and greater military demand. We look for growth to continue slowing this year. The high end of management's earnings guidance (\$1.65 to \$1.75 a share) appears a little too bullish in our opinion, given the tough comparisons and the continuously rising costs of doing business in this space. Indeed, infrastructure expenses are likely to remain on an upswing, as many systems are decaying and in need of significant, if not complete, overhauls. American is not exactly flush with cash though and will need to look to outside financiers to foot the bill. The increased debt load and/or higher share count will dilute share-net gains. We have introduced our 2012 estimates with similar trends in mind. True, American continues to make inroads with military bases, and these non-regulated ventures should remain profitable, but the company remains for all intents and purposes, a heavily regulated business. Although regulatory commissions have been far more-business friendly of late, there is no way of getting around the need to maintain the nation's waterways and pipelines. These infrastructure costs, and the associated financing expenses, ought to keep share-earnings growth in single-digit territory next year and thereafter out to mid-decade. These shares are ranked 1 (Highest) for Timeliness, thanks to recent share-price momentum. They have been on a steady climb upward since last summer, and are up nearly 30% in all. This issue looks to be undervalued according to our projections. Despite the financial constraints we envision, price appreciation potential out to mid-decade is on par with the Value Line average. Traction in nonregulated areas ought to help pick up some of the slack. Meanwhile, the dividend adds to the issue's 3- to 5-year total-return appeal.			
ANNUAL RATES Past 10 Yrs. Past 5 Yrs. Est'd '08-'10 to '14-'16 Revenues --- --- 3.5% "Cash Flow" --- --- 5.0% Earnings --- --- 8.5% Dividends --- --- 8.0% Book Value --- --- 5%		QUARTERLY REVENUES (\$ mill.) Cal- Mar.31 Jun.30 Sep.30 Dec.31 Full Year 2008 506.8 589.4 672.2 568.5 2336.9 2009 550.2 612.7 680.0 597.8 2440.7 2010 588.1 671.2 786.9 664.5 2710.7 2011 620 715 820 725 2875 2012 650 750 865 760 3025		EARNINGS PER SHARE Cal- Mar.31 Jun.30 Sep.30 Dec.31 Full Year 2008 .04 .28 .55 .23 1.10 2009 .19 .32 .52 .21 1.25 2010 .18 .42 .71 .23 1.53 2011 .22 .46 .75 .27 1.70 2012 .24 .49 .79 .28 1.80		QUARTERLY DIVIDENDS PAID Cal- Mar.31 Jun.30 Sep.30 Dec.31 Full Year 2007 --- --- --- --- .40 2008 --- --- .20 .20 .82 2009 .20 .20 .21 .21 .82 2010 .21 .21 .22 .22 .86 2011 --- --- --- --- ---		Company's Financial Strength Stock's Price Stability B Price Growth Persistence NMF Earnings Predictability 10			

(A) Diluted earnings. Excludes nonrecurring gains (losses): '08, (\$4.62); '09, (\$2.63). Discontinued operations: '06, (4¢). Next earnings report due early May. Quarterly earnings may not sum due to rounding. (B) Dividends to be paid in February, May, August, and November. (C) Div. reinvestment available. (D) In millions. (E) Includes intangibles. In 2010: \$1.251 billion, \$7.15/share.

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AQUA AMERICA NYSE-WTR RECENT PRICE **21.94** P/E RATIO **23.8** (Trailing: 24.4) (Median: 25.0) RELATIVE P/E RATIO **1.43** DIVD YLD **2.8%** VALUE LINE



Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Value Line Pub. LLC	14-16
Revenues per sh	1.84	1.86	2.02	2.09	2.41	2.46	2.70	2.85	2.97	3.48	3.85	4.03	4.52	4.63	4.91	5.26	5.60	5.90	6.80	6.80
"Cash Flow" per sh	.47	.50	.56	.61	.72	.76	.86	.94	.96	1.09	1.21	1.26	1.37	1.42	1.61	1.78	1.85	1.95	2.35	2.35
Earnings per sh A	.29	.30	.34	.40	.42	.47	.51	.54	.57	.64	.71	.70	.71	.73	.77	.90	.95	1.05	1.35	1.35
Div'd Dec'd per sh B=C	.22	.23	.24	.26	.27	.28	.30	.32	.35	.37	.40	.44	.48	.51	.55	.59	.63	.67	.79	.79
Cap'l Spending per sh	.52	.48	.58	.82	.90	1.16	1.09	1.20	1.32	1.54	1.84	2.05	1.79	1.98	2.08	2.37	2.45	1.55	2.80	2.80
Book Value per sh	2.46	2.69	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	8.51	8.75	9.10	10.50	10.50
Common Shs Outstg C	63.74	65.75	67.47	72.20	106.80	111.82	113.97	113.19	123.45	127.11	128.97	132.33	133.40	135.37	136.49	137.97	138.90	139.90	142.90	142.90
Avg Ann'l P/E Ratio	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	21.1	21.1	21.1	21.0	21.0
Relative P/E Ratio	.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	1.36	1.36	1.36	1.40	1.40
Avg Ann'l Div'd Yield	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%	3.1%	3.1%	3.1%	2.5%	2.5%

Year	2009	2010	2011	2012
Revenues (\$mill)	670.5	726.1	775	825
Net Profit (\$mill)	130	145	145	190
Income Tax Rate	40.0%	40.0%	40.0%	40.0%
AFUDC % to Net Profit	2.5%	2.5%	2.5%	1.5%
Long-Term Debt Ratio	54.0%	54.0%	54.0%	54.0%
Common Equity Ratio	46.0%	46.0%	46.0%	46.0%
Total Capital (\$mill)	3210	3210	3210	3210
Net Plant (\$mill)	4395	4395	4395	4395
Return on Total Cap'l	7.5%	7.5%	7.5%	7.5%
Return on Shr. Equity	13.0%	13.0%	13.0%	13.0%
Return on Com Equity	13.0%	13.0%	13.0%	13.0%
Retained to Com Eq	5.5%	5.5%	5.5%	5.5%
All Div'ds to Net Prof	59%	59%	59%	59%

Pension Assets-12/10 \$159.2 mill. Oblig. \$234.9 mill.

Pfd Stock None

Common Stock 137,968,188 shares as of 2/11/11

MARKET CAP: \$3.0 billion (Mid Cap)

CURRENT POSITION (MILL)

Year	2008	2009	12/31/10
Cash Assets	14.9	21.9	5.9
Receivables	84.5	78.7	85.9
Inventory (AvgCat)	9.8	9.5	9.2
Other	11.8	11.5	44.4
Current Assets	121.0	121.6	145.4
Acc'ts Payable	50.0	57.9	45.3
Debt Due	87.9	87.0	28.5
Other	55.3	56.1	149.9
Current Liab.	193.2	201.0	223.7
Fix. Chrg. Cov.	329%	346%	290%

ANNUAL RATES Past 10 Yrs. Past 5 Yrs. Est'd '08-'10 to '14-'16

Rate	Past 10 Yrs.	Past 5 Yrs.	Est'd '08-'10 to '14-'16
Revenues	8.0%	7.5%	6.5%
"Cash Flow"	8.5%	8.0%	8.0%
Earnings	6.5%	4.5%	10.0%
Dividends	7.5%	8.0%	6.0%
Book Value	9.0%	7.0%	5.0%

QUARTERLY REVENUES (\$ mill)

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2008	139.3	151.0	177.1	159.6	627.0
2009	154.5	167.3	180.8	167.9	670.5
2010	160.5	178.4	207.8	179.3	726.0
2011	180	185	215	195	775
2012	195	200	230	200	825

EARNINGS PER SHARE A

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2008	.11	.17	.26	.19	.73
2009	.14	.19	.25	.20	.77
2010	.16	.22	.32	.20	.90
2011	.16	.22	.34	.23	.95
2012	.18	.24	.36	.27	1.05

QUARTERLY DIVIDENDS PAID B=C

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	.115	.115	.125	.125	.48
2008	.125	.125	.125	.135	.51
2009	.135	.135	.135	.145	.55
2010	.145	.145	.145	.155	.59
2011	.155	.155	.155	.155	.59

Aqua America is slated to improve steadily in 2011. Earnings growth is likely to be driven by purchases, as well as future favorable rate rulings.

Acquisitions remain the backbone of growth. With its strong balance sheet, Aqua America is poised to continue growth via purchases this year. Though no concrete details are known at this time, we do anticipate seeing a string of transactions, similar to the previous year.

Rate rulings should provide an additional boost to the bottom line. The company has implemented a rate recovery program, with most of its rate cases likely to receive favorable rulings. It already has several major cases on the horizon, though there have not been any filings. States that the company plans to file in include Pennsylvania, New Jersey, Ohio, Illinois, and Texas. In the best-case scenario, the increase in revenues should boost the bottom lines from 2012 onward.

The Marcellus Shale project provides many growth opportunities. The company has already implemented a new program of "water stations" to fill the trucks that service the drillers in Marcellus Shale. As the drilling requires significant water use, we expect drilling-related water consumption to increase in the future, adding to the revenue stream. Furthermore as the Marcellus Shale is set to provide impetus to many states that the company serves, we anticipate organic growth to increase over the next few years.

Long-term prospects look bright for Aqua America. It looks ever likely that the company will benefit both from acquisition-driven growth and organic growth. Finally, Aqua America's diversification into other sectors continues. It is looking at three to four more solar operations this year, and is quite likely to ramp up production from 2012 onward, as these projects are turning out to be quite profitable in the near and long term. The company is also cutting down on costs, which should aid in boosting the bottom line over the next few years.

Income investors should find this issue of interest. This equity's dividend yield is well above the industry average. Furthermore, the company has a history of steady dividend increases.

Sahana Zutshi April 22, 2011

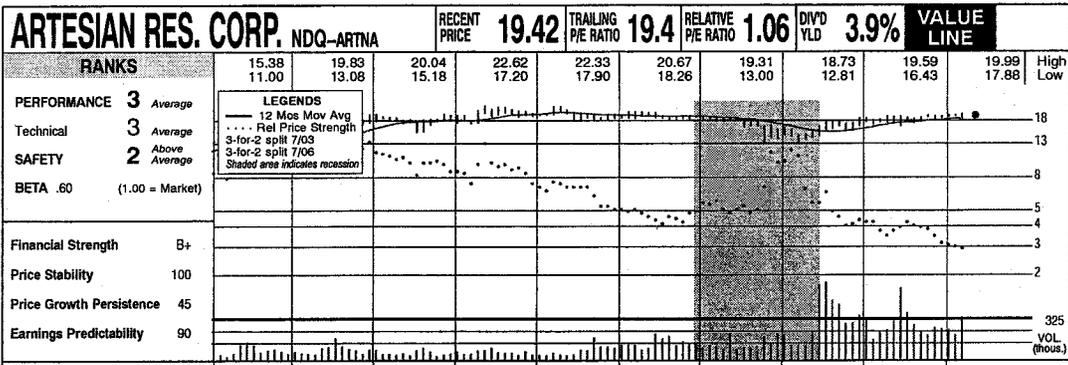
(A) Diluted eqs. Excl. nonrec. gains (losses): '99, (11g); '00, 2g; '01, 2g; '02, 5g; '03, 4g. Excl. gain from disc. operations: '96, 2g. Earnings may not add due to rounding. Next earnings report due mid-May.

(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	100
Price Growth Persistence	70
Earnings Predictability	100

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© VALUE LINE PUBLISHING LLC	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011/2012
SALES PER SH	5.97	6.20	6.67	7.52	7.77	7.20	7.59	8.11	8.48	
"CASH FLOW" PER SH	1.27	1.28	1.42	1.56	1.75	1.57	1.65	1.84	1.92	
EARNINGS PER SH	.76	.64	.72	.84	.97	.90	.86	.97	1.00	1.07 ^A /1.15 ^C
DIV'DS DECL'D PER SH	.52	1.06	1.11	1.16	.61	.66	.71	.72	.75	
CAP'L SPENDING PER SH	3.18	4.20	4.82	3.35	5.08	3.66	6.09	2.32	2.57	
BOOK VALUE PER SH	8.84	9.01	9.26	9.60	10.15	11.66	11.86	12.15	12.44	
COMMON SHS OUTST'G (MILL)	5.79	5.85	5.93	6.02	6.09	7.30	7.40	7.51	7.65	
AVG ANN'L P/E RATIO	17.3	24.7	25.4	23.5	20.3	21.5	20.1	16.4	18.2	18.1/16.9
RELATIVE P/E RATIO	.94	1.41	1.34	1.24	1.10	1.14	1.21	1.09	1.17	
AVG ANN'L DIV'D YIELD	3.9%	6.7%	6.1%	5.9%	3.1%	3.4%	4.1%	4.5%	4.1%	
SALES (\$MILL)	34.6	36.3	39.6	45.3	47.3	52.5	56.2	60.9	64.9	Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.
OPERATING MARGIN	99.6%	--	--	100.0%	45.6%	45.6%	45.1%	46.9%	46.5%	
DEPRECIATION (\$MILL)	3.2	3.6	4.0	4.4	4.6	5.2	5.8	6.6	7.0	
NET PROFIT (\$MILL)	4.2	3.9	4.4	5.0	6.1	6.3	6.4	7.3	7.6	
INCOME TAX RATE	40.4%	37.9%	39.6%	39.9%	39.0%	39.8%	40.8%	40.1%	40.0%	
NET PROFIT MARGIN	12.0%	10.8%	11.1%	11.1%	12.8%	11.9%	11.4%	11.9%	11.7%	
WORKING CAP'L (\$MILL)	2.4	d10.5	d8.7	d1.8	d8.8	2.5	d20.9	d23.3	d27.9	
LONG-TERM DEBT (\$MILL)	64.0	80.6	82.4	92.4	92.1	91.8	107.6	106.0	105.1	
SHR. EQUITY (\$MILL)	51.3	52.7	54.9	57.8	61.8	85.1	87.8	91.2	95.1	
RETURN ON TOTAL CAP'L	5.6%	4.5%	5.1%	5.3%	5.8%	5.3%	4.7%	5.2%	5.6%	
RETURN ON SHR. EQUITY	8.1%	7.4%	8.0%	8.7%	9.8%	7.4%	7.3%	8.0%	8.0%	
RETAINED TO COM EQ	2.8%	1.4%	2.1%	2.7%	3.8%	2.1%	1.4%	2.1%	2.0%	
ALL DIV'DS TO NET PROF	65%	81%	74%	69%	61%	71%	81%	74%	75%	

^ANo. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 3.6% per year. ^BBased upon 3 analysts' estimates. ^CBased upon 3 analysts' estimates.

ANNUAL RATES				ASSETS (\$mill.)		
of change (per share)	5 Yrs.	1 Yr.		2008	2009	12/31/10
Sales	3.5%	4.5%		2.9	.5	.2
"Cash Flow"	5.0%	4.0%		7.8	9.0	5.1
Earnings	5.0%	3.0%		1.1	1.2	1.2
Dividends	-8.0%	4.5%		1.7	2.5	7.5
Book Value	5.5%	2.5%				

Fiscal Year	QUARTERLY SALES (\$mill.)				Full Year
	1Q	2Q	3Q	4Q	
12/31/08	12.3	13.9	15.7	14.3	56.2
12/31/09	13.9	15.4	16.1	15.5	60.9
12/31/10	15.0	16.0	18.0	15.9	64.9
12/31/11					

Fiscal Year	EARNINGS PER SHARE				Full Year
	1Q	2Q	3Q	4Q	
12/31/07	.18	.19	.37	.14	.90
12/31/08	.13	.21	.35	.17	.86
12/31/09	.22	.27	.28	.20	.97
12/31/10	.22	.24	.38	.16	1.00
12/31/11	.21	.25	.37		

Cal-endar	QUARTERLY DIVIDENDS PAID				Full Year
	1Q	2Q	3Q	4Q	
2008	.172	.178	.178	.178	.71
2009	.178	.178	.178	.187	.72
2010	.187	.188	.188	.189	.75
2011	.197				

INSTITUTIONAL DECISIONS			
	2Q'10	3Q'10	4Q'10
to Buy	26	17	23
to Sell	15	20	21
Hld's(000)	2151	2148	2190

INDUSTRY: Water Utility				
<p>BUSINESS: Artesian Resources Corporation, through its subsidiaries, provides water, wastewater and other services on the Delmarva Peninsula. The company distributes and sells water, including water for public and private fire protection, to residential, commercial, industrial, municipal and utility customers throughout the states of Delaware, Maryland and Pennsylvania. It also provides wastewater services to customers in Delaware and has entered into purchase agreements to provide wastewater services in the State of Maryland. In addition, Artesian provides contract water and wastewater operations, water and sewer Service Line Protection Plans, wastewater management services, and design, construction and engineering services. Artesian Resources is the parent holding company of Artesian Water Company, Inc., Artesian Water Pennsylvania, Inc., Artesian Water Maryland, Inc., Artesian Wastewater Management, Inc., Artesian Wastewater Maryland, Inc. and three other entities. Has 238 employees. Chairman, C.E.O. & President: Dian C. Taylor. Address: 664 Churchmans Rd., Newark, DE 19702. Tel.: 302 453-6900. Internet: http://www.artesianwater.com. <i>W/T</i></p>				
April 22, 2011				
TOTAL SHAREHOLDER RETURN				
<i>Dividends plus appreciation as of 3/31/2011</i>				
3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
3.86%	4.22%	14.86%	19.74%	6.44%

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CALIFORNIA WATER NYSE-CWT

RECENT PRICE **36.39** P/E RATIO **18.8** (Trailing: 20.1 Median: 22.0) RELATIVE P/E RATIO **1.12** DIVD YLD **3.4%** VALUE LINE

TIMELINESS 4 Lowered 3/4/11	High: 31.4 28.6 26.9 31.4 37.9 42.1 45.8 45.4 46.6	48.3 39.7 38.3	Target Price Range 2014 2015 2016
SAFETY 3 Lowered 7/27/07	Low: 21.5 22.9 20.5 23.7 26.1 31.2 32.8 34.2 27.7	33.5 33.8 34.6	
TECHNICAL 3 Lowered 11/21/10	LEGENDS 1.33 x Dividends p sh divided by Interest Rate Relative Price Strength 2-for-1 split 1998 Options: Yes Shaded areas indicate recessions		
BETA .70 (1.00 = Market)	2014-16 PROJECTIONS		
	Price Gain	Ann'l Total Return	
High 55 (+50%)	40 (10%)	14% 6%	
Insider Decisions			
M J J A S O N D J			
to Buy 0 0 0 1 0 0 0 0 0 0			
to Sell 0 0 0 0 2 0 1 0 0 0			
Options 1 0 0 0 0 0 1 0 0 0			
Institutional Decisions			
202010 302010 402010			
to Buy 43 53 62			
to Sell 72 53 48			
Hld's(000) 8640 9706 10125			
Percent shares traded 9 6 3			

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	© VALUE LINE PUB. LLC 14-16	
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	22.10	21.75	21.00	Revenues per sh	23.15
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	3.86	4.00	3.90	"Cash Flow" per sh	4.05
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	1.81	2.00	2.15	Earnings per sh A	2.35
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	1.23	1.27	Div'd Dec'd per sh B	1.38
2.17	2.83	2.61	2.74	3.44	2.45	4.09	5.82	4.39	3.73	4.01	4.28	3.68	4.82	5.33	5.95	5.55	5.20	Cap'l Spending per sh	5.55
11.72	12.22	13.00	13.38	13.43	12.90	12.95	13.12	14.44	15.66	15.79	18.15	18.50	19.44	20.26	20.91	20.85	22.80	Book Value per sh C	23.70
12.54	12.62	12.62	12.62	12.94	15.15	15.18	16.93	18.37	18.39	20.66	20.67	20.72	20.77	20.83	23.00	25.00		Common Shs Outstg D	27.00
13.7	11.9	12.6	17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	26.1	19.8	19.7	20.3	20.3	20.3	Avg Ann'l P/E Ratio	20.0
.92	.75	.73	.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.19	1.31	1.30			Relative P/E Ratio	1.35
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%	3.2%			Avg Ann'l Div'd Yield	2.9%

CAPITAL STRUCTURE as of 12/31/10
 Total Debt \$505.3 mill. Due in 5 Yrs \$43.9 mill.
 LT Debt \$479.2 mill. LT Interest \$27.9 mill.
 (LT interest earned: 3.4x; total int. cov.: 3.2x)

Pension Assets-12/10 \$139.0 mill.
 Oblig. \$269.9 mill.

Pfd Stock None

Common Stock 20,833,303 shs.
 as of 2/24/11

MARKET CAP: \$750 million (Small Cap)

CURRENT POSITION	2008	2009	12/31/10
Cash Assets	13.9	9.9	42.3
Other	65.9	82.3	83.9
Current Assets	79.8	92.2	126.2
Accts Payable	45.1	43.7	39.5
Debt Due	42.8	25.0	26.1
Other	35.3	41.7	41.7
Current Liab.	123.2	110.4	107.3
Fix. Chg. Cov.	398%	430%	390%

ANNUAL RATES	Past 10 Yrs	Past 5 Yrs	Est'd '08-'10
Revenues	3.0%	4.5%	1.5%
"Cash Flow"	4.0%	6.5%	1.0%
Earnings	3.0%	6.5%	3.0%
Dividends	1.0%	1.0%	2.5%
Book Value	4.5%	5.5%	2.5%

Cal-ender	QUARTERLY REVENUES (\$ mill.) ^E	Full Year
	Mar.31 Jun.30 Sep.30 Dec.31	
2008	72.9 105.6 131.7 100.1	410.3
2009	86.6 116.7 139.2 106.9	449.4
2010	90.3 118.3 146.3 105.5	460.4
2011	95.0 130 160 115	500
2012	100 135 170 120	525

Cal-ender	EARNINGS PER SHARE A	Full Year
	Mar.31 Jun.30 Sep.30 Dec.31	
2008	.01 .48 1.06 .35	1.90
2009	.12 .58 .94 .31	1.95
2010	.10 .50 .98 .23	1.81
2011	.11 .55 1.05 .29	2.00
2012	.12 .60 1.11 .32	2.15

Cal-ender	QUARTERLY DIVIDENDS PAID B	Full Year
	Mar.31 Jun.30 Sep.30 Dec.31	
2007	.290 .290 .290 .290	1.16
2008	.293 .293 .293 .293	1.17
2009	.295 .295 .295 .295	1.18
2010	.2975 .2975 .2975 .2975	1.19
2011		

Business: California Water Service Group provides regulated and nonregulated water service to roughly 470,200 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: '10: residential, 72%; business, 20%; public authorities, 4%; industrial, 4%. '10 reported depreciation rate: 2.3%. Has roughly 1,127 employees. Chairman: Robert W. Foy, President & CEO; Peter C. Nelson (4/11 Proxy), Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

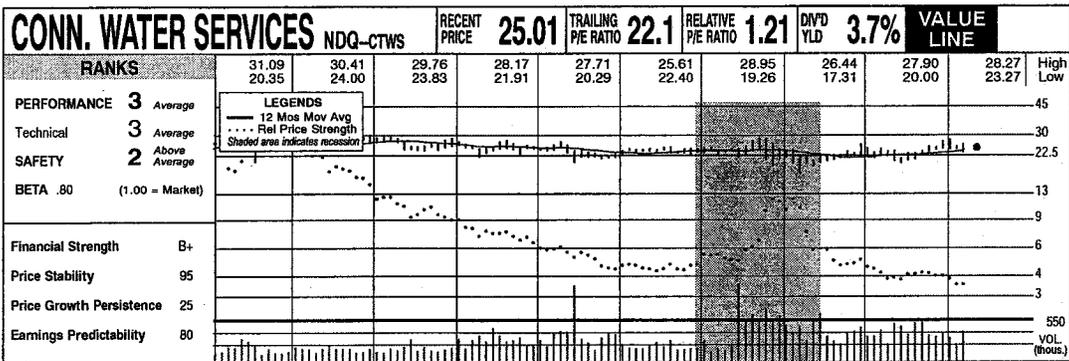
We look for California Water Service Group to bounce back nicely this year. The water utility disappointed in the fourth quarter of 2010, reporting earnings of \$0.23 a share, well below the year-earlier mark and estimates. The top line dipped 1%, as the net effect of WRAM and the MCBA resulted in a decrease of \$2.9 million in revenue. These usage of these methodologies added \$5.2 million to the books in the same period last year. But there should not be any lagging effects with the transition to a three year general rate case cycle in California now in the rear view mirror. In fact, the regulatory landscape ought to be complementary after the California Public Utilities Commission recently approved CWT's rate case authorizing the company to recognize an additional \$25 million in annualized revenues and another \$8 million in funds to be obtained at the conclusion of certain projects. With that, we look for a 10% share-net advance in 2011, despite the rising costs of doing business (see below). **Growth will likely taper off in 2012 and thereafter, however.** U.S. water infrastructures are extremely capital-intensive. Costs of maintenance are adding up as many systems require significant investment. CWT is reasonably cash-strapped, though, and will probably have to continue seeking outside financing. Though necessary, such ventures come at a price, and the initiatives will probably cause earnings growth to begin slowing. **We do not recommend this issue to most.** The financing costs should weigh on shareholder gains for the foreseeable future. Although the steadily increasing dividend is a boon, it is not enough to make up for the lack of earnings power in our opinion. There are better income vehicles out there, especially in the Electric Utilities Industry. We also worry that the dearth of cash on hand could potentially affect the dividend payout if the operating environment remains so capital intensive. It should be noted that CWT announced a 2-for-1 stock split and a stock offering that looks to be contingent upon approval of the former action. If granted shareholder approval, both are slated to go through in June. Our presentation does not account for the split at this time.

Andre J. Costanza April 22, 2011

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, ('74); '01, 4¢; '02, 8¢. Next earnings report due April 28th.
 (B) Dividends historically paid in early Feb., May, Aug., and Nov. = Div'd reinvestment plan available.
 (C) Incl. deferred charges. In '10: \$2.2 mill., \$0.11/sh.
 (D) In millions, adjusted for split.
 (E) Excludes non-reg. rev.

Company's Financial Strength B+
 Stock's Price Stability 90
 Price Growth Persistence 70
 Earnings Predictability 05

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© VALUE LINE PUBLISHING LLC	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011/2012
SALES PER SH	5.77	5.91	6.04	5.81	5.68	7.05	7.24	6.93	7.65	
"CASH FLOW" PER SH	1.78	1.89	1.91	1.62	1.52	1.90	1.95	1.93	2.04	
EARNINGS PER SH	1.12	1.15	1.16	.88	.81	1.05	1.11	1.19	1.13	1.20 ^A /1.24 ^C
DIV'DS DECL'D PER SH	.81	.83	.84	.85	.86	.87	.88	.90	.92	
CAP'L SPENDING PER SH	1.98	1.49	1.58	1.96	1.96	2.24	2.44	3.28	3.06	
BOOK VALUE PER SH	10.06	10.46	10.94	11.52	11.60	11.95	12.23	12.67	13.05	
COMMON SHS OUTST'G (MILL)	7.94	7.97	8.04	8.17	8.27	8.38	8.46	8.57	8.68	
AVG ANN'L P/E RATIO	24.3	23.5	22.9	28.6	29.0	23.0	22.2	18.4	20.7	20.8/20.2
RELATIVE P/E RATIO	1.33	1.34	1.21	1.51	1.57	1.22	1.34	1.22	1.33	
AVG ANN'L DIV'D YIELD	3.0%	3.0%	3.1%	3.4%	3.6%	3.6%	3.6%	4.1%	3.9%	
SALES (\$MILL)	45.8	47.1	48.5	47.5	46.9	59.0	61.3	59.4	66.4	Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.
OPERATING MARGIN	57.7%	52.1%	51.0%	48.3%	43.7%	40.8%	49.0%	35.8%	40.7%	
DEPRECIATION (\$MILL)	5.4	5.9	6.0	6.1	5.9	7.2	7.1	6.4	7.9	
NET PROFIT (\$MILL)	8.8	9.2	9.4	7.2	6.7	8.8	9.4	10.2	9.8	
INCOME TAX RATE	33.8%	17.9%	22.9%	--	23.5%	32.4%	27.2%	19.5%	35.2%	
NET PROFIT MARGIN	19.2%	19.5%	19.4%	15.1%	14.3%	14.9%	15.4%	17.2%	14.8%	
WORKING CAP'L (\$MILL)	d5.1	d3.9	d.7	13.0	1.2	8.1	d3.3	d13.1	d14.7	
LONG-TERM DEBT (\$MILL)	64.8	64.8	66.4	77.4	77.3	92.3	92.2	112.0	111.7	
SHR. EQUITY (\$MILL)	80.7	84.2	88.7	94.9	96.7	100.9	104.2	109.3	114.0	
RETURN ON TOTAL CAP'L	7.4%	7.5%	7.0%	5.0%	4.9%	5.5%	5.9%	5.5%	5.4%	
RETURN ON SHR. EQUITY	10.9%	10.9%	10.6%	7.5%	6.9%	8.7%	9.0%	9.3%	8.6%	
RETAINED TO COM EQ	3.1%	3.2%	3.1%	.3%	NMF	1.6%	1.9%	2.3%	1.6%	
ALL DIV'DS TO NET PROF	72%	71%	71%	95%	105%	82%	79%	76%	81%	

^ANo. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 4.0% per year. ^BBased upon 3 analysts' estimates. ^CBased upon 3 analysts' estimates.

ANNUAL RATES					ASSETS (\$mill.)		
of change (per share)	5 Yrs.	1 Yr.	2008	2009	12/31/10		
Sales	4.0%	10.5%	.7	5.4	1.0		
"Cash Flow"	2.0%	5.5%	12.0	6.5	10.1		
Earnings	1.5%	-5.0%	1.1	1.1	1.7		
Dividends	1.5%	2.0%	2.0	7.0	7.8		
Book Value	3.0%	3.0%	15.8	20.0	20.4		

Fiscal Year	QUARTERLY SALES (\$mill.)				Full Year	LIABILITIES (\$mill.)		
	1Q	2Q	3Q	4Q		2008	2009	12/31/10
12/31/08	13.6	16.0	17.0	14.7	61.3	Accts Payable	5.7	6.5
12/31/09	13.4	15.2	16.6	14.2	59.4	Debt Due	12.1	25.0
12/31/10	13.8	15.9	21.0	15.7	66.4	Other	1.3	1.8
12/31/11						Current Liab	19.1	33.1

Cal-endar	QUARTERLY DIVIDENDS PAID				Full Year	LONG-TERM DEBT AND EQUITY as of 12/31/10	
	1Q	2Q	3Q	4Q		Total Debt	Due in 5 Yrs.
2008	.218	.218	.222	.222	.88	\$138.0 mill.	\$26.3 mill.
2009	.222	.222	.228	.228	.90	LT Debt \$111.7 mill.	
2010	.228	.228	.233	.233	.92	Including Cap. Leases None	
2011	.233					(49% of Cap'l)	

INSTITUTIONAL DECISIONS				Pension Liability \$16.7 mill. in '10 vs. \$14.9 mill. in '09	
	2Q'10	3Q'10	4Q'10	Pfd Stock	Pfd Div'd Paid Nil
to Buy	30	21	27	\$8 mill.	
to Sell	23	21	19		
Hld's(000)	2790	2747	2764	Common Stock 8,676,849 shares	(51% of Cap'l)

INDUSTRY: Water Utility

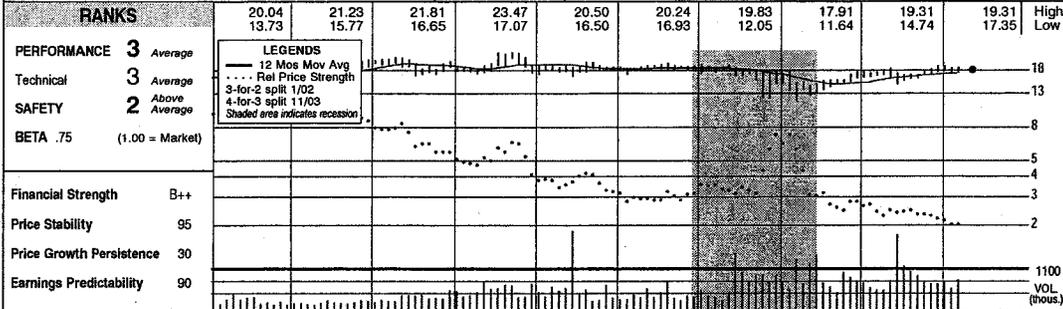
BUSINESS: Connecticut Water Service, Inc. primarily operates as a water utility provider. The company operates through three segments: Water Activities, Real Estate Transactions, and Services and Rentals. The Water Activities segment supplies public drinking water to its customers. Its Real Estate Transactions segment involves in the sale of its limited excess real estate holdings. The Services and Rentals segment provides contracted services to water and wastewater utilities and other clients, as well as leases certain properties to third parties. This segment's services include contract operations of water and wastewater facilities; Linebacker, its service line protection plan for public drinking water customers; and provision of bulk deliveries of emergency drinking water to businesses and residences via tanker truck. As of December 31, 2010, Connecticut Water Service provided water to approximately 90,000 customers in 55 towns throughout Connecticut. Has 225 employees. Chairman, C.E.O. & President: Eric W. Thornburg, Inc.: CT. Address: 93 West Main Street, Clinton, CT 06413. Tel.: (860) 669-8636. Internet: <http://www.ctwater.com>. W.T.

April 22, 2011

TOTAL SHAREHOLDER RETURN				
Dividends plus appreciation as of 3/31/2011				
3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
-4.61%	12.06%	17.78%	25.16%	21.46%

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MIDDLESEX WATER NDQ-MSEX **RECENT PRICE 18.14** **TRAILING P/E RATIO 18.9** **RELATIVE P/E RATIO 1.04** **DIVD YLD 4.0%** **VALUE LINE**



© VALUE LINE PUBLISHING LLC	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011/2012
SALES PER SH	5.98	6.12	6.25	6.44	6.16	6.50	6.79	6.75	6.60	
"CASH FLOW" PER SH	1.20	1.15	1.28	1.33	1.33	1.49	1.53	1.40	1.55	
EARNINGS PER SH	.73	.61	.73	.71	.82	.87	.89	.72	.96	.95 ^A /.99 ^C
DIV'DS DECL'D PER SH	.63	.65	.66	.67	.68	.69	.70	.71	.72	
CAP'L SPENDING PER SH	1.59	1.87	2.54	2.18	2.31	1.65	2.12	1.49	1.90	
BOOK VALUE PER SH	7.39	7.60	8.02	8.26	9.52	10.05	10.03	10.33	11.13	
COMMON SHS OUTST'G (MILL)	10.36	10.48	11.36	11.58	13.17	13.25	13.40	13.52	15.57	
AVG ANNL P/E RATIO	23.5	30.0	26.4	27.4	22.7	21.6	19.8	21.0	17.8	19.1/18.3
RELATIVE P/E RATIO	1.28	1.71	1.39	1.45	1.23	1.15	1.19	1.40	1.14	
AVG ANNL DIV'D YIELD	3.7%	3.5%	3.4%	3.5%	3.7%	3.7%	4.0%	4.7%	4.2%	
SALES (\$MILL)	61.9	64.1	71.0	74.6	81.1	86.1	91.0	91.2	102.7	Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.
OPERATING MARGIN	47.1%	44.0%	44.4%	44.4%	47.4%	47.0%	46.9%	42.6%	46.7%	
DEPRECIATION (\$MILL)	5.0	5.6	6.4	7.2	7.8	8.2	8.5	9.2	10.0	
NET PROFIT (\$MILL)	7.8	6.6	8.4	8.5	10.0	11.8	12.2	10.0	14.3	
INCOME TAX RATE	33.3%	32.8%	31.1%	27.6%	33.4%	32.6%	33.2%	34.1%	32.1%	
NET PROFIT MARGIN	12.5%	10.3%	11.9%	11.4%	12.4%	13.8%	13.4%	10.9%	13.9%	
WORKING CAP'L (\$MILL)	d9.3	d13.3	d11.8	d4.5	2.8	d9.6	d40.9	d38.6	d17.9	
LONG-TERM DEBT (\$MILL)	87.5	97.4	115.3	128.2	130.7	131.6	118.2	124.9	133.8	
SHR. EQUITY (\$MILL)	80.6	83.7	99.2	103.6	133.3	137.1	141.2	143.0	176.6	
RETURN ON TOTAL CAP'L	6.0%	5.0%	5.1%	5.0%	5.1%	5.6%	5.8%	5.0%	5.7%	
RETURN ON SHR. EQUITY	9.6%	7.9%	8.5%	8.2%	7.5%	8.6%	8.6%	7.0%	8.1%	
RETAINED TO COM EQ	1.3%	NMF	.9%	.6%	1.3%	1.8%	2.0%	.1%	2.1%	
ALL DIV'DS TO NET PROF	87%	106%	90%	94%	84%	79%	78%	98%	75%	

^ANo. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 3.0% per year. ^BBased upon 2 analysts' estimates. ^CBased upon 2 analysts' estimates.

ANNUAL RATES				
of change (per share)	5 Yrs.	1 Yr.		
Sales	1.5%	-2.0%		
"Cash Flow"	3.5%	10.0%		
Earnings	4.5%	33.5%		
Dividends	1.5%	1.5%		
Book Value	5.5%	8.0%		

Fiscal Year	QUARTERLY SALES (\$mill.)	Full Year
	1Q 2Q 3Q 4Q	Year
12/31/08	20.8 23.0 25.7 21.5	91.0
12/31/09	20.6 23.1 25.5 22.0	91.2
12/31/10	21.6 26.5 29.6 25.0	102.7
12/31/11		

Fiscal Year	EARNINGS PER SHARE	Full Year
	1Q 2Q 3Q 4Q	Year
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	.11 .31 .37 .17	.96
12/31/11	.11 .29 .34	

Cal-ender	QUARTERLY DIVIDENDS PAID	Full Year
	1Q 2Q 3Q 4Q	Year
2008	.175 .175 .175 .178	.70
2009	.178 .178 .178 .18	.71
2010	.18 .18 .18 .183	.72
2011	.183	

INSTITUTIONAL DECISIONS			
	2Q'10	3Q'10	4Q'10
to Buy	40	30	39
to Sell	21	24	21
Hld's(000)	5706	5930	6031

INDUSTRY: Water Utility

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey and Delaware, and a regulated wastewater utility in NJ. The company 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, as well as water and wastewater services to residents in Southampton Township. Middlesex Water's Delaware subsidiaries provide water services to retail customers in New Castle, Kent, and Sussex counties. In February, Middlesex Water announced the retirement of J. Richard Tompkins, who will not seek re-election when his term expires in May 2011. Has 285 employees. Chairman: Dennis W. Doll. Address: 1500 Ronson Rd, P.O. BOX 1500, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: <http://www.middlesexwater.com>.

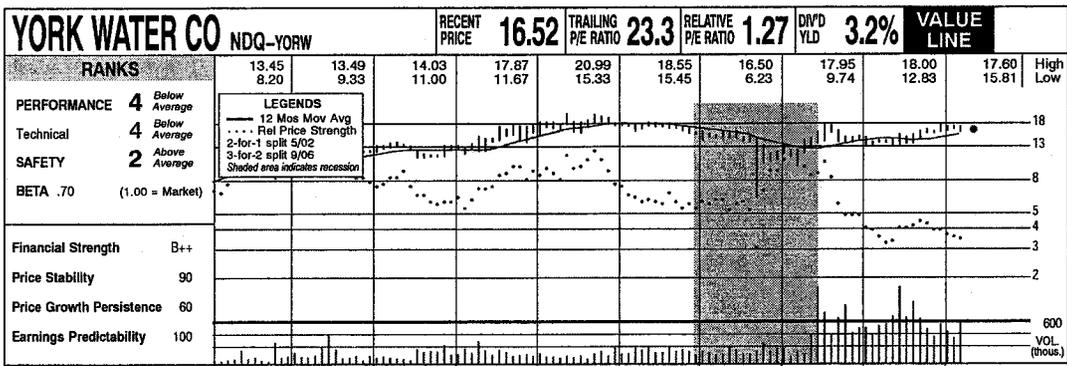
W.T.

April 22, 2011

TOTAL SHAREHOLDER RETURN				
Dividends plus appreciation as of 3/31/2011				
3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
0.10%	10.18%	11.08%	13.92%	16.41%

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SJW CORP. NYSE-SJW				RECENT PRICE	22.65	P/E RATIO	NMF (Trailing: 27.0 Median: 22.0)	RELATIVE P/E RATIO	NMF	DIVID YLD	3.0%	VALUE LINE							
TIMELINESS 4 New 4/22/11	High: 20.3	17.8	15.1	15.0	19.6	27.8	45.3	43.0	35.1	30.4	28.2	26.8	Target Price 2014	2015	2016				
SAFETY 3 New 4/22/11	Low: 15.8	11.6	12.7	12.6	14.6	16.1	21.2	27.7	20.0	18.2	21.6	22.3							
TECHNICAL 3 New 4/22/11	LEGENDS 1.50 x Dividends p sh divided by Interest Rate Relative Price Strength Options: No Shaded areas indicate recessions																		
BETA .90 (1.00 = Market)	2014-16 PROJECTIONS Price Gain Ann'l Total Return High 40 (+75%) 17% Low 25 (+10%) 6%																		
Insider Decisions																			
M J A S O N D J to Buy 1 0 0 0 0 0 0 0 1 0 Options 0 0 0 0 0 0 0 0 1 0 to Sell 0 0 0 0 0 0 0 0 1 0				Institutional Decisions x2010 32010 402010 to Buy 31 26 34 to Sell 32 28 26 Hrs(000) 8930 8969 8640 Percent shares traded 21 14 7															
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012				© VALUE LINE PUB. LLC 14-16															
4.99	5.39	5.79	5.58	6.40	6.74	7.45	7.97	8.20	9.14	9.86	10.35	11.25	12.12	11.68	11.62	11.20	11.35	Revenues per sh	12.00
.98	1.43	1.27	1.26	1.43	1.23	1.49	1.55	1.75	1.89	2.21	2.38	2.30	2.44	2.21	2.37	2.40	2.40	"Cash Flow" per sh	2.60
.59	.96	.80	.76	.87	.58	.77	.78	.91	.87	1.12	1.19	1.04	1.08	.81	.84	.90	1.00	Earnings per sh A	1.30
.35	.37	.38	.39	.40	.41	.43	.46	.49	.51	.53	.57	.61	.65	.66	.68	.69	.74	Div'd Decl'd per sh B	.82
.96	1.06	1.27	1.81	1.77	1.89	2.63	2.06	3.41	2.31	2.88	3.87	6.62	3.79	3.17	5.65	5.15	5.00	Cap'l Spending per sh	4.80
5.58	6.31	7.02	7.53	7.88	7.90	8.17	8.40	9.11	10.11	10.72	12.48	12.90	13.99	13.66	13.75	14.90	15.70	Book Value per sh	17.00
19.50	19.02	19.02	19.01	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.28	18.36	18.18	18.50	18.55	20.50	22.00	Common Shs Outst'g C	25.00
9.9	6.8	11.2	13.1	15.5	33.1	18.5	17.3	15.4	19.6	19.7	23.5	33.4	26.2	28.7	29.5	29.5	29.5	Avg Ann'l P/E Ratio	25.0
.66	.43	.65	.68	.88	2.15	.95	.94	.88	1.04	1.05	1.27	1.77	1.58	1.91	1.89	1.91	1.89	Relative P/E Ratio	1.65
6.0%	5.7%	4.3%	3.9%	3.0%	2.1%	3.0%	3.4%	3.5%	3.0%	2.4%	2.0%	1.7%	2.3%	2.8%	2.8%	2.8%	2.8%	Avg Ann'l Div'd Yield	2.5%
CAPITAL STRUCTURE as of 12/31/10				136.1 145.7 149.7 166.9 180.1 189.2 206.6 220.3 216.1 215.6 230 250 Total Debt \$300.8 mill. Due in 5 Yrs \$12.4 mill. LT Debt \$295.7 mill. LT Interest \$15.9 mill. (LT Interest earned: 2.7x; total interest coverage: 2.6x)															
Leases, Uncapitalized: Annual rentals \$4.2 mill.				34.5% 40.4% 36.2% 42.1% 41.6% 40.8% 39.4% 39.5% 40.4% 39.7% 40.0% 40.0% 4.4% 4.2% 1.6% 2.1% 1.6% 2.1% 2.7% 2.3% 2.0% 3.6% 5.0% 5.0%															
Pension Assets-12/10 \$10.8 mill. Oblig. \$58.8 mill.				42.4% 41.7% 45.6% 43.7% 42.6% 41.8% 47.7% 46.0% 49.4% 53.7% 51.0% 50.0% 57.6% 58.3% 54.4% 56.3% 57.4% 58.2% 52.3% 54.0% 50.6% 46.3% 49.0% 50.0%															
Pfd Stock None.				259.4 283.5 306.0 328.3 341.2 391.8 453.2 470.9 499.6 550.7 625 700 367.8 390.8 428.5 456.8 484.8 541.7 645.5 684.2 718.5 785.5 850 930 6.7% 6.9% 6.9% 6.5% 7.6% 7.0% 5.7% 5.8% 4.4% 4.2% 4.5% 4.5%															
Common Stock 18,577,012 shs. as of 2/8/11				9.4% 9.3% 10.0% 8.7% 10.6% 9.7% 8.2% 8.0% 6.0% 6.1% 6.0% 6.5% 9.4% 9.3% 10.0% 8.7% 10.6% 9.7% 8.2% 8.0% 6.0% 6.1% 6.0% 6.5%															
MARKET CAP: \$425 million (Small Cap)				4.1% 3.8% 4.7% 3.6% 5.6% 5.2% 3.5% 3.3% 1.2% 1.2% 1.5% 2.0% 56% 59% 53% 58% 47% 46% 57% 58% 80% 81% 74% 74%															
CURRENT POSITION 2008 2009 12/31/10 (\$MILL)				BUSINESS: SJW Corporation engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 226,000 connections that serve a population of approximately one million people in the San Jose area and 8,700 connections that serve approximately 36,000 residents in a service area in the region between San Antonio and Austin, Texas. The company offers nonregulated water-related services, including water system operations, cash remittances, and maintenance contract services. SJW also owns and operates commercial real estate investments. Has 375 employees. Chairman: Charles J. Toeniskoetter, Inc. CA. Address: 110 W. Taylor Street, San Jose, CA 95110. Tel.: (408) 279-7800. Int: www.sjwater.com.															
Cash Assets 3.4 1.4 1.7 Other 28.6 26.6 36.3 Current Assets 32.0 28.0 38.0 Accts Payable 5.8 6.6 5.5 Debt Due 19.1 6.9 5.1 Other 18.4 18.5 18.6 Current Liab. 43.3 32.0 29.2 Fix. Chg. Cov. 293% 352% 400%				We welcome newcomer SJW Corp to The Value Line Investment Survey in this issue. Although it dabbles in commercial property, the company, for all intents and purposes, is a water utility, engaging in the production, purchase, storage, purification, distribution, and sale of water. It offers nonregulated services via agreements with municipalities and other utilities, but the bulk of its business is regulated. Operations are centered around San Jose, California, where it provides more than 225,000 connections that serve population of roughly one million people. Services are not exclusive to the Golden State, however, with another 8,700 connections serving 36,000 residents in the state of Texas.															
ANNUAL RATES of change (per sh)				We are a little wary of the company's near-term prospects. Operating costs are likely to remain on the rise, given the shape that many water systems appear to be in across the United States. That said, SJW, like many of its bedfellows, is not exactly flush with cash and will probably have to turn to outside financing to make the improvements. The costs associated with additional debt or share offerings, however, will be dilutive, likely keeping growth under wraps going forward. Note, however, that growth may look decent against depressed 2010 comparisons.															
10 Yrs. 6.5% 5 Yrs. 5.5% '08-'10 5.0% Revenues "Cash Flow" 6.0% Earnings 2.0% Dividends 5.0% Book Value 6.0%				We advise investors to take a pass on this issue. SJW is ranked 4 (Below Average) for Timeliness and lacks 3- to 5-year appreciation potential, as well. Meanwhile, the balance sheet is highly leveraged, adding some skepticism about the sustainability of the stock's only saving grace at this time, its dividend. Although the steady stream of income is not likely to dry up completely, the financial constraints alluded to above could prompt the company to use the funds to make capital improvements instead.															
QUARTERLY REVENUES (\$ mill.)				Andre J. Costanza April 22, 2011															
Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 2008 41.3 60.0 69.5 49.5 220.3 2009 40.0 58.2 69.3 48.6 216.1 2010 40.4 54.1 70.3 50.8 215.6 2011 43.0 58.0 75.0 54.0 230 2012 47.0 63.0 81.0 59.0 250				Company's Financial Strength B+ Stock's Price Stability 70 Price Growth Persistence 80 Earnings Predictability 85															
EARNINGS PER SHARE A				To subscribe call 1-800-833-0046.															
Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 2008 .15 .34 .44 .15 1.08 2009 .01 .23 .43 .14 .81 2010 .05 .24 .44 .11 .84 2011 .05 .25 .47 .13 .90 2012 .07 .28 .50 .15 1.00				add due to rounding. (B) Dividends historically paid in early March, June, September, and December. # Div'd reinvestment plan available. (C) In millions.															
QUARTERLY DIVIDENDS PAID #				2007 .15 .15 .15 .15 .60 2008 .16 .16 .16 .16 .64 2009 .165 .165 .165 .165 .66 2010 .17 .17 .17 .17 .68 2011 .173															
(A) Diluted earnings. Excludes nonrecurring losses: '03, \$1.97; '04, \$3.78; '05, \$1.09; '06, \$16.36; '08, \$1.22; '10, 46¢. Next earnings report due April 28th. Quarterly egs. may not add due to rounding.																			
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© VALUE LINE PUBLISHING LLC	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011/2012
REVENUES PER SH	2.05	2.17	2.18	2.58	2.56	2.79	2.89	2.95	3.07	
"CASH FLOW" PER SH	.57	.65	.65	.79	.77	.86	.88	.95	1.07	
EARNINGS PER SH	.40	.47	.49	.56	.58	.57	.57	.64	.71	.77 ^A /.80 ^C
DIV'D DECL'D PER SH	.35	.37	.39	.42	.45	.48	.49	.51	.52	
CAP'L SPENDING PER SH	.66	1.07	2.50	1.69	1.85	1.69	2.17	1.18	.83	
BOOK VALUE PER SH	3.90	4.06	4.65	4.85	5.84	5.97	6.14	6.92	7.19	
COMMON SHS OUTST'G (MILL)	9.55	9.63	10.33	10.40	11.20	11.27	11.37	12.56	12.69	
AVG ANNUAL P/E RATIO	26.9	24.5	25.7	26.3	31.2	30.3	24.6	21.9	20.7	21.5/20.7
RELATIVE P/E RATIO	1.47	1.40	1.36	1.39	1.68	1.61	1.48	1.46	1.33	
AVG ANNUAL DIV'D YIELD	3.3%	3.2%	3.1%	2.9%	2.5%	2.8%	3.5%	3.6%	3.5%	
REVENUES (\$MILL)	19.6	20.9	22.5	26.8	28.7	31.4	32.8	37.0	39.0	<i>Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.</i>
NET PROFIT (\$MILL)	3.8	4.4	4.8	5.8	6.1	6.4	6.4	7.5	8.9	
INCOME TAX RATE	34.9%	34.8%	36.7%	36.7%	34.4%	36.5%	36.1%	37.9%	38.5%	
AFUDC % TO NET PROFIT	3.7%	--	--	--	7.2%	3.6%	10.1%	--	1.2%	
LONG-TERM DEBT RATIO	46.7%	43.4%	42.5%	44.1%	48.3%	46.5%	54.5%	45.7%	48.3%	
COMMON EQUITY RATIO	53.3%	56.6%	57.5%	55.9%	51.7%	53.5%	45.5%	54.3%	51.7%	
TOTAL CAPITAL (\$MILL)	69.9	69.0	83.6	90.3	126.5	125.7	153.4	160.1	176.4	
NET PLANT (\$MILL)	106.7	116.5	140.0	155.3	174.4	191.6	211.4	222.0	228.4	
RETURN ON TOTAL CAP'L	7.4%	8.5%	7.6%	8.4%	6.2%	6.7%	5.7%	6.2%	6.5%	
RETURN ON SHR. EQUITY	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	
RETURN ON COM EQUITY	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	
RETAINED TO COM EQ	1.3%	2.6%	2.1%	3.0%	2.2%	1.7%	1.4%	1.9%	2.7%	
ALL DIV'DS TO NET PROF	88%	77%	79%	74%	77%	82%	85%	78%	72%	

^ANo. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 6.0% per year. ^BBased upon 4 analysts' estimates. ^CBased upon 4 analysts' estimates.

ANNUAL RATES				ASSETS (\$mill.)			INDUSTRY: Water Utility					
<i>of change (per share)</i>	5 Yrs.	1 Yr.		2008	2009	12/31/10	<p>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, it 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, 2010, York Water served approximately 182,000 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.</p> <p style="text-align: right;"><i>W.T.</i></p> <p style="text-align: center;"><i>April 22, 2011</i></p>					
Revenues	5.0%	4.0%		Cash Assets	.0	.0				1.3		
"Cash Flow"	7.0%	12.0%		Receivables	5.9	5.4				6.3		
Earnings	5.0%	11.0%		Inventory (Avg cost)	.7	.7				.6		
Dividends	5.0%	2.0%		Other	.7	1.0				.6		
Book Value	8.5%	4.0%		Current Assets	7.3	7.1				8.8		
Fiscal Year	QUARTERLY SALES (\$mill.)		Full Year	Property, Plant & Equip, at cost	246.0	260.4				270.8		
	1Q	2Q	3Q	Accum Depreciation	34.6	38.4				42.4		
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	9.0	9.7	10.5	9.8	39.0							
12/31/11												
Fiscal Year	EARNINGS PER SHARE		Full Year	Net Property	211.4	222.0	228.4					
	1Q	2Q	3Q	4Q	21.7	19.7	22.7					
12/31/07	.12	.15	.15	.15	240.4	248.8	259.9					
12/31/08	.11	.13	.15	.18								
12/31/09	.13	.17	.18	.16								
12/31/10	.15	.18	.21	.17								
12/31/11	.17	.20	.22	.22								
Cal-endar	QUARTERLY DIVIDENDS PAID		Full Year	Total Assets	240.4	248.8	259.9					
	1Q	2Q	3Q	4Q								
2008	.121	.121	.121	.121								
2009	.126	.126	.126	.126								
2010	.128	.128	.128	.128								
2011	.131	.13										
INSTITUTIONAL DECISIONS				LIABILITIES (\$mill.)			<p>LONG-TERM DEBT AND EQUITY as of 12/31/10</p> <p>Total Debt \$95.2 mill. Due in 5 Yrs. \$12.2 mill. LT Debt \$85.1 mill. (48% of Cap'l) Including Cap. Leases None Leases, Uncapitalized Annual rentals None</p> <p>Pension Liability \$9.8 mill. in '10 vs. \$8.8 mill. in '09</p> <p>Pfd Stock None Pfd Div'd Paid None</p> <p>Common Stock 12,692,000 shares (52% of Cap'l)</p>					
	2Q'10	3Q'10	4Q'10	Accs Payable	1.6	1.4				1.2		
to Buy	29	21	25	Debt Due	9.1	9.3				.0		
to Sell	19	18	16	Other	3.5	3.9				4.1		
Hld's(000)	2811	3078	3107	Current Liab	14.2	14.6				5.3		
TOTAL SHAREHOLDER RETURN				LONG-TERM DEBT AND EQUITY						<p>3 Mos. 6 Mos. 1 Yr. 3 Yrs. 5 Yrs.</p> <p>1.47% 10.26% 30.68% 28.75% 16.25%</p>		
Dividends plus appreciation as of 3/31/2011				Pension Liability \$9.8 mill. in '10 vs. \$8.8 mill. in '09								
				Pfd Stock None Pfd Div'd Paid None								
				Common Stock 12,692,000 shares (52% of Cap'l)								

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United Water Idaho, Inc.
 Current Institutional Holdings and Individual Holdings
the Proxy Group of Nine Water Companies

	<u>1</u>	<u>2</u>
	July 06, 2011 Percentage of Institutional Holdings	July 06, 2011 Percentage of Individual Holdings (1)
<u>Proxy Group of Nine Water Companies</u>		
American States Water Co.	61.86 %	38.14 %
American Water Works Co., Inc.	84.08	15.92
Aqua America, Inc.	41.26	58.74
Artesian Resources Corp.	34.01	65.99
California Water Service Group	52.31	47.69
Connecticut Water Service, Inc.	32.20	67.80
Middlesex Water Company	39.65	60.35
SJW Corporation	46.54	53.46
York Water Company	<u>24.25</u>	<u>75.75</u>
Average	<u>46.24 %</u>	<u>53.76 %</u>

Notes:

(1) (1 - column 1).

Source of Information: pro.edgar-online.com, July 6, 2011

United Water Idaho, Inc.
 Indicated Common Equity Cost Rate
 Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

<u>Line No.</u>		<u>Proxy Group of Nine Water Companies</u>
1.	Prospective Yield on Aaa Rated Corporate Bonds (1)	5.35 %
2.	Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A Rated Public Utility Bonds	<u>0.34 (2)</u>
3.	Adjusted Prospective Yield on A Rated Public Utility Bonds	5.69 %
4.	Adjustment to Reflect Bond Rating Difference of Proxy Group	<u>0.14 (3)</u>
5.	Adjusted Prospective Bond Yield	5.83
6.	Equity Risk Premium (4)	<u>4.50</u>
7.	Risk Premium Derived Common Equity Cost Rate	<u><u>10.33 %</u></u>

- Notes:
- (1) Derived in Note (4) on page 6 of this Schedule.
 - (2) The average yield spread of A rated public utility bonds over Aaa rated corporate bonds of 0.34% from page 4 of this Schedule.
 - (3) Adjustment to reflect the A3 Moody's bond rating of the proxy group of nine water companies as shown on page 2 of this Schedule. The 14 basis point adjustment is derived by taking 1/3 of the spread between Baa2 and A2 Public Utility Bonds ($1/3 * 0.42\% = 0.14\%$).
 - (4) From page 5 of this Schedule.

United Water, Idaho, Inc.
 Comparison of Bond Ratings, Business Risk and Financial Risk Profiles for the
 Proxy Group of Nine Water Companies

	Moody's		Standard & Poor's		Bond Rating		Credit		Business Risk		Financial Risk		Numerical	
	Bond Rating		Bond Rating		July 2011		Rating		Profile (2)		Profile (2)		Weighting (1)	
	Bond Rating	Numerical Weighting (1)	Bond Rating	Numerical Weighting (1)	Bond Rating	Numerical Weighting (1)	Credit Rating	Business Risk Profile (2)	Financial Risk Profile (2)	Numerical Weighting (1)	Numerical Weighting (1)	Numerical Weighting (1)		
Proxy Group of Nine Water Companies	A2	6.0	A+	5.0	A+	5.0	Excellent	Intermediate	1.0	3.0				
American States Water Co. (3)	Baa1	8.0	A+	5.0	BBB+	8.0	Excellent	Aggressive	1.0	5.0				
American Water Works Co., Inc. (4)	NR	--	AA-	4.0	A+	5.0	Excellent	Intermediate	1.0	3.0				
Aqua America, Inc. (5)	NR	--	NR	--	NR	--	NR	NR	--	--				
Artesian Resources Corp.	NR	--	AA-	4.0	A+	5.0	Excellent	Intermediate	1.0	3.0				
California Water Service Group (6)	NR	--	A	6.0	A	6.0	Excellent	Intermediate	1.0	3.0				
Connecticut Water Service, Inc. (7)	NR	--	A	6.0	A-	7.0	Excellent	Intermediate	1.0	3.0				
Middlesex Water Company	NR	--	A	6.0	A	6.0	Excellent	Intermediate	1.0	3.0				
SJW Corporation (8)	NR	--	A-	7.0	A-	7.0	Excellent	Intermediate	1.0	3.0				
York Water Company	NR	--	A+	5.4	A	6.1	Excellent	Intermediate	1.0	3.3				
Average	A3	7.0	A+	5.4	A	6.1	Excellent	Intermediate	1.0	3.3				

- Notes: (1) From page 3 of this Schedule.
 (2) From Standard & Poor's Issuer Ranking: U.S. Investor-Owned Water Utilities, Strongest to Weakest, June 20, 2011.
 (3) Ratings, business risk and financial risk profiles are those of Golden State Water Company.
 (4) Rating, business risk and financial risk profiles are those of Pennsylvania and New Jersey American Water.
 (5) Ratings, business risk and financial risk profiles are those of Aqua Pennsylvania, Inc.
 (6) Ratings, business risk and financial risk profiles are those of California Water Service Co.
 (7) Ratings, business risk and financial risk profiles are those of Connecticut Water Company.
 (8) Ratings, business risk and financial risk profiles are those of San Jose Water Co.

Source Information: Moody's Investors Service
 Standard & Poor's Global Utilities Rating Service

United Water Idaho, Inc.
Numerical Assignment for
Moody's and Standard & Poor's Bond Ratings
and Standard & Poor's Business and Financial Risk Profiles

<u>Moody's Bond Rating</u>	<u>Numerical Bond Weighting</u>	<u>Standard & Poor's Bond Rating</u>
Aaa	1	AAA
Aa1	2	AA+
Aa2	3	AA
Aa3	4	AA-
A1	5	A+
A2	6	A
A3	7	A-
Baa1	8	BBB+
Baa2	9	BBB
Baa3	10	BBB-
Ba1	11	BB+
Ba2	12	BB
Ba3	13	BB-

Standard & Poor's

<u>Business Risk Profile</u>	<u>Numerical Weighting</u>	<u>Financial Risk Profile</u>	<u>Numerical Weighting</u>
Excellent	1	Minimal	1
Strong	2	Modest	2
Satisfactory	3	Intermediate	3
Fair	4	Significant	4
Weak	5	Aggressive	5
Vulnerable	6	Highly Leveraged	6

Moody's
 Comparison of Interest Rate Trends
 for the Three Months Ending June 2011 (1)

Months	Corporate Bonds		Public Utility Bonds		Spread - Corporate v. Public Utility Bonds		Spread - Public Utility Bonds	
	Aaa Rated	Aa Rated	A Rated	Baa Rated	Aa (Pub. Util.) over Aaa (Corp.)	A (Pub. Util.) over Aaa (Corp.)	A over Aa	Baa over A
June-11	4.99 %	5.04 %	5.26 %	5.67 %				
May-11	4.96	5.08	5.32	5.74				
April-11	5.16	5.32	5.55	5.96				
Average of Last 3 Months	5.04 %	5.15 %	5.38 %	5.80 %	0.11 %	0.34 %	0.23 %	0.42 %

Notes: (1) All yields are distributed yields.

Source of Information: Mergent Bond Record, July 2011, Vol. 78, No. 7.

United Water Idaho, Inc.
Judgment of Equity Risk Premium for
the Proxy Group of Nine Water Companies

<u>Line No.</u>		<u>Proxy Group of Nine Water Companies</u>
1.	Calculated equity risk premium based on the total market using the beta approach (1)	4.87
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with A rated bonds (2)	<u>4.12</u>
3.	Average equity risk premium	<u><u>4.50</u></u> %

Notes: (1) From page 6 of this Schedule.
(2) From page 8 of this Schedule.

United Water Idaho, Inc.
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
the Proxy Group of Nine Water Companies

<u>Line No.</u>		<u>Proxy Group of Nine Water Companies</u>
1.	Arithmetic mean total return rate on the Standard & Poor's 500 Composite Index - 1926-2010 (1)	11.90 %
2.	Arithmetic mean yield on Aaa and Aa Corporate Bonds 1926-2010 (2)	<u>(6.10)</u>
3.	Historical Equity Risk Premium	<u>5.80 %</u>
4.	Forecasted 3-5 year Total Annual Market Return (3)	13.44 %
5.	Prospective Yield an Aaa Rated Corporate Bonds (4)	<u>(5.35)</u>
6.	Forecasted Equity Risk Premium	<u>8.09 %</u>
7.	Conclusion of Equity Risk Premium (5)	6.95 %
8.	Adjusted Value Line Beta (6)	<u>0.70</u>
9.	Beta Adjusted Equity Risk Premium	<u>4.87 %</u>

- Notes: (1) Stocks, Bonds, Bills, and Inflation - Market Results for 1926-2010 Yearbook Valuation Edition, Morningstar, Inc., 2011 Chicago, IL.
(2) From Moody's Industrial Manual and Mergent Bond Record Monthly Update.
(3) From page 3 of Schedule 10.
(4) Average forecast based upon six quarterly estimates of Aaa rated corporate bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated July 1, 2011 (see page 7 of this Schedule). The estimates are detailed below.

Third Quarter 2011	5.00 %
Fourth Quarter 2011	5.10
First Quarter 2012	5.30
Second Quarter 2012	5.40
Third Quarter 2012	5.60
Fourth Quarter 2012	<u>5.70</u>
Average	<u>5.35 %</u>

- (5) The average of the historical equity risk premium of 5.80% from Line No. 3 and the forecasted equity risk premium of 8.09% from Line No. 6 $((5.80\% + 8.09\%) / 2 = 6.95\%$.
(6) Median beta from page 1 of Schedule 10.

Consensus Forecasts Of U.S. Interest Rates And Key Assumptions¹

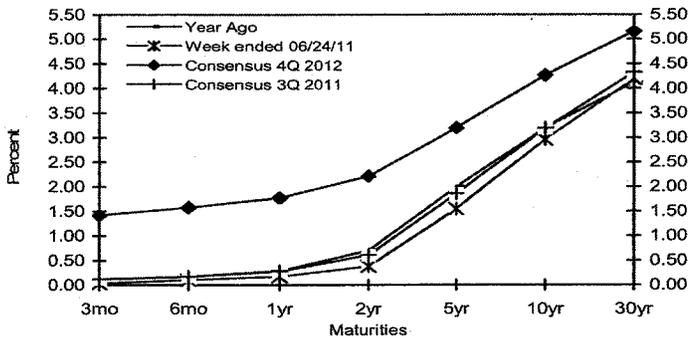
	-----History-----								Consensus Forecasts-Quarterly Avg.						
	-----Average For Week Ending-----				-----Average For Month-----				Latest Q*	3Q	4Q	1Q	2Q	3Q	4Q
Interest Rates	June 24	June 17	June 10	June 3	May	Apr.	Mar.	2Q 2011	2011	2011	2012	2012	2012	2012	2012
Federal Funds Rate	0.09	0.09	0.10	0.10	0.09	0.10	0.14	0.11	0.2	0.2	0.3	0.6	1.0	1.4	
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.3	3.3	3.4	3.6	4.0	4.4	
LIBOR, 3-mo.	0.25	0.25	0.25	0.25	0.26	0.28	0.31	0.28	0.3	0.4	0.6	0.9	1.3	1.7	
Commercial Paper, 1-mo.	0.14	0.12	0.10	0.12	0.11	0.14	0.17	0.14	0.2	0.3	0.5	0.7	1.1	1.6	
Treasury bill, 3-mo.	0.03	0.05	0.05	0.05	0.04	0.06	0.10	0.06	0.1	0.2	0.4	0.6	1.0	1.4	
Treasury bill, 6-mo.	0.10	0.11	0.10	0.11	0.09	0.12	0.16	0.11	0.2	0.3	0.5	0.8	1.2	1.6	
Treasury bill, 1 yr.	0.17	0.18	0.18	0.18	0.19	0.25	0.26	0.22	0.3	0.4	0.7	0.9	1.4	1.8	
Treasury note, 2 yr.	0.39	0.40	0.41	0.44	0.56	0.73	0.70	0.62	0.6	0.8	1.1	1.4	1.8	2.2	
Treasury note, 5 yr.	1.55	1.58	1.58	1.63	1.84	2.17	2.11	1.96	1.9	2.1	2.4	2.6	2.9	3.2	
Treasury note, 10 yr.	2.97	2.99	3.00	3.01	3.17	3.46	3.41	3.29	3.2	3.4	3.6	3.8	4.1	4.3	
Treasury note, 30 yr.	4.19	4.21	4.22	4.21	4.29	4.50	4.51	4.40	4.3	4.5	4.6	4.8	5.0	5.2	
Corporate Aaa bond	4.96	4.98	4.97	4.95	4.96	5.16	5.13	5.06	5.0	5.1	5.3	5.4	5.6	5.7	
Corporate Baa bond	5.73	5.73	5.73	5.70	5.78	6.02	6.03	5.91	5.8	5.9	6.1	6.2	6.4	6.6	
State & Local bonds	4.46	4.49	4.49	4.51	4.59	4.99	4.92	4.77	4.6	4.7	4.9	5.0	5.2	5.3	
Home mortgage rate	4.50	4.50	4.49	4.55	4.64	4.84	4.84	4.73	4.7	4.9	5.1	5.3	5.5	5.7	

	-----History-----								Consensus Forecasts-Quarterly					
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q*	3Q	4Q	1Q	2Q	3Q	4Q
Key Assumptions	2009	2009	2010	2010	2010	2011	2011	2011	2011	2011	2012	2012	2012	2012
Major Currency Index	76.4	72.8	74.8	77.6	75.9	73.0	71.9	69.7	70.1	70.2	70.6	71.2	71.7	71.9
Real GDP	1.6	5.0	3.7	1.7	2.6	3.1	1.9	2.2	3.1	3.2	2.9	3.0	3.2	3.2
GDP Price Index	0.7	-0.2	1.0	1.9	2.1	0.4	2.0	2.3	1.9	1.7	1.9	2.0	2.0	2.0
Consumer Price Index	3.7	2.7	1.3	-0.5	1.4	2.6	5.2	4.2	2.2	2.1	2.3	2.3	2.3	2.4

Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data for interest rates except LIBOR is from Federal Reserve Release (FRSR) H.15. LIBOR quotes available from *The Wall Street Journal*. Interest rate definitions are the same as those in FRSR H.15. Treasury yields are reported on a constant maturity basis. Historical data for the Fed's Major Currency Index is from FRSR H.10 and G.5. Historical data for Real GDP and GDP Chained Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index (CPI) history is from the Department of Labor's Bureau of Labor Statistics (BLS). ¹Interest rate data for 2Q 2011 based on historical data through the week ended June 24. Data for 2Q 2011 Major Currency Index also is based on data through week ended June 24. Figures for 2Q 2011 Real GDP, GDP Chained Price Index and Consumer Price Index are consensus forecasts based on a special question asked of the panelists this month (see page 14).

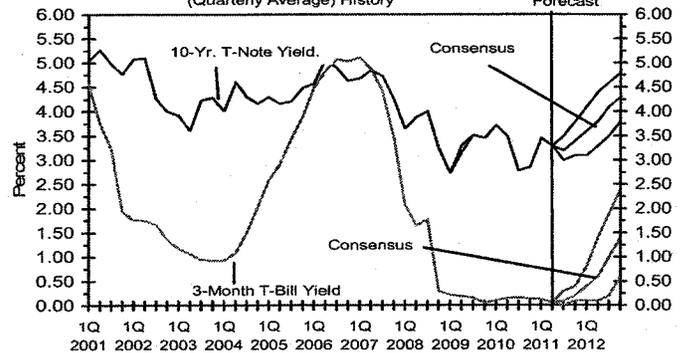
U.S. Treasury Yield Curve

Week ended May 20, 2011 and Year Ago vs. 2Q 2011 and 3Q 2012 Consensus Forecasts



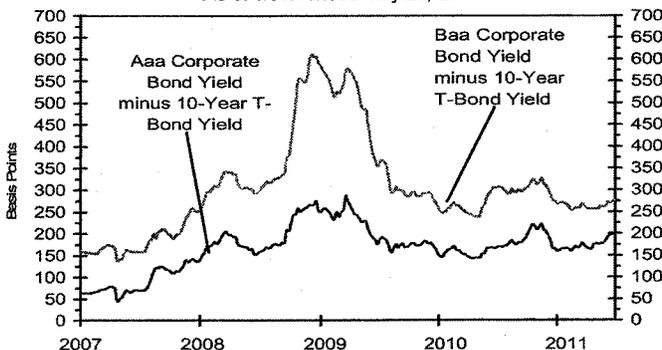
U.S. 3-Mo. T-Bills & 10-Yr. T-Note Yield

(Quarterly Average) History Forecast



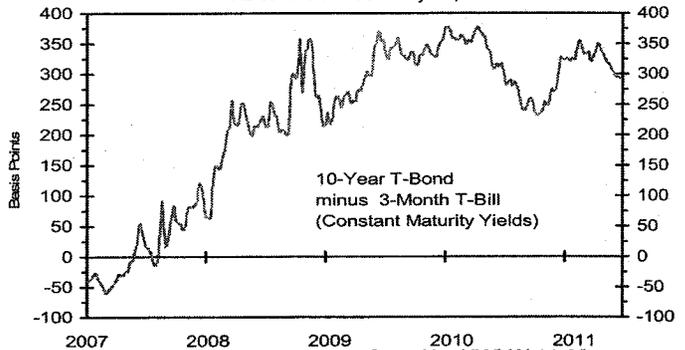
Corporate Bond Spreads

As of week ended May 20, 2011



U.S. Treasury Yield Curve

As of week ended May 20, 2011

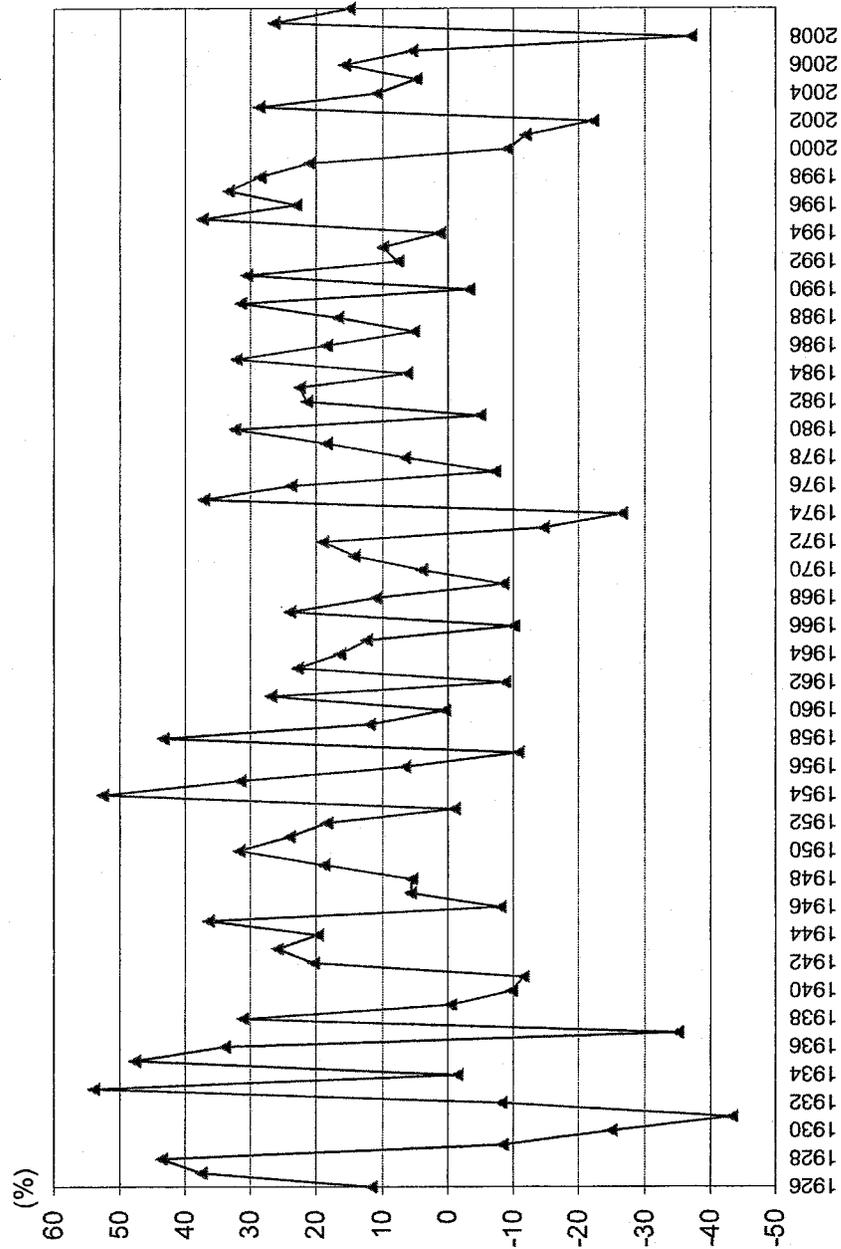


United Water Idaho, Inc.
 Derivation of Mean Equity Risk Premium Based on a Study
Using Holding Period Returns of Public Utilities

<u>Line No.</u>		<u>Over A Rated Moody's Public Utility Bonds - AUS Consultants Study (1)</u>
1.	Arithmetic Mean Holding Period Returns on the Standard & Poor's Utility Index 1926-2010 (2):	10.69 %
2.	Arithmetic Mean Yield on Moody's A Rated Public Utility Yields 1926-2010	<u>(6.57)</u>
3.	Equity Risk Premium	<u><u>4.12 %</u></u>

- Notes: (1) S&P Public Utility Index and Moody's Public Utility Bond Average Annual Yields 1928-2010, (AUS Consultants - Utility Services, 2011).
- (2) Holding period returns are calculated based upon income received (dividends and interest) plus the relative change in the market value of a security over a one-year holding period.

Large Company Stock Returns From 1926 to 2010



Source of Information:
 Ibbotson® S&P® - 2011 Valuation Yearbook - Market Results for Stocks Bonds Bills and Inflation - 1926-2010.
 Morningstar, Inc., 2011 Chicago, IL.

Total Returns on Large Company Stocks 1926 to 2010

Large Company Stocks



$$\text{Geometric Mean: } r_G = \left[\frac{V_n}{V_0} \right]^{1/n} - 1$$

Source: Ibbotson@SBBi @ - 2011 Valuation Yearbook - Market Results for Stocks, Bonds, Bills, and Inflation -1926-2010
Morningstar, Inc., 2011 Chicago, IL

United Water Idaho, Inc.
 Indicated Common Equity Cost Rate Through Use
 of the Traditional Capital Asset Pricing Model (CAPM) and Empirical Capital Asset Pricing Model (ECAPM)

	1	2	3	4	5	6
<u>Proxy Group of Nine Water Companies</u>	<u>Value Line Adjusted Beta</u>	<u>Market Risk Premium (1)</u>	<u>Risk-Free Rate (2)</u>	<u>Traditional CAPM Cost Rate (3)</u>	<u>ECAPM Cost Rate (4)</u>	<u>Indicated Common Equity Cost Rate (5)</u>
American States Water Co.	0.75	7.71 %	4.73 %	10.51 %	10.99 %	
American Water Works Co., Inc.	0.65	7.71	4.73	9.74	10.42	
Aqua America, Inc.	0.65	7.71	4.73	9.74	10.42	
Artesian Resources Corp.	0.60	7.71	4.73	9.36	10.13	
California Water Service Group	0.70	7.71	4.73	10.13	10.71	
Connecticut Water Service, Inc.	0.80	7.71	4.73	10.90	11.28	
Middlesex Water Company	0.75	7.71	4.73	10.51	10.99	
SJW Corporation	0.90	7.71	4.73	11.67	11.86	
York Water Company	0.70	7.71	4.73	10.13	10.71	
Average				<u>10.30 %</u>	<u>10.83 %</u>	<u>10.57 %</u>
Median				<u>10.13 %</u>	<u>10.71 %</u>	<u>10.42 %</u>

See page 2 for notes.

United Water Idaho, Inc.
 Development of the Market-Required Rate of Return on Common Equity Using
 the Capital Asset Pricing Model for
 the Proxy Group of Nine AUS Utility Reports Water Companies
Adjusted to Reflect a Forecasted Risk-Free Rate and Market Return

Notes:

- (1) For reasons explained in Ms. Ahern's accompanying direct testimony, from the thirteen weeks ending July 8, 2011, Value Line Summary & Index, a forecasted 3-5 year total annual market return of 13.44% can be derived by averaging the thirteen weeks ended July 8, 2011 forecasted total 3-5 year total appreciation, converting it into an annual market appreciation and adding the Value Line average forecasted annual dividend yield.

The 3-5 year average total market appreciation of 55% produces a four-year average annual return of 11.51% $((1.55^{.25}) - 1)$. When the average annual forecasted dividend yield of 1.93% is added, a total average market return of 13.44% (1.93% + 11.51%) is derived.

The thirteen week forecasted total market return of 13.44% minus the forecasted risk-free rate of 4.73% (developed in Note 2) is 8.71% (13.44% - 4.73%). The Morningstar, Inc. (Ibbotson Associates) calculated market premium of 6.70% for the period 1926-2010 results from a total market return of 11.90% less the average income return on long-term U.S. Government Securities of 5.20% (11.90% - 5.20% = 6.70%). This is then averaged with the 8.71% Value Line market premium resulting in a 7.71% market premium. The 7.71% market premium is then multiplied by the beta in column 1 of page 1 of this Schedule.

- (2) The average forecast based upon six quarterly estimates of 30-year Treasury Note yields per the consensus of nearly 50 economists reported in the Blue Chip Financial Forecasts dated July 1, 2011 (see page 7 of Schedule 8). The estimates are detailed below:

	<u>30-Year Treasury Note Yield</u>
Third Quarter 2011	4.30
Fourth Quarter 2011	4.50
First Quarter 2012	4.60
Second Quarter 2012	4.80
Third Quarter 2012	5.00
Fourth Quarter 2012	<u>5.20</u>
Average	<u>4.73%</u>

- (3) The traditional Capital Asset Pricing Model (CAPM) is applied using the following formula:

$$R_S = R_F + \beta (R_M - R_F)$$

Where R_S = Return rate of common stock
 R_F = Risk Free Rate
 β = Value Line Adjusted Beta
 R_M = Return on the market as a whole

- (4) The empirical CAPM is applied using the following formula:

$$R_S = R_F + .25 (R_M - R_F) + .75 \beta (R_M - R_F)$$

Where R_S = Return rate of common stock
 R_F = Risk-Free Rate
 β = Value Line Adjusted Beta
 R_M = Return on the market as a whole

Source of Information: Value Line Summary & Index
Blue Chip Financial Forecasts, July 1, 2011
Value Line Investment Survey, April 22, 2011
 Standard Edition and Small and Mid-Cap Edition
Ibbotson® S&P® 2011 Valuation Yearbook – Market Results for
 Stocks, Bonds, Bills, and Inflation – 1926 – 2010, Morningstar, Inc., 2011 Chicago, IL

United Water Idaho, Inc.
Summary of Cost of Equity Models Applied to the
Proxy Group of Non-Utility Companies
Comparable in Total Risk to the
Proxy Group of Nine Water Companies

<u>Principal Methods</u>	<u>Proxy Group of Thirty-Nine Non- Utility Companies</u>
Projected Return on Book Common Equity (1)	15.50 %
Average of Market-Based Models (2)	<u>11.39 %</u>
Average	<u><u>13.45 %</u></u>

Notes:

- (1) From Schedule 12.
- (2) Average of the results of the DCF (12.05%), RPM (11.38%), and CAPM / ECAPM (10.75%) analyses as shown on pages 1, 2, and 5 of Schedule 13 respectively.

United Water Idaho, Inc.
Basis of Selection of Comparable Risk
Domestic Non-Price Regulated Companies

<u>Proxy Group of Nine Water Companies</u>	<u>Value Line Adjusted Beta</u>	<u>Unadjusted Beta</u>	<u>Residual Standard Error of the Regression</u>
American States Water Co.	0.75	0.57	3.6376
American Water Works Co., Inc.	0.65	0.43	3.5017
Aqua America, Inc.	0.65	0.41	2.7699
Artesian Resources Corp.	0.60	0.34	2.4340
California Water Service Group	0.70	0.49	3.4453
Connecticut Water Service, Inc.	0.80	0.64	2.8611
Middlesex Water Company	0.75	0.56	2.6991
SJW Corporation	0.90	0.82	4.3423
York Water Company	0.70	0.48	3.2807
Average	<u>0.72</u>	<u>0.53</u>	<u>3.2191</u>
Beta Range (+/- 2 std. Devs. of Beta)	0.40	0.66	
2 std. Devs. of Beta	0.13		
Residual Std. Err. Range (+/- 2 std. Devs. of the Residual Std. Err.)	2.9363	3.5019	
Std. dev. of the Res. Std. Err.	0.1414		
2 std. devs. of the Res. Std. Err.	0.2828		

United Water Idaho, Inc.
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Nine Water Companies

<u>Proxy Group of Thirty-Nine Non-Utility Companies</u>	<u>VL Adjusted Beta</u>	<u>Unadjusted Beta</u>	<u>Residual Standard Error of the Regression</u>
Gallagher (Arthur J.)	0.70	0.54	3.0362
AutoZone Inc.	0.70	0.51	3.3427
Baxter Intl Inc.	0.65	0.45	2.9474
Bristol-Myers Squibb	0.75	0.57	3.0546
Brown & Brown	0.70	0.48	3.0383
Capitol Fed. Finl	0.65	0.44	3.2917
CenturyLink Inc.	0.75	0.55	2.9789
Quest Diagnostics	0.70	0.49	2.9409
Edwards Lifesciences	0.65	0.41	3.1041
Forest Labs.	0.80	0.64	3.3015
Gilead Sciences	0.65	0.46	3.5013
Gen-Probe	0.80	0.66	3.4121
Hasbro, Inc.	0.75	0.60	3.4389
Hudson City Bancorp	0.80	0.66	3.2150
Hospira Inc.	0.70	0.52	3.4108
IAC/InterActiveCorp	0.70	0.49	3.2562
Investors Bancorp	0.75	0.55	3.3951
J&J Snack Foods	0.70	0.48	3.4541
Lancaster Colony	0.75	0.57	3.3757
McKesson Corp.	0.75	0.58	3.3192
Marsh & McLennan	0.75	0.59	2.9986
MAXIMUS Inc.	0.80	0.63	3.4865
Owens & Minor	0.65	0.46	3.3308
Rollins, Inc.	0.80	0.66	3.0435
Sherwin-Williams	0.70	0.49	3.0351
Smucker (J.M.)	0.70	0.49	3.0242
Sara Lee Corp.	0.80	0.65	3.2561
Silgan Holdings	0.75	0.62	3.1746
Suburban Propane	0.75	0.59	2.9382
Stericycle Inc.	0.70	0.48	3.1808
Safeway Inc.	0.70	0.48	3.1874
Stryker Corp.	0.80	0.66	3.1280
TJX Companies	0.80	0.65	3.0165
Walgreen Co.	0.75	0.61	3.2419
WD-40 Co.	0.75	0.56	3.4782
Weis Markets	0.65	0.45	2.9598
Watson Pharmac.	0.75	0.57	3.0355
Berkley (W.R.)	0.70	0.50	3.0005
West Pharmac. Svcs.	0.80	0.62	3.4659
Average	<u>0.73</u>	<u>0.55</u>	<u>3.1999</u>
Proxy Group of Nine Water Companies	<u>0.72</u>	<u>0.53</u>	<u>3.2191</u>

United Water Idaho, Inc.
Basis of Selection of Groups of Domestic, Non-Price Regulated Companies
Comparable in Total Risk to the Proxy Group of Nine Water Companies

- (1) The proxy group of thirty-nine non-utility companies was selected based upon the proxy group of nine water companies unadjusted beta range of 0.40 – 0.66 and standard error of the regression range of 2.9363 – 3.5019. These ranges are based upon plus or minus two standard deviations of the unadjusted beta and standard error of the regression as detailed in Ms. Ahern's direct testimony. Plus or minus two standard deviations captures 95.50% of the distribution of unadjusted betas and standard errors of the regression.
- (2) The standard deviation of group of nine water companies' standard error of the regression is 0.1414. The standard deviation of the standard error of the regression is calculated as follows:

$$\text{Standard Deviation of the Std. Err. of the Regr.} = \frac{\text{Standard Error of the Regression}}{\sqrt{2N}}$$

where: N = number of observations. Since Value Line betas are derived from weekly price change observations over a period of five years, N = 259

$$\text{Thus, } 0.1414 = \frac{3.2191}{\sqrt{518}} = \frac{3.2191}{22.7596}$$

Source of Information: Value Line, Inc., June 15, 2011
Value Line Investment Survey (Standard Edition)

United Water Idaho, Inc.
Comparable Earnings Analysis
for the Proxy Group of Non-Utility Companies Comparable to the
Proxy Group of Nine Water Companies(1)

Proxy Group of Thirty-Nine Non-Utility Companies	VL Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta	Rate of Return on Book Common Equity, Net Worth, or Partner's Capital	
					5 Year Projection	Student's T Statistic
Gallagher (Arthur J.)	0.70	0.54	3.0362	0.0629	13.00 %	(0.5)
AutoZone Inc.	0.70	0.51	3.3427	0.0693	NMF	(1.3)
Baxter Intl Inc.	0.65	0.45	2.9474	0.0611	27.50	0.5
Bristol-Myers Squibb	0.75	0.57	3.0546	0.0633	20.00	0.0
Brown & Brown	0.70	0.48	3.0383	0.0630	12.00	(0.5)
Capitol Fed. Finl	0.65	0.44	3.2917	0.0682	3.50	(1.1)
CenturyLink Inc.	0.75	0.55	2.9789	0.0617	9.00	(0.7)
Quest Diagnostics	0.70	0.49	2.9409	0.0609	15.00	(0.3)
Edwards Lifesciences	0.65	0.41	3.1041	0.0643	18.50	(0.1)
Forest Labs.	0.80	0.64	3.3015	0.0684	13.50	(0.4)
Gilead Sciences	0.65	0.46	3.5013	0.0726	36.50	1.1
Gen-Probe	0.80	0.66	3.4121	0.0707	13.50	(0.4)
Hasbro, Inc.	0.75	0.60	3.4389	0.0713	28.00	0.5
Hudson City Bancorp	0.80	0.66	3.2150	0.0666	10.00	(0.7)
Hospira Inc.	0.70	0.52	3.4108	0.0707	24.50	0.3
IAC/interActiveCorp	0.70	0.49	3.2562	0.0754	4.50	(1.0)
Investors Bancorp	0.75	0.55	3.3951	0.0704	9.50	(0.7)
J&J Snack Foods	0.70	0.48	3.4541	0.0716	13.00	(0.5)
Lancaster Colony	0.75	0.57	3.3757	0.0700	17.50	(0.2)
McKesson Corp.	0.75	0.58	3.3192	0.0688	14.50	(0.4)
Marsh & McLennan	0.75	0.59	2.9986	0.0621	15.00	(0.3)
MAXIMUS Inc.	0.80	0.63	3.4865	0.0723	35.00	1.0
Owens & Minor	0.65	0.46	3.3308	0.0690	16.00	(0.3)
Rollins, Inc.	0.80	0.66	3.0435	0.0631	32.00	0.8
Sherwin-Williams	0.70	0.49	3.0351	0.0629	24.50	0.3
Smucker (J.M.)	0.70	0.49	3.0242	0.0627	11.50	(0.6)
Sara Lee Corp.	0.80	0.65	3.2561	0.0675	94.00 (3)	4.9
Silgan Holdings	0.75	0.62	3.1746	0.0658	17.00	(0.2)
Suburban Propane	0.75	0.59	2.9382	0.0609	25.00	0.3
Stericycle Inc.	0.70	0.48	3.1808	0.0659	15.50	(0.3)
Safeway Inc.	0.70	0.48	3.1874	0.0661	17.00	(0.2)
Stryker Corp.	0.80	0.66	3.1280	0.0648	19.50	(0.0)
TJX Companies	0.80	0.65	3.0165	0.0625	44.00	1.6
Walgreen Co.	0.75	0.61	3.2419	0.0672	20.50	0.0
WD-40 Co.	0.75	0.56	3.4782	0.0721	15.50	(0.3)
Weis Markets	0.65	0.45	2.9598	0.0613	9.00	(0.7)
Watson Pharmac.	0.75	0.57	3.0355	0.0629	13.50	(0.4)
Berkley (W.R.)	0.70	0.50	3.0005	0.0622	13.50	(0.4)
West Pharmac. Svcs.	0.80	0.62	3.4659	0.0718	14.50	(0.4)
Average	0.73	0.55	3.1999	0.0665		
Average for the Proxy Group of Nine Water Companies	0.72	0.53	3.2191 (1)	0.0674		
Median (4)					15.50%	
Conservative Median (5)					15.50%	

Notes:

- (1) See Page 4 of Schedule 11.
- (2) From Value Line Investment Survey, various issues for the years 2013 - 2015 / 2014 - 2016.
- (3) The student's T statistic associated with these returns exceeds 1.96 at the 95% level of confidence. Therefore, they have been excluded, as outliers, to arrive at proper projected returns as fully explained in Ms. Ahern's testimony.
- (4) Median five year projected rate of return on book common equity, shareholders' equity, net worth, or partners' capital including returns identified as outliers as outlined in note (3) above.
- (5) Median five year projected rate of return on book common equity, shareholders' equity, net worth, or partners' capital excluding returns identified as outliers as outlined in note (3) above.

United Water Idaho, Inc.
DCF Results for the Proxy Group of Non-Utility Companies Comparable in Total Risk to
the Proxy Group of Nine Water Companies

Proxy Group of Thirty-Nine Non-Utility Companies	Average Dividend Yield	Value Line Projected Five Year Growth in EPS	Reuters Mean Consensus Projected Five Year Growth Rate in EPS	Zack's Five Year Projected Growth Rate in EPS	Yahoo! Finance Projected Five Year Growth in EPS	Average Projected Five Year Growth Rate in EPS	Adjusted Dividend Yield	Indicated Common Equity Cost Rate
Gallagher (Arthur J. AutoZone Inc.	4.57 %	8.50 %	9.00 %	9.80 %	9.00 %	9.08 %	4.77 %	13.85 %
Baxter Intl Inc.	2.13	9.50	9.00	9.70	9.87	9.52	2.24	11.76
Bristol-Myers Squibb	4.67	7.50	1.90	0.70	(1.19)	3.37	4.75	8.12
Brown & Brown	1.25	7.00	11.00	13.30	11.60	10.73	1.32	12.05
Capitol Fed. Finl	2.60	12.00	N/A	N/A	N/A	12.00	2.75	14.75
Centurylink, Inc.	7.10	(1.00)	2.80	(0.30)	5.65	4.23	7.25	11.48
Quest Diagnostics	0.69	9.00	11.00	11.70	11.21	10.73	0.73	11.46
Edwards Lifesciences	-	15.00	27.00	33.90	26.31	25.55	-	N/A
Forest Labs.	-	NMF	3.40	(2.40)	(1.51)	3.40	-	N/A
Gilead Sciences	-	10.00	15.00	14.60	15.53	13.78	-	N/A
Gen-Probe	-	11.00	12.00	13.60	12.48	12.27	-	N/A
Hasbro, Inc.	2.64	10.00	13.00	N/A	13.55	12.18	2.80	14.98
Hudson City Bancorp	3.58	3.50	4.50	4.50	5.00	4.38	3.66	8.04
Hospira Inc.	-	11.50	11.00	12.20	10.78	11.37	-	N/A
IAC/InterActiveCorp	-	22.50	35.00	25.00	25.00	26.88	-	N/A
Investors Bancorp In	-	NMF	15.00	15.00	15.00	15.00	-	N/A
J&J Snack Foods	0.96	10.50	N/A	N/A	N/A	10.50	1.01	11.51
Lancaster Colony	2.18	9.00	N/A	N/A	10.00	9.50	2.28	11.78
McKesson Corp.	0.86	9.50	11.00	11.30	13.70	11.38	0.91	12.29
Marsh & McLennan	2.79	28.50	8.50	10.70	8.54	14.06	2.99	17.05
MAXIMUS Inc.	0.38	18.00	10.00	N/A	10.00	12.67	0.41	13.08
Owens & Minor	2.37	11.00	10.00	11.50	10.07	10.64	2.49	13.13
Rollins, Inc.	1.41	14.50	N/A	N/A	10.00	12.25	1.49	13.74
Sherwin-Williams	1.74	11.00	11.00	10.40	11.70	11.03	1.83	12.86
Smucker (J.M.)	2.31	10.50	6.90	8.00	7.08	8.12	2.41	10.53
Sara Lee Corp.	2.42	6.00	8.70	6.00	9.48	7.55	2.51	10.06
Silgan Holdings	1.02	11.50	8.00	5.00	8.06	8.14	1.06	9.20
Suburban Propane	6.41	1.00	4.00	3.00	4.00	3.00	6.51	9.51
Stericycle Inc.	-	14.50	17.00	16.50	16.00	16.00	-	N/A
Safeway Inc.	2.02	6.50	10.00	10.70	10.43	9.41	2.11	11.52
Stryker Corp.	1.20	13.00	11.00	11.20	10.89	11.52	1.27	12.79
TJX Companies	1.46	13.50	13.00	14.60	13.35	13.61	1.56	15.17
Walgreen Co.	1.62	12.00	13.00	13.40	14.17	13.14	1.73	14.87
WD-40 Co.	2.66	9.00	12.00	12.00	12.00	11.25	2.80	14.05
Weis Markets	2.90	6.50	N/A	N/A	N/A	6.50	2.99	9.49
Watson Pharmac.	-	11.50	11.00	12.80	12.53	11.96	-	N/A
Berkley (W.R.)	0.87	11.50	11.00	11.30	9.67	10.87	0.92	11.79
West Pharmac. Svcs.	1.51	8.50	20.00	N/A	15.00	14.50	1.62	16.12
Average								12.31 %
Median								12.05 %

NA= Not Available
NMF= Not Meaningful Figure

(1) Ms. Ahern's application of the DCF model to the domestic, non-price regulated comparable risk companies is identical to the application of the DCF to her proxy group of water companies. She uses the 60 day average price and the spot indicated dividend as of 4/07/30 for her dividend yield and then adjusts that yield for 1/2 the average projected growth rate in EPS, which is calculated by averaging the 5 year projected growth in EPS provided by Value Line, www.reuters.com, www.zacks.com, and www.yahoo.com (excluding any negative growth rates) and then adding that growth rate to the adjusted dividend yield.

Source of Information: Value Line Investment Survey:
www.reuters.com Downloaded on 07/06/2011
www.zacks.com Downloaded on 07/06/2011
www.yahoo.com Downloaded on 07/06/2011

United Water Idaho, Inc.
 Indicated Common Equity Cost Rate
 Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

<u>Line No.</u>		<u>Proxy Group of Thirty-Nine Non- Utility Companies</u>
1.	Prospective Yield on Baa Rated Corporate Bonds (1)	6.17 %
2.	Equity Risk Premium (2)	<u>5.21</u>
3.	Risk Premium Derived Common Equity Cost Rate	<u><u>11.38 %</u></u>

Notes: (1) Average forecast based upon six quarterly estimates of Baa rated corporate bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated July 1, 2011 (see page 7 of Schedule 8). The estimates are detailed below.

Third Quarter 2011	5.80 %
Fourth Quarter 2011	5.90
First Quarter 2012	6.10
Second Quarter 2012	6.20
Third Quarter 2012	6.40
Fourth Quarter 2012	<u>6.60</u>
Average	<u><u>6.17 %</u></u>

(2) From page 4 of this Schedule.

United Water Idaho, Inc.
Comparison of Bond Ratings for the
Proxy Group of Non-Utility Companies Comparable in Total Risk to the
Proxy Group of Nine Water Companies

Proxy Group of Thirty-Nine Non-Utility Companies	Moody's Bond Rating 7/6/2011		Standard & Poor's Bond Rating 7/6/2011	
	Bond Rating	Numerical Weighting (1)	Bond Rating	Numerical Weighting (1)
Gallagher (Arthur J.)	N/A	--	N/A	--
AutoZone Inc.	Baa2	9	BBB	9
Baxter Intl Inc.	A3	7	A+	5
Bristol-Myers Squibb	A2	6	A+	5
Brown & Brown	N/A	--	N/A	--
Capitol Fed. Finl	N/A	--	N/A	--
CenturyLink Inc.	Baa3	10	N/A	--
Quest Diagnostics	Baa2	9	BBB+	8
Edwards Lifesciences	N/A	--	N/A	--
Forest Labs.	N/A	--	N/A	--
Gilead Sciences	Baa1	8	N/A	--
Gen-Probe	N/A	--	N/A	8
Hasbro, Inc.	Baa2	9	BBB+	--
Hudson City Bancorp	N/A	--	N/A	--
Hospira Inc.	Baa3	10	BBB+	8
IAC/InterActiveCorp	Ba2	12	N/A	--
Investors Bancorp	N/A	--	N/A	--
J&J Snack Foods	N/A	--	N/A	--
Lancaster Colony	N/A	--	N/A	--
McKesson Corp.	Baa2	9	A-	7
Marsh & McLennan	Baa2	9	BBB-	10
MAXIMUS Inc.	N/A	--	N/A	--
Owens & Minor	Ba2	12	BBB-	10
Rollins, Inc.	N/A	--	N/A	--
Sherwin-Williams	A3	4	A	6
Smucker (J.M.)	N/A	--	N/A	--
Sara Lee Corp.	Baa1	8	BBB	9
Silgan Holdings	Ba3	13	N/A	--
Suburban Propane	Ba2	12	N/A	--
Stericycle Inc.	N/A	--	N/A	--
Safeway Inc.	A3	7	BBB	9
Stryker Corp.	A3	7	N/A	--
TJX Companies	A3	7	A	6
Walgreen Co.	A2	6	N/A	--
WD-40 Co.	N/A	--	N/A	--
Weis Markets	N/A	--	N/A	--
Watson Pharmac.	Baa3	10	N/A	--
Berkley (W.R.)	Baa2	9	BBB+	8
West Pharmac. Svcs.	N/A	--	N/A	--
Average	Baa2	8.8	BBB+	7.7

Notes:

(1) From page 3 of Schedule

Source of Information:
Standard & Poor's Bond Guide June 2011
www.moody's.com; downloaded 7/6/2011

United Water Idaho, Inc.
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
the Proxy Group of Non-Utility Companies
Comparable in Total Risk to the
Proxy Group of Nine Water Companies

<u>Line No.</u>		<u>Proxy Group of Thirty-Nine Non- Utility Companies</u>
1.	Arithmetic mean total return rate on the Standard & Poor's 500 Composite Index - 1926-2010 (1)	11.90 %
2.	Arithmetic mean yield on Aaa and Aa Corporate Bonds 1926-2010 (2)	<u>(6.10)</u>
3.	Historical Equity Risk Premium	<u>5.80 %</u>
4.	Forecasted 3-5 year Total Annual Market Return (3)	13.44 %
5.	Prospective Yield an Aaa Rated Corporate Bonds (4)	<u>(5.35)</u>
6.	Forecasted Equity Risk Premium	<u>8.09 %</u>
7.	Conclusion of Equity Risk Premium (5)	6.95 %
8.	Adjusted Value Line Beta (6)	<u>0.75</u>
9.	Beta Adjusted Equity Risk Premium	<u>5.21 %</u>

- Notes: (1) Ibbotson Associates 2011 Valuation Yearbook - Market Results for 1926-2010, Morningstar, Inc., 2011 Chicago, IL.
(2) From Moody's Industrial Manual and Mergent Bond Record Monthly Update.
(3) From page 2 of Schedule 10.
(4) Average forecast based upon six quarterly estimates of Aaa rated corporate bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated July 1, 2011 (see page 7 of Schedule 8). The estimates are detailed below.

Third Quarter 2011	5.00 %
Fourth Quarter 2011	5.10
First Quarter 2012	5.30
Second Quarter 2012	5.40
Third Quarter 2012	5.60
Fourth Quarter 2012	<u>5.70</u>
Average	<u>5.35 %</u>

- (5) The average of the historical equity risk premium of 5.80% from Line No. 3 and the forecasted equity risk premium of 8.09% from Line No. 6 $((5.80\% + 8.09\%) / 2 = 6.95\%$.
(6) Median beta from page 5 of this Schedule.

United Water Idaho, Inc.

Traditional CAPM and ECAPM Results for the Proxy Group of Non-Utility Companies Comparable in Total Risk to the
Proxy Group of Nine Water Companies

<u>Proxy Group of Thirty-Nine Non-Utility Companies</u>	<u>Value Line Adjusted Beta</u>	<u>Market Risk Premium (1)</u>	<u>Risk-Free Rate (2)</u>	<u>Traditional CAPM Cost Rate (3)</u>	<u>ECAPM Cost Rate (4)</u>	<u>Indicated Common Equity Cost Rate (5)</u>
Gallagher (Arthur J.)	0.70	7.71	4.73	10.13	10.71	
AutoZone Inc.	0.70	7.71	4.73	10.13	10.71	
Baxter Intl Inc.	0.65	7.71	4.73	9.74	10.42	
Bristol-Myers Squibb	0.75	7.71	4.73	10.51	10.99	
Brown & Brown	0.70	7.71	4.73	10.13	10.71	
Capitol Fed. Finl	0.65	7.71	4.73	9.74	10.42	
CenturyLink Inc.	0.75	7.71	4.73	10.51	10.99	
Quest Diagnostics	0.70	7.71	4.73	10.13	10.71	
Edwards Lifesciences	0.65	7.71	4.73	9.74	10.42	
Forest Labs.	0.80	7.71	4.73	10.90	11.28	
Gilead Sciences	0.65	7.71	4.73	9.74	10.42	
Gen-Probe	0.80	7.71	4.73	10.90	11.28	
Hasbro, Inc.	0.75	7.71	4.73	10.51	10.99	
Hudson City Bancorp	0.80	7.71	4.73	10.90	11.28	
Hospira Inc.	0.70	7.71	4.73	10.13	10.71	
IAC/InterActiveCorp	0.70	7.71	4.73	10.13	10.71	
Investors Bancorp	0.75	7.71	4.73	10.51	10.99	
J&J Snack Foods	0.70	7.71	4.73	10.13	10.71	
Lancaster Colony	0.75	7.71	4.73	10.51	10.99	
McKesson Corp.	0.75	7.71	4.73	10.51	10.99	
Marsh & McLennan	0.75	7.71	4.73	10.51	10.99	
MAXIMUS Inc.	0.80	7.71	4.73	10.90	11.28	
Owens & Minor	0.65	7.71	4.73	9.74	10.42	
Rollins, Inc.	0.80	7.71	4.73	10.90	11.28	
Sherwin-Williams	0.70	7.71	4.73	10.13	10.71	
Smucker (J.M.)	0.70	7.71	4.73	10.13	10.71	
Sara Lee Corp.	0.80	7.71	4.73	10.90	11.28	
Silgan Holdings	0.75	7.71	4.73	10.51	10.99	
Suburban Propane	0.75	7.71	4.73	10.51	10.99	
Stericycle Inc.	0.70	7.71	4.73	10.13	10.71	
Safeway Inc.	0.70	7.71	4.73	10.13	10.71	
Stryker Corp.	0.80	7.71	4.73	10.90	11.28	
TJX Companies	0.80	7.71	4.73	10.90	11.28	
Walgreen Co.	0.75	7.71	4.73	10.51	10.99	
WD-40 Co.	0.75	7.71	4.73	10.51	10.99	
Weis Markets	0.65	7.71	4.73	9.74	10.42	
Watson Pharmac.	0.75	7.71	4.73	10.51	10.99	
Berkley (W.R.)	0.70	7.71	4.73	10.13	10.71	
West Pharmac. Svcs.	0.80	7.71	4.73	10.90	11.28	
Average				<u>10.36 %</u>	<u>10.88 %</u>	<u>10.62 %</u>
Median				<u>10.51 %</u>	<u>10.99 %</u>	<u>10.75 %</u>

Notes:

- (1) From Schedule 10, page 2, note 1.
- (2) From Schedule 10, page 2, note 2.
- (3) Derived from the model shown on Schedule 10, page 2, note 3.
- (4) Derived from the model shown on Schedule 10, page 2, note 4.
- (5) Average of CAPM and ECAPM cost rates.

United Water Idaho, Inc.
 Derivation of Investment Risk Adjustment Based upon
 Ibbotson Associates' Size Premia for the Decile Portfolios of the NYSE/AMEX/NASDAQ

Line No.	1	2	3	4
Market Capitalization on July 6, 2011 (1) (millions)	(times larger)	Applicable Decile of the NYSE/AMEX/NASDAQ (2)	Applicable Size Premium (3)	Spread from Applicable Size Premium for (4)
1. <u>United Water Idaho, Inc.</u>				
a. <u>Based Upon the Proxy Group of Nine Water Companies</u>	\$ 142.597	10	6.36%	
2. <u>Proxy Group of Nine Water Companies</u>	\$ 1,194.619	6-7	1.85%	4.51%

(A)	(B)	(C)	(D)	(E)
Decile	Number of Companies (millions)	Recent Total Market Capitalization (millions)	Recent Average Market Capitalization (millions)	Size Premium (Return in Excess of CAPM) (2)
Largest	1 168	\$ 8,586,385,656	\$ 51,109,438	-0.38%
	2 181	1,873,378,709	\$ 10,350,159	0.81%
	3 187	1,022,604,243	\$ 5,468,472	1.01%
	4 185	594,702,185	\$ 3,214,606	1.20%
	5 213	482,327,242	\$ 2,264,447	1.81%
	6 230	360,140,550	\$ 1,565,828	1.82%
	7 287	304,948,414	\$ 1,062,538	1.88%
	8 361	239,018,595	\$ 662,101	2.65%
	9 491	181,744,805	\$ 370,152	2.94%
Smallest	10 1320	136,119,075	\$ 103,121	6.36%

*From Ibbotson 2011 Yearbook

Notes:

- (1) From Page 2 of this Schedule.
- (2) Gleaned from Column (D) on the bottom of this page. The appropriate decile (Column (A)) corresponds to the market capitalization of the proxy group, which is found in Column 1.
- (3) Corresponding risk premium to the decile is provided on Column (E) on the bottom of this page.
- (4) Line No. 1a Column 3 - Line No. 2 Column 3 and Line No. 1b, Column 3 - Line No. 3 of Column 3 etc.. For example, the 4.51% in Column 4, Line No. 2 is derived as follows 4.51% = 6.36% - 1.85%.

United Water Idaho, Inc.
Market Capitalization of United Water Idaho, Inc. and
the Proxy Group of Nine Water Companies

	1	2	3	4	5	6
Company	Common Stock Shares Outstanding at Fiscal Year End 2010 (millions)	Book Value per Share at Fiscal Year End 2010 (1)	Total Common Equity at Fiscal Year End 2010 (millions)	Closing Stock Market Price on July 06, 2011	Market-to-Book Ratio on July 06, 2011 (2)	Market Capitalization on July 06, 2011 (3) (millions)
United Water Idaho, Inc.	NA	NA	\$ 81,113 (4)	NA	175.8 % (5)	\$ 142,597 (6)
Based Upon the Proxy Group of Nine Water Companies						
Proxy Group of Nine Water Companies						
American States Water Co.	18,631	\$ 20,264	\$ 377,541	\$ 35,130	173.4 %	\$ 654,502
American Water Works Co., Inc.	174,996	\$ 23,614	\$ 4,132,272	\$ 30,010	127.1	\$ 5,251,630
Aqua America, Inc.	138,449	\$ 8,481	\$ 1,174,254	\$ 22,570	266.1	\$ 3,124,795
Artesian Resources Corp.	7,517	\$ 12,657	\$ 95,146	\$ 18,290	144.5	\$ 137,488
California Water Service Group	20,833	\$ 20,906	\$ 435,526	\$ 18,750	89.7	\$ 390,619
Connecticut Water Service, Inc.	8,677	\$ 13,134	\$ 113,963	\$ 25,820	196.6	\$ 224,036
Middlesex Water Company	15,566	\$ 11,132	\$ 173,279	\$ 19,000	170.7	\$ 295,754
SJW Corporation	18,552	\$ 13,747	\$ 255,032	\$ 24,770	180.2	\$ 459,522
York Water Company	12,692	\$ 7,190	\$ 91,257	\$ 16,800	233.7	\$ 213,227
Average	46,212	\$ 14,569	\$ 760,919	\$ 23,460	175.8 %	\$ 1,194,619

NA= Not Available

- Notes: (1) Column 3 / Column 1.
(2) Column 4 / Column 2.
(3) Column 5 * Column 3.
(4) Allocation of total capitalization of United Water Idaho at 12/31/2010 of \$154.472 million by the requested common equity ratio of 52.51% (\$154.472 M x 52.51% = \$81.113 M).
(5) The market-to-book ratio of United Water Idaho, Inc. on July 06, 2011 is assumed to be equal to the market-to-book ratio of the Proxy Group of Nine Water Companies at July 06, 2011.
(6) United Water Idaho, Inc.'s common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at July 06, 2011 of the Proxy Group of Nine Water Companies, 175.8%, and United Water Idaho, Inc.'s market capitalization on July 06, 2011 would therefore have been \$142,597 million.

Source of Information: 2010 Annual Forms 10K
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