Summary

Dylan is an experienced consultant and a Certified Rate of Return Analyst (CRRA) and Certified Valuation Analyst (CVA). He has served as a consultant for investor-owned and municipal utilities and authorities for 12 years. Dylan has extensive experience in rate of return analyses, class cost of service, rate design, and valuation for regulated public utilities. He has testified as an expert witness in the subjects of rate of return, cost of service, rate design, and valuation before 23 regulatory commissions in the U.S., one Canadian province, and an American Arbitration Association panel.

He also maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured.

Areas of Specialization

- Regulation and Rates
- Utilities
- Mutual Fund Benchmarking
- Capital Market Risk
- Financial Modeling
- Valuation
- Regulatory Strategy
- Rate Case Support
- Rate of Return
- Cost of Service
- Rate Design

Recent Expert Testimony Submission/Appearances

Jurisdiction	***Topic***
Massachusetts Department of Public Utilities	Rate of Return
New Jersey Board of Public Utilities	Rate of Return
Hawaii Public Utilities Commission	Cost of Service, Rate Design
South Carolina Public Service Commission	Return on Common Equity
American Arbitration Association	Valuation

Recent Assignments

- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies
- Maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured
- Sponsored valuation testimony for a large municipal water company in front of an American Arbitration Association Board to justify the reasonability of their lease payments to the City
- Co-authored a valuation report on behalf of a large investor-owned utility company in response to a new state regulation which allowed the appraised value of acquired assets into rate base

Recent Publications and Speeches

- Co-Author of: "Decoupling, Risk Impacts and the Cost of Capital", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. The Electricity Journal, March, 2020.
- Co-Author of: "Decoupling Impact and Public Utility Conservation Investment", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. Energy Policy Journal, 130 (2019), 311-319.
- "Establishing Alternative Proxy Groups", before the Society of Utility and Regulatory Financial Analysts: 51st Financial Forum, April 4, 2019, New Orleans, LA.
- "Past is Prologue: Future Test Year", Presentation before the National Association of Water Companies 2017 Southeast Water Infrastructure Summit, May 2, 2017, Savannah, GA.
- Co-author of: "Comparative Evaluation of the Predictive Risk Premium Model™, the Discounted Cash Flow Model and the Capital Asset Pricing Model", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University, Pauline M. Ahern, and Frank J. Hanley, The Electricity Journal, May, 2013.
- "Decoupling: Impact on the Risk and Cost of Common Equity of Public Utility Stocks", before the Society of Utility and Regulatory Financial Analysts: 45th Financial Forum, April 17-18, 2013, Indianapolis, IN.

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Regulatory Commission of Alaska				
Alaska Power Company	09/20	Alaska Power Company; Goat Lake Hydro, Inc.; BBL Hydro, Inc.	Tariff Nos. TA886-2; TA6-521; TA4-573	Capital Structure
Alaska Power Company	07/16	Alaska Power Company	Docket No. TA857-2	Rate of Return
Alberta Utilities Commission				
AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	01/20	AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	2021 Generic Cost of Capital, Proceeding ID. 24110	Rate of Return
Arizona Corporation Commission				
EPCOR Water Arizona, Inc.	06/20	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-20-0177	Rate of Return
Arizona Water Company	12/19	Arizona Water Company – Western Group	Docket No. W-01445A-19-0278	Rate of Return
Arizona Water Company	08/18	Arizona Water Company – Northern Group	Docket No. W-01445A-18-0164	Rate of Return
Colorado Public Utilities Commission				
Summit Utilities, Inc.	04/18	Colorado Natural Gas Company	Docket No. 18AL-0305G	Rate of Return
Atmos Energy Corporation	06/17	Atmos Energy Corporation	Docket No. 17AL-0429G	Rate of Return
Delaware Public Service Commission				
Delmarva Power & Light Co.	10/20	Delmarva Power & Light Co.	Docket No. 20-0150	Rate of Return
Tidewater Utilities, Inc.	11/13	Tidewater Utilities, Inc.	Docket No. 13-466	Capital Structure
Public Service Commission of the District of Columbia				
Washington Gas Light Company	09/20	Washington Gas Light Company	Formal Case No. 1162	Rate of Return
Federal Energy Regulatory Commission				
LS Power Grid California, LLC	10/20	LS Power Grid California, LLC	Docket No. ER21-195-000	Rate of Return
Florida Public Service Commission				
Peoples Gas System	09/20	Peoples Gas System	Docket No. 20200051-GU	Rate of Return
Utilities, Inc. of Florida	06/20	Utilities, Inc. of Florida	Docket No. 20200139-WS	Rate of Return
Hawaii Public Utilities Commission				
Lanai Water Company, Inc.	12/19	Lanai Water Company, Inc.	Docket No. 2019-0386	Cost of Service / Rate Design
Manele Water Resources, LLC	08/19	Manele Water Resources, LLC	Docket No. 2019-0311	Cost of Service / Rate Design
Kaupulehu Water Company	02/18	Kaupulehu Water Company	Docket No. 2016-0363	Rate of Return
Aqua Engineers, LLC	05/17	Puhi Sewer & Water Company	Docket No. 2017-0118	Cost of Service / Rate Design
Hawaii Resources, Inc.	09/16	Laie Water Company	Docket No. 2016-0229	Cost of Service / Rate Design
Illinois Commerce Commission				
Ameren Illinois Company d/b/a Ameren Illinois	07/20	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 20-0308	Return on Equity
Utility Services of Illinois, Inc.	11/17	Utility Services of Illinois, Inc.	Docket No. 17-1106	Cost of Service / Rate Design
Aqua Illinois, Inc.	04/17	Aqua Illinois, Inc.	Docket No. 17-0259	Rate of Return

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Utility Services of Illinois, Inc.	04/15	Utility Services of Illinois, Inc.	Docket No. 14-0741	Rate of Return
Indiana Utility Regulatory Commission				
Aqua Indiana, Inc.	03/16	Aqua Indiana, Inc. Aboite Wastewater Division	Docket No. 44752	Rate of Return
Twin Lakes, Utilities, Inc.	08/13	Twin Lakes, Utilities, Inc.	Docket No. 44388	Rate of Return
Kansas Corporation Commission				
Atmos Energy	07/19	Atmos Energy	19-ATMG-525-RTS	Rate of Return
Louisiana Public Service Commission				
Atmos Energy	04/20	Atmos Energy	Docket No. U-35535	Rate of Return
Louisiana Water Service, Inc.	06/13	Louisiana Water Service, Inc.	Docket No. U-32848	Rate of Return
Maryland Public Service Commission				
Washington Gas Light Company	08/20	Washington Gas Light Company	Case No. 9651	Rate of Return
FirstEnergy, Inc.	08/18	Potomac Edison Company	Case No. 9490	Rate of Return
Massachusetts Department of Public Utilities				
Unitil Corporation	12/19	Fitchburg Gas & Electric Co. (Elec.)	D.P.U. 19-130	Rate of Return
Unitil Corporation	12/19	Fitchburg Gas & Electric Co. (Gas)	D.P.U. 19-131	Rate of Return
Liberty Utilities	07/15	Liberty Utilities d/b/a New England Natural Gas Company	Docket No. 15-75	Rate of Return
Mississippi Public Service Commission				
Atmos Energy	03/19	Atmos Energy	Docket No. 2015-UN-049	Capital Structure
Atmos Energy	07/18	Atmos Energy	Docket No. 2015-UN-049	Capital Structure
Missouri Public Service Commission				
Indian Hills Utility Operating Company, Inc.	10/17	Indian Hills Utility Operating Company, Inc.	Case No. SR-2017-0259	Rate of Return
Raccoon Creek Utility Operating Company, Inc.	09/16	Raccoon Creek Utility Operating Company, Inc.	Docket No. SR-2016-0202	Rate of Return
Public Utilities Commission of Nevada				
Southwest Gas Corporation	08/20	Southwest Gas Corporation	Docket No. 20-02023	Return on Equity
New Jersey Board of Public Utilities				
FirstEnergy	02/20	Jersey Central Power & Light Co.	Docket No. ER20020146	Rate of Return
Aqua New Jersey, Inc.	12/18	Aqua New Jersey, Inc.	Docket No. WR18121351	Rate of Return
Middlesex Water Company	10/17	Middlesex Water Company	Docket No. WR17101049	Rate of Return
Middlesex Water Company	03/15	Middlesex Water Company	Docket No. WR15030391	Rate of Return
The Atlantic City Sewerage Company	10/14	The Atlantic City Sewerage Company	Docket No. WR14101263	Cost of Service / Rate Design
Middlesex Water Company	11/13	Middlesex Water Company	Docket No. WR1311059	Capital Structure
North Carolina Utilities Commission				
Duke Energy Carolinas, LLC	07/20	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 1214	Return on Equity
Duke Energy Progress, LLC	07/20	Duke Energy Progress, LLC	Docket No. E-2, Sub 1219	Return on Equity
Aqua North Carolina, Inc.	12/19	Aqua North Carolina, Inc.	Docket No. W-218 Sub 526	Rate of Return
Carolina Water Service, Inc.	06/19	Carolina Water Service, Inc.	Docket No. W-354 Sub 364	Rate of Return
Carolina Water Service, Inc.	09/18	Carolina Water Service, Inc.	Docket No. W-354 Sub 360	Rate of Return

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Aqua North Carolina, Inc.	07/18	Aqua North Carolina, Inc.	Docket No. W-218 Sub 497	Rate of Return
Public Utilities Commission of Ohio				
Aqua Ohio, Inc.	05/16	Aqua Ohio, Inc.	Docket No. 16-0907-WW-AIR	Rate of Return
Pennsylvania Public Utility Commission				
Valley Energy, Inc.	07/19	C&T Enterprises	Docket No. R-2019-3008209	Rate of Return
Wellsboro Electric Company	07/19	C&T Enterprises	Docket No. R-2019-3008208	Rate of Return
Citizens' Electric Company of Lewisburg	07/19	C&T Enterprises	Docket No. R-2019-3008212	Rate of Return
Steelton Borough Authority	01/19	Steelton Borough Authority	Docket No. A-2019-3006880	Valuation
Mahoning Township, PA	08/18	Mahoning Township, PA	Docket No. A-2018-3003519	Valuation
SUEZ Water Pennsylvania Inc.	04/18	SUEZ Water Pennsylvania Inc.	Docket No. R-2018-000834	Rate of Return
Columbia Water Company	09/17	Columbia Water Company	Docket No. R-2017-2598203	Rate of Return
Veolia Energy Philadelphia, Inc.	06/17	Veolia Energy Philadelphia, Inc.	Docket No. R-2017-2593142	Rate of Return
Emporium Water Company	07/14	Emporium Water Company	Docket No. R-2014-2402324	Rate of Return
Columbia Water Company	07/13	Columbia Water Company	Docket No. R-2013-2360798	Rate of Return
Penn Estates Utilities, Inc.	12/11	Penn Estates, Utilities, Inc.	Docket No. R-2011-2255159	Capital Structure / Long-Term Debt Cost Rate
South Carolina Public Service Commission				
Blue Granite Water Co.	12/19	Blue Granite Water Company	Docket No. 2019-292-WS	Rate of Return
Carolina Water Service, Inc.	02/18	Carolina Water Service, Inc.	Docket No. 2017-292-WS	Rate of Return
Carolina Water Service, Inc.	06/15	Carolina Water Service, Inc.	Docket No. 2015-199-WS	Rate of Return
Carolina Water Service, Inc.	11/13	Carolina Water Service, Inc.	Docket No. 2013-275-WS	Rate of Return
United Utility Companies, Inc.	09/13	United Utility Companies, Inc.	Docket No. 2013-199-WS	Rate of Return
Utility Services of South Carolina, Inc.	09/13	Utility Services of South Carolina, Inc.	Docket No. 2013-201-WS	Rate of Return
Tega Cay Water Services, Inc.	11/12	Tega Cay Water Services, Inc.	Docket No. 2012-177-WS	Capital Structure
Tennessee Public Utility Commission				
Piedmont Natural Gas Company	07/20	Piedmont Natural Gas Company	Docket No. 20-00086	Return on Equity
Public Utility Commission of Texas				
Southwestern Electric Power Company	10/20	Southwestern Electric Power Company	Docket No. 51415	Rate of Return
Virginia State Corporation Commission				
Aqua Virginia, Inc.	07/20	Aqua Virginia, Inc.	PUR-2020-00106	Rate of Return
WGL Holdings, Inc.	07/18	Washington Gas Light Company	PUR-2018-00080	Rate of Return
Atmos Energy Corporation	05/18	Atmos Energy Corporation	PUR-2018-00014	Rate of Return
Aqua Virginia, Inc.	07/17	Aqua Virginia, Inc.	PUR-2017-00082	Rate of Return
Massanutten Public Service Corp.	08/14	Massanutten Public Service Corp.	PUE-2014-00035	Rate of Return / Rate Design

Aquarion Water Company of New Hampshire, Inc.
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Dylan W. D'Ascendis, CRRA, CVA

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Financial Profile of the Utility Proxy Group	DWD-2
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model	DWD-3
Indicated Common Equity Cost Rate Using the Risk Premium Model	DWD-4
Indicated Common Equity Cost Rate Using the Capital Asset Pricing Model	DWD-5
Basis of Selection for the Non-Price Regulated Companies Comparable in Total Risk to the Utility Proxy Group	DWD-6
Cost of Common Equity Models Applied to the Non-Price Regulated Proxy Group	DWD-7
Estimated Risk Adjustment and Market Capitalization for AWNH and the Utility Proxy Group	DWD-8
Rate Mechanisms In Place at Proxy Group Operating Subsidiaries	DWD-9
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Aquarion Water Company of New Hampshire, Inc.
Recommended Capital Structure and Cost Rates
for Ratemaking Purposes
at December 31, 2019

Type Of Capital	Ratios (1)	Cost Rate		Weighted Cost Rate
Long-Term Debt	43.85%	6.14%	(1)	2.69%
Short-Term Debt	3.78%	2.42%	(1)	0.09%
Preferred Equity	0.01%	6.00%	(1)	0.00%
Common Equity	52.36%	10.25%	(2)	5.37%
Total	100.00%			8.15%

Notes:

(1) Company-provided.
(2) From page 2 of this Attachment.

Aquarion Water Company of New Hampshire, Inc.
Brief Summary of Common Equity Cost Rate

Line No.	Principal Methods	Proxy Group of Seven Water Companies
1.	Discounted Cash Flow Model (DCF) (1)	9.09%
2.	Risk Premium Model (RPM) (2)	10.56%
3.	Capital Asset Pricing Model (CAPM) (3)	10.87%
4.	Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4)	10.76%
5.	Indicated Range of Common Equity Cost Rates before Adjustment for Unique Risk	9.09% - 10.87%
6.	Business Risk Adjustment (5)	1.00%
7.	Flotation Cost Adjustment (6)	0.04%
8.	Indicated Range of Common Equity Cost Rates after Adjustment	10.13% - 11.91%
9.	Recommended Common Equity Cost Rate	10.25%

Notes:
(1) From Attachment DWD-3.
(2) From page 1 of Attachment DWD-4.
(3) From page 1 of Attachment DWD-5.
(4) From page 1 of Attachment DWD-7.
(5) Business risk adjustment to reflect AWNH's unique risk compared to the Utility Proxy Group as detailed in the accompanying direct testimony.
(6) From Attachment DWD-10.

Proxy Group of Seven Water Companies
CAPITALIZATION AND FINANCIAL STATISTICS (1)
2015 - 2019, Inclusive

	2019	2018	2017	2016	2015	5 YEAR AVERAGE
			(MILLIONS OF DOLLARS)			
Capitalization Statistics						
Amount of Capital Employed						
Total Permanent Capital	$3,888.223	$3,208.636	$2,837.657	$2,680.018	$2,535.795	
Short-Term Debt	$189.862	$184.221	$185.250	$152.691	$106.277	
Total Capital Employed	$4,078.085	$3,392.857	$3,022.907	$2,832.709	$2,642.072	
Indicated Average Capital Cost Rates (2)						
Total Debt	4.30 %	4.75 %	4.83 %	4.94 %	5.08 %	
Preferred Stock	5.84 %	5.92 %	5.91 %	5.91 %	5.91 %	
Capital Structure Ratios						
Based on Total Permanent Capital:						
Long-Term Debt	47.17 %	45.15 %	45.58 %	46.14 %	46.49 %	46.11 %
Preferred Stock	0.06	0.09	0.10	0.11	0.11	0.09
Common Eqity	52.77	54.76	54.32	53.75	53.40	53.80
Total	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Based on Total Capital:						
Total Debt, Including Short-Term Debt	50.61 %	48.37 %	48.93 %	48.42 %	47.77 %	48.82 %
Preferred Stock	0.06	0.08	0.09	0.10	0.11	0.09
Common Equity	49.34	51.54	50.98	51.47	52.12	51.09
Total	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Financial Statistics						
Financial Ratios - Market Based						
Earnings / Price Ratio	2.67 %	6.31 %	7.91 %	3.97 %	4.59 %	5.09 %
Market / Average Book Ratio	340.26	289.89	288.75	280.21	229.70	285.76
Dividend Yield	1.77	3.74	3.69	2.15	2.62	2.79
Dividend Payout Ratio	72.32	60.08	55.80	56.03	57.45	60.34
Rate of Return on Average Book Common Equity	9.49 %	10.12 %	11.31 %	10.93 %	10.39 %	10.45 %
Total Debt / EBITDA (3)	5.54 x	4.22 x	3.42 x	3.41 x	3.42 x	4.00 x
Funds from Operations / Total Debt (4)	14.49 %	21.37 %	22.87 %	23.65 %	25.81 %	21.64 %
Total Debt / Total Capital	50.61 %	48.37 %	48.93 %	48.42 %	47.77 %	48.82 %

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 relative to 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: Company Annual Forms 10-K

Capital Structure Based upon Total Permanent Capital for the
Proxy Group of Seven Water Companies
2015 - 2019, Inclusive

	2019	2018	2017	2016	2015	5 YEAR AVERAGE
American States Water Company						
Long-Term Debt	25.86 %	32.96 %	35.30 %	35.48 %	39.75 %	33.87 %
Short-Term Debt	18.84	9.79	6.48	9.94	3.41	9.69
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	55.30	57.25	58.22	54.58	56.84	56.44
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
American Water Works Company, Inc.						
Long-Term Debt	55.63 %	52.78 %	51.96 %	50.99 %	50.98 %	52.47 %
Short-Term Debt	5.05	6.66	6.90	6.85	5.41	6.17
Preferred Stock	0.03	0.05	0.06	0.08	0.10	0.06
Common Equity	39.29	40.51	41.08	42.08	43.51	41.30
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
California Water Service Group						
Long-Term Debt	45.85 %	50.61 %	35.44 %	42.44 %	43.44 %	43.56 %
Short-Term Debt	9.93	4.04	18.34	7.39	2.81	8.50
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	44.22	45.35	46.22	50.17	53.75	47.94
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Essential Utilities, Inc.						
Long-Term Debt	44.06 %	55.87 %	52.21 %	50.72 %	50.52 %	50.67 %
Short-Term Debt	0.37	0.34	0.09	0.17	0.47	0.29
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	55.57	43.79	47.70	49.11	49.01	49.04
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Middlesex Water Company						
Long-Term Debt	40.76 %	34.83 %	35.98 %	37.66 %	40.10 %	37.87 %
Short-Term Debt	3.42	10.55	6.90	3.21	0.85	4.99
Preferred Stock	0.36	0.53	0.60	0.65	0.68	0.56
Common Equity	55.46	54.09	56.52	58.48	58.37	56.58
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
SJW Group						
Long-Term Debt	56.45 %	30.37 %	46.89 %	49.86 %	47.88 %	46.29 %
Short-Term Debt	5.07	7.04	2.72	1.63	4.31	4.15
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	38.48	62.59	50.39	48.51	47.81	49.56
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
York Water Company						
Long-Term Debt	42.95 %	42.33 %	42.81 %	42.60 %	44.46 %	43.03 %
Short-Term Debt	0.00	0.45	0.48	0.00	0.00	0.19
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	57.05	57.22	56.71	57.40	55.54	56.78
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Proxy Group of Seven Water Companies						
Long-Term Debt	44.51 %	42.82 %	42.94 %	44.25 %	45.30 %	43.97 %
Short-Term Debt	6.10	5.55	5.99	4.17	2.47	4.85
Preferred Stock	0.05	0.08	0.09	0.10	0.11	0.09
Common Equity	49.34	51.55	50.98	51.48	52.12	51.09
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %

Source of Information
Annual Forms 10-K

Aquarion Water Company of New Hampshire, Inc.
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for the
Proxy Group of Seven Water Companies

Proxy Group of Seven Water Companies	[1] Average Dividend Yield (1)	[2] Value Line Projected Five Year Growth in EPS (2)	[3] Zack's Five Year Projected Growth Rate in EPS	[4] Yahoo! Finance Projected Five Year Growth in EPS	[5] Bloomberg Projected Five Year Growth in EPS	[6] Average Projected Five Year Growth in EPS (3)	[7] Adjusted Dividend Yield (4)	[8] Indicated Common Equity Cost Rate (5)
American States Water Company	1.75 %	6.50 %	4.90 %	5.30 %	6.00 %	5.68 %	1.80 %	7.48 %
American Water Works Company, Inc.	1.51	8.50	8.10	8.30	8.00	8.23	1.57	9.80
California Water Service Group	1.86	6.50	NA	11.50	9.00	9.00	1.94	10.94
Essential Utilities, Inc.	2.36	7.00	6.00	6.70	6.52	6.55	2.44	8.99
Middlesex Water Company	1.59	6.00	NA	2.70	NA	4.35	1.62	5.97
SJW Group	2.03	10.50	14.00	14.10	7.00	11.40	2.15	13.55
York Water Company	1.61	7.00	NA	4.90	NA	5.95	1.66	7.61
							Average	9.19 %
							Median	8.99 %
							Average of Mean and Median	9.09 %

NA= Not Available

Notes:

(1) Indicated dividend at 10/16/2020 divided by the average closing price of the last 60 trading days ending 10/16/2020 for each company.

(2) From pages 2 through 8 of this Attachment.

(3) Average of columns 2 through 4 excluding negative growth rates.

(4) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 5) x column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for American States Water Company, 1.75% x (1+(1/2 x 5.68%)) = 1.80%.

(5) Column 5 + column 6.

Source of Information:

Value Line Investment Survey
www.zacks.com Downloaded on 10/16/2020
www.yahoo.com Downloaded on 10/16/2020
Bloomberg Professional Services

AMER. STATES WATER NYSE-AWR

RECENT PRICE 74.33 | P/E RATIO 31.6 (Trailing: 32.6 Median: 22.0) | RELATIVE P/E RATIO 1.51 | DIV'D YLD 1.8% | VALUE LINE

TIMELINESS 2 Lowered 10/9/20
SAFETY 2 Raised 7/20/12
TECHNICAL 4 Lowered 10/9/20
BETA .65 (1.00 = Market)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
High:	19.4	19.8	18.2	24.1	33.1	38.7	44.1	47.2	58.4	69.6	96.0	96.6
Low:	14.9	15.6	15.3	17.0	24.0	27.0	35.8	37.3	41.1	50.1	63.3	65.1

Target Price Range 2023 | 2024 | 2025

18-Month Target Price Range

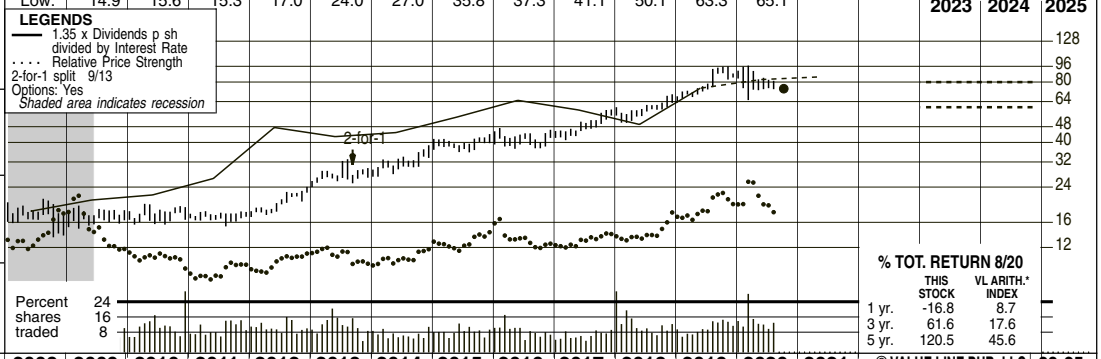
Low-High	Midpoint (% to Mid)
$64-$121	$93 (25%)

2023-25 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	80	(+10%)	4%
Low	60	(-20%)	-2%

Institutional Decisions

	4Q2019	1Q2020	2Q2020
to Buy	137	125	135
to Sell	145	166	129
Hld's(000)	26734	26162	25635



% TOT. RETURN 8/20

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-16.8	8.7
3 yr.	61.6	17.6
5 yr.	120.5	45.6

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	© VALUE LINE PUB. LLC	23-25
6.81	7.03	7.88	8.75	9.21	9.74	10.71	11.12	12.12	12.19	12.17	12.56	11.92	12.01	11.88	12.86	*13.10*	*13.40*	Revenues per sh	*16.40*
1.11	1.32	1.45	1.65	1.69	1.70	2.11	2.13	2.48	2.65	2.67	2.81	2.70	2.96	2.84	3.26	*3.30*	*3.60*	"Cash Flow" per sh	*4.50*
.53	.66	.67	.81	.78	.81	1.11	1.12	1.41	1.61	1.57	1.61	1.62	1.88	1.72	2.28	*2.30*	*2.45*	Earnings per sh A	*2.90*
.44	.45	.46	.48	.50	.51	.52	.55	.64	.76	.83	.87	.91	.99	1.06	1.16	*1.28*	*1.40*	Div'd Decl'd per sh B■	*1.85*
2.51	2.12	1.95	1.45	2.23	2.09	2.12	2.13	1.77	2.52	1.89	2.39	3.55	3.08	3.44	4.12	*3.60*	*3.50*	Cap'l Spending per sh	*3.75*
7.51	7.86	8.32	8.77	8.97	9.70	10.13	10.84	11.80	12.72	13.24	12.77	13.52	14.45	15.19	16.33	*17.15*	*18.10*	Book Value per sh D	*21.35*
33.50	33.60	34.10	34.46	34.60	37.06	37.26	37.70	38.53	38.72	38.29	36.50	36.57	36.68	36.76	36.85	*37.00*	*37.25*	Common Shs Outst'g C	*37.50*
23.2	21.9	27.7	24.0	22.6	21.2	15.7	15.4	14.3	17.2	20.1	24.6	25.6	25.7	34.0	34.4	*Bold figures are*		Avg Ann'l P/E Ratio	*23.5*
1.23	1.17	1.50	1.27	1.36	1.41	1.00	.97	.91	.97	1.06	1.24	1.34	1.29	1.84	1.87	*Value Line*		Relative P/E Ratio	*1.30*
3.6%	3.1%	2.5%	2.5%	2.9%	2.9%	3.0%	3.2%	3.1%	2.7%	2.6%	2.2%	2.2%	2.0%	1.8%	1.5%	*estimates*		Avg Ann'l Div'd Yield	*2.6%*

CAPITAL STRUCTURE as of 6/30/20
Total Debt $330.3 mill. **Due in 5 Yrs** $6.9 mill.
LT Debt $280.9 mill. **LT Interest** $24.5 mill.
(31% of Cap'l)

Leases, Uncapitalized: Annual rentals $2.7 mill.
Pension Assets-12/19 $192.5 mill.
Oblig. $231.9 mill.
Pfd Stock None

Common Stock 36,883,874 shs.
as of 7/30/20

MARKET CAP: $2.7 billion (Mid Cap)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		23-25
398.9	419.3	466.9	472.1	465.8	458.6	436.1	440.6	436.8	473.9	*485*	*500*	Revenues ($mill)	*615*
41.4	42.0	54.1	62.7	61.1	60.5	59.7	69.4	63.9	84.3	*85.0*	*90.0*	Net Profit ($mill)	*110*
43.2%	41.7%	39.9%	36.3%	38.4%	38.4%	36.8%	36.0%	22.0%	22.6%	*23.0%*	*23.0%*	Income Tax Rate	*23.0%*
5.8%	2.0%	2.5%	- -	- -	- -	- -	- -	2.5%	- -	*1.0%*	*1.0%*	AFUDC % to Net Profit	*1.0%*
44.3%	45.4%	42.2%	39.8%	39.1%	41.1%	39.4%	38.0%	40.5%	44.4%	*46.0%*	*47.0%*	Long-Term Debt Ratio	*49.5%*
55.7%	54.6%	57.8%	60.2%	60.9%	58.9%	60.6%	62.0%	59.5%	55.6%	*54.0%*	*53.0%*	Common Equity Ratio	*51.5%*
677.4	749.1	787.0	818.4	832.6	791.5	815.3	854.9	938.4	1082.5	*1180*	*1275*	Total Capital ($mill)	*1565*
855.0	896.5	917.8	981.5	1003.5	1060.8	1150.9	1205.0	1296.3	1415.7	*1485*	*1590*	Net Plant ($mill)	*1780*
7.6%	7.1%	8.3%	8.9%	8.6%	9.0%	8.6%	9.3%	7.9%	8.9%	*8.0%*	*8.0%*	Return on Total Cap'l	*8.5%*
11.0%	10.3%	11.9%	12.7%	12.0%	13.0%	12.1%	13.1%	11.4%	14.0%	*13.0%*	*13.5%*	Return on Shr. Equity	*14.0%*
11.0%	10.3%	11.9%	12.7%	12.0%	13.0%	12.1%	13.1%	11.4%	14.0%	*13.0%*	*13.5%*	Return on Com Equity	*14.0%*
5.8%	5.3%	6.6%	6.8%	5.7%	6.0%	5.3%	6.2%	4.5%	6.9%	*6.0%*	*6.0%*	Retained to Com Eq	*5.0%*
47%	49%	45%	47%	53%	54%	56%	52%	61%	51%	*56%*	*56%*	All Div'ds to Net Prof	*64%*

CURRENT POSITION ($MILL.)	2018	2019	6/30/20
Cash Assets	7.1	1.3	6.5
Accts Receivable	23.4	20.9	30.4
Other	101.0	100.3	100.1
Current Assets	131.5	122.5	137.0
Accts Payable	59.5	55.6	51.8
Debt Due	40.3	5.3	49.4
Other	46.8	55.1	57.5
Current Liab.	146.6	116.0	158.7

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '17-'19 to '23-'25
Revenues	3.0%	- -	*5.0%*
"Cash Flow"	6.0%	3.0%	*7.0%*
Earnings	9.5%	5.0%	*6.5%*
Dividends	8.0%	7.5%	*9.5%*
Book Value	5.5%	4.0%	*5.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	98.8	113.2	124.4	104.2	440.6
2018	94.7	106.9	124.2	111.0	436.8
2019	101.7	124.7	134.5	113.0	473.9
2020	109.1	121.3	*139.6*	*115*	*485*
2021	*110*	*125*	*145*	*120*	*500*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	.34	.62	.57	.35	1.88
2018	.29	.44	.62	.37	1.72
2019	.35	.72	.76	.45	2.28
2020	.38	.69	*.73*	*.50*	*2.30*
2021	*.43*	*.72*	*.75*	*.55*	*2.45*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2016	.224	.224	.224	.242	.91
2017	.242	.242	.255	.255	.99
2018	.255	.255	.275	.275	1.06
2019	.275	.275	.305	.305	1.16
2020	.305	.305	.335		

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Co., it supplies water to 260,708 customers in 10 California counties. Service areas include the metropolitan areas of Los Angeles and Orange Counties. The company also provides electricity to 24,420 customers in Big Bear Lake and San Bernardino Cnty. Provides water & wastewater services to U.S. military bases through its ASUS subsidiary. Sold Chaparral City Wtr. of AZ. (6/11). Employs 841. BlackRock, Inc. owns 15.9% of out. shares; Vanguard, 11.9%; off. & dir. 1.0%. (4/20 Proxy). Chairman: Lloyd Ross. Pres. & CEO: Robert Sprowls. Inc: CA. Address: 630 East Foothill Blvd., San Dimas, CA 91773. Tel: 909-394-3600. Internet: www.aswater.com.

American States Water recently raised its dividend by more than we had anticipated. In the third quarter, the water utility hiked the quarterly payout almost 10%. This represented one of the largest increases in the entire industry. What's more, with a dividend-to-net profit ratio that is considered low for this group, there is ample room for growth in the distribution in the years ahead. We think annual increases of close to double digits are possible through mid-decade.

Golden State Water is doing well, despite problems in its home state. The second-quarter year-over-year earnings comparison was much better than it appeared, as the company recorded a large one-time gain in the 2019 period. As California deals with the impact of the coronavirus and wildfires, the utility is operating smoothly as the demand for water typically remains stable whether the economy is booming or in a recession, as is the case now.

Our earnings estimates are unchanged, once again. As we often point out, one of the main advantages of a water utility is the predictable nature of its income stream. Hence, we are still looking for share earnings of $2.30 and $2.45 for 2020 and 2021, respectively.

Nonregulated operations should be a key driver of long-term growth. Though its ASUS subsidiary, American States provides water services to U.S. Army bases around the country. As the military continues to privatize its water systems, we expect the company to win its fair share of the 50-year contracts. Responsible for over 17% of net profits last quarter, this percentage should continue to trend higher. Also, profitability in this sector is not capped like it is in the regulated business.

Short-term investors might find these shares attractive. For starters, the equity is expected to outperform the market averages in the year ahead. What's more, during this period of economic and political uncertainty, the utility has very well-defined prospects. As usual, a premium will have to be paid to own stock in this space. Also, as is the case with most utilities, AWR's total return prospects out to 2023-2025 are not impressive.

James A. Flood *October 9, 2020*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 7¢; '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢); '11, 10¢. Next earnings report due early November.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.
(D) Includes intangibles. As of 12/31/19; $1.1 million/$0.04 a share.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	85
Earnings Predictability	85

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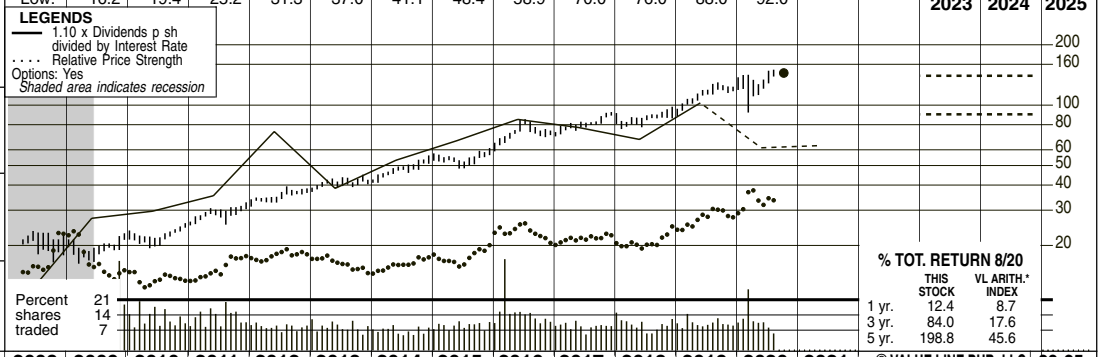
AMERICAN WATER NYSE-AWK

RECENT PRICE 144.55 | P/E RATIO 37.2 (Trailing: 41.1 Median: 22.0) | RELATIVE P/E RATIO 1.78 | DIV'D YLD 1.6% | VALUE LINE

TIMELINESS 1 Raised 10/9/20
SAFETY 3 New 7/25/08
TECHNICAL 3 Lowered 10/9/20
BETA .85 (1.00 = Market)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
High:	23.0	25.8	32.8	39.4	45.1	56.2	61.2	85.2	92.4	98.2	129.9	150.5
Low:	16.2	19.4	25.2	31.3	37.0	41.1	48.4	58.9	70.0	76.0	88.0	92.0

LEGENDS
— 1.10 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession



Target Price Range 2023 | 2024 | 2025

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$104-$236	$170 (20%)

2023-25 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	140	(-5%)	1%
Low	90	(-40%)	-9%

Institutional Decisions

	4Q2019	1Q2020	2Q2020
to Buy	393	333	363
to Sell	361	415	371
Hld's(000)	155435	151948	151102

Percent shares traded 21 14 7

% TOT. RETURN 8/20

	THIS STOCK	VL ARITH.* INDEX
1 yr.	12.4	8.7
3 yr.	84.0	17.6
5 yr.	198.8	45.6

2004	2005	2006E	2007E	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	© VALUE LINE PUB. LLC	23-25
- -	- -	13.08	13.84	14.61	13.98	15.49	15.18	16.25	16.28	16.78	17.72	18.54	18.81	19.04	19.97	*20.95*	*21.85*	Revenues per sh	*24.75*
- -	- -	.65	d.47	2.87	2.89	3.56	3.73	4.27	4.36	4.75	5.13	5.26	5.14	6.15	6.65	*8.00*	*8.15*	"Cash Flow" per sh	*8.75*
- -	- -	d.97	d2.14	1.10	1.25	1.53	1.72	2.11	2.06	2.39	2.64	2.62	2.38	3.15	3.43	*3.85*	*4.20*	Earnings per sh A	*4.90*
- -	- -	- -	- -	.40	.82	.86	.90	1.21	.84	1.21	1.33	1.47	1.62	1.78	1.96	*2.15*	*2.35*	Div'd Decl'd per sh B■	*2.90*
- -	- -	4.31	4.74	6.31	4.50	4.38	5.27	5.25	5.50	5.33	6.51	7.36	8.04	8.78	9.15	*8.70*	*9.20*	Cap'l Spending per sh	*9.00*
- -	- -	23.86	28.39	25.64	22.91	23.59	24.11	25.11	26.52	27.39	28.25	29.24	30.13	32.42	33.83	*35.40*	*36.95*	Book Value per sh D	*42.50*
- -	- -	160.00	160.00	160.00	174.63	175.00	175.66	176.99	178.25	179.46	178.28	178.10	178.44	180.68	180.81	*181.50*	*182.00*	Common Shs Outst'g C	*189.00*
- -	- -	- -	- -	18.9	15.6	14.6	16.8	16.7	19.9	20.0	20.5	27.7	33.8	27.3	32.9	*Bold figures are*		Avg Ann'l P/E Ratio	*23.5*
- -	- -	- -	- -	1.14	1.04	.93	1.05	1.06	1.12	1.05	1.03	1.45	1.70	1.47	1.79	*Value Line*		Relative P/E Ratio	*1.30*
- -	- -	- -	- -	1.9%	4.2%	3.8%	3.1%	3.4%	2.0%	2.5%	2.5%	2.0%	2.0%	2.1%	1.7%	*estimates*		Avg Ann'l Div'd Yield	*2.5%*

CAPITAL STRUCTURE as of 6/30/20
Total Debt $10578 mil. **Due in 5 Yrs** $2500 mil.
LT Debt $9589 mil. **LT Interest** $354 mil.
(60% of Cap'l)

Leases, Uncapitalized: Annual rentals $14.0 mill.
Pension Assets12/19 $1747.0 mill **Oblig.** $2161.0 mill.
Pfd Stock $5.0 mill. **Pfd Div'd** $.4 mill

Common Stock 181,204,068 shares as of 7/31/20

MARKET CAP: $26.2 billion (Large Cap)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		23-25
2710.7	2666.2	2876.9	2901.9	3011.3	3159.0	3302.0	3357.0	3440.0	3610.0	*3800*	*3975*	Revenues ($mill)	*4675*
267.8	304.9	374.3	369.3	429.8	476.0	468.0	426.0	567.0	621.0	*700*	*765*	Net Profit ($mill)	*925*
40.4%	39.5%	40.7%	39.1%	39.4%	39.1%	39.2%	53.3%	28.2%	25.5%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
- -	- -	6.2%	5.1%	- -	- -	- -	- -	5.1%	4.0%	*5.0%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
56.8%	55.7%	53.9%	52.4%	52.4%	53.7%	52.4%	54.7%	56.3%	58.5%	*61.0%*	*60.5%*	Long-Term Debt Ratio	*59.0%*
43.2%	44.2%	46.1%	47.6%	47.4%	46.2%	47.5%	45.3%	43.6%	41.4%	*39.0%*	*39.5%*	Common Equity Ratio	*41.0%*
9561.3	9580.3	9635.5	9940.7	10364	10911	10967	11875	13433	14760	*15800*	*17050*	Total Capital ($mill)	*20000*
11059	11021	11739	12391	12900	13933	14992	16246	17409	18232	*19100*	*20000*	Net Plant ($mill)	*22200*
4.4%	4.8%	5.4%	5.1%	5.5%	5.7%	5.6%	4.9%	5.4%	5.4%	*5.5%*	*5.5%*	Return on Total Cap'l	*6.0%*
6.5%	7.2%	8.4%	7.8%	8.7%	9.4%	9.0%	7.9%	9.7%	10.1%	*11.0%*	*11.5%*	Return on Shr. Equity	*11.5%*
6.5%	7.2%	8.4%	7.8%	8.7%	9.4%	9.0%	7.9%	9.7%	10.1%	*11.9%*	*11.5%*	Return on Com Equity	*11.5%*
2.8%	3.5%	3.6%	4.7%	4.3%	4.7%	4.0%	2.5%	4.2%	4.4%	*5.0%*	*4.5%*	Retained to Com Eq	*4.5%*
56%	52%	57%	40%	50%	50%	56%	68%	56%	57%	*56%*	*59%*	All Div'ds to Net Prof	*59%*

CURRENT POSITION ($MILL.)	2018	2019	6/30/20
Cash Assets	158	91	569
Accts Receivable	301	294	298
Other	322	900	1029
Current Assets	781	1285	1896
Accts Payable	175	203	169
Debt Due	1035	814	989
Other	884	1028	955
Current Liab.	2094	2045	2113

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '17-'19 to '23-'25
Revenues	3.0%	3.0%	*4.5%*
"Cash Flow"	13.0%	6.0%	*6.5%*
Earnings	45.5%	6.5%	*8.5%*
Dividends	16.0%	10.5%	*8.5%*
Book Value	2.5%	4.0%	*5.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	756	844	936	821	3357
2018	761	853	976	850	3440
2019	813	882	1013	902	3610
2020	844	931	*1090*	*935*	*3800*
2021	*885*	*970*	*1120*	*1000*	*3975*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	.52	.73	1.12	.01	2.38
2018	.59	.91	1.03	.62	3.15
2019	.62	.94	1.33	.54	3.43
2020	.68	.97	*1.40*	*.80*	*3.85*
2021	*.72*	*1.05*	*1.60*	*.83*	*4.20*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2016	.34	.375	.375	.375	1.47
2017	.375	.415	.415	.415	1.62
2018	.415	.455	.455	.455	1.78
2019	.455	.50	.50	.50	1.96
2020	.50	.55	.55		

BUSINESS: American Water Works Company, Inc. is the largest investor-owned water and wastewater utility in the U.S., providing services to approximately 15 million people in 46 states. Nonregulated business assists municipalities and military bases with the maintenance and upkeep as well. Regulated operations made up 86% of 2019 revenues. New Jersey is its largest market accounting for 24.6% of regulated revenues; Pennsylvania, 22.3%; Missouri, 10.5%. Has 6,800 employees. The Vanguard Grp, owns 12.4% of outstanding shares; BlackRock, Inc., 8.7%; officers & directors, less than 1.0%. (3/20 Proxy). President & CEO: Susan N. Story. Chairman: George MacKenzie. Address: 1 Water Street, Camden, NJ 08102. Tel.: 856-346-8200. Internet: www.amwater.com.

Shares of American Water Works continue to outperform the broader market, as well as that of its peers. Since our last report three months ago, the equity has increased nearly 14% in value, versus about a 6% rise in the S&P 500 Index. In addition, most of the other stocks in this group have actually posted negative returns averaging in the double digits over the same time span.

Earnings and dividend growth prospects are bright. Due to its bolt-on acquisition strategy, a constructive relationship with its many different state regulators, and the ability to cut costs, we estimate that American Water's share-net and annual payout may well rise 9%-11% in 2020 and 2021. This is far superior to most others in the industry. Much of the expense control is related to its merger policy. Because the water industry is very fragmented, significant economies of scale are very attainable. So, American Water can purchase other water districts and increase the margins on the purchased assets. Through July of this year, more than 60,000 new customers were added, with another 43,600 under agreement.

The construction budget remain massive. As is the case with most water utilities, the company is investing heavily to upgrade and modernize its pipeline and water treatment assets. Approximately $28 billion has been spent over the past decade, with about another $20 billion projected to be used over the next decade. Still, we expect American Water's balance sheet to remain in decent shape even though a fair amount of new debt will probably be needed to finance the building program.

Investors will likely have to continue to pay a hefty premium for these timely shares. As we have pointed out in previous reports, by a metric such as the Price/Earnings ratio, AWK is trading at levels well above the market averages and its group. We attribute this to the company's well-defined earnings and dividend growth prospects. The equity also seems to benefit from it large size, as well as the lack of options in this space for institutions seeking to take large positions. Over the pull to 2023-2025, these shares have subpar total return prospects.

James A. Flood *October 9, 2020*

(A) Diluted earnings. Excludes nonrecur. losses: '08, $4.62; '09, $2.63; '11, $0.07. Disc. oper.: '06, ($0.04); '11, $0.03; '12, ($0.10); '13,($0.01). GAAP used as of 2014. Next earnings report due early Nov.
(B) Dividends paid in March, June, September, and December. ■ Div. reinvestment available.
(C) In millions. (D) Includes intangibles. On 6/30/20: $1.567 billion, $8.65/share.
(E) Pro forma numbers for '06 & '07.

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

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CALIFORNIA WATER NYSE-CWT

RECENT PRICE 43.55 | P/E RATIO 33.0 (Trailing: 53.8 Median: 23.0) | RELATIVE P/E RATIO 1.58 | DIV'D YLD 2.0% | VALUE LINE

TIMELINESS 3 Lowered 3/6/20
SAFETY 3 Lowered 7/27/07
TECHNICAL 3 Lowered 6/12/20
BETA .65 (1.00 = Market)

High:	24.1	19.8	19.4	19.3	23.4	26.4	26.0	36.8	46.2	49.1	57.5	57.4
Low:	16.7	16.9	16.7	16.8	18.4	20.3	19.5	22.5	32.4	35.3	44.6	39.7

18-Month Target Price Range

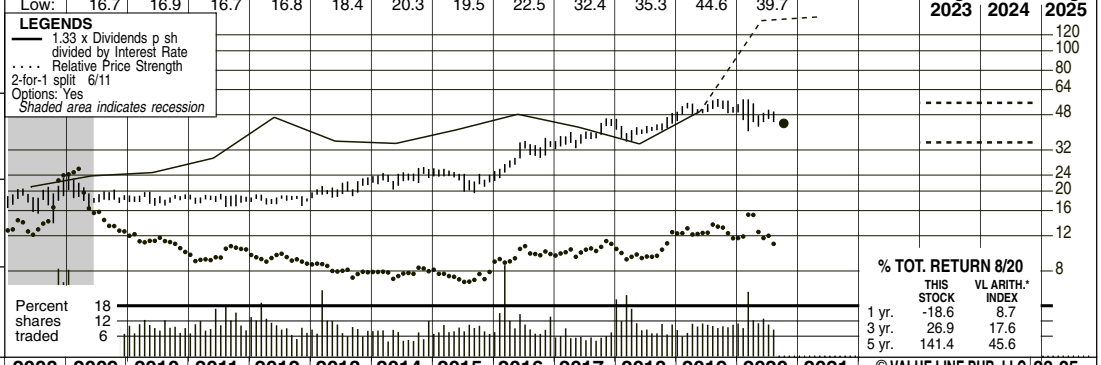
Low-High	Midpoint (% to Mid)
$36-$71	$54 (25%)

2023-25 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	55	(+25%)	8%
Low	35	(-20%)	-3%

Institutional Decisions

	4Q2019	1Q2020	2Q2020
to Buy	115	104	109
to Sell	101	118	107
Hld's(000)	36624	35792	35580



% TOT. RETURN 8/20

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-18.6	8.7
3 yr.	26.9	17.6
5 yr.	141.4	45.6

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	© VALUE LINE PUB. LLC	23-25
8.59	8.72	8.10	8.88	9.90	10.82	11.05	12.00	13.34	12.23	12.50	12.29	12.70	13.89	14.53	14.72	*14.60*	*15.20*	Revenues per sh	*15.00*
1.42	1.52	1.36	1.56	1.86	1.93	1.93	2.07	2.32	2.21	2.47	2.22	2.34	3.00	3.11	3.14	*2.45*	*3.30*	"Cash Flow" per sh	*3.50*
.73	.74	.67	.75	.95	.98	.91	.86	1.02	1.02	1.19	.94	1.01	1.40	1.36	1.31	*.85*	*1.75*	Earnings per sh A	*2.00*
.57	.57	.58	.58	.59	.59	.60	.62	.63	.64	.65	.67	.69	.72	.75	.79	*.85*	*.89*	Div'd Decl'd per sh B ■	*1.05*
1.87	2.01	2.14	1.84	2.41	2.66	2.97	2.83	3.04	2.58	2.76	3.69	4.77	5.40	5.65	5.64	*4.85*	*4.75*	Cap'l Spending per sh	*4.25*
7.83	7.90	9.07	9.25	9.72	10.13	10.45	10.76	11.28	12.54	13.11	13.41	13.75	14.44	15.19	16.07	*15.70*	*15.90*	Book Value per sh C	*16.05*
36.73	36.78	41.31	41.33	41.45	41.53	41.67	41.82	41.98	47.74	47.81	47.88	47.97	48.01	48.07	48.53	*50.00*	*51.00*	Common Shs Outst'g D	*53.00*
20.1	24.9	29.2	26.1	19.8	19.7	20.3	21.3	17.9	20.1	19.7	24.8	29.6	26.9	30.3	39.3	*Bold figures are*		Avg Ann'l P/E Ratio	*23.0*
1.06	1.33	1.58	1.39	1.19	1.31	1.29	1.34	1.14	1.13	1.04	1.25	1.55	1.35	1.64	2.13	*Value Line*		Relative P/E Ratio	*1.25*
3.9%	3.1%	2.9%	3.0%	3.1%	3.1%	3.2%	3.4%	3.5%	3.1%	2.8%	2.9%	2.3%	1.9%	1.8%	1.5%	*estimates*		Avg Ann'l Div'd Yield	*2.3%*

CAPITAL STRUCTURE as of 6/30/20
Total Debt $1182.3 mill. **Due in 5 Yrs** $357.0 mill.
LT Debt $785.3 mill. **LT Interest** $40.0 mill.
(Total interest coverage: 3.2x) (50% of Cap'l)

Pension Assets-12/19 $573.6 mill. **Oblig.** $812.0 mill.

Pfd Stock None

Common Stock 49,398,000 shs.

MARKET CAP: $2.2 billion (Mid Cap)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		23-25
460.4	501.8	560.0	584.1	597.5	588.4	609.4	666.9	698.2	714.6	*730*	*775*	Revenues ($mill) E	*795*
37.7	36.1	42.6	47.3	56.7	45.0	48.7	67.2	65.6	63.1	*43.0*	*90.0*	Net Profit ($mill)	*105*
39.5%	40.5%	37.5%	30.3%	33.0%	36.0%	35.5%	30.1%	24.5%	19.1%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
4.2%	7.6%	8.0%	4.3%	2.7%	4.3%	6.1%	3.5%	3.1%	5.8%	*5.0%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
52.4%	51.7%	47.8%	41.6%	40.1%	44.4%	44.6%	42.7%	49.3%	50.2%	*49.0%*	*47.0%*	Long-Term Debt Ratio	*43.5%*
47.6%	48.3%	52.2%	58.4%	59.9%	55.6%	55.4%	57.3%	50.7%	49.8%	*51.0%*	*53.0%*	Common Equity Ratio	*56.5%*
914.7	931.5	908.2	1024.9	1045.9	1154.4	1191.2	1209.3	1440.2	1566.7	*1535*	*1525*	Total Capital ($mill)	*1500*
1294.3	1381.1	1457.1	1515.8	1590.4	1701.8	1859.3	2048.0	2232.7	2406.4	*2550*	*2575*	Net Plant ($mill)	*2500*
5.5%	5.5%	6.3%	6.0%	6.3%	5.2%	5.5%	7.1%	5.9%	5.5%	*3.5%*	*6.5%*	Return on Total Cap'l	*8.0%*
8.6%	8.0%	9.0%	7.9%	9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	*5.5%*	*11.0%*	Return on Shr. Equity	*12.5%*
8.6%	8.0%	9.0%	7.9%	9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	*5.5%*	*11.0%*	Return on Com Equity	*12.5%*
3.0%	2.3%	3.4%	3.4%	4.1%	2.0%	2.4%	4.7%	4.0%	3.2%	*NMF*	*5.5%*	Retained to Com Eq	*6.0%*
66%	71%	62%	56%	55%	71%	68%	51%	55%	60%	*100%*	*51%*	All Div'ds to Net Prof	*53%*

CURRENT POSITION ($MILL.)	2018	2019	6/30/20
Cash Assets	47.2	42.7	114.4
Other	141.5	142.0	152.5
Current Assets	188.7	184.7	266.9
Accts Payable	95.6	108.5	128.2
Debt Due	170.0	197.0	397.0
Other	55.6	53.2	132.4
Current Liab.	321.2	358.7	557.6

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '17-'19 to '23-'25
Revenues	4.0%	2.5%	*.5%*
"Cash Flow"	5.5%	5.5%	*2.0%*
Earnings	4.5%	4.5%	*6.5%*
Dividends	2.5%	3.5%	*5.5%*
Book Value	4.5%	4.5%	*1.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.)E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	122.1	171.1	211.7	162.0	666.9
2018	134.6	174.9	221.3	167.4	698.2
2019	126.1	179.0	232.6	176.9	714.6
2020	125.6	175.5	*247*	*181.9*	*730*
2021	*147*	*195*	*248*	*185*	*775*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.02	.39	.70	.29	1.40
2018	d.02	.31	.75	.32	1.36
2019	d.16	.35	.88	.24	1.31
2020	d.42	.11	*.79*	*.37*	*.85*
2021	*.05*	*.42*	*.90*	*.38*	*1.75*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2016	.1725	.1725	.1725	.1725	.69
2017	.18	.18	.18	.18	.72
2018	.1875	.1875	.1875	.1875	.75
2019	.1975	.1975	.1975	.1975	.79
2020	.2125	.2125	.2125		

BUSINESS: California Water Service Group provides regulated and nonregulated water service to 489,600 customers in 100 communities in the state of California. Accounts for over 94% of total customers. Also operates in 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, '19: residential, 67%; business, 20%; industrial, 5%; public authorities, 5%; other 3%. Off. and dir. own 1% of common stock (4/20 proxy). Has 1,184 employees. Pres. and CEO: Martin A. Kropelnicki. Inc.: DE. Addr.: 1720 North First St., San Jose, CA 95112-4598. Tel.: 408-367-8200. Internet: www.calwatergroup.com.

California Water's financial results continue to be hampered by a lack of resolution on the rate case front. Specifically, the California Public Utilities Commission has yet to officially approve the settlement filed in October of 2019 that would provide general rate relief and other cost recovery methods. The new rates would be effective from January 1, 2020 and would be recouped via customer surcharges. In fact, if they had been approved, management estimates an additional $30 million in revenues would have been generated in the June period. Moreover, water production costs, another metric that would have benefited from a rate case approval, increased significantly from the previous-year figure. All told, CWT drastically underperformed expectations in the first half of 2020. Second-quarter revenues of $176 million fell modestly, year over year, while share net declined sharply from $0.35, to $0.11.

We are tempering our 2020 profit forecast for the second time this year. Due largely to a weak first-half showing, we now expect California Water to earn $0.85 a share this year, down from our previous call of $1.20 a share.

Financials should rebound sharply next year. We are cautiously optimistic that the general rate case situation will be resolved in the near future. In addition, operating headwinds, such as rising production expenses and purchased water costs, may begin to ease. Too, an expanded footprint in Washington State, thanks to its recent acquisition of Rainier View Water Company, augurs well. In sum, we are leaving unchanged our 2021 top- and bottom-line estimates at $775 million and $1.75 a share, respectively.

Interested subscribers with a holding period out to mid-decade would be wise to wait for a better entry point. Overall, we think California Water's long-term business prospects are bright, and operating conditions should smooth out once regulatory matters are in the rear-view mirror. That said, the stock price has been on a tear since early 2016 and, as a result, total return potential over the pull to 2023-2025 is subpar at the recent quotation. The equity is only an average selection for the year ahead, too.

Nicholas P. Patrikis *October 9, 2020*

(A) Basic EPS. Excl. nonrecurring gain (loss): '11, 4¢. Next earnings report due early Nov.
(B) Dividends historically paid in late Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. intangible assets. In '19 : $24.9 mill., $0.51/sh.
(D) In millions, adjusted for split.
(E) Excludes non-reg. rev.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	60
Earnings Predictability	65

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ESSENTIAL UTIL. NYSE-WTRG

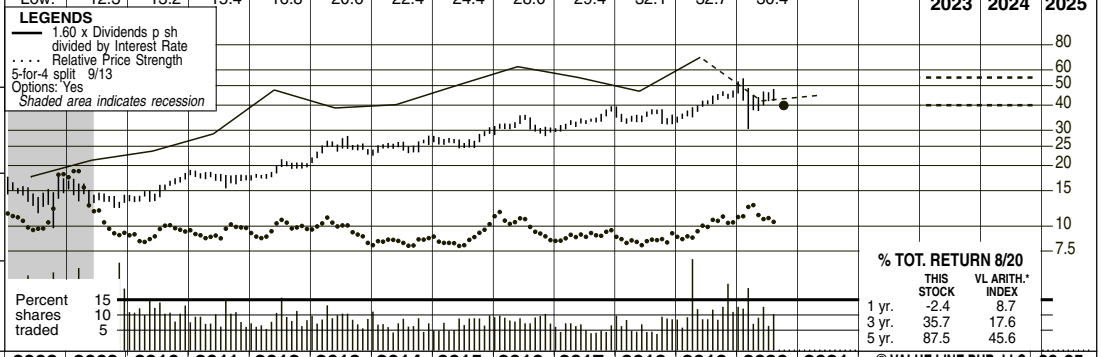
RECENT PRICE **39.93** | P/E RATIO **39.1** (Trailing: 34.7 Median: 23.0) | RELATIVE P/E RATIO **1.87** | DIV'D YLD **2.6%** | VALUE LINE

TIMELINESS 2 Lowered 4/24/20
SAFETY 2 Raised 4/20/12
TECHNICAL 2 Lowered 6/12/20
BETA .90 (1.00 = Market)

High:	17.2	18.4	19.0	21.5	28.1	28.2	31.1	35.8	39.6	39.4	47.3	54.5
Low:	12.3	13.2	15.4	16.8	20.6	22.4	24.4	28.0	29.4	32.1	32.7	30.4

Target Price Range 2023 | 2024 | 2025

LEGENDS
— 1.60 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
5-for-4 split 9/13
Options: Yes
Shaded area indicates recession



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$31-$80	$56 (40%)

2023-25 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	55	(+40%)	*11%*
Low	40	(Nil)	*3%*

Institutional Decisions

	4Q2019	1Q2020	2Q2020
to Buy	274	252	250
to Sell	242	292	235
Hld's(000)	149836	161407	161504

% TOT. RETURN 8/20

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-2.4	8.7
3 yr.	35.7	17.6
5 yr.	87.5	45.6

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	© VALUE LINE PUB. LLC	23-25
2.78	3.08	3.23	3.61	3.71	3.93	4.21	4.10	4.32	4.32	4.37	4.61	4.62	4.56	4.71	4.03	*6.35*	*7.55*	Revenues per sh	*8.45*
.87	.97	1.01	1.10	1.14	1.29	1.42	1.45	1.51	1.82	1.89	1.87	2.07	2.12	1.90	1.73	*1.95*	*2.30*	"Cash Flow" per sh	*2.65*
.51	.57	.56	.57	.58	.62	.72	.83	.87	1.16	1.20	1.14	1.32	1.35	1.08	1.04	*1.00*	*1.20*	Earnings per sh A	*1.75*
.29	.32	.35	.38	.41	.44	.47	.50	.54	.58	.63	.69	.74	.79	.85	.91	*.97*	*1.04*	Div'd Decl'd per sh B■	*1.30*
1.23	1.47	1.64	1.43	1.58	1.66	1.89	1.90	1.98	1.73	1.84	2.07	2.16	2.69	2.78	2.49	*2.20*	*3.80*	Cap'l Spending per sh	*4.75*
4.71	5.04	5.57	5.85	6.26	6.50	6.81	7.21	7.90	8.63	9.27	9.78	10.43	11.02	11.28	17.58	*19.00*	*19.05*	Book Value per sh	*20.00*
158.97	161.21	165.41	166.75	169.21	170.61	172.46	173.60	175.43	177.93	178.59	176.54	177.39	177.71	178.09	220.76	*251.25*	*252.00*	Common Shs Outst'g C	*260.00*
25.1	31.8	34.7	32.0	24.9	23.1	21.1	21.3	21.9	21.2	20.8	23.5	23.9	24.7	32.6	39.1	*Bold figures are*		Avg Ann'l P/E Ratio	*27.0*
1.33	1.69	1.87	1.70	1.50	1.54	1.34	1.34	1.39	1.19	1.09	1.18	1.25	1.24	1.76	2.12	*Value Line*		Relative P/E Ratio	*1.50*
2.3%	1.8%	1.8%	2.1%	2.8%	3.1%	3.1%	2.8%	2.8%	2.4%	2.5%	2.6%	2.3%	2.4%	2.4%	2.2%	*estimates*		Avg Ann'l Div'd Yield	*2.7%*

CAPITAL STRUCTURE as of 6/30/20
Total Debt $5277.4 mill. **Due in 5 Yrs** $496.0 mill.
LT Debt $5174.6 mill. **LT Interest** $200.0 mill.
(53% of Cap'l)

Pension Assets-12/19 $266.4 mill.
Oblig. $310.5 mill.

Pfd Stock None
Common Stock 245,151,093 shares
as of 7/27/20

MARKET CAP: $9.8 billion (Large Cap)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		23-25
726.1	712.0	757.8	768.6	779.9	814.2	819.9	809.5	838.1	889.7	*1600*	*1900*	Revenues ($mill)	*2200*
124.0	144.8	153.1	205.0	213.9	201.8	234.2	239.7	192.0	224.5	*250*	*300*	Net Profit ($mill)	*455*
39.2%	32.9%	39.0%	10.0%	10.5%	6.9%	8.2%	6.6%	6.6%	6.6%	*2.0%*	*3.5%*	Income Tax Rate	*8.0%*
--	--	--	1.1%	2.4%	3.1%	3.8%	6.3%	6.8%	7.2%	*7.0%*	*7.0%*	AFUDC % to Net Profit	*7.0%*
56.6%	52.7%	52.7%	48.9%	48.5%	50.3%	48.4%	50.6%	54.4%	43.1%	*53.5%*	*57.0%*	Long-Term Debt Ratio	*40.5%*
43.4%	47.3%	47.3%	51.1%	51.5%	49.7%	51.6%	49.4%	45.6%	56.9%	*46.5%*	*43.0%*	Common Equity Ratio	*59.5%*
2706.2	2646.8	2929.7	3003.6	3216.0	3469.5	3587.7	3965.4	4407.8	6824.2	*10300*	*11000*	Total Capital ($mill)	*12800*
3469.3	3612.9	3936.2	4167.3	4402.0	4688.9	5001.6	5399.9	5930.3	6345.8	*9500*	*10150*	Net Plant ($mill)	*12000*
5.9%	6.9%	6.6%	8.0%	7.8%	6.9%	7.6%	7.1%	5.5%	4.2%	*3.0%*	*4.0%*	Return on Total Cap'l	*4.5%*
10.6%	11.6%	11.0%	13.4%	12.9%	11.7%	12.7%	12.2%	9.6%	5.8%	*5.0%*	*6.5%*	Return on Shr. Equity	*9.0%*
10.6%	11.6%	11.0%	13.4%	12.9%	11.7%	12.7%	12.2%	9.6%	5.8%	*5.0%*	*6.5%*	Return on Com Equity	*9.0%*
3.7%	4.6%	4.3%	6.7%	6.1%	4.7%	5.6%	5.1%	2.1%	.9%	*NMF*	*1.0%*	Retained to Com Eq	*2.5%*
65%	60%	61%	50%	52%	60%	56%	59%	79%	84%	*97%*	*87%*	All Div'ds to Net Prof	*74%*

CURRENT POSITION ($MILL.)	2018	2019	6/30/20
Cash Assets	3.6	1868.9	7.3
Receivables	101.2	67.1	152.9
Inventory (AvgCst)	15.8	18.4	50.1
Other	26.6	58.3	102.2
Current Assets	147.2	2012.7	312.5
Accts Payable	77.3	74.9	124.1
Debt Due	160.0	130.8	102.8
Other	161.7	113.1	221.3
Current Liab.	399.0	318.8	448.2

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '17-'19 to '23-'25
Revenues	1.5%	.5%	*11.5%*
"Cash Flow"	5.0%	2.0%	*5.5%*
Earnings	7.0%	1.5%	*7.0%*
Dividends	7.5%	8.0%	*7.5%*
Book Value	8.0%	9.0%	*7.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	187.8	203.4	215.0	203.3	809.5
2018	194.3	211.9	226.2	205.7	838.1
2019	201.1	218.9	243.6	226.1	889.7
2020	255.6	384.5	*395*	*564.9*	*1600*
2021	*395*	*450*	*430*	*625*	*1900*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.28	.34	.43	.30	1.35
2018	.29	.37	.44	d.02	1.08
2019	.09	.25	.38	.28	1.04
2020	.20	.29	*.23*	*.28*	*1.00*
2021	*.22*	*.33*	*.33*	*.32*	*1.20*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2016	.178	.178	.1913	.1913	.74
2017	.1913	.1913	.2047	.2047	.79
2018	.2047	.2047	.219	.219	.85
2019	.219	.219	.2343	.2343	.91
2020	.2343	.2343	.2507		

BUSINESS: Essential Utilities, Inc. became the new name for Aqua America on Feb. 3, 2020, to reflect the acquisition of Peoples, a natural gas utility, which occurred in 3/20. In 2019, Aqua Amer. provided water and wastewater services to about three million people in PA, OH, TX, IL, NC, NJ, IN, and VA. Employed 1,583. Acquired AquaSource, 7/13; North Maine Utilities, 7/15; and others. Water supply revenues 2019: residential, 58%; commercial, 16%; industrial, wastewater & other, 26%. Off. & dir. own less than 1% of the common stock; BlackRock, 10.5%; Vanguard, 10.4%; (4/20 proxy). Canadian Pension Plan about 8.8%. Pres. & CEO: Christopher Franklin. Inc.: PA Addr.: 762 West Lancaster Ave., Bryn Mawr, PA 19010. Tel.: 610-525-1400. Int.: www.essential.co.

Essential Utilities raised its dividend a solid 7% last quarter. The company increased the share payout from $0.2343 to $0.2507. This rate of increase ought to be maintained to mid-decade.

Earnings comparisons should be flat in 2020. Even though the second quarter surpassed our expectations, the company will probably be hindered by the costs associated with the large acquisition it made earlier this year. Recall that it (then known as Aqua America), paid $4.3 billion and assumed over $1 billion in debt to purchase Peoples gas utility. All told, Essential's share net should to be around $1.00, which isn't bad considering the amount of unusual charges. It also should be noted that both of the company's two key segments are much less vulnerable to the economic slowdown caused by the coronavirus. With the exception of industrial customers, the demand for water and gas is relatively inelastic.

In 2021, we expect the bottom line to get back on track. Management is estimating that the regulated water and segments will grow 6% to 7.0%, and 8% to 10%, annually through 2022. This, along with some rate relief and cost savings, should enable Essential's share net to reach $1.20.

The construction budget is large. This year, the company plans on spending only $550 million to upgrade its water pipelines and other assets. However, capital expenditures have been projected to total about $2.8 billion through 2022. Thus, spending ought to average over a $1 billion annually in 2021 and 2020.

Finances are more than decent. True, debt levels have increased as a result of the Peoples merger. In addition, external funds will be required to fund the massive building program discussed above. Nevertheless, the balance sheet is still better than average, and will likely remain so.

These shares are ranked 2 (Above Average) for year-ahead performance. So short-term investors looking for well-defined prospects should find the stock of interest. For those looking out to 2023-2025, however, total return potential remains well below the *Value Line* median, as is the case with most members in this group.

James A. Flood *October 9, 2020*

(A) Diluted egs. Excl. nonrec. gains: '12, 18¢. Excl. gain from disc. operations: '12, 7¢; '13, 9¢; '14, 11¢. Quarterly EPS do not add in '19 due to a large change in the number of shares outstanding in the Dec. period. Next earnings report early Nov. **(B)** Dividends historically paid in early March, June, Sept., & Dec. ■ Div'd. reinvestment plan available (5% discount). **(C)** In millions, adjusted for stock splits. **(D)** Includes intangibles: 6/30/20, $2.342 bill./$9.55 a share.

Company's Financial Strength	A
Stock's Price Stability	90
Price Growth Persistence	95
Earnings Predictability	60

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MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 62.37 | P/E RATIO 28.9 (Trailing: 29.4 Median: 21.0) | RELATIVE P/E RATIO 1.38 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 2 Raised 5/15/20
SAFETY 2 New 10/21/11
TECHNICAL 2 Raised 5/1/20
BETA .70 (1.00 = Market)

High:	17.9	19.3	19.4	19.6	22.5	23.7	28.0	44.5	46.7	60.3	67.7	72.4
Low:	11.6	14.7	16.5	17.5	18.6	19.1	21.2	25.0	32.2	34.0	51.0	48.8

18-Month Target Price Range

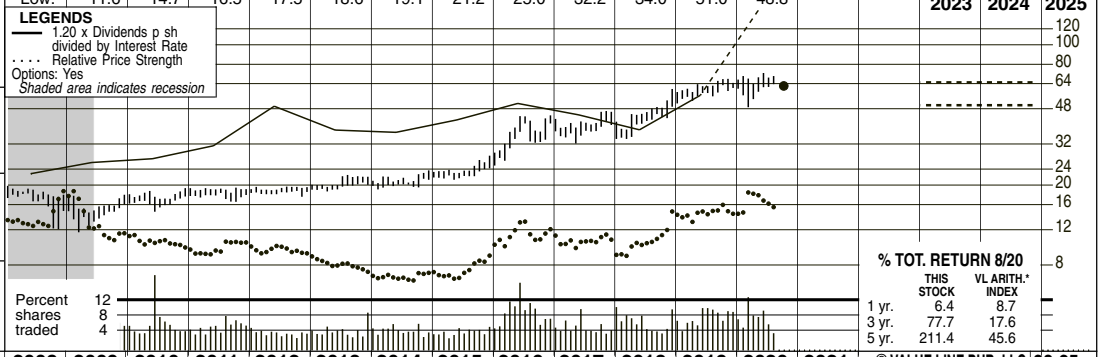
Low-High	Midpoint (% to Mid)
$53-$99	$76 (20%)

2023-25 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	65	(+5%)	3%
Low	50	(-20%)	-3%

Institutional Decisions

	4Q2019	1Q2020	2Q2020
to Buy	68	55	68
to Sell	68	70	55
Hld's(000)	10433	10280	10359



% TOT. RETURN 8/20

	THIS STOCK	VL ARITH.* INDEX
1 yr.	6.4	8.7
3 yr.	77.7	17.6
5 yr.	211.4	45.6

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	© VALUE LINE PUB. LLC	23-25
6.25	6.44	6.16	6.50	6.79	6.75	6.60	6.50	6.98	7.19	7.26	7.77	8.16	8.00	8.42	7.72	*8.20*	*8.45*	Revenues per sh	*9.15*
1.28	1.33	1.33	1.49	1.53	1.40	1.55	1.46	1.56	1.72	1.84	1.97	2.17	2.24	2.89	2.90	*3.00*	*3.15*	"Cash Flow" per sh	*3.50*
.73	.71	.82	.87	.89	.72	.96	.84	.90	1.03	1.13	1.22	1.38	1.38	1.96	2.01	*2.15*	*2.25*	Earnings per sh A	*2.50*
.66	.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	.78	.81	.86	.91	.98	*1.04*	*1.10*	Div'd Decl'd per sh B■	*1.25*
2.54	2.18	2.31	1.66	2.12	1.49	1.90	1.50	1.36	1.26	1.40	1.59	2.91	3.08	4.40	5.11	*3.95*	*4.50*	Cap'l Spending per sh	*5.00*
8.02	8.26	9.52	10.05	10.03	10.33	11.13	11.27	11.48	11.82	12.24	12.74	13.40	14.02	15.17	18.57	*16.15*	*16.50*	Book Value per sh	*17.35*
11.36	11.58	13.17	13.25	13.40	13.52	15.57	15.70	15.82	15.96	16.12	16.23	16.30	16.35	16.40	17.43	*17.65*	*17.75*	Common Shs Outst'g C	*18.00*
26.4	27.4	22.7	21.6	19.8	21.0	17.8	21.7	20.8	19.7	18.5	19.1	25.6	28.4	22.2	29.7	*Bold figures are*		Avg Ann'l P/E Ratio	*23.0*
1.39	1.46	1.23	1.15	1.19	1.40	1.13	1.36	1.32	1.11	.97	.96	1.34	1.43	1.20	1.61	*Value Line*		Relative P/E Ratio	*1.30*
3.4%	3.5%	3.7%	3.7%	4.0%	4.7%	4.2%	4.0%	4.0%	3.7%	3.7%	3.3%	2.3%	2.2%	2.1%	1.6%	*estimates*		Avg Ann'l Div'd Yield	*2.2%*

CAPITAL STRUCTURE as of 6/30/20
Total Debt $282.7 mill. **Due in 5 Yrs** $33.3 mill.
LT Debt $237.9 mill. **LT Interest** $7.2 mill.
(Total interest coverage: 7.4x)
(42% of Cap'l)

Pension Assets-12/19 $80.4 mill.
Oblig. $100.9 mill.
Pfd Stock $2.4 mill. **Pfd Div'd:** $.1 mill.

Common Stock 17,464,795 shs.
as of 7/31/20

MARKET CAP: $1.1 billion (Mid-Cap)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		23-25
102.7	102.1	110.4	114.8	117.1	126.0	132.9	130.8	138.1	134.6	*145*	*150*	Revenues ($mill)	*165*
14.3	13.4	14.4	16.6	18.4	20.0	22.7	22.8	32.5	33.9	*38.0*	*40.0*	Net Profit ($mill)	*45.0*
32.1%	32.7%	33.9%	34.1%	35.0%	34.5%	34.0%	32.7%	2.8%	2.8%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
6.8%	6.1%	3.4%	1.9%	1.7%	1.9%	2.7%	3.1%	1.4%	3.4%	*2.0%*	*2.0%*	AFUDC % to Net Profit	*2.5%*
43.1%	42.3%	41.5%	40.4%	40.5%	39.4%	37.9%	37.5%	37.8%	41.5%	*42.5%*	*41.5%*	Long-Term Debt Ratio	*39.0%*
55.8%	56.6%	57.4%	58.7%	58.8%	59.8%	61.5%	61.8%	61.6%	58.2%	*57.0%*	*58.0%*	Common Equity Ratio	*60.5%*
310.5	312.5	316.5	321.4	335.8	345.4	355.4	370.7	404.1	556.7	*500*	*505*	Total Capital ($mill)	*515*
405.9	422.2	435.2	446.5	465.4	481.9	517.8	557.2	618.5	705.7	*720*	*735*	Net Plant ($mill)	*775*
5.7%	5.2%	5.4%	5.9%	6.3%	6.6%	7.1%	6.9%	8.9%	6.7%	*8.0%*	*8.5%*	Return on Total Cap'l	*9.0%*
8.1%	7.5%	7.8%	8.7%	9.2%	9.6%	10.3%	9.8%	12.9%	10.4%	*13.0%*	*13.5%*	Return on Shr. Equity	*14.5%*
8.2%	7.5%	7.8%	8.7%	9.3%	9.6%	10.3%	9.9%	13.0%	10.4%	*13.5%*	*13.5%*	Return on Com Equity	*14.5%*
2.1%	1.0%	1.4%	2.4%	3.1%	3.5%	4.3%	3.8%	7.0%	5.4%	*7.0%*	*7.0%*	Retained to Com Eq	*7.0%*
75%	87%	83%	73%	67%	63%	58%	62%	46%	48%	*48%*	*49%*	All Div'ds to Net Prof	*50%*

CURRENT POSITION ($MILL.)	2018	2019	6/30/20
Cash Assets	3.7	2.2	13.2
Other	27.1	26.9	30.8
Current Assets	30.8	29.1	44.0
Accts Payable	19.3	23.3	22.8
Debt Due	55.8	27.2	44.8
Other	19.3	14.5	16.7
Current Liab.	94.4	65.0	84.3

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '17-'19 to '23-'25
Revenues	2.0%	2.5%	*2.0%*
"Cash Flow"	6.0%	9.5%	*4.5%*
Earnings	8.0%	12.0%	*6.0%*
Dividends	2.5%	4.0%	*5.5%*
Book Value	4.5%	6.0%	*1.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	30.1	33.0	36.2	31.5	130.8
2018	31.2	34.9	38.7	33.3	138.1
2019	30.7	33.4	37.8	32.7	134.6
2020	31.8	35.3	*42.0*	*35.9*	*145*
2021	*33.0*	*37.0*	*44.0*	*36.0*	*150*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	.27	.33	.46	.32	1.38
2018	.27	.52	.74	.43	1.96
2019	.39	.49	.66	.46	2.01
2020	.44	.55	*.69*	*.47*	*2.15*
2021	*.45*	*.55*	*.73*	*.52*	*2.25*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2016	.19875	.19875	.19875	.21125	.81
2017	.21125	.21125	.21125	.22375	.86
2018	.22375	.22375	.22375	.24	.91
2019	.24	.24	.24	.2562	.98
2020	.2562	.2562	.2562		

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 61,000 retail customers, primarily in Middlesex County, New Jersey. In 2019, the Middlesex System accounted for 60% of operating revenues. At 12/31/19, the company had 352 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 3.1% of the com. stock; BlackRock Inst. Trust Co., 7.7% (4/20 proxy). Add.: 485 C Route 1 South, Suite 400, Iselin, NJ 08830. Tel.: 732-634-1500. Int.: www.middlesexwater.com.

Middlesex Water's bottom line surged in the June period. The regulated water utility posted second-quarter profits of $0.55 a share, a nickel better than we had expected. Driving the outperformance was healthier operating margins and an income tax benefit related to recently adopted tangible property regulations. Revenues rose nicely, as well, thanks to an expanding customer base in its Delaware system and higher water consumption. Accordingly, we are adding $0.05 to our earnings-per-share forecasts for this year and next, to $2.15 and $2.25, respectively. We are leaving unchanged our top-line estimates at this time. Plenty of tailwinds, such as higher rates, increasing customers, and a heighten approach to personal hygiene, are likely to persist. However, we are keeping an eye on residential water consumption levels as stay-at-home restrictions fade and members of the household slowly return to the office and classroom.

The company recently wrapped up a major infrastructure project. Middlesex completed construction of a two-year, $50 million supplemental transmission pipeline in its New Jersey system. Subsequent to this accomplishment, we do not expect leadership to take its foot off the gas in terms of infrastructure improvement spending. To reiterate, the company's long-term program, Water For Tomorrow, boasts a $300 million budget, and ought to be used to replace and improve aging infrastructure such as watermains, pipelines, and wastewater treatment facilities.

At recent levels, Middlesex stock is suited primarily for subscribers with a short-term investment horizon. The equity is presently in the good graces of our Timeliness Ranking System. That said, the stock's multiyear price ascent (MSEX shares recently traded at an all-time high) has limited some of its long-term appeal. To this point, capital appreciation potential over the 3- to 5-year time frame is below average, and the current dividend yield is dwarfed by the *Value Line* median. All told, we recommend buy-and-hold accounts defer capital commitments until a more attractive entry point is available.

Nicholas P. Patrikis *October 9, 2020*

(A) Diluted earnings. Next earnings report due late October.
(B) Dividends historically paid in mid-Feb., May, Aug., and November.■ Div'd reinvestment plan available.
(C) In millions.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	60
Earnings Predictability	80

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SJW GROUP NYSE-SJW

RECENT PRICE **61.23** | P/E RATIO **28.2** (Trailing: 42.5 Median: 21.0) | RELATIVE P/E RATIO **1.35** | DIV'D YLD **2.1%** | VALUE LINE

TIMELINESS — Suspended 5/4/18
SAFETY 3 New 4/22/11
TECHNICAL — Suspended 5/4/18
BETA .80 (1.00 = Market)

High:	30.4	28.2	26.8	26.9	30.1	33.7	35.7	56.9	69.3	68.4	74.5	75.0
Low:	18.2	21.6	20.9	22.6	24.5	25.5	27.5	28.6	45.4	51.3	53.9	45.6

Target Price Range 2023 | 2024 | 2025

LEGENDS
— 1.50 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$54-$128	$91 (50%)

2023-25 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	95	(+55%)	*13%*
Low	65	(+5%)	*4%*

Institutional Decisions

	4Q2019	1Q2020	2Q2020
to Buy	93	72	78
to Sell	76	95	75
Hld's(000)	19650	19448	19939

Percent shares traded 15 10 5

% TOT. RETURN 8/20

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-7.2	8.7
3 yr.	18.6	17.6
5 yr.	138.5	45.6

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	© VALUE LINE PUB. LLC	23-25
9.14	9.86	10.35	11.25	12.12	11.68	11.62	12.85	14.01	13.73	15.76	14.97	16.61	18.97	14.00	14.78	*19.15*	*19.85*	Revenues per sh	*21.65*
1.89	2.21	2.38	2.30	2.44	2.21	2.38	2.80	2.97	2.90	4.42	3.86	4.76	5.24	3.29	3.67	*3.80*	*4.20*	"Cash Flow" per sh	*5.30*
.87	1.12	1.19	1.04	1.08	.81	.84	1.11	1.18	1.12	2.54	1.85	2.57	2.86	1.82	1.35	*2.05*	*2.50*	Earnings per sh A	*3.65*
.51	.53	.57	.61	.65	.66	.68	.69	.71	.73	.75	.78	.81	1.04	1.12	1.20	*1.28*	*1.36*	Div'd Decl'd per sh B■	*1.66*
2.31	2.83	3.87	6.62	3.79	3.17	5.65	3.75	5.67	4.68	5.02	5.24	6.95	7.26	5.08	6.25	*5.25*	*5.75*	Cap'l Spending per sh	*6.50*
10.11	10.72	12.48	12.90	13.99	13.66	13.75	14.20	14.71	15.92	17.75	18.83	20.61	22.57	31.31	31.27	*32.25*	*35.60*	Book Value per sh	*39.15*
18.27	18.27	18.28	18.36	18.18	18.50	18.55	18.59	18.67	20.17	20.29	20.38	20.46	20.52	28.40	28.46	*29.00*	*29.50*	Common Shs Outst'g C	*30.00*
19.6	19.7	23.5	33.4	26.2	28.7	29.1	21.2	20.4	24.3	11.2	16.6	15.7	18.8	32.7	47.8	*Bold figures are*		Avg Ann'l P/E Ratio	*22.0*
1.04	1.05	1.27	1.77	1.58	1.91	1.85	1.33	1.30	1.37	.59	.84	.82	.95	1.77	2.58	*Value Line*		Relative P/E Ratio	*1.20*
3.0%	2.4%	2.0%	1.7%	2.3%	2.8%	2.8%	2.9%	3.0%	2.7%	2.6%	2.5%	2.0%	1.9%	1.9%	1.9%	*estimates*		Avg Ann'l Div'd Yield	*2.1%*

CAPITAL STRUCTURE as of 6/30/20
Total Debt $1338.4 mill. **Due in 5 Yrs** $22.4 mill.
LT Debt $1316.0 mill. **LT Interest** $50.0 mill.
(LT Interest Coverage: 4.5x)
(60% of Cap'l)

Pension Assets-12/19 $243.5 mill.
Oblig. $338.2 mill.
Pfd Stock None.
Common Stock 28,516,705 shs.

MARKET CAP: $1.7 billion (Mid Cap)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		23-25
215.6	239.0	261.5	276.9	319.7	305.1	339.7	389.2	397.7	420.5	*555*	*585*	Revenues ($mill)	*650*
15.8	20.9	22.3	23.5	51.8	37.9	52.8	59.2	38.8	38.7	*59.5*	*73.5*	Net Profit ($mill)	*110*
38.8%	41.1%	41.1%	38.7%	32.5%	38.1%	38.8%	36.7%	20.6%	25.3%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
--	--	--	--	--	--	--	--	2.0%	1.5%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*1.5%*
53.7%	56.6%	55.0%	51.1%	51.6%	49.8%	50.7%	48.2%	32.7%	59.1%	*58.0%*	*53.5%*	Long-Term Debt Ratio	*39.0%*
46.3%	43.4%	45.0%	48.9%	48.4%	50.2%	49.3%	51.8%	67.3%	40.9%	*42.0%*	*46.5%*	Common Equity Ratio	*61.0%*
550.7	607.9	610.2	656.2	744.5	764.6	855.0	894.3	1320.7	2173.6	*2235*	*2250*	Total Capital ($mill)	*1925*
785.5	756.2	831.6	898.7	963.0	1036.8	1146.4	1239.3	1328.8	2206.5	*2300*	*2450*	Net Plant ($mill)	*2775*
4.3%	4.9%	5.0%	5.0%	8.3%	6.3%	7.4%	7.9%	3.9%	2.5%	*3.0%*	*4.0%*	Return on Total Cap'l	*6.5%*
6.2%	7.9%	8.1%	7.3%	14.4%	9.9%	12.5%	12.8%	4.4%	4.3%	*6.5%*	*7.0%*	Return on Shr. Equity	*9.5%*
6.2%	7.9%	8.1%	7.3%	14.4%	9.9%	12.5%	12.8%	4.4%	4.3%	*6.5%*	*7.0%*	Return on Com Equity	*9.5%*
1.2%	3.1%	3.3%	2.8%	10.2%	5.7%	8.6%	8.2%	1.8%	.5%	*2.5%*	*3.0%*	Retained to Com Eq	*5.0%*
80%	61%	59%	62%	29%	42%	31%	36%	60%	88%	*62%*	*54%*	All Div'ds to Net Prof	*45%*

CURRENT POSITION ($MILL.)	2018	2019	6/30/20
Cash Assets	420.7	17.9	23.3
Accts Receivable	19.2	36.3	44.9
Other	62.8	67.8	77.3
Current Assets	502.7	122.0	145.5
Accts Payable	24.9	34.9	24.3
Debt Due	- -	22.3	22.4
Other	139.1	177.4	211.3
Current Liab.	164.0	234.6	258.0

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '17-'19 to '23-'25
Revenues	3.0%	2.0%	*5.5%*
"Cash Flow"	6.0%	3.5%	*4.5%*
Earnings	7.5%	4.5%	*10.5%*
Dividends	6.0%	9.0%	*7.0%*
Book Value	7.5%	12.0%	*5.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	69.0	102.1	124.6	93.5	389.2
2018	75.0	99.1	124.9	98.7	397.7
2019	77.7	103.0	114.0	126.0	420.5
2020	115.8	147.2	*160*	*132*	*555*
2021	*120*	*150*	*170*	*145*	*585*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	.18	.90	.94	.84	2.86
2018	.06	.62	.76	.38	1.82
2019	.21	.47	.33	.34	1.35
2020	.08	.69	*.85*	*.43*	*2.05*
2021	*.20*	*.75*	*.90*	*.65*	*2.50*

Cal-endar	QUARTERLY DIVIDENDS PAID BD■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2016	.2025	.2025	.2025	.2025	.81
2017	.2175	.2175	.2175	.3875	1.04
2018	.28	.28	.28	.28	1.12
2019	.30	.30	.30	.30	1.20
2020	.32	.32	.32		

BUSINESS: SJW Group engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 231,000 connections with a total population of roughly one million people in the San Jose area and 16,000 connections that reach about 49,000 residents in the region between San Antonio and Austin, Texas. The company merged with Connecticut Water (10/19) which provides service to approx. 138,000 connections with a total population of 450,000 people. Has 361 employees. Officers and directors own 8.3% of outstanding shares (3/20 proxy). Chairman & CEO: Richard Roth. Incorporated: California. Address: 110 West Taylor Street, San Jose, CA 95110. Telephone: (408) 279-7800. Internet: www.sjwater.com.

Shares of SJW traded above $70 per share in mid-August before pulling back to levels seen three months prior. The East and West coasts (post CTWS merger) regulated water utility found some market support following the release of better-than-expected second-quarter financial results. Earlier this year, the company had been on shaky ground stemming from a combination of COVID-19-related disruptions and the ongoing integration of Connecticut Water. Even so, SJW delivered a relatively inspiring June-period performance. Revenues of $147 million exceeded our $135 million call, while earnings came in $0.09 better than expected, at $0.69 a share. However, the stock was unable to hold its gains, likely due to recent broader market turbulence amidst an uncertain economic backdrop.

We are lifting our profit forecasts for this year and next. Specifically, we are adding $0.10 and $0.05 to our 2020 and 2021 share-net estimates, to $2.05 and $2.50, respectively. In regard to the latter, our call for healthy double-digit bottom-line expansion is underpinned by the assumption of subsiding integration-related operating expenses, as well as lower production and water purchase costs.

Despite slightly lagging the *Value Line* median, SJW is currently one of the more-attractive income-generating options in the Water Utility industry. The current yield is hovering just above 2.0%, while many of its peers fall below that metric. Additionally, a reasonable payout ratio and prospects for increased profitability suggest that annual dividend hikes are likely on tap over the coming years.

We are fans of the long-term story here; however, at the recent quotation, we are not presently recommending the stock. From a business perspective, SJW is well positioned to benefit from increased hygiene awareness, a rapidly expanding customer base, and periodic rate hikes. Nevertheless, unranked SJW shares have risen considerably in price over the past few years, thus rendering 3- to 5-year total return potential subpar. All told, subscribers interested in adding a noncyclical water utility to their portfolios should hold off, for now.

Nicholas P. Patrikis *October 9, 2020*

(A) Diluted earnings. Excludes nonrecurring losses: '04, $3.78; '05, $1.09; '06, $16.36; '08, $1.22; '10, $0.46. GAAP accounting as of 2013. Next earnings report due early Nov. 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.
(D) Paid special dividend of $0.17 per share on 11/17.
(E) Suspended due to recent CTWS merger.

Company's Financial Strength	B+
Stock's Price Stability	75
Price Growth Persistence	65
Earnings Predictability	45

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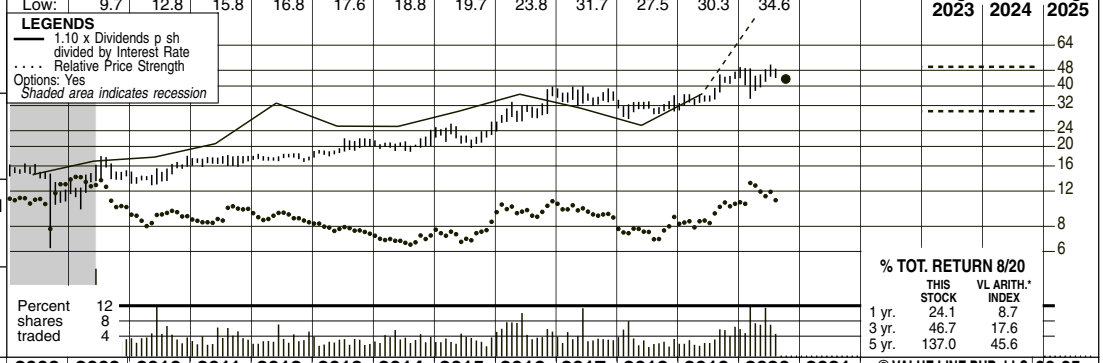
YORK WATER NDQ-YORW

RECENT PRICE 43.39 | P/E RATIO 34.2 (Trailing: 35.0 Median: 26.0) | RELATIVE P/E RATIO 1.64 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 2 Raised 5/29/20
SAFETY 3 Lowered 7/17/15
TECHNICAL 2 Lowered 5/29/20
BETA .80 (1.00 = Market)

High:	18.0	18.0	18.1	18.5	22.0	24.3	26.7	39.8	39.9	36.1	47.3	51.3
Low:	9.7	12.8	15.8	16.8	17.6	18.8	19.7	23.8	31.7	27.5	30.3	34.6

LEGENDS
— 1.10 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession



Target Price Range 2023 | 2024 | 2025

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$34-$74	$54 (25%)

2023-25 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+15%)	6%
Low	30	(-30%)	-6%

Institutional Decisions

	4Q2019	1Q2020	2Q2020
to Buy	52	61	59
to Sell	39	52	48
Hld's(000)	5387	5387	5479

Percent shares traded 12 8 4

% TOT. RETURN 8/20

	THIS STOCK	VL ARITH.* INDEX
1 yr.	24.1	8.7
3 yr.	46.7	17.6
5 yr.	137.0	45.6

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	© VALUE LINE PUB. LLC	23-25
2.18	2.58	2.56	2.79	2.89	2.95	3.07	3.18	3.21	3.27	3.58	3.68	3.70	3.77	3.74	3.96	*4.10*	*4.20*	Revenues per sh	*5.10*
.65	.79	.77	.86	.88	.95	1.07	1.09	1.12	1.19	1.36	1.45	1.42	1.53	1.58	1.70	*1.90*	*1.95*	"Cash Flow" per sh	*2.40*
.49	.56	.58	.57	.57	.64	.71	.71	.72	.75	.89	.97	.92	1.01	1.04	1.11	*1.30*	*1.35*	Earnings per sh A	*1.60*
.39	.42	.45	.48	.49	.51	.52	.53	.54	.55	.57	.60	.63	.65	.67	.70	*.73*	*.78*	Div'd Decl'd per sh B	*.95*
2.50	1.69	1.85	1.69	2.17	1.18	.83	.74	.94	.76	1.10	1.11	1.03	1.95	1.95	.16	*.85*	*1.35*	Cap'l Spending per sh	*1.85*
4.65	4.85	5.84	5.97	6.14	6.92	7.19	7.45	7.73	7.98	8.15	8.51	8.88	9.28	9.75	10.31	*11.15*	*11.60*	Book Value per sh	*12.50*
10.33	10.40	11.20	11.27	11.37	12.56	12.69	12.79	12.92	12.98	12.83	12.81	12.85	12.87	12.94	13.02	*13.00*	*12.95*	Common Shs Outst'g C	*12.80*
25.7	26.3	31.2	30.3	24.6	21.9	20.7	23.9	24.4	26.3	23.1	23.5	32.8	34.6	30.3	33.8	*Bold figures are*		Avg Ann'l P/E Ratio	*25.0*
1.36	1.40	1.68	1.61	1.48	1.46	1.32	1.50	1.55	1.48	1.22	1.18	1.72	1.74	1.64	1.83	*Value Line*		Relative P/E Ratio	*1.40*
3.1%	2.9%	2.5%	2.8%	3.5%	3.6%	3.5%	3.1%	3.1%	2.8%	2.8%	2.6%	2.1%	1.9%	2.1%	1.9%	*estimates*		Avg Ann'l Div'd Yield	*2.4%*

CAPITAL STRUCTURE as of 6/30/20
Total Debt $103.1 mill. **Due in 5 Yrs** $42.5 mill.
LT Debt $96.6 mill. **LT Interest** $5.5 mill.
(41% of Cap'l)

Pension Assets12/19 $49.3 mill.
Oblig. $47.3 mill.

Pfd Stock None

Common Stock 13,033,999 shs.

MARKET CAP: $575 million (Small Cap)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		23-25
39.0	40.6	41.4	42.4	45.9	47.1	47.6	48.6	48.4	51.6	*53.5*	*54.5*	Revenues ($mill)	*65.0*
8.9	9.1	9.3	9.7	11.5	12.5	11.8	13.0	13.4	14.4	*17.0*	*17.5*	Net Profit ($mill)	*20.5*
38.5%	35.3%	37.6%	37.6%	29.8%	27.5%	31.3%	25.9%	15.7%	13.5%	*18.5%*	*21.0%*	Income Tax Rate	*21.0%*
1.2%	1.1%	1.1%	.8%	1.8%	1.6%	1.9%	6.7%	1.7%	2.5%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*1.5%*
48.3%	47.1%	46.0%	45.1%	44.8%	44.4%	42.6%	43.0%	42.5%	41.3%	*38.5%*	*37.5%*	Long-Term Debt Ratio	*36.0%*
51.7%	52.9%	54.0%	54.9%	55.2%	55.6%	57.4%	57.0%	57.5%	58.7%	*61.5%*	*62.5%*	Common Equity Ratio	*64.0%*
176.4	180.2	184.8	188.4	189.4	196.3	198.7	209.5	219.5	228.7	*235*	*240*	Total Capital ($mill)	*250*
228.4	233.0	240.3	244.2	253.2	261.4	270.9	288.8	299.2	313.2	*315*	*320*	Net Plant ($mill)	*335*
6.5%	6.4%	6.4%	6.5%	7.4%	7.6%	7.2%	7.5%	7.3%	7.4%	*8.5%*	*8.5%*	Return on Total Cap'l	*9.0%*
9.8%	9.5%	9.3%	9.3%	11.0%	11.5%	10.4%	10.9%	10.6%	10.7%	*11.5%*	*11.5%*	Return on Shr. Equity	*13.0%*
9.8%	9.5%	9.3%	9.3%	11.0%	11.5%	10.4%	10.9%	10.6%	10.7%	*11.5%*	*11.5%*	Return on Com Equity	*13.0%*
2.7%	2.5%	2.4%	2.4%	3.9%	4.4%	3.4%	4.0%	3.8%	4.0%	*5.0%*	*5.0%*	Retained to Com Eq	*5.0%*
72%	73%	74%	74%	64%	62%	67%	63%	64%	62%	*56%*	*58%*	All Div'ds to Net Prof	*59%*

CURRENT POSITION ($MILL.)	2018	2019	6/30/20
Cash Assets	- -	- -	- -
Accounts Receivable	4.8	4.4	5.0
Inventory (Avg. Cost)	.9	1.0	1.1
Other	3.3	4.0	4.1
Current Assets	9.0	9.4	10.2
Accts Payable	3.0	3.4	4.0
Debt Due	1.0	6.5	6.5
Other	6.8	5.3	5.7
Current Liab.	10.8	15.2	16.2

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '17-'19 to '23-'25
Revenues	3.0%	2.5%	*5.0%*
"Cash Flow"	6.0%	5.5%	*7.0%*
Earnings	6.0%	6.0%	*7.0%*
Dividends	3.0%	4.0%	*6.0%*
Book Value	4.5%	4.0%	*4.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	11.3	12.3	12.7	12.3	48.6
2018	11.6	12.0	12.7	12.1	48.4
2019	11.8	13.0	13.7	13.1	51.6
2020	12.9	13.3	*14.0*	*13.3*	*53.5*
2021	*13.0*	*13.5*	*14.5*	*13.5*	*54.5*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2017	.20	.23	.31	.27	1.01
2018	.20	.26	.29	.29	1.04
2019	.22	.28	.35	.26	1.11
2020	.31	.32	*.35*	*.32*	*1.30*
2021	*.28*	*.35*	*.37*	*.35*	*1.35*

Cal-endar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2016	.1555	.1555	.1555	.1602	.627
2017	.1602	.1602	.1602	.1666	.647
2018	.1666	.1666	.1666	.1733	.673
2019	.1733	.1733	.1733	.1802	.70
2020	.1802	.1802	.1802		

BUSINESS: The York Water Company is the oldest investor-owned regulated water utility in the United States. It has operated continuously since 1816. As of December 31, 2019, the company's average daily availability was 35.4 million gallons and its service territory had an estimated population of 201,000. Has more than 71,400 customers. Residential customers accounted for 65% of 2019 revenues; commercial and industrial (28%); other (7%). It also provides sewer billing services. Incorporated: PA. York had 106 full-time employees at 12/31/19. President/Chief Executive Officer: J.T. Hand. Officers/directors own 1.2% of the common stock (3/20 proxy). Address: 130 East Market Street, York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

York Water delivered strong top- and bottom-line performances in the second quarter. Indeed, the Pennsylvania-based regulated water utility held up considerably well during the height of the pandemic, and should continue to thrive as the economy appears to be entering recovery mode. The company generated $13.3 million in revenues in the June period, up 21% from the previous-year figure, while earnings clocked in at $0.32 a share, up about 14% year over year. Underpinning the advances was a combination of recent rate hikes, increased water consumption per residential customers (largely due to more people staying and working from home amidst lingering health concerns), as well as growth in its customer base (both acquisition and homebuying related). Moreover, share profits were boosted by lower taxes tied to greater tangible property deductions and a declining interest expense.

We think modest financial growth is in the cards next year. Revenues are expected to increase to about $55 million, while earnings may edge up a nickel, to $1.35 a share. Our somewhat conservative projections stem partly from periodically rising operation and maintenance expenses. On top of that, as much of the population slowly returns to work and school, household water consumption could take a slight step back, despite an increase in general hygiene practices.

True to form, infrastructure upgrades are on tap over the pull to mid-decade. York invested $9.0 million year to date on various replacements and water system improvements, and expects to spend an additional $12.0 million over the next six months on main extensions, wastewater treatment plant expansions, and broad pipe and service line upgrades. Infrastructure spending ought to considerably ramp up over the coming years, as the company focuses on delivering safe water to its growing customer base.

The equity is favorably ranked (2) for relative year-ahead price performance. That said, although York shares have slipped modestly in price since our mid-July review, total return potential out to 2023-2025 still leaves much to be desired at the recent quotation.

Nicholas P. Patrikis *October 9, 2020*

(A) Diluted earnings. Next earnings report due late October.
(B) Dividends historically paid in late February, June, September, and December.
(C) In millions, adjusted for split.

Company's Financial Strength	B+
Stock's Price Stability	75
Price Growth Persistence	75
Earnings Predictability	100

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Aquarion Water Company of New Hampshire, Inc.
Summary of Risk Premium Models for the
Proxy Group of Seven Water Companies

	Proxy Group of Seven Water Companies
Predictive Risk Premium Model (PRPM) (1)	10.82 %
Risk Premium Using an Adjusted Total Market Approach (2)	10.30 %
Average	10.56 %

Notes:
(1) From page 2 of this Attachment.
(2) From page 3 of this Attachment.

Aquarion Water Company of New Hampshire, Inc.
Indicated ROE
Derived by the Predictive Risk Premium Model (1)

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
Proxy Group of Seven Water Companies	LT Average Predicted Variance	Spot Predicted Variance	Recommended Variance	GARCH Coefficient	Predicted Risk Premium (2)	Risk-Free Rate (3)	Indicated ROE (4)
American States Water Company	0.38%	0.37%	0.38%	1.8583	8.73%	2.11%	10.84%
American Water Works Company, Inc.	0.23%	0.15%	0.19%	5.9529	14.28%	2.11%	NMF
California Water Service Group	0.32%	0.29%	0.30%	1.8743	7.05%	2.11%	9.16%
Essential Utilities, Inc.	0.44%	0.44%	0.44%	2.2287	12.45%	2.11%	14.56%
Middlesex Water Company	0.30%	0.30%	0.30%	2.1314	7.91%	2.11%	10.02%
SJW Group	0.42%	0.37%	0.39%	1.5198	7.44%	2.11%	9.55%
York Water Company	0.45%	0.37%	0.41%	2.1147	10.95%	2.11%	13.06%
						Average	11.20%
						Median	10.43%
						Average of Mean and Median	10.82%

NMF = Not Meaningful Figure

Notes:

(1) The Predictive Risk Premium Model uses historical data to generate a predicted variance and a GARCH coefficient. The historical data used are the equity risk premiums for the first available trading month as reported by Bloomberg Professional Service.

(2) (1+(Column [3] * Column [4])^12) - 1.

(3) From note 2 on page 2 of Attachment DWD-5.

(4) Column [5] + Column [6].

Aquarion Water Company of New Hampshire, Inc.
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

Line No.		Proxy Group of Seven Water Companies	
1.	Prospective Yield on Aaa Rated Corporate Bonds (1)	2.96	%
2.	Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A2 Rated Public Utility Bonds	0.54	(2)
3.	Adjusted Prospective Yield on A2 Rated Public Utility Bonds	3.50	%
4.	Adjustment to Reflect Bond Rating Difference of Proxy Group	0.06	(3)
5.	Adjusted Prospective Bond Yield	3.56	%
6.	Equity Risk Premium (4)	6.74	
7.	Risk Premium Derived Common Equity Cost Rate	10.30	%

Notes:
(1) Consensus forecast of Moody's Aaa Rated Corporate bonds from Blue Chip Financial Forecasts (see pages 10-11 of this Attachment).
(2) The average yield spread of A2 rated public utility bonds over Aaa rated corporate bonds of 0.54% from page 4 of this Attachment.
(3) Adjustment to reflect the A2/A3 Moody's LT issuer rating of the Utility Proxy Group as shown on page 5 of this Attachment. The 0.06% upward adjustment is derived by taking 1/6 of the spread between A2 and Baa2 Public Utility Bonds (1/6 * 0.34% = 0.06%) as derived from page 4 of this Attachment.
(4) From page 7 of this Attachment.

Aquarion Water Company of New Hampshire, Inc.
Interest Rates and Bond Spreads for
Moody's Corporate and Public Utility Bonds

Selected Bond Yields

	[1] Aaa Rated Corporate Bond	[2] A2 Rated Public Utility Bond	[3] Baa2 Rated Public Utility Bond
Sep-2020	2.31 %	2.84 %	3.17 %
Aug-2020	2.25	2.73	3.06
Jul-2020	2.14	2.74	3.09
Average	2.23 %	2.77 %	3.11 %

Selected Bond Spreads

A2 Rated Public Utility Bonds Over Aaa Rated Corporate Bonds:
0.54 % (1)

Baa2 Rated Public Utility Bonds Over A2 Rated Public Utility Bonds:
0.34 % (2)

Notes:
(1) Column [2] - Column [1].
(2) Column [3] - Column [2].

Source of Information:
Bloomberg Professional Service

Aquarion Water Company of New Hampshire, Inc.
Comparison of Long-Term Issuer Ratings for
Proxy Group of Seven Water Companies

	Moody's Long-Term Issuer Rating October 2020		Standard & Poor's Long-Term Issuer Rating October 2020	
Proxy Group of Seven Water Companies	Long-Term Issuer Rating	Numerical Weighting (1)	Long-Term Issuer Rating	Numerical Weighting(1)
American States Water Company (2)	A2	6.0	A+	5.0
American Water Works Company Inc (3)	A3	7.0	A	6.0
California Water Service Group (4)	NR	- -	A+	5.0
Essential Utilities, Inc. (5)	NR	- -	A	6.0
Middlesex Water Company	NR	- -	A	6.0
SJW Corp. (6)	NR	- -	A/A-	6.5
York Water Company	NR	- -	A-	7.0
Average	A2/A3	6.5	A	5.9

Notes:

(1) From page 6 of this Attachment.
(2) Ratings that of Golden State Water Company.
(3) Ratings that of New Jersey and Pennsylvania American Water Companies.
(4) Ratings that of California Water Service Company.
(5) Ratings that of Aqua Pennsylvania, Inc.
(6) Ratings that of San Jose Water Company and The Connecticut Water Company

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

Numerical Assignment for
Moody's and Standard & Poor's Bond Ratings

Moody's Bond Rating	Numerical Bond Weighting	Standard & Poor's Bond Rating
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-
B1	14	B+
B2	15	B
B3	16	B-

Aquarion Water Company of New Hampshire, Inc.
Judgment of Equity Risk Premium for the
Proxy Group of Seven Water Companies

Line No.		Proxy Group of Seven Water Companies
1.	Calculated equity risk premium based on the total market using the beta approach (1)	7.72 %
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with A2 rated bonds (2)	5.75
3.	Average equity risk premium	6.74 %

Notes: (1) From page 8 of this Attachment.
(2) From page 12 of this Attachment.

Aquarion Water Company of New Hampshire, Inc.
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for the
Proxy Group of Seven Water Companies

Line No.	Equity Risk Premium Measure	Proxy Group of Seven Water Companies
	Ibbotson-Based Equity Risk Premiums:	
1.	Ibbotson Equity Risk Premium (1)	5.78 %
2.	Regression on Ibbotson Risk Premium Data (2)	9.42
3.	Ibbotson Equity Risk Premium based on PRPM (3)	9.54
4.	Equity Risk Premium Based on Value Line Summary and Index (4)	10.73
5.	Equity Risk Premium Based on Value Line S&P 500 Companies (5)	10.99
6.	Equity Risk Premium Based on Bloomberg S&P 500 Companies (6)	10.74
7.	Conclusion of Equity Risk Premium	9.53 %
8.	Adjusted Beta (7)	0.81
9.	Forecasted Equity Risk Premium	7.72 %

Notes provided on page 9 of this Attachment.

Aquarion Water Company of New Hampshire, Inc.
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for the
Proxy Group of Seven Water Companies

Notes:

(1) Based on the arithmetic mean historical monthly returns on large company common stocks from Ibbotson® SBBI® 2020 Market Report minus the arithmetic mean monthly yield of Moody's average Aaa and Aa2 corporate bonds from 1926-2019.

(2) This equity risk premium is based on a regression of the monthly equity risk premiums of large company common stocks relative to Moody's average Aaa and Aa rated corporate bond yields from 1928-2019 referenced in Note 1 above.

(3) The Predictive Risk Premium Model (PRPM) is discussed in the accompanying direct testimony. The Ibbotson equity risk premium based on the PRPM is derived by applying the PRPM to the monthly risk premiums between Ibbotson large company common stock monthly returns and average Aaa and Aa2 corporate monthly bond yields, from January 1928 through September 2020.

(4) The equity risk premium based on the Value Line Summary and Index is derived by subtracting the average consensus forecast of Aaa corporate bonds of 2.96% (from page 3 of this Attachment) from the projected 3-5 year total annual market return of 13.69% (described fully in note 1 on page 2 of Attachment DWD-5).

(5) Using data from Value Line for the S&P 500, an expected total return of 13.95% was derived based upon expected dividend yields and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 2.96% results in an expected equity risk premium of 10.99%.

(6) Using data from the Bloomberg Professional Service for the S&P 500, an expected total return of 13.70% was derived based upon expected dividend yields and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 2.96% results in an expected equity risk premium of 10.74%.

(7) Average of mean and median beta from Attachment DWD-5.

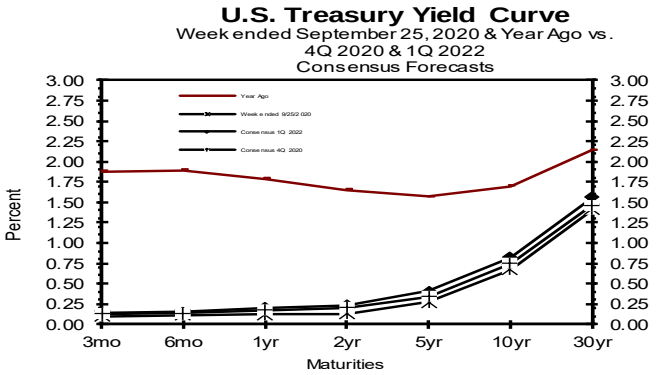
Sources of Information:

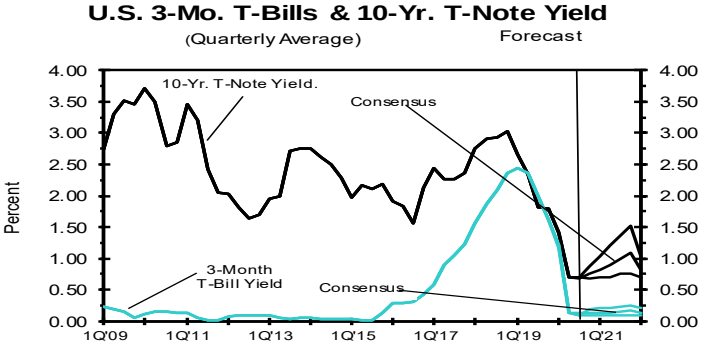
Stocks, Bonds, Bills, and Inflation - 2020 SBBI Yearbook, John Wiley & Sons, Inc.
Industrial Manual and Mergent Bond Record Monthly Update.
Value Line Summary and Index
Blue Chip Financial Forecasts, October 1, 2020 and June 1, 2020
Bloomberg Professional Service

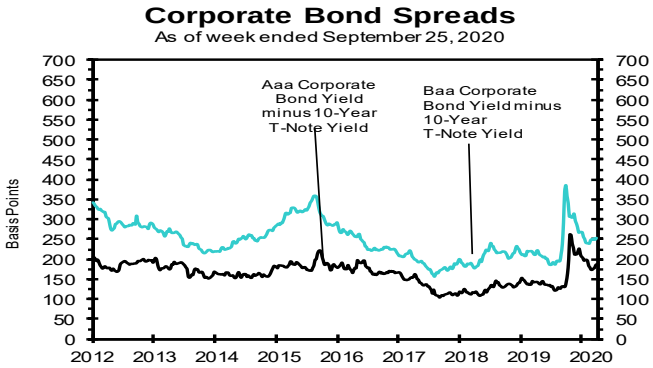
Consensus Forecasts of U.S. Interest Rates and Key Assumptions

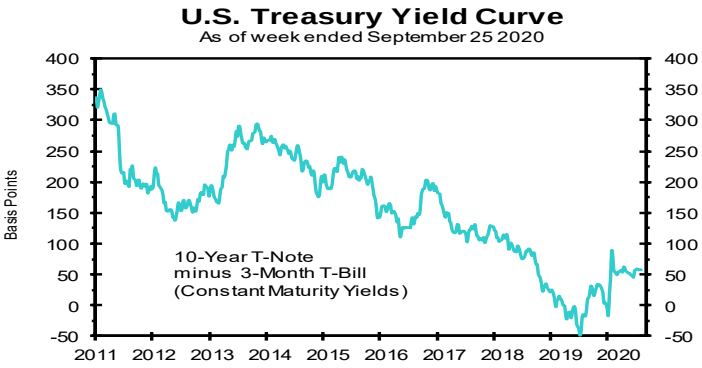
	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week Ending				Average For Month			*Latest Qtr*	4Q	1Q	2Q	3Q	4Q	1Q
Interest Rates	Sep 25	Sep 18	Sep 11	Sep 4	Aug	Jul	Jun	3Q 2020*	2020	2021	2021	2021	2021	2022
Federal Funds Rate	0.09	0.09	0.09	0.09	0.10	0.09	0.08	0.09	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	**3.3**	**3.3**	**3.3**	**3.3**	**3.3**	**3.3**
LIBOR, 3-mo.	0.22	0.23	0.25	0.25	0.25	0.27	0.31	0.26	**0.3**	**0.3**	**0.3**	**0.3**	**0.4**	**0.4**
Commercial Paper, 1-mo.	0.10	0.10	0.09	0.09	0.09	0.11	0.12	0.10	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**
Treasury bill, 3-mo.	0.10	0.11	0.12	0.11	0.10	0.13	0.16	0.12	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**
Treasury bill, 6-mo.	0.11	0.12	0.13	0.12	0.12	0.14	0.18	0.13	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**
Treasury bill, 1 yr.	0.12	0.13	0.14	0.12	0.13	0.15	0.18	0.14	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**
Treasury note, 2 yr.	0.13	0.14	0.14	0.14	0.14	0.15	0.19	0.14	**0.2**	**0.2**	**0.3**	**0.3**	**0.3**	**0.4**
Treasury note, 5 yr.	0.27	0.28	0.27	0.27	0.27	0.28	0.34	0.27	**0.3**	**0.4**	**0.5**	**0.5**	**0.6**	**0.7**
Treasury note, 10 yr.	0.67	0.69	0.69	0.68	0.65	0.62	0.73	0.65	**0.8**	**0.8**	**0.9**	**1.0**	**1.1**	**1.1**
Treasury note, 30 yr.	1.41	1.44	1.43	1.42	1.36	1.31	1.49	1.36	**1.5**	**1.6**	**1.6**	**1.7**	**1.8**	**1.9**
Corporate Aaa bond	2.56	2.55	2.57	2.54	2.48	2.43	2.73	2.49	**2.3**	**2.4**	**2.5**	**2.6**	**2.7**	**2.7**
Corporate Baa bond	3.20	3.18	3.21	3.17	3.09	3.12	3.44	3.14	**3.5**	**3.6**	**3.6**	**3.7**	**3.7**	**3.8**
State & Local bonds	2.91	2.92	2.92	2.93	2.88	2.99	3.10	2.94	**2.4**	**2.4**	**2.5**	**2.6**	**2.6**	**2.6**
Home mortgage rate	2.90	2.87	2.86	2.93	2.94	3.02	3.16	2.95	**3.0**	**3.0**	**3.1**	**3.1**	**3.2**	**3.2**
	History								Consensus Forecasts-Quarterly					
	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q
Key Assumptions	2018	2019	2019	2019	2019	2020	2020	2020**	2020	2021	2021	2021	2021	2022
Fed's AFE $ Index	109.4	109.4	110.3	110.5	110.3	111.2	112.4	107.2	**107.2**	**107.1**	**106.9**	**106.3**	**106.2**	**106.5**
Real GDP	1.3	2.9	1.5	2.6	2.4	-5.0	-31.7	21.5	**4.6**	**4.3**	**4.0**	**3.8**	**3.4**	**3.1**
GDP Price Index	1.8	1.2	2.5	1.5	1.4	1.4	-2.0	1.9	**1.5**	**1.7**	**1.5**	**1.7**	**1.7**	**1.8**
Consumer Price Index	1.3	0.9	3.0	1.8	2.4	1.2	-3.5	3.2	**2.1**	**1.9**	**1.8**	**2.0**	**2.0**	**2.0**

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: Treasury rates from the Federal Reserve Board's H.15; AAA-AA and A-BBB corporate bond yields from Bank of America-Merrill Lynch and are 15+ years, yield to maturity; State and local bond yields from Bank of America-Merrill Lynch, A-rated, yield to maturity; Mortgage rates from Freddie Mac, 30-year, fixed; LIBOR quotes from Intercontinental Exchange. All interest rate data are sourced from Haver Analytics. Historical data for Fed's Major Currency Index are from FRSR H.10. 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). *Interest rate data for 3Q 2020 based on historical data through the week ended September 23. **Data for 3Q 2020 for the Fed's AFE $ Index based on data through the week ended September 25. Figures for 3Q 2020 Real GDP, GDP Chained Price Index and Consumer Price Index are consensus forecasts from the September 2020 survey.









Long-Range Survey:

The table below contains the results of our twice-annual long-range CONSENSUS survey. There are also Top 10 and Bottom 10 averages for each variable. Shown are consensus estimates for the years 2021 through 2026 and averages for the five-year periods 2022-2026 and 2027-2031. Apply these projections cautiously. Few if any economic, demographic and political forces can be evaluated accurately over such long time spans.

		---------- Average For The Year ----------						Five-Year Averages	
		2021	2022	2023	2024	2025	2026	2022-2026	2027-2031
1. Federal Funds Rate	CONSENSUS	**0.2**	**0.4**	**1.0**	**1.6**	**1.9**	**2.1**	**1.4**	**2.3**
	Top 10 Average	0.4	0.8	1.6	2.2	2.5	2.7	1.9	2.8
	Bottom 10 Average	0.1	0.1	0.4	1.0	1.3	1.5	0.9	1.7
2. Prime Rate	CONSENSUS	**3.4**	**3.6**	**4.1**	**4.7**	**5.0**	**5.2**	**4.5**	**5.4**
	Top 10 Average	3.5	3.9	4.6	5.3	5.5	5.7	5.0	5.9
	Bottom 10 Average	3.3	3.3	3.7	4.2	4.5	4.7	4.1	4.9
3. LIBOR, 3-Mo.	CONSENSUS	**0.6**	**0.9**	**1.4**	**2.0**	**2.3**	**2.4**	**1.8**	**2.6**
	Top 10 Average	0.8	1.3	1.9	2.5	2.7	3.0	2.3	3.1
	Bottom 10 Average	0.4	0.5	0.9	1.6	1.9	2.0	1.4	2.1
4. Commercial Paper, 1-Mo	CONSENSUS	**0.6**	**0.9**	**1.4**	**2.0**	**2.2**	**2.3**	**1.7**	**2.6**
	Top 10 Average	0.7	1.2	1.8	2.3	2.6	2.8	2.1	3.0
	Bottom 10 Average	0.3	0.5	1.1	1.6	1.9	2.0	1.4	2.2
5. Treasury Bill Yield, 3-Mo	CONSENSUS	**0.2**	**0.5**	**1.1**	**1.6**	**1.9**	**2.1**	**1.4**	**2.3**
	Top 10 Average	0.4	0.9	1.6	2.2	2.4	2.6	1.9	2.8
	Bottom 10 Average	0.1	0.2	0.5	1.1	1.4	1.6	0.9	1.8
6. Treasury Bill Yield, 6-Mo	CONSENSUS	**0.3**	**0.6**	**1.1**	**1.7**	**2.0**	**2.2**	**1.5**	**2.5**
	Top 10 Average	0.4	0.9	1.7	2.3	2.6	2.7	2.0	3.0
	Bottom 10 Average	0.2	0.2	0.6	1.2	1.5	1.7	1.1	1.9
7. Treasury Bill Yield, 1-Yr	CONSENSUS	**0.4**	**0.7**	**1.3**	**1.8**	**2.1**	**2.3**	**1.7**	**2.6**
	Top 10 Average	0.5	1.1	1.8	2.4	2.7	2.9	2.2	3.1
	Bottom 10 Average	0.2	0.3	0.7	1.3	1.6	1.8	1.1	2.0
8. Treasury Note Yield, 2-Yr	CONSENSUS	**0.5**	**0.9**	**1.5**	**2.0**	**2.3**	**2.5**	**1.8**	**2.7**
	Top 10 Average	0.8	1.3	2.0	2.5	2.9	3.0	2.4	3.3
	Bottom 10 Average	0.3	0.4	0.9	1.4	1.7	2.0	1.3	2.2
9. Treasury Note Yield, 5-Yr	CONSENSUS	**0.7**	**1.1**	**1.7**	**2.2**	**2.5**	**2.7**	**2.0**	**2.9**
	Top 10 Average	1.1	1.6	2.3	2.8	3.1	3.3	2.6	3.5
	Bottom 10 Average	0.5	0.7	1.2	1.6	1.8	2.1	1.5	2.3
10. Treasury Note Yield, 10-Yr	CONSENSUS	**1.2**	**1.5**	**2.1**	**2.5**	**2.7**	**2.9**	**2.3**	**3.1**
	Top 10 Average	1.5	2.0	2.6	3.1	3.3	3.5	2.9	3.8
	Bottom 10 Average	0.8	1.1	1.6	1.9	2.1	2.2	1.8	2.5
11. Treasury Bond Yield, 30-Yr	CONSENSUS	**1.8**	**2.2**	**2.7**	**3.1**	**3.3**	**3.5**	**3.0**	**3.8**
	Top 10 Average	2.2	2.7	3.3	3.7	3.9	4.1	3.5	4.4
	Bottom 10 Average	1.4	1.7	2.2	2.6	2.8	2.9	2.4	3.1
12. Corporate Aaa Bond Yield	CONSENSUS	**2.8**	**3.2**	**3.6**	**4.0**	**4.2**	**4.3**	**3.9**	**4.6**
	Top 10 Average	3.1	3.6	4.2	4.6	4.7	4.8	4.4	5.1
	Bottom 10 Average	2.4	2.7	3.1	3.5	3.7	3.8	3.4	4.2
13. Corporate Baa Bond Yield	CONSENSUS	**4.1**	**4.5**	**4.9**	**5.2**	**5.3**	**5.4**	**5.0**	**5.7**
	Top 10 Average	4.6	5.0	5.4	5.7	5.8	6.0	5.6	6.2
	Bottom 10 Average	3.6	3.9	4.3	4.6	4.7	4.8	4.4	5.2
14. State & Local Bonds Yield	CONSENSUS	**2.6**	**3.0**	**3.5**	**3.7**	**3.8**	**3.8**	**3.6**	**4.1**
	Top 10 Average	3.0	3.3	3.9	4.2	4.3	4.4	4.0	4.6
	Bottom 10 Average	2.3	2.6	2.9	3.2	3.2	3.3	3.0	3.7
15. Home Mortgage Rate	CONSENSUS	**3.4**	**3.6**	**4.0**	**4.4**	**4.5**	**4.7**	**4.2**	**4.9**
	Top 10 Average	3.8	4.0	4.5	4.8	5.0	5.2	4.7	5.5
	Bottom 10 Average	3.0	3.2	3.5	3.9	4.1	4.1	3.7	4.4
A. Fed's AFE Nominal $ Index	CONSENSUS	**112.8**	**112.6**	**112.5**	**111.8**	**111.4**	**111.0**	**111.9**	**110.6**
	Top 10 Average	114.1	114.5	114.1	113.8	113.5	113.4	113.9	113.9
	Bottom 10 Average	111.7	110.7	110.7	110.2	109.5	108.7	110.0	107.6
		---------- Year-Over-Year, % Change ----------						Five-Year Averages	
		2021	2022	2023	2024	2025	2026	2022-2026	2027-2031
B. Real GDP	CONSENSUS	**3.2**	**3.2**	**2.4**	**2.2**	**2.1**	**2.0**	**2.4**	**2.1**
	Top 10 Average	5.7	4.3	2.9	2.5	2.3	2.3	2.9	2.4
	Bottom 10 Average	0.5	2.2	1.9	1.9	1.8	1.8	1.9	1.8
C. GDP Chained Price Index	CONSENSUS	**1.1**	**1.7**	**1.9**	**2.0**	**2.0**	**2.0**	**1.9**	**2.0**
	Top 10 Average	1.8	2.2	2.2	2.2	2.3	2.2	2.2	2.2
	Bottom 10 Average	0.3	1.3	1.6	1.8	1.8	1.8	1.7	1.9
D. Consumer Price Index	CONSENSUS	**1.3**	**2.0**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**2.2**
	Top 10 Average	2.2	2.5	2.3	2.3	2.4	2.3	2.4	2.4
	Bottom 10 Average	0.4	1.5	1.8	1.8	1.9	1.9	1.8	2.0

Aquarion Water Company of New Hampshire, Inc.
Derivation of Mean Equity Risk Premium Based Studies
Using Holding Period Returns and
Projected Market Appreciation of the S&P Utility Index

Line No.		Implied Equity Risk Premium
	Equity Risk Premium based on S&P Utility Index Holding Period Returns (1):	
1.	Historical Equity Risk Premium	4.21 %
2.	Regression of Historical Equity Risk Premium (2)	6.88
3.	Forecasted Equity Risk Premium Based on PRPM (3)	5.53
4.	Forecasted Equity Risk Premium based on Projected Total Return on the S&P Utilities Index (Value Line Data) (4)	6.68
5.	Forecasted Equity Risk Premium based on Projected Total Return on the S&P Utilities Index (Bloomberg Data) (5)	5.44
6.	Average Equity Risk Premium (6)	5.75 %

Notes:
(1) Based on S&P Public Utility Index monthly total returns and Moody's Public Utility Bond average monthly yields from 1928-2019. 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.

(2) This equity risk premium is based on a regression of the monthly equity risk premiums of the S&P Utility Index relative to Moody's A2 rated public utility bond yields from 1928 - 2019 referenced in note 1 above.

(3) The Predictive Risk Premium Model (PRPM) is applied to the risk premium of the monthly total returns of the S&P Utility Index and the monthly yields on Moody's A2 rated public utility bonds from January 1928 - September 2020.

(4) Using data from Value Line for the S&P Utilities Index, an expected return of 10.18% was derived based on expected dividend yields and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A2 rated public utility bond yield of 3.50%, calculated on line 3 of page 3 of this Attachment results in an equity risk premium of 6.68%. (10.18% - 3.50% = 6.68%)

(5) Using data from Bloomberg Professional Service for the S&P Utilities Index, an expected return of 8.94% was derived based on expected dividend yields and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A2 rated public utility bond yield of 3.50%, calculated on line 3 of page 3 of this Attachment results in an equity risk premium of 5.44%. (8.94% - 3.50% = 5.44%)

(6) Average of lines 1 through 5.

Aquarion Water Company of New Hampshire, 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]	[7]	[8]
Proxy Group of Seven Water Companies	Value Line Adjusted Beta	Bloomberg Adjusted Beta	Average Beta	Market Risk Premium (1)	Risk-Free Rate (2)	Traditional CAPM Cost Rate	ECAPM Cost Rate	Indicated Common Equity Cost Rate (3)
American States Water Company	0.65	0.56	0.60	10.48 %	2.11 %	8.40 %	9.44 %	8.92 %
American Water Works Company, Inc.	0.85	0.99	0.92	10.48	2.11	11.75	11.96	11.85
California Water Service Group	0.65	0.56	0.60	10.48	2.11	8.40	9.44	8.92
Essential Utilities, Inc.	0.90	0.97	0.93	10.48	2.11	11.85	12.04	11.95
Middlesex Water Company	0.70	0.77	0.74	10.48	2.11	9.86	10.54	10.20
SJW Group	0.80	0.88	0.84	10.48	2.11	10.91	11.33	11.12
York Water Company	0.80	0.92	0.86	10.48	2.11	11.12	11.49	11.30
Mean			0.78			10.33 %	10.89 %	10.61 %
Median			0.84			10.91 %	11.33 %	11.12 %
Average of Mean and Median			0.81			10.62	11.11	10.87 %

Notes on page 2 of this Attachment.

Aquarion Water Company of New Hampshire, Inc.
Notes to Accompany the Application of the CAPM and ECAPM

Notes:

(1) The market risk premium (MRP) is derived by using six different measures from three sources: Ibbotson, Value Line, and Bloomberg as illustrated below:

Historical Data MRP Estimates:

Measure 1: Ibbotson Arithmetic Mean MRP (1926-2019)

Arithmetic Mean Monthly Returns for Large Stocks 1926-2019:	12.10	%
Arithmetic Mean Income Returns on Long-Term Government Bonds:	5.09	
MRP based on Ibbotson Historical Data:	7.01	%

Measure 2: Application of a Regression Analysis to Ibbotson Historical Data (1926-2019) 10.18 %

Measure 3: Application of the PRPM to Ibbotson Historical Data: (January 1926 - September 2020) 10.66 %

Value Line MRP Estimates:

Measure 4: Value Line Projected MRP (Thirteen weeks ending October 16, 2020)

Total projected return on the market 3-5 years hence*:	13.69	%
Projected Risk-Free Rate (see note 2):	2.11	
MRP based on Value Line Summary & Index:	11.58	%

*Forcasted 3-5 year capital appreciation plus expected dividend yield

Measure 5: Value Line Projected Return on the Market based on the S&P 500

Total return on the Market based on the S&P 500:	13.95	%
Projected Risk-Free Rate (see note 2):	2.11	
MRP based on Value Line data	11.84	%

Measure 6: Bloomberg Projected MRP

Total return on the Market based on the S&P 500:	13.70	%
Projected Risk-Free Rate (see note 2):	2.11	
MRP based on Bloomberg data	11.59	%
Average of Value Line, Ibbotson, and Bloomberg MRP:	10.48	%

(2) For reasons explained in the direct testimony, the appropriate risk-free rate for cost of capital purposes is the average forecast of 30 year Treasury Bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts. (See pages 10-11 of Attachment DWD-4.) The projection of the risk-free rate is illustrated below:

Fourth Quarter 2020	1.50	%
First Quarter 2021	1.60	
Second Quarter 2021	1.60	
Third Quarter 2021	1.70	
Fourth Quarter 2021	1.80	
First Quarter 2022	1.90	
2022-2026	3.00	
2027-2031	3.80	
	2.11	%

(3) Average of Column 6 and Column 7.

Sources of Information:

Value Line Summary and Index
Blue Chip Financial Forecasts, October 1, 2020 and June 1, 2020
Stocks, Bonds, Bills, and Inflation - 2020 SBBI Yearbook, John Wiley & Sons, Inc.
Bloomberg Professional Services

Aquarion Water Company of New Hampshire, Inc.
Basis of Selection of the Group of Non-Price Regulated Companies
Comparable in Total Risk to the Utility Proxy Group

The criteria for selection of the Non-Price Regulated Proxy Group was that the non-price regulated companies be domestic and reported in Value Line Investment Survey (Standard Edition).

The Non-Price Regulated Proxy Group was then selected based on the unadjusted beta range of 0.45 – 0.75 and residual standard error of the regression range of 2.9166 – 3.4786 of the Utility Proxy Group.

These ranges are based upon plus or minus two standard deviations of the unadjusted beta and standard error of the regression. Plus or minus two standard deviations captures 95.50% of the distribution of unadjusted betas and residual standard errors of the regression.

The standard deviation of the Utility Proxy Group's residual standard error of the regression is 0.1405. 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

$$\text{Thus, } 0.1405 = \frac{3.1976}{\sqrt{518}} = \frac{3.1976}{22.7596}$$

Source of Information: Value Line, Inc., September 2020
Value Line Investment Survey (Standard Edition)

Aquarion Water Company of New Hampshire, Inc.
Basis of Selection of Comparable Risk
Domestic Non-Price Regulated Companies

Proxy Group of Seven Water Companies	[1] Value Line Adjusted Beta	[2] Unadjusted Beta	[3] Residual Standard Error of the Regression	[4] Standard Deviation of Beta
American States Water Company	0.65	0.42	2.7018	0.0652
American Water Works Company, Inc.	0.85	0.70	3.1629	0.0763
California Water Service Group	0.65	0.40	3.1081	0.0750
Essential Utilities, Inc.	0.90	0.83	2.7162	0.0655
Middlesex Water Company	0.70	0.52	3.4887	0.0841
SJW Group	0.80	0.67	3.5594	0.0858
York Water Company	0.80	0.64	3.6461	0.0879
Average	0.76	0.60	3.1976	0.0771

Beta Range (+/- 2 std. Devs. of Beta)	0.45	0.75
2 std. Devs. of Beta	0.15	
Residual Std. Err. Range (+/- 2 std. Devs. of the Residual Std. Err.)	2.9166	3.4786
Std. dev. of the Res. Std. Err.	0.1405	
2 std. devs. of the Res. Std. Err.	0.2810	

Source of Information: Valueline Proprietary Database, September 2020

Aquarion Water Company of New Hampshire, Inc.
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Seven Water Companies

Proxy Group of Twenty-Three Non-Price Regulated Companies	[1] VL Adjusted Beta	[2] Unadjusted Beta	[3] Residual Standard Error of the Regression	[4] Standard Deviation of Beta
Adobe Inc.	0.80	0.68	3.2135	0.0775
Bio-Rad Labs. 'A'	0.80	0.64	3.0465	0.0735
Casey's Gen'l Stores	0.80	0.69	3.2699	0.0789
C.H. Robinson	0.70	0.49	2.9211	0.0704
salesforce.com	0.85	0.74	3.3139	0.0799
CSG Systems Int'l	0.75	0.60	3.1939	0.0770
Citrix Sys.	0.75	0.58	3.3490	0.0808
Dollar General	0.70	0.47	3.2817	0.0791
Ennis, Inc.	0.80	0.63	3.3760	0.0814
FirstCash, Inc.	0.80	0.67	3.2660	0.0788
Gen'l Mills	0.65	0.45	2.9700	0.0716
Heartland Express	0.75	0.56	3.1152	0.0751
St. Joe Corp.	0.85	0.72	2.9838	0.0720
Lancaster Colony	0.70	0.50	3.1119	0.0751
Lilly (Eli)	0.75	0.56	2.9987	0.0723
ManTech Int'l 'A'	0.85	0.71	3.1009	0.0748
MAXIMUS Inc.	0.80	0.67	3.3500	0.0808
Smucker (J.M.)	0.65	0.45	3.0513	0.0736
Standard Motor Prod.	0.80	0.68	3.3622	0.0811
Bio-Techne Corp.	0.80	0.66	3.1657	0.0763
Tyler Technologies	0.75	0.61	3.1722	0.0765
Walgreens Boots	0.80	0.67	3.2476	0.0783
West Pharmac. Svcs.	0.80	0.68	3.1016	0.0748
Average	0.77	0.61	3.1700	0.0800
Proxy Group of Seven Water Companies	0.76	0.60	3.1976	0.0771

Source of Information: Valueline Proprietary Database, September 2020

Aquarion Water Company of New Hampshire, Inc.
Summary of Cost of Equity Models Applied to
Proxy Group of Twenty-Three Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Seven Water Companies

Principal Methods	Proxy Group of Twenty-Three Non-Price Regulated Companies
Discounted Cash Flow Model (DCF) (1)	10.26 %
Risk Premium Model (RPM) (2)	11.50
Capital Asset Pricing Model (CAPM) (3)	10.70
Mean	10.82 %
Median	10.70 %
Average of Mean and Median	10.76 %

Notes:
(1) From page 2 of this Attachment.
(2) From page 3 of this Attachment.
(3) From page 6 of this Attachment.

Aquarion Water Company of New Hampshire, Inc.
DCF Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Seven Water Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Twenty-Three Non-Price Regulated Companies	Average Dividend Yield	Value Line Projected Five Year Growth in EPS	Zack's Five Year Projected Growth Rate in EPS	Yahoo! Finance Projected Five Year Growth in EPS	Bloomberg Projected Five Year Growth in EPS	Average Projected Five Year Growth Rate in EPS	Adjusted Dividend Yield	Indicated Common Equity Cost Rate (1)
Adobe Inc.	- %	19.50 %	19.00 %	17.42 %	16.27 %	18.05 %	- %	NA %
Bio-Rad Labs. 'A'	-	11.50	NA	17.80	21.75	17.02	-	NA
Casey's Gen'l Stores	0.73	6.50	NA	5.56	16.31	9.46	0.76	10.22
C.H. Robinson	2.06	8.00	9.00	4.12	8.63	7.44	2.14	9.58
salesforce.com	-	34.50	15.70	16.72	18.85	21.44	-	NA
CSG Systems Int'l	2.25	10.00	NA	(5.00)	8.00	9.00	2.35	11.35
Citrix Sys.	1.01	9.00	7.00	9.37	9.63	8.75	1.05	9.80
Dollar General	0.71	12.00	11.10	14.79	12.89	12.70	0.76	13.46
Ennis, Inc.	5.08	3.00	NA	5.00	NA	4.00	5.18	9.18
FirstCash, Inc.	1.81	9.00	NA	(0.93)	NA	9.00	1.89	10.89
Gen'l Mills	3.28	3.00	7.50	5.05	4.37	4.98	3.36	8.34
Heartland Express	0.40	8.50	NA	5.80	NA	7.15	0.41	7.56
St. Joe Corp.	-	15.00	NA	(28.10)	NA	15.00	-	NA
Lancaster Colony	1.63	5.00	NA	3.00	NA	4.00	1.66	5.66
Lilly (Eli)	1.96	10.00	16.10	13.16	19.33	14.65	2.10	16.75
ManTech Int'l 'A'	1.78	12.00	7.40	7.02	7.36	8.45	1.86	10.31
MAXIMUS Inc.	1.53	10.00	NA	12.50	7.50	10.00	1.61	11.61
Smucker (J.M.)	3.15	3.00	2.20	0.68	(0.13)	1.96	3.18	5.14
Standard Motor Prod.	-	7.50	NA	7.00	NA	7.25	-	NA
Bio-Techne Corp.	0.50	14.00	7.00	7.00	10.45	9.61	0.52	10.13
Tyler Technologies	-	10.50	15.00	10.00	13.25	12.19	-	NA
Walgreens Boots	4.91	6.00	5.00	(5.18)	3.58	4.86	5.03	9.89
West Pharmac. Svcs.	0.23	16.00	17.40	17.40	14.94	16.43	0.25	16.68
							Mean	10.39 %
							Median	10.13 %
							Average of Mean and Median	10.26 %

NA= Not Available
NMF= Not Meaningful Figure

(1) The application of the DCF model to the domestic, non-price regluated comparable risk companies is identical to the application of the DCF to the utility proxy group. The dividend yield is derived by using the 60 day average price and the spot indicated dividend as of October 16, 2020. The dividend yield is then adjusted by 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, Bloomberg, 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.zacks.com Downloaded on 10/16/2020
www.yahoo.com Downloaded on 10/16/2020
Bloomberg Professional Services

Aquarion Water Company of New Hampshire, Inc.
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

Line No.		Proxy Group of Twenty-Three Non-Price Regulated Companies
1.	Prospective Yield on Baa2 Rated Corporate Bonds (1)	4.08 %
2.	Adjustment to Reflect Proxy Group Bond Rating (2)	(0.20)
3.	Prospective Bond Yield Applicable to the Non-Price Regulated Proxy Group	3.88
4.	Equity Risk Premium (3)	7.62
5.	Risk Premium Derived Common Equity Cost Rate	11.50 %

Notes: (1) Average forecast of Baa2 corporate bonds based upon the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated October 1, 2020 and June 1, 2020 (see pages 10 and 11 of Attachment DWD-4). The estimates are detailed below.

Fourth Quarter 2020	3.50 %
First Quarter 2021	3.60
Second Quarter 2021	3.60
Third Quarter 2021	3.70
Fourth Quarter 2021	3.70
First Quarter 2022	3.80
2022-2026	5.00
2027-2031	5.70
Average	4.08 %

(2) To reflect the Baa1 average rating of the Non-Price Regulated Proxy Group, the prosepctive yield on Baa2 corporate bonds must be adjusted downward by 1/3 of the spread between A2 and Baa2 corporate bond yields as shown below:

	A2 Corp. Bond Yield	Baa2 Corp. Bond Yield	Spread
Sep-2020	2.79 %	3.36 %	0.57 %
Aug-2020	2.68	3.27	0.59
Jul-2020	2.69	3.31	0.62
		Average yield spread	0.59 %
		1/3 of spread	0.20 %

(3) From page 5 of this Attachment.

Aquarion Water Company of New Hampshire, Inc.
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Twenty-Three Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Seven Water Companies

	Moody's Long-Term Issuer Rating October 2020		Standard & Poor's Long-Term Issuer Rating October 2020	
Proxy Group of Twenty-Three Non-Price Regulated Companies	Long-Term Issuer Rating	Numerical Weighting (1)	Long-Term Issuer Rating	Numerical Weighting (1)
Adobe Inc.	A2	6.0	A	6.0
Bio-Rad Labs. 'A'	Baa2	9.0	BBB	9.0
Casey's Gen'l Stores	NR	--	NR	--
C.H. Robinson	Baa2	9.0	BBB+	8.0
salesforce.com	A2	6.0	A	6.0
CSG Systems Int'l	NR	--	BB+	11.0
Citrix Sys.	NR	--	BBB	9.0
Dollar General	Baa2	9.0	BBB	9.0
Ennis, Inc.	NR	--	NR	--
FirstCash, Inc.	Ba1	11.0	BB	12.0
Gen'l Mills	Baa2	9.0	BBB	9.0
Heartland Express	NR	--	NR	--
St. Joe Corp.	NR	--	NR	--
Lancaster Colony	NR	--	NR	--
Lilly (Eli)	A2	6.0	A+	5.0
ManTech Int'l 'A'	WR	--	BB+	11.0
MAXIMUS Inc.	NR	--	NR	--
Smucker (J.M.)	Baa2	9.0	BBB	9.0
Standard Motor Prod.	NR	--	NR	--
Bio-Techne Corp.	NR	--	NR	--
Tyler Technologies	NR	--	NR	--
Walgreens Boots	Baa2	9.0	BBB	9.0
West Pharmac. Svcs.	NR	--	NR	--
Average	Baa1	8.3	BBB	8.7

Notes:
(1) From page 6 of Attachment DWD-4.

Source of Information:
Bloomberg Professional Services

Aquarion Water Company of New Hampshire, Inc.
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
Proxy Group of Twenty-Three Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Seven Water Companies

Line No.	Equity Risk Premium Measure	Proxy Group of Twenty-Three Non-Price Regulated Companies
	Ibbotson-Based Equity Risk Premiums:	
1.	Ibbotson Equity Risk Premium (1)	5.78 %
2.	Regression on Ibbotson Risk Premium Data (2)	9.42
3.	Ibbotson Equity Risk Premium based on PRPM (3)	9.54
4.	Equity Risk Premium Based on Value Line Summary and Index (4)	10.73
5	Equity Risk Premium Based on Value Line S&P 500 Companies (5)	10.99
6.	Equity Risk Premium Based on Bloomberg S&P 500 Companies (6)	10.74
7.	Conclusion of Equity Risk Premium	9.53 %
8.	Adjusted Beta (7)	0.80
9.	Forecasted Equity Risk Premium	7.62 %

Notes:
(1) From note 1 of page 9 of Attachment DWD-4.
(2) From note 2 of page 9 of Attachment DWD-4.
(3) From note 3 of page 9 of Attachment DWD-4.
(4) From note 4 of page 9 of Attachment DWD-4.
(5) From note 5 of page 9 of Attachment DWD-4.
(6) From note 6 of page 9 of Attachment DWD-4.
(7) Average of mean and median beta from page 6 of this Attachment.

Sources of Information:
Stocks, Bonds, Bills, and Inflation - 2020 SBBI Yearbook, John Wiley & Sons, Inc.
Value Line Summary and Index
Blue Chip Financial Forecasts, October 1, 2020 and June 1, 2020
Bloomberg Professional Services

Aquarion Water Company of New Hampshire, Inc.
Traditional CAPM and ECAPM Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Seven Water Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Twenty-Three Non-Price Regulated Companies	Value Line Adjusted Beta	Bloomberg Beta	Average Beta	Market Risk Premium (1)	Risk-Free Rate (2)	Traditional CAPM Cost Rate	ECAPM Cost Rate	Indicated Common Equity Cost Rate (3)
Adobe Inc.	0.85	0.86	0.86	10.48 %	2.11 %	11.12 %	11.49 %	11.30 %
Bio-Rad Labs. 'A'	0.80	0.72	0.76	10.48	2.11	10.07	10.70	10.39
Casey's Gen'l Stores	0.80	0.86	0.83	10.48	2.11	10.81	11.25	11.03
C.H. Robinson	0.70	0.64	0.67	10.48	2.11	9.13	9.99	9.56
salesforce.com	0.85	1.05	0.95	10.48	2.11	12.06	12.19	12.13
CSG Systems Int'l	0.75	0.89	0.82	10.48	2.11	10.70	11.17	10.94
Citrix Sys.	0.80	0.64	0.72	10.48	2.11	9.65	10.39	10.02
Dollar General	0.70	0.68	0.69	10.48	2.11	9.34	10.15	9.75
Ennis, Inc.	0.80	0.79	0.79	10.48	2.11	10.39	10.94	10.66
FirstCash, Inc.	0.80	0.98	0.89	10.48	2.11	11.44	11.72	11.58
Gen'l Mills	0.70	0.50	0.60	10.48	2.11	8.40	9.44	8.92
Heartland Express	0.75	0.81	0.78	10.48	2.11	10.28	10.86	10.57
St. Joe Corp.	0.85	1.01	0.93	10.48	2.11	11.85	12.04	11.95
Lancaster Colony	0.65	0.64	0.64	10.48	2.11	8.82	9.76	9.29
Lilly (Eli)	0.75	0.73	0.74	10.48	2.11	9.86	10.54	10.20
ManTech Int'l 'A'	0.85	1.09	0.97	10.48	2.11	12.27	12.35	12.31
MAXIMUS Inc.	0.80	0.90	0.85	10.48	2.11	11.02	11.41	11.21
Smucker (J.M.)	0.65	0.52	0.58	10.48	2.11	8.19	9.29	8.74
Standard Motor Prod.	0.80	0.94	0.87	10.48	2.11	11.23	11.57	11.40
Bio-Techne Corp.	0.80	0.81	0.81	10.48	2.11	10.60	11.09	10.85
Tyler Technologies	0.80	0.75	0.78	10.48	2.11	10.28	10.86	10.57
Walgreens Boots	0.80	0.79	0.80	10.48	2.11	10.49	11.02	10.75
West Pharmac. Svcs.	0.80	0.83	0.81	10.48	2.11	10.60	11.09	10.85
Mean			0.79			10.37 %	10.93 %	10.65 %
Median			0.80			10.49 %	11.02 %	10.75 %
Average of Mean and Median			0.80			10.43 %	10.98 %	10.70 %

Notes:
(1) From Attachment DWD-5, note 1.
(2) From Attachment DWD-5, note 2.
(3) Average of CAPM and ECAPM cost rates.

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

Line No.		[1] Market Capitalization on September 30, 2020 (1) (millions)	[1] (times larger)		[2] Applicable Decile of the NYSE/AMEX/ NASDAQ (2)	[3] Applicable Size Premium (3)	[4] Spread from Applicable Size Premium (4)
1.	Aquarion Water Company of New Hampshire, Inc.	$ 54.075			10	4.99%	
2.	Proxy Group of Seven Water Companies	$ 6,572.792	121.5	x	4	0.79%	4.20%

	[A] Decile	[B] Market Capitalization of Smallest Company (millions)	[C] Market Capitalization of Largest Company (millions)	[D] Size Premium (Return in Excess of CAPM)*
Largest	1	$ 31,090.379	$ 1,061,355.011	-0.28%
	2	13,142.606	30,542.936	0.50%
	3	6,618.604	13,100.225	0.73%
	4	4,312.546	6,614.962	0.79%
	5	2,688.889	4,311.252	1.10%
	6	1,669.856	2,685.865	1.34%
	7	993.855	1,668.282	1.47%
	8	515.621	993.847	1.59%
	9	230.024	515.602	2.22%
Smallest	10	1.973	229.748	4.99%

*From 2020 Duff & Phelps Cost of Capital Navigator

Notes:

(1) From page 2 of this Attachment.

(2) Gleaned from Columns [B] and [C] 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 in Column [D] on the bottom of this page.

(4) Line No. 1 Column [3] – Line No. 2 Column [3]. For example, the 4.20% in Column [4], Line No. 2 is derived as follows 4.20% = 4.99% - 0.79%.

Aquarion Water Company of New Hampshire, Inc.
Market Capitalization of Aquarion Water Company of New Hampshire, Inc. and the
Proxy Group of Seven Water Companies

Company	Exchange	[1] Common Stock Shares Outstanding at Fiscal Year End 2019 (millions)	[2] Book Value per Share at Fiscal Year End 2019 (1)	[3] Total Common Equity at Fiscal Year End 2019 (millions)	[4] Closing Stock Market Price on October 16, 2020	[5] Market-to-Book Ratio on October 16, 2020 (2)	[6] Market Capitalization on October 16, 2020 (3) (millions)
Aquarion Water Company of New Hampshire, Inc.		NA	NA	$ 15.402 (4)	NA		
Based upon Proxy Group of Seven Water Companies						351.1 (5)	$ 54.075 (6)
Proxy Group of Seven Water Companies							
American States Water Company	NYSE	36.847	$ 16.325	$ 601.530	$ 77.620	475.5 %	$ 2,860.034
American Water Works Company, Inc.	NYSE	180.813	33.853	6,121.000	155.720	460.0	$ 28,156.180
California Water Service Group	NYSE	48.532	16.070	779.906	46.270	287.9	$ 2,245.585
Essential Utilities, Inc.	NYSE	220.759	17.580	3,880.860	41.850	238.1	$ 9,238.752
Middlesex Water Company	NASDAQ	17.434	18.572	323.792	66.880	360.1	$ 1,165.986
SJW Group	NYSE	28.457	31.275	889.984	61.650	197.1	$ 1,754.344
York Water Company	NASDAQ	13.015	10.310	134.185	45.230	438.7	$ 588.664
Average		77.979	$ 20.569	$ 1,818.751	$ 70.746	351.1 %	$ 6,572.792

NA= Not Available

Notes: (1) Column 3 / Column 1.
(2) Column 4 / Column 2.
(3) Column 1 * Column 4.
(4) Company requested rate base multiplied by Company requested equity ratio.
(5) The market-to-book ratio of Aquarion Water Company of New Hampshire, Inc. on October 16, 2020 is assumed to be equal to the market-to-book ratio of Proxy Group of Seven Water Companies on October 16, 2020 as appropriate.
(6) Column [3] multiplied by Column [5].

Source of Information: 2019 Annual Forms 10K
Bloomberg Financial Services

Aquarion Water Company of New Hampshire, Inc.
Rate Mechanisms In Place at Proxy Group Operating Subsidiaries

Ticker	Company (bold if parent)		State	Decoupling?	Mechanism Name	Type of Mechanism	Source
AWR	**American States Water Company**						
		Golden State Water Company	CA	Yes	Water Revenue Adjustment Mechanism (WRAM)	Full Decoupling (Actual to Target Revenues)	Annual Report, tariff
AWK	**American Water**						
		California American Water	CA	Yes	Water Revenue Adjustment Mechanism (WRAM); Modifidied Cost Balancing Adjustment (MCBA)	Full Decoupling (Actual to Target Revenues)	Annual Report, tariff
		Hawaii American Water	HI	No			Annual Report
		Illinois American Water	IL	Yes	Volume Balancing Adjustment Rider (VBA); Qualifying Infrastructure Plant (QIP) Surcharge	Full Decoupling (Actual to Target Revenues); Capital Recovery	Annual Report; tariff; Commission Order dated December 13, 2016, Docket No. 16-0093
		Indiana American Water	IN	No	Distribution System Improvement Charge (DSIC)	Capital Recovery	Annual Report, tariff
		Iowa American Water	IA	No			Annual Report, tariff
		Kentucky American Water	KY	No			Annual Report, tariff
		Maryland American Water	MD	No			Annual Report, tariff
		Michigan American Water	MI	No			Annual Report
		Missouri American Water	MO	No	Infrastructure System Replacement Surcharge	Capital Recovery	Annual Report, tariff
		New Jersey American Water	NJ	No			Annual Report, tariff
		New York American Water	NY	Yes	Revenue And Production Cost Reconciliation Adjustment Clause and Property Tax Clause (RAC/PTC)	Full Decoupling (Actual to Target Revenues)	Annual Report; tariff; Commission Order in Case 07-W-0508 and Case 16-W-0259
		Pennsylvania American Water	PA	No	Distribution System Improvement Charge (DSIC)	Capital Recovery	Annual Report, tariff
		Tennessee American Water	TN	No			Annual Report, tariff
		Virginia American Water	VA	No	Water & Wastewater Infrastructure Service Charge "WWISC" Rider	Capital Recovery	Annual Report, tariff
		West Virginia American Water	WV	No	Distribution System Improvement Charge (DSIC)	Capital Recovery	Annual Report, tariff
CWT	**California Water Service Group**						
		California Water Service Co.	CA	Yes	Water Revenue Adjustment Mechanism (WRAM); Modifidied Cost Balancing Adjustment (MCBA); and Sales Reconciliation Mechanism (SRM)	Full Decoupling (Actual to Target Revenues)	Annual Report, tariff
		New Mexico Water Service Co.	NM	No			Annual Report, tariff
		Washington Water Service Co.	WA	No			Annual Report, tariff
		Hawaii Water Service Co.	HI	No			Annual Report, tariff
WTRG	**Essential Utilities, Inc.**						
		Aqua Illinois, Inc.	IL	Yes	Volume Balancing Adjustment Rider (VBA)	Full Decoupling (Actual to Target Revenues)	Order in Docket No. 17-0259
		Aqua Indiana, Inc.	IN	No			Annual Report, tariff
		Aqua New Jersey, Inc.	NJ	No	Distribution System Improvement Charge (DSIC)	Capital Recovery	Annual Report, tariff
		Aqua North Carolina, Inc.	NC	No			Annual Report
		Aqua Ohio, Inc.	OH	No			Annual Report
		Aqua Pennsylvania, Inc.	PA	No	Distribution System Improvement Charge (DSIC)	Capital Recovery	Annual Report; tariff
		Aqua Texas, Inc.	TX	No			Annual Report
		Aqua Virginia, Inc.	VA	No			Annual Report
MSEX	**Middlesex Water Company**						
		Middlesex Water Company (NJ)	NJ	No			Annual Report; tariff
		Southern Shores Water Company (DE)	DE	No			Annual Report
		Tidewater Utlities, Inc. (DE)	DE	No	Distribution System Improvement Charge (DSIC)	Capital Recovery	Annual Report; tariff
		Pinelands Water Company (NJ)	NJ	No			Annual Report; tariff
		Twin Lakes Utilities, Inc. (PA)	PA	No			Annual Report; tariff
SJW	**SJW Group**						
		San Jose Water Company (CA)	CA	No			
		SJWTX, Inc.	TX	No			
		The Connecticut Water Company	CT	Yes	Water Revenue Adjustment (WRA); Water Infrastructure and Conservation Adjustment (WICA)	Full Decoupling (Actual to Target Revenues); Capital Recovery	Annual Report ; tariff
		The Heritage Village Water Company	CT	Yes	Water Revenue Adjustment (WRA); Water Infrastructure and Conservation Adjustment (WICA)	Full Decoupling (Actual to Target Revenues); Capital Recovery	Annual Report ; tariff
		The Avon Water Company	CT	No			
		The Maine Water Company	ME	No	Water Infrastructure Charge (WISC)	Capital Recovery	Annual Report ; tariff
YORW	**York Water Company**		PA	No	Distribution System Improvement Charge (DSIC)	Capital Recovery	

Aquarion Water Company of New Hampshire, Inc.
Derivation of the Flotation Cost Adjustment to the Cost of Common Equity

Equity Issuances and Flotation Costs of the Parent Since Aquarion Acquisition

		[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]	[Column 8]	[Column 9]	[Column 10]
Date	Transaction (1)	Shares Issued	Market Price per Share	Offering Price per Share	Market Pressure (2)	Total Offering Expense per Share	Net Proceeds per Share (3)	Gross Equity Issue before Costs (4)	Total Net Proceeds (5)	Total Flotation Costs (6)	Flotation Cost Percentage (7)
05/30/19	Equity Offering	17,940,000	$ 73.1700	$ 71.4800	$ 1.6900	$ 0.0343	$ 71.4457	$ 1,312,669,800	$ 1,281,736,200	$ 30,933,600	2.36%
06/11/20	Equity Offering	6,900,000	$ 86.2600	$ 84.9100	$ 1.3500	$ 0.0870	$ 84.8230	$ 595,194,000	$ 585,279,000	$ 9,915,000	1.67%
								$ 1,907,863,800	$ 1,867,015,200	$ 40,848,600	2.14%

Flotation Cost Adjustment

	Average Dividend Yield	Average Projected EPS Growth Rate	Adjusted Dividend Yield	Average DCF Cost Rate Unadjusted for Flotation (8)	DCF Cost Rate Adjusted for Flotation (9)	Flotation Cost Adjustment (10)
Proxy Group of Seven Water Companies	1.82 %	7.31 %	1.89 %	9.20 %	9.24 %	0.04 %

See page 2 of this Attachment for notes.

Aquarion Water Company of New Hampshire, Inc.
Notes to Accompany the
Derivation of the Flotation Cost Adjustment to the Cost of Common Equity

(1) Company-provided.

(2) Column 2 – Column 3.

(3) Column 2 – the sum of Columns 4 and 5.

(4) Column 1 * Column 2.

(5) Column1 * Column 6.

(6) Column 1 * the sum of Columns 4 and 5.

(7) (Column 7 – Column 8)/ Column 7.

(8) Using the average growth rate and average dividend yield on page 1 of Attachment DWD-3.

(9) Adjustment for flotation costs based on adjusting the average DCF constant growth cost rate in accordance with the following:

$$K = \frac{D(1+0.5g)}{P(1-F)} + g,$$

where g is the growth factor and F is the percentage of flotation costs.

(10) Flotation cost adjustment of 0.04% equals the difference between the flotation adjusted average DCF cost rate of 9.24% and the unadjusted average DCF cost rate of 9.20% of the Utility Proxy Group.

Source of Information:

Company SEC filings