ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 1 of 45

DR. DOUGLAS H. CARLISLE, JR.
1104 Gregg Street
Columbia, South Carolina 29201
803-429-8392
econcarlisle@gmail.com

Education

Ph.D., Government and Foreign Affairs, University of Virginia, May 1991
Honors: Teaching Fellowship, 1981-1983
DuPont Fellow, 1981-1982
Colgate Darden Fellow, 1981

M.A., Government and Public Administration, University of Virginia, 1979
B.A., Political Science, Brown University, Providence, Rhode Island, 1975

Specializations

Public Administration (with economics focus)
Public Policy-making
American Government
International Relations
Comparative Government

Languages

English and Spanish

Publications and Presentations

"The Legislative Veto, Diffuseness, and Constitutionally Mandated Friction," Ph.D. dissertation; University of Virginia, May 1991
"The Venezuelan-Guyanan Border Dispute," delivered at the International Studies Association, Atlanta, Georgia, 1983

Employment

Economist, South Carolina Office of Regulatory Staff, 2004-2018.
Provide expert testimony regarding rate of return and return on equity on behalf of South Carolina before Public Service Commission in administrative hearings. Apply economic data and analyses to regulated public utility matters to recommend policy and prepare reports to agency. Submitted over a dozen testimonies to

Commission. Testimony includes written direct testimony and sur-rebuttal. Oral testimony involves cross-examination on data, analyses, and conclusions. Responsible for economic and financial databases including debt issuances by public utilities and review of financial matters pertaining to utilities. As Board member of professional organization led panel on annual Forum on proposed Federal tax reform

Analyst, South Carolina Budget & Control Board, Board of Economic Advisors, Office of Research and Statistics, 1999 to 2004
Responsible for Revenue Impact Statements required for all proposed legislation affecting revenue collection. Analyzed economic issues in government resources allocations and prepared written reports of analyses. Provided economic analyses to General Assembly committees, subcommittees, and members as requested and directed. Substantive issues included allocation of funds from the Barnwell nuclear storage facility and estimates of public school attendance (from public, private, and home school surveys) for allocation of funds to school districts.

Legislative Staff, South Carolina House of Representatives, Committee on Education and Public Works, Higher Education Subcommittee, June 1998 to December 1999
Briefed committee members and House members on higher-education issues in proposed legislation for hearings and floor debates and in response to inquiries from constituents. Advised Committee chairman on various State constitutional issues. Responded to constituent inquiries regarding State-funded scholarships. Served as liaison to Commission on Higher Education.

Analyst, South Carolina State Reorganization Commission, 1996 to 1998
Performed post-audit follow-up review of agencies' response to recommendations of Legislative Audit Council in reorganization of State government. Presented findings to mixed select committees of lay, gubernatorial, and legislative members. Reviews evaluated agencies' implementation of steps for efficiency, effectiveness, risk assessments, prevention of fraud, waste, and abuse, and compliance with laws, regulations, and Generally Accepted Government Auditing Standards. Evaluations involved devising audit plans, reviewing agency documents, compiling an analyzing databases, and interviewing agency directors and staff.

Political Science Instructor, Midlands Technical College, 1993 to 1997
Taught up to five sections of two courses per semester in American government and state and local government. Prepared and presented lectures, exercises, and tests, graded term papers and compiled final grades. Counseled and coached students. Established section from Midlands Technical College of students to South Carolina State Student Legislature. Organized 1994 debate at College at which five candidates for governor appeared and were questioned by a local television anchor. Reviewed competing textbooks for department chairman.

Consultant, Market Compass, 1994-1996
Operated opinion-research and policy-analysis firm, consulting in tandem with marketing agency to advise clients on expanding overseas business, providing Sinsight on local culture. Composed and executed polls and presented to municipality's leadership findings and conclusions from executive interviews regarding public opinion on municipal services.

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 2 of 45

Commission. Testimony includes written direct testimony and sur-rebuttal. Oral testimony involves cross-examination on data, analyses, and conclusions. Responsible for economic and financial databases including debt issuances by public utilities and review of financial matters pertaining to utilities. As Board member of professional organization led panel on annual Forum on proposed Federal tax reform

Analyst, South Carolina Budget & Control Board, Board of Economic Advisors, Office of Research and Statistics, 1999 to 2004
Responsible for Revenue Impact Statements required for all proposed legislation affecting revenue collection. Analyzed economic issues in government resources allocations and prepared written reports of analyses. Provided economic analyses to General Assembly committees, subcommittees, and members as requested and directed. Substantive issues included allocation of funds from the Barnwell nuclear storage facility and estimates of public school attendance (from public, private, and home school surveys) for allocation of funds to school districts.

Legislative Staff, South Carolina House of Representatives, Committee on Education and Public Works, Higher Education Subcommittee, June 1998 to December 1999
Briefed committee members and House members on higher-education issues in proposed legislation for hearings and floor debates and in response to inquiries from constituents. Advised Committee chairman on various State constitutional issues. Responded to constituent inquiries regarding State-funded scholarships. Served as liaison to Commission on Higher Education.

Analyst, South Carolina State Reorganization Commission, 1996 to 1998
Performed post-audit follow-up review of agencies' response to recommendations of Legislative Audit Council in reorganization of State government. Presented findings to mixed select committees of lay, gubernatorial, and legislative members. Reviews evaluated agencies' implementation of steps for efficiency, effectiveness, risk assessments, prevention of fraud, waste, and abuse, and compliance with laws, regulations, and Generally Accepted Government Auditing Standards. Evaluations involved devising audit plans, reviewing agency documents, compiling an analyzing databases, and interviewing agency directors and staff.

Political Science Instructor, Midlands Technical College, 1993 to 1997
Taught up to five sections of two courses per semester in American government and state and local government. Prepared and presented lectures, exercises, and tests, graded term papers and compiled final grades. Counseled and coached students. Established section from Midlands Technical College of students to South Carolina State Student Legislature. Organized 1994 debate at College at which five candidates for governor appeared and were questioned by a local television anchor. Reviewed competing textbooks for department chairman.

Consultant, Market Compass, 1994-1996
Operated opinion-research and policy-analysis firm, consulting in tandem with marketing agency to advise clients on expanding overseas business, providing Sinsight on local culture. Composed and executed polls and presented to municipality's leadership findings and conclusions from executive interviews regarding public opinion on municipal services.

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 3 of 45

DOUGLAS H. CARLISLE, JR. -- TESTIMONIES

Count	Company	Filed?	Docket Number	Type of testimony
1	Wyboo	Yes	2005-13-WS	Margin, Direct Test.
2	Haig Point	Yes	2005-34-WS	ROE, Direct Test.
3	Haig Point	Yes	2005-34-WS	ROE, Surrebuttal
4	Southland	No*	2007-244-W	ROE, Direct & Settlement
5	Utility Services	Yes	2007-286-WS	ROE, Direct & Settlement
6	Alpine	Yes	2008-190-S	Margin, Direct Test.
7	Duke Energy Carolinas	Yes	2009-226-E	ROE, Direct
8	Tega Cay	Yes	2009-473-WS	ROE, Direct
9	United	Yes	2009-479-WS	ROE, Direct
10	Lockhart Power	No	2010-181-E	ROE, Direct
11	Carolina Water Service	No	2011-47-WS	ROE, Direct
12	Daufuskie Island	Yes	2011-229-WS	ROE, Direct
14	Daufuskie Island	Yes	2011-229-WS	ROE, Surrebuttal
15	Duke Energy Carolinas	Yes	2010-271-E	ROE, Direct
16	Tega Cay	Yes	2010-177-WS	ROE, Direct
17	Tega Cay	Yes	2010-177-WS	ROE, Surrebuttal
18	SCE&G	Yes	2010-218-E	ROE, Direct
19	Duke Energy Carolinas	No	2013-59-E	ROE, Direct
20	United	Yes	2013-199-WS	ROE, Direct
21	Utility Services	Yes	2013-201-WS	ROE, Direct
22	Utility Services	Yes	2013-201-WS	ROE, Surrebuttal
23	Carolina Water Service	Yes	2013-275-WS	ROE, Direct
24	Lockhart	No	2013-178-E	ROE, Direct
25	Daufuskie Island	Yes	2014-346-WS	ROE, Direct
26	Carolina Water Service	Yes	2015-199-WS	ROE, Direct
27	Kiawah	Yes	2016-222-WS	ROE, Direct
28	Duke Energy Progress	Yes	2016-227-E	ROE, Direct

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 4 of 45

SUMMARY, ALSO SHOWING CAP-M CALCULATON

R_m	11.41% *	
R_f (+1.5 yr)	2.70%	
ERP	8.71%	
Adjusted ERP (ERP*β)	6.90% †	
Adjusted ERP + R_f =CAP-M	**9.60%**	
DCF	**7.74%**	(Exhibit DHC-8)
CEM	**9.11%**	(Exhibit DHC-12, p.4)
AVERAGE OF METHODS	**8.82%**	

8.43% lower middle of range: (DCF + CEM)/2
9.35% upper middle of range: (CEM + CAP-M)/2

*R_m is average of numbers in bold:

	Geometric mean	Arithmetic mean	Average of Means
Largest Companies	**10.20%**	12.10%	11.15%
Smallest Companies	11.90%	16.30%	14.10%
Average of Largest & Smallest	11.05%	14.20%	
			12.63%

Source of above table: Exhibit DHC-15

† See Exhibit DHC-13 for source of β

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 5 of 45

Ten-Year Change in Prices of U.S. Publicly Traded Stocks

Stock Prices (median, by yr.)	2011	2012	2013	2014	2015	2016	2017	2018	2019
American Water Works	$29.00	$35.35	$41.05	$48.65	$54.80	$72.05	$81.20	$87.10	$108.95
American States Water Co	$16.75	$20.55	$28.55	$32.85	$39.95	$42.25	$49.75	$59.85	$79.65
Artesian Resources	$17.58	$21.32	$22.90	$21.84	$24.58	$31.08	$36.30	$36.96	$37.06
California Water Svc. Group	$18.05	$18.05	$20.90	$23.35	$22.75	$29.65	$39.30	$42.20	$51.05
Global Water Resources						$7.76	$8.95	$10.01	$12.00
Middlesex Water Co	$17.95	$18.55	$20.55	$21.40	$24.60	$34.75	$39.45	$47.15	$59.35
SJW Group	$23.85	$24.75	$27.30	$29.60	$31.60	$42.75	$57.35	$59.85	$64.20
Essential Utilities	$17.20	$19.15	$24.35	$25.30	$27.75	$31.90	$34.50	$35.75	$40.00
York Water Company	$16.95	$17.65	$19.80	$21.55	$23.20	$31.80	$35.80	$31.80	$38.80

Source: Exhibit DHC-4
*Compound Annual Growth Rate

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 6 of 45

Stock Prices (median, by yr.)	**2020**	**2021**	**CAGR***
American Water Works	$132.30	$160.20	18.6%
American States Water Co	$80.85	$86.45	17.8%
Artesian Resources	$35.13	$41.95	9.1%
California Water Svc. Group	$48.55	$61.35	13.0%
Global Water Resources	$12.35	$17.83	18.1%
Middlesex Water Co	$62.45	$91.75	17.7%
SJW Group	$60.30	$65.85	10.7%
Essential Utilities	$42.45	$46.90	10.6%
York Water Company	$42.95	$47.25	10.8%
		Average=	**14.0%**

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 7 of 45

BOOK VALUE PER SHARE

Company Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
American Water Works	$24.11	$25.11	$26.52	$27.39	$28.25	$29.24	$30.13	$32.42	$33.83	$35.58
American States Water Co	$10.84	$11.80	$12.72	$13.24	$12.77	$13.52	$14.45	$15.19	$16.33	$17.39
Artesian Resources	$13.12	$13.57	$13.80	$14.09	$14.61	$15.23	$15.91	$16.57	$17.25	$18.11
California Water Service Group	$10.76	$11.28	$12.54	$13.11	$13.41	$13.75	$14.44	$15.19	$16.07	$18.30
Global Water Resources						$0.78	$0.76	$1.30	$1.15	$1.43
Middlesex Water Co	$11.27	$11.48	$11.82	$12.24	$12.74	$13.40	$14.02	$15.17	$18.57	$19.81
SJW Group	$14.20	$14.71	$15.92	$17.75	$18.83	$20.61	$22.57	$31.31	$31.27	$32.12
Essential Utilities	$7.21	$7.90	$8.63	$9.27	$9.78	$10.43	$11.02	$11.28	$17.58	$19.09
York Water Company	$7.45	$7.73	$7.98	$8.15	$8.51	$8.88	$9.28	$9.75	$10.31	$10.97

Mean (History & Estimates)
Median (History & Estimates)

Average of Mean & Median
Average for Period or Estimates

Source: Exhibit DHC-4

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 8 of 45

BOOK VALUE PER SHARE

		BOOK VALUE PER SHARE HISTORICAL GROWTH						ESTIMATED BVPS
		10-YEAR		5-YEAR		3-YEAR		
Company Name	2021	Compound	Simple	Compound	Simple	Compound	Simple	ValueLine
American Water Works	$38.15	4.70%	4.71%	5.46%	5.48%	5.59%	5.6%	7.00%
American States Water Co	$17.45	4.88%	4.94%	5.24%	5.27%	4.74%	4.8%	7.38%
Artesian Resources				4.39%	4.39%	4.41%	4.4%	
California Water Service Group	$21.35	7.09%	7.19%	9.20%	9.31%	12.04%	12.1%	1.54%
Global Water Resources						23.51%	28.0%	
Middlesex Water Co	$20.85	6.35%	6.48%	9.24%	9.43%	11.21%	11.4%	1.58%
SJW Group	$35.00	9.44%	9.86%	11.17%	11.96%	3.79%	3.9%	3.94%
Essential Utilities	$20.45	10.99%	11.80%	14.41%	15.92%	21.98%	23.9%	4.25%
York Water Company	$11.55	4.48%	4.49%	5.40%	5.40%	5.82%	5.8%	2.80%
Mean (History & Estimates)		6.85%	7.07%	8.06%	8.39%	10.34%	11.09%	4.07%
Median (History & Estimates)		6.35%	6.48%	7.33%	7.39%	5.82%	5.81%	3.94%
								Estimate Avg.
Average of Mean & Median		6.60%	6.77%	7.70%	7.89%	8.08%	8.45%	**4.00%**
Average for Period or Estimates		6.77%		7.80%		8.27%		Combined Average
					Historical Average		**7.61%**	**5.81%**

Source: Exhibit DHC-4

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 9 of 45

AMERICAN WATER NYSE-AWK

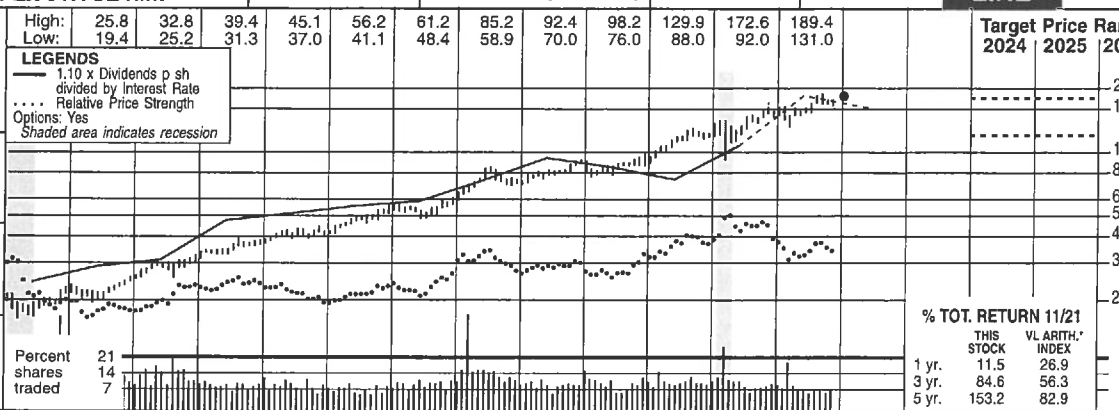
RECENT PRICE 183.58 | P/E RATIO 42.4 (Trailing: 43.7 Median: 24.0) | RELATIVE P/E RATIO 2.23 | DIV'D YLD 1.4% | VALUE LINE

TIMELINESS 3 Lowered 6/25/21
SAFETY 3 New 7/25/08
TECHNICAL 4 Raised 1/7/22
BETA .85 (1.00 = Market)

High:	25.8	32.8	39.4	45.1	56.2	61.2	85.2	92.4	98.2	129.9	172.6	189.4
Low:	19.4	25.2	31.3	37.0	41.1	48.4	58.9	70.0	76.0	88.0	92.0	131.0

Target Price Range 2024 | 2025 | 2026

LEGENDS
— 1.10 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)
$148-$237	$193 (5%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	180	(Nil)	1%
Low	120	(-35%)	-8%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	434	444	465
to Sell	388	377	362
Hld's(000)	148561	150291	155734

Percent shares traded 21 14 7

% TOT. RETURN 11/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	11.5	26.9
3 yr.	84.6	56.3
5 yr.	153.2	82.9

2005	2006E	2007E	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
--	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	20.83	*21.85*	*22.90*	Revenues per sh	*25.80*
--	.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	7.24	*7.80*	*8.25*	"Cash Flow" per sh	*9.70*
--	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	3.91	*4.25*	*4.50*	Earnings per sh A	*5.50*
--	--	--	.40	.82	.86	.90	1.21	.84	1.21	1.33	1.47	1.62	1.78	1.96	2.15	2.36	*2.58*	Div'd Decl'd per sh B■	*3.10*
--	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	10.05	*10.75*	*12.60*	Cap'l Spending per sh	*11.75*
--	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	35.58	*38.15*	*40.20*	Book Value per sh D	*50.00*
--	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	181.30	*181.60*	*182.00*	Common Shs Outst'g C	*190.00*
--	--	--	18.9	15.6	14.6	16.8	16.7	19.9	20.0	20.5	27.7	33.8	27.3	32.9	35.3	*38.8*		Avg Ann'l P/E Ratio	*27.0*
--	--	--	1.14	1.04	.93	1.05	1.06	1.12	1.05	1.03	1.45	1.70	1.47	1.75	1.83	*2.09*		Relative P/E Ratio	*1.50*
--	--	--	1.9%	4.2%	3.8%	3.1%	3.4%	2.0%	2.5%	2.5%	2.0%	2.0%	2.1%	1.7%	1.6%	1.4%		Avg Ann'l Div'd Yield	*2.1%*

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
2666.2	2876.9	2901.9	3011.3	3159.0	3302.0	3357.0	3440.0	3610.0	3777.0	*3965*	*4165*	Revenues ($mill)	*4900*
304.9	374.3	369.3	429.8	476.0	468.0	426.0	567.0	621.0	709.0	*772*	*835*	Net Profit ($mill)	*1045*
39.5%	40.7%	39.1%	39.4%	39.1%	39.2%	53.3%	28.2%	25.5%	23.3%	*17.5%*	*23.5%*	Income Tax Rate	*24.0%*
--	6.2%	5.1%	--	--	--	--	--	5.1%	4.0%	*4.0%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
55.7%	53.9%	52.4%	52.4%	53.7%	52.4%	54.7%	56.3%	58.5%	59.1%	*60.0%*	*61.5%*	Long-Term Debt Ratio	*61.0%*
44.2%	46.1%	47.6%	47.4%	46.2%	47.5%	45.3%	43.6%	41.4%	40.9%	*40.0%*	*39.5%*	Common Equity Ratio	*39.0%*
9580.3	9635.5	9940.7	10364	10911	10967	11875	13433	14760	15787	*17425*	*18700*	Total Capital ($mill)	*20000*
11021	11739	12391	12900	13933	14992	16246	17409	18232	19710	*20825*	*22150*	Net Plant ($mill)	*24500*
4.8%	5.4%	5.1%	5.5%	5.7%	5.6%	4.9%	5.4%	5.4%	5.7%	*5.5%*	*5.5%*	Return on Total Cap'l	*6.0%*
7.2%	8.4%	7.8%	8.7%	9.4%	9.0%	7.9%	9.7%	10.1%	11.0%	*11.0%*	*11.5%*	Return on Shr. Equity	*11.0%*
7.2%	8.4%	7.8%	8.7%	9.4%	9.0%	7.9%	9.7%	10.1%	11.0%	*11.0%*	*11.5%*	Return on Com Equity	*11.0%*
3.5%	3.6%	4.7%	4.3%	4.7%	4.0%	2.5%	4.2%	4.4%	5.0%	*5.0%*	*5.5%*	Retained to Com Eq	*4.5%*
52%	57%	40%	50%	50%	56%	68%	56%	57%	55%	*56%*	*56%*	All Div'ds to Net Prof	*56%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $11084 mil. Due in 5 Yrs $2867 mil.
LT Debt $10352 mil. LT Interest $384 mil.
(58% of Cap'l)

Leases, Uncapitalized: Annual rentals $13.0 mill.
Pension Assets 12/20 $1990.0 mill
Oblig. $2386.0 mill.
Pfd Stock $3.0 mill. Pfd Div'd $.2 mill

Common Stock 181,537,748 shares
as of 10/27/21

MARKET CAP: $33.1 billion (Large Cap)

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	91	576	100
Accts Receivable	294	321	348
Other	900	1009	1142
Current Assets	1285	1906	1590
Accts Payable	203	189	175
Debt Due	814	1611	732
Other	1028	1081	937
Current Liab.	2045	2881	1844

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.0%	3.5%	*4.5%*
"Cash Flow"	8.0%	7.0%	*6.5%*
Earnings	10.5%	8.0%	*8.5%*
Dividends	11.0%	11.5%	*8.5%*
Book Value	3.5%	4.5%	*5.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	761	853	976	850	3440
2019	813	882	1013	902	3610
2020	844	931	1079	923	3777
2021	888	999	1092	*986*	*3965*
2022	*915*	*1065*	*1130*	*1055*	*4165*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.59	.91	1.03	.62	3.15
2019	.62	.94	1.33	.54	3.43
2020	.68	.97	1.46	.80	3.91
2021	.73	1.14	1.53	*.85*	*4.25*
2022	*.75*	*1.20*	*1.60*	*.95*	*4.50*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.415	.455	.455	.455	1.78
2019	.455	.50	.50	.50	1.96
2020	.50	.55	.55	.55	2.15
2021	.55	.6025	.6025	.6025	
2022					

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 2020 revenues. New Jersey is its largest market accounting for 24.5% of regulated revenues; Pennsylvania, 22.5%; Missouri, 10.6%. Has 6,800 employees. The Vanguard Grp, owns 11.7% of outstanding shares; BlackRock, Inc., 8.1%; officers & directors, less than 1.0%. (3/21 Proxy). President & CEO: Susan N. Story. Chairman: George MacKenzie. Address: 1 Water Street, Camden, NJ 08102. Tel.: 856-346-8200. Internet: www.amwater.com.

American Water Works most likely finished up another successful year. Share earnings probably came in close to our $4.25 estimate, which represents a 9% gain over the previous year's healthy total. It should be noted that water utilities have been among the industries that have not been materially affected by the COVID-19 pandemic.

Earnings prospects are bright for next year and out to mid-decade. We believe the company's share net can rise to $4.50 in 2022. Moreover, management projects that share earnings can increase from 7% to 9% from 2022 to 2026.

Acquisitions will continue to fuel American Water's income growth. The water utility industry in the United States is extremely fragmented, as it consists of over 50,000 mostly small municipally run water districts. In addition to having very outdated infrastructure, most water districts are also not well capitalized and are extremely inefficient. This scenario is perfect for American Water's strategy of increasing its rate base, by investing heavily to update their pipelines, and wringing significant cost savings out of them. In this industry, there are clearly benefits to economies of scale. Thus far in 2021, American has made 14 acquisitions and has another 31 "under agreement" to be bought. With state regulators typically on board, we expect the buying spree to rise later in the decade. Indeed, out to 2026, management plans on budgeting $1.5 billion to $2 billion a year for takeovers.

The capital budget remains large. The company projects that it will spend, on average, somewhere between $2.3 billion to $2.4 billion per annum on construction. The two main sectors where the expenditures will be invested are to replace old infrastructure (69%) and improving the resiliency of current assets (11%). Though external funds will be required to finance a portion of the spending, American Water's balance sheet is capable of handling more debt without a problem.

These shares do not stand out at this particular time. In the short term, the stock is only ranked to be an average performer in the year ahead. Over the 18-month and three-to five-year period, the equity offers subpar total return potential.

James A. Flood *January 7, 2022*

(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 mid-February.
(B) Dividends paid in March, June, September, and December. ■ Div. reinvestment available.
(C) In millions. (D) Includes intangibles. On 9/30/21: $1.653 billion, $9.11/share.
(E) Pro forma numbers for '06 & '07.

Company's Financial Strength	B++
Stock's Price Stability	85
Price Growth Persistence	75
Earnings Predictability	90

© 2021 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-VALUELINE

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 10 of 45

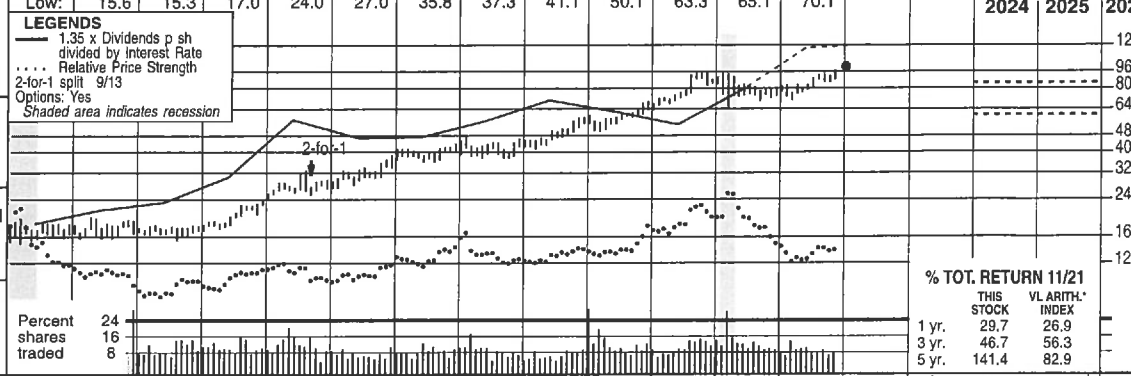
AMER. STATES WATER NYSE-AWR

RECENT PRICE 100.96 | P/E RATIO 41.4 (Trailing: 39.7 Median: 24.0) | RELATIVE P/E RATIO 2.18 | DIV'D YLD 1.5% | VALUE LINE

TIMELINESS 3 Raised 3/5/21
SAFETY 2 Raised 7/20/12
TECHNICAL 4 Lowered 12/24/21
BETA .65 (1.00 = Market)

High:	19.8	18.2	24.1	33.1	38.7	44.1	47.2	58.4	69.6	96.0	96.6	102.8
Low:	15.6	15.3	17.0	24.0	27.0	35.8	37.3	41.1	50.1	63.3	65.1	70.1

Target Price Range 2024 | 2025 | 2026



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$82-$115	$99 (0%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	85	(-15%)	-2%
Low	60	(-40%)	-9%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	120	126	146
to Sell	128	117	101
Hld's(000)	25737	25636	26958

% TOT. RETURN 11/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	29.7	26.9
3 yr.	46.7	56.3
5 yr.	141.4	82.9

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
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	13.24	*13.55*	*13.75*	Revenues per sh	*17.20*
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	3.34	*3.50*	*3.75*	"Cash Flow" per sh	*4.80*
.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	2.33	*2.45*	*2.60*	Earnings per sh A	*3.05*
.45	.46	.48	.50	.51	.52	.55	.64	.76	.83	.87	.91	.99	1.06	1.16	1.28	1.40	*1.52*	Div'd Decl'd per sh B■	*2.00*
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	3.54	*4.05*	*4.20*	Cap'l Spending per sh	*4.25*
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	17.39	*17.45*	*20.00*	Book Value per sh D	*23.20*
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	36.89	*37.25*	*37.50*	Common Shs Outst'g C	*37.50*
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	34.3	*34.6*		Avg Ann'l P/E Ratio	*24.0*
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	1.83	1.78	*1.86*		Relative P/E Ratio	*1.35*
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%	1.6%	1.7%		Avg Ann'l Div'd Yield	*2.8%*
						419.3	466.9	472.1	465.8	458.6	436.1	440.6	436.8	473.9	488.2	*510*	*525*	Revenues ($mill)	*645*
						42.0	54.1	62.7	61.1	60.5	59.7	69.4	63.9	84.3	86.4	*90.0*	*95.0*	Net Profit ($mill)	*115*
						41.7%	39.9%	36.3%	38.4%	38.4%	36.8%	36.0%	22.0%	22.6%	24.6%	*23.5%*	*24.0%*	Income Tax Rate	*23.0%*
						2.0%	2.5%	--	--	--	--	--	--	2.5%	--	*1.0%*	*1.0%*	AFUDC % to Net Profit	*1.0%*
						45.4%	42.2%	39.8%	39.1%	41.1%	39.4%	38.0%	40.5%	44.4%	47.2%	*45.5%*	*48.5%*	Long-Term Debt Ratio	*53.5%*
						54.6%	57.8%	60.2%	60.9%	58.9%	60.6%	62.0%	59.5%	55.6%	52.8%	*54.5%*	*51.5%*	Common Equity Ratio	*46.5%*
						749.1	787.0	818.4	832.6	791.5	815.3	854.9	938.4	1082.5	1216.2	*1260*	*1390*	Total Capital ($mill)	*1620*
						896.5	917.8	981.5	1003.5	1060.8	1150.9	1205.0	1296.3	1415.7	1512.0	*1600*	*1700*	Net Plant ($mill)	*1925*
						7.1%	8.3%	8.9%	8.6%	9.0%	8.6%	9.3%	7.9%	8.9%	8.0%	*8.0%*	*8.0%*	Return on Total Cap'l	*8.5%*
						10.3%	11.9%	12.7%	12.0%	13.0%	12.1%	13.1%	11.4%	14.0%	13.5%	*13.5%*	*13.5%*	Return on Shr. Equity	*13.0%*
						10.3%	11.9%	12.7%	12.0%	13.0%	12.1%	13.1%	11.4%	14.0%	13.5%	*13.5%*	*13.5%*	Return on Com Equity	*13.0%*
						5.3%	6.6%	6.8%	5.7%	6.0%	5.3%	6.2%	4.5%	6.9%	6.1%	*6.0%*	*5.5%*	Retained to Com Eq	*4.5%*
						49%	45%	47%	53%	54%	56%	52%	61%	51%	55%	*57%*	*60%*	All Div'ds to Net Prof	*66%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $440.5 mill. **Due In 5 Yrs** $136.0 mill.
LT Debt $412.1 mill. **LT Interest** $24.0 mill.
(38% of Cap'l)

Leases, Uncapitalized: Annual rentals $2.6 mill.
Pension Assets-12/20 $213.1 mill.
Oblig. $272.8 mill.

Pfd Stock None

Common Stock 36,936,252 shs.
as of 10/29/21

MARKET CAP: $3.7 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	1.3	36.7	7.1
Accts Receivable	20.9	29.2	33.3
Other	100.3	91.2	103.3
Current Assets	122.5	157.1	143.7
Accts Payable	55.6	63.8	68.0
Debt Due	5.3	.4	28.4
Other	55.1	54.4	54.7
Current Liab.	116.0	118.6	151.1

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	2.5%	.5%	*5.0%*
"Cash Flow"	5.5%	3.0%	*7.0%*
Earnings	9.0%	5.5%	*6.5%*
Dividends	8.5%	7.5%	*9.5%*
Book Value	5.5%	5.0%	*5.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
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	133.6	124.2	488.2
2021	117.1	128.4	136.8	*127.7*	*510*
2022	*120*	*130*	*145*	*130*	*525*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.29	.44	.62	.37	1.72
2019	.35	.72	.76	.45	2.28
2020	.38	.69	.72	.54	2.33
2021	.52	.72	.76	*.45*	*2.45*
2022	*.48*	*.75*	*.80*	*.57*	*2.60*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.255	.255	.275	.275	1.06
2019	.275	.275	.305	.305	1.16
2020	.305	.305	.335	.335	1.28
2021	.335	.335	.365	.365	1.40
2022					

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Co., it supplies water to 261,976 customers in 10 California counties. Service areas include the metropolitan areas of Los Angeles and Orange Counties. The company also provides electricity to 24,545 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 16.4% of out. shares; Vanguard, 12.0%; off. & dir., 1.0% (4/21 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 has reached a preliminary agreement on a pending rate case. In late November, its water subsidiary, Golden States Water (GSW), agreed to a settlement with the state's Public Advocates Office (PAO) on a petition for higher rates. The importance of the pact cannot be underestimated, as the application was for rates from 2022 through to 2024. (In California, utilities typically file new petitions for rate adjustments triennially.) Final approval is still required by the California Public Utility Commission, but, generally it tends to go along with the PAO's recommendations. According to the pact, GSW will invest about $417 million over the next three years to upgrade its water assets. Rates will increase $20.6 million a year. Also, GSW would be partially protected from inflation, as about $13 million in additional hikes can be implemented should costs continue to be a problem. Several minor issues have yet to be resolved.

Wall Street took notice of the deal. Since the announcement, the price of AWR stock has done much better than the S&P 500 Index and all but one of the equities in the Water Industry.

Earnings prospects for 2022 are encouraging. On a year-over-year basis, we expect the utility's share net to decline in the fourth quarter for two reasons. First, it's versus a strong 2020 interim. And second, it is not unusual for a utility's bottom line to not do well in the final stretch of an old rate case. Next year, we think American States share net can rise 6%, thanks to higher rates being in effect.

Unregulated activities should also help spur profit and dividend growth. The company's ASUS subsidiary provides water services to U.S. military bases. Returns on these operations are not determined by state authorities, so margins are typically higher here. One possible problem that could stall progress would be if inflation remains at its current level for an extended period.

Investors can probably find better selections elsewhere. All of the company's positive attributes seem to be fully factored into its current quote. Thus, total return potential in the short, medium, and long terms are not attractive.

James A. Flood *January 7, 2022*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢); '11, 10¢. Next earnings report due early February.
(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 9/30/20; $1.1 million/$0.03 a share.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	90
Earnings Predictability	95

© 2021 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-VALUELINE

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 11 of 45

ARTESIAN RES. CORP. NDQ–ARTNA

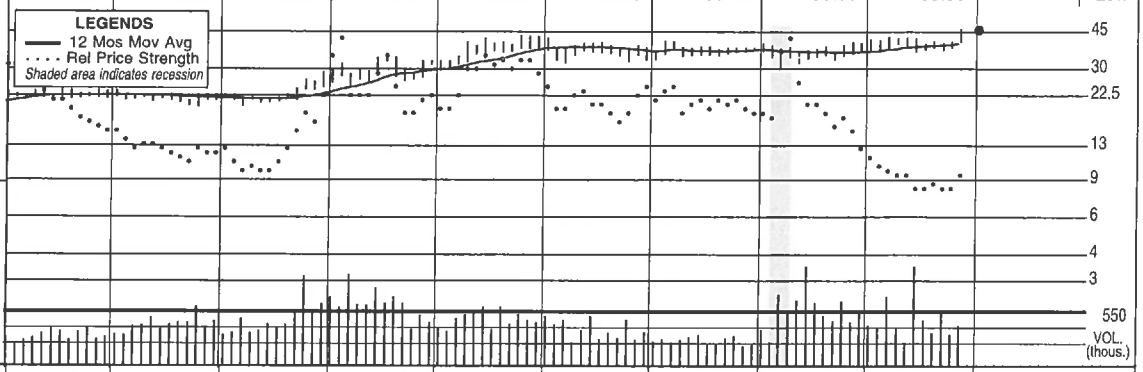
RECENT PRICE 45.87 | TRAILING P/E RATIO 25.5 | RELATIVE P/E RATIO 1.48 | DIV'D YLD 2.3% | VALUE LINE

RANKS

PERFORMANCE 3 Average
Technical 3 Average
SAFETY 3 Average
BETA .75 (1.00 = Market)

Financial Strength B+
Price Stability 90
Price Growth Persistence 55
Earnings Predictability 100

High	24.27	23.82	29.16	35.00	43.22	41.92	40.97	40.26	47.99
Low	21.52	19.85	20.00	25.17	29.37	32.00	33.14	30.00	35.90



© VALUE LINE PUBLISHING LLC	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022/2023
SALES PER SH	7.82	8.13	8.50	8.67	8.92	8.69	9.00	9.42	--	
"CASH FLOW" PER SH	1.87	2.04	2.22	2.43	2.55	2.66	2.77	2.99	--	
EARNINGS PER SH	.94	1.07	1.26	1.41	1.51	1.54	1.60	1.79	*1.81* A,B	*1.96* C/NA
DIV'DS DECL'D PER SH	.82	.85	.87	.90	.93	.96	.98	1.01	--	
CAP'L SPENDING PER SH	2.40	2.66	2.28	3.10	4.46	5.30	4.38	3.66	--	
BOOK VALUE PER SH	13.80	14.09	14.61	15.23	15.91	16.57	17.25	18.11	--	
COMMON SHS OUTST'G (MILL)	8.83	8.91	9.06	9.13	9.22	9.25	9.29	9.36	--	
AVG ANN'L P/E RATIO	23.9	20.5	18.0	20.9	24.2	23.9	22.8	20.2	*25.3*	*23.4/NA*
RELATIVE P/E RATIO	1.34	1.08	.93	1.14	1.21	1.35	1.32	1.18	--	
AVG ANN'L DIV'D YIELD	3.7%	3.9%	3.8%	3.1%	2.5%	2.6%	2.7%	2.8%	--	
SALES ($MILL)	69.1	72.5	77.0	79.1	82.2	80.4	83.6	88.1	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	47.0%	48.8%	43.0%	44.4%	44.6%	46.1%	43.0%	47.8%	--	
DEPRECIATION ($MILL)	8.3	8.7	8.8	9.2	9.6	10.3	10.8	11.1	--	
NET PROFIT ($MILL)	8.3	9.5	11.3	13.0	14.0	14.3	14.9	16.8	--	
INCOME TAX RATE	40.2%	40.1%	--	--	--	--	--	--	--	
NET PROFIT MARGIN	12.0%	13.1%	14.7%	16.4%	17.0%	17.8%	17.9%	19.1%	--	
WORKING CAP'L ($MILL)	d12.3	d13.5	d8.8	d4.7	d9.5	d21.6	d11.4	d26.1	--	
LONG-TERM DEBT ($MILL)	105.5	105.0	103.6	102.3	105.6	115.9	144.2	142.3	--	
SHR. EQUITY ($MILL)	121.8	125.6	132.3	139.0	146.6	153.3	160.3	169.4	--	
RETURN ON TOTAL CAP'L	5.1%	5.5%	6.3%	6.7%	6.8%	6.5%	6.1%	6.6%	--	
RETURN ON SHR. EQUITY	6.8%	7.6%	8.5%	9.3%	9.5%	9.3%	9.3%	9.9%	--	
RETAINED TO COM EQ	.9%	1.6%	2.6%	3.4%	3.7%	3.6%	3.6%	4.4%	--	
ALL DIV'DS TO NET PROF	87%	79%	69%	63%	61%	62%	61%	56%	--	

A No. of analysts changing earn. est. in last 27 days: 0 up, 0 down, consensus 5-year earnings growth not available. B Based upon one analyst's estimate. C Based upon one analyst's estimate.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	2.0%	4.5%
"Cash Flow"	6.5%	8.0%
Earnings	8.5%	12.0%
Dividends	3.0%	2.5%
Book Value	4.0%	5.0%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/19	19.4	20.7	22.5	21.0	83.6
12/31/20	19.9	21.8	24.7	21.7	88.1
12/31/21	20.7	22.6	25.0		
12/31/22					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/18	.38	.42	.42	.32	1.54
12/31/19	.38	.41	.48	.33	1.60
12/31/20	.43	.49	.54	.33	1.79
12/31/21	.45	.48	.54	*.35*	
12/31/22	*.50*	*.52*			

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2019	.242	.246	.246	.25	.98
2020	.25	.25	.25	.26	1.01
2021	.257	.261	.261	.268	1.05
2022					

INSTITUTIONAL DECISIONS

	1Q'21	2Q'21	3Q'21
to Buy	36	40	38
to Sell	43	42	40
Hld's(000)	4359	4214	4255

ASSETS ($mill.)	2019	2020	9/30/21
Cash Assets	.6	.0	.6
Receivables	6.9	10.2	9.6
Inventory	1.3	1.5	1.7
Other	5.4	5.9	7.3
Current Assets	14.2	17.6	19.2
Property, Plant & Equip, at cost	671.9	711.7	- -
Accum Depreciation	137.4	148.3	- -
Net Property	534.5	563.4	585.3
Other	11.7	12.2	11.9
Total Assets	560.4	593.2	616.4
LIABILITIES ($mill.)			
Accts Payable	8.2	6.4	5.3
Debt Due	9.2	28.6	29.1
Other	8.2	8.7	13.6
Current Liab	25.6	43.7	48.0

LONG-TERM DEBT AND EQUITY as of 9/30/21

Total Debt $172.5 mill. **Due in 5 Yrs.** NA
LT Debt $143.3 mill.
Including Cap. Leases NA
(45% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability None in '20 vs. None in '19

Pfd Stock None **Pfd Div'd Paid** None

Common Stock 8,524,837 shares
(55% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Artesian Resources Corp. operates as the parent holding company of five regulated public utilities: Artesian Water Company, Inc., Artesian Water Pennsylvania, Inc., Artesian Water Maryland, Inc., Artesian Wastewater Management, Inc., and Artesian Wastewater Maryland, Inc.; and three non-regulated subsidiaries: Artesian Utility Development, Inc., Artesian Development Corp., and Artesian Storm Water Services, Inc. Its principal subsidiary, Artesian Water Company, Inc., distributes and sells water, including water for public and private fire protection, to residential, commercial, industrial, municipal, and utility customers in Delaware, Maryland, and Pennsylvania. It provides wastewater services to customers in Delaware. In addition, it provides contract water and wastewater operations, and water, sewer and internal Service Line Protection Plans. Has 235 employees. Chairman, C.E.O. & President: Dian C. Taylor Address: 664 Churchmans Rd., Newark, DE 19702. Tel.: (302) 453-6900. Internet: www.artesianresources.com.

E.B.

January 7, 2022

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 11/30/2021

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
9.19%	5.03%	18.67%	26.63%	53.93%

© 2021 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-VALUELINE

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 12 of 45

CALIFORNIA WATER NYSE-CWT

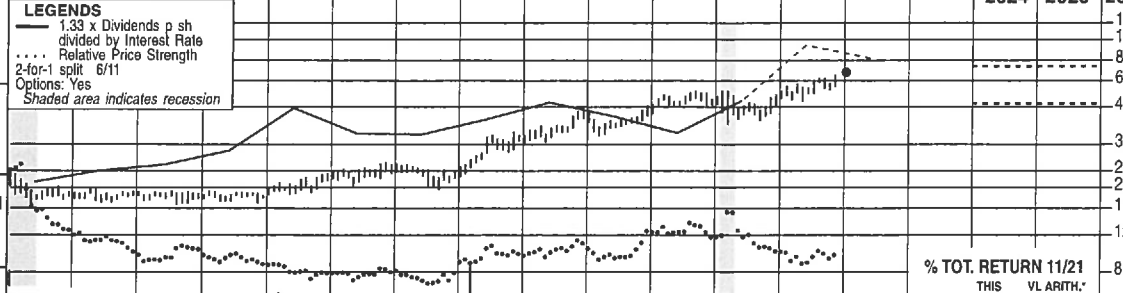
RECENT PRICE 70.02 | P/E RATIO 29.7 (Trailing: 31.8 Median: 24.0) | RELATIVE P/E RATIO 1.56 | DIV'D YLD 1.3% | VALUE LINE

TIMELINESS 3 Lowered 10/29/21
SAFETY 3 Lowered 7/27/07
TECHNICAL 3 Raised 1/7/22
BETA .70 (1.00 = Market)

High:	19.8	19.4	19.3	23.4	26.4	26.0	36.8	46.2	49.1	57.5	57.4	71.7
Low:	16.9	16.7	16.8	18.4	20.3	19.5	22.5	32.4	35.3	44.6	39.7	51.0

Target Price Range 2024 | 2025 | 2026

LEGENDS
— 1.33 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 6/11
Options: Yes
Shaded area indicates recession



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$58-$89	$74 (5%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	75	(+5%)	3%
Low	50	(-30%)	-6%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	112	113	133
to Sell	104	99	93
Hld's(000)	38005	39103	41511

Percent shares traded 18 12 6

% TOT. RETURN 11/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	29.3	26.9
3 yr.	44.0	56.3
5 yr.	97.9	82.9

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
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	15.78	*15.55*	*15.75*	Revenues per sh	*16.40*
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	3.88	*3.80*	*3.85*	"Cash Flow" per sh	*4.05*
.74	.67	.75	.95	.98	.91	.86	1.02	1.02	1.19	.94	1.01	1.40	1.36	1.31	1.97	*2.30*	*2.35*	Earnings per sh A	*2.55*
.57	.58	.58	.59	.59	.60	.62	.63	.64	.65	.67	.69	.72	.75	.79	.85	.92	*.98*	Div'd Decl'd per sh B ■	*1.15*
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	5.93	*5.25*	*5.85*	Cap'l Spending per sh	*6.45*
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	18.30	*21.35*	*21.70*	Book Value per sh C	*22.70*
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	50.33	*52.75*	*53.00*	Common Shs Outst'g D	*54.00*
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	24.9	*26.0*		Avg Ann'l P/E Ratio	*24.0*
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	2.09	1.29	*1.40*		Relative P/E Ratio	*1.30*
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%	1.7%	1.5%		Avg Ann'l Div'd Yield	*1.8%*
						501.8	560.0	584.1	597.5	588.4	609.4	666.9	698.2	714.6	794.3	*820*	*835*	Revenues ($mill) E	*885*
						36.1	42.6	47.3	56.7	45.0	48.7	67.2	65.6	63.1	96.8	*120*	*125*	Net Profit ($mill)	*138*
						40.5%	37.5%	30.3%	33.0%	36.0%	35.5%	30.1%	24.5%	19.1%	11.1%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
						7.6%	8.0%	4.3%	2.7%	4.3%	6.1%	3.5%	3.1%	5.8%	3.3%	*5.0%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
						51.7%	47.8%	41.6%	40.1%	44.4%	44.6%	42.7%	49.3%	50.2%	45.9%	*48.5%*	*44.0%*	Long-Term Debt Ratio	*38.0%*
						48.3%	52.2%	58.4%	59.9%	55.6%	55.4%	57.3%	50.7%	49.8%	54.1%	*51.5%*	*56.0%*	Common Equity Ratio	*62.0%*
						931.5	908.2	1024.9	1045.9	1154.4	1191.2	1209.3	1440.2	1566.7	1702.4	*2175*	*2050*	Total Capital ($mill)	*1975*
						1381.1	1457.1	1515.8	1590.4	1701.8	1859.3	2048.0	2232.7	2406.4	2650.6	*2800*	*2835*	Net Plant ($mill)	*2925*
						5.5%	6.3%	6.0%	6.3%	5.2%	5.5%	7.1%	5.9%	5.5%	7.0%	*6.0%*	*6.5%*	Return on Total Cap'l	*7.5%*
						8.0%	9.0%	7.9%	9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	10.5%	*11.0%*	*11.0%*	Return on Shr. Equity	*11.0%*
						8.0%	9.0%	7.9%	9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	10.5%	*11.0%*	*11.0%*	Return on Com Equity	*11.0%*
						2.3%	3.4%	3.4%	4.1%	2.0%	2.4%	4.7%	4.0%	3.2%	6.0%	*6.5%*	*6.5%*	Retained to Com Eq	*6.0%*
						71%	62%	56%	55%	71%	68%	51%	55%	60%	43%	*40%*	*42%*	All Div'ds to Net Prof	*45%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $1184.9 mill. **Due In 5 Yrs** $357.0 mill.
LT Debt $1059.7 mill. **LT Interest** $40.0 mill.
(Total interest coverage: 8.4x) (48% of Cap'l)

Pension Assets-12/20 $716.8 mill.
Oblig. $833.9 mill.

Pfd Stock None

Common Stock 52,608,000 shs.

MARKET CAP: $3.7 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	42.7	44.6	140.4
Other	142.0	221.4	253.0
Current Assets	184.7	266.0	393.4
Accts Payable	108.5	131.7	148.4
Debt Due	197.0	375.1	125.2
Other	53.2	81.9	87.3
Current Liab.	358.7	588.7	360.9

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.5%	4.0%	*1.5%*
"Cash Flow"	6.0%	8.0%	*3.0%*
Earnings	5.0%	8.0%	*8.5%*
Dividends	3.0%	4.0%	*6.5%*
Book Value	5.0%	5.0%	*5.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.)E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
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	304.1	189.1	794.3
2021	147.7	213.1	256.7	*202.5*	*820*
2022	*155*	*215*	*260*	*205*	*835*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	d.02	.31	.75	.32	1.36
2019	d.16	.35	.88	.24	1.31
2020	d.42	.11	1.94	.31	1.97
2021	d.06	.75	1.20	*.41*	*2.30*
2022	*.10*	*.65*	*1.15*	*.45*	*2.35*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.1875	.1875	.1875	.1875	.75
2019	.1975	.1975	.1975	.1975	.79
2020	.2125	.2125	.2125	.2125	.85
2021	.230	.230	.230	.230	.92
2022					

BUSINESS: California Water Service Group provides regulated and nonregulated water service to 492,600 customers in 100 communities in the state of California. Accounts for about 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, '20: residential, 70%; business, 18%; industrial, 4%; public authorities, 5%; other 3%. Off. and dir. own 1% of common stock (4/21 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.

Shares of California Water Service Group have appreciated strongly over the past three months. The stock is up more than 15% in price since our early-October full-page report, etching a fresh all-time high along the way. A combination of better-than-expected September-period financial results, coupled with a broader shift toward more-conservative, noncyclical assets, likely underpinned the advance. That said, we think the recent run-up in price presents a decent opportunity for committed investors to lock in some profits. In fact, the stock has slipped one spot on our Timeliness ranking scale, to 3, and is now just an Average selection for relative year-ahead price performance.

Top- and bottom-line expansion may not be as pronounced in 2022 as it was in 2021. Following a strong profit beat in the third-quarter, which was driven by rate hikes associated with its recent California rate case decision, we are raising our 2021 share-net estimate by $0.25, to $2.30. Thus, California Water probably closed the books on 2021 with revenues and earnings growth of 3% and 17%, respectively. For this year, however, growth may be a bit more muted. Revenues are poised to advance 2%, to $835 million, while earnings may increase only a nickel, to $2.35 per share. It's worth noting that a few one-off benefits recognized in 2021 are factored into our relatively flat bottom-line forecast.

Robust capital spending on infrastructure upgrades is on tap for the pull to mid-decade. Most notably, management's strategic investment initiatives include servicing outdated pipelines, watermain replacement projects, treatment plant upgrades, and IT system enhancements. On balance, California Water's annual capital budget is likely to approach $350 million over the next few years.

Buy-and-hold subscribers should look elsewhere, too. At the recent quotation, total return potential three to five years hence is unappealing, as the equity is presently trading near the top of our 3- to 5-year Target Price Range. In sum, investors would be wise to defer capital commitments at this juncture.

Nicholas P. Patrikis *January 7, 2022*

(A) Basic EPS. Excl. nonrecurring gain (loss): '11, 4¢. Next earnings report due early Feb.
(B) Dividends historically paid in late Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. intangible assets. In '20 : $27.6 mill., $0.55/sh.
(D) In millions, adjusted for split.
(E) Excludes non-regulated revenues

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	75
Earnings Predictability	55

© 2021 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-VALUELINE

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 13 of 45

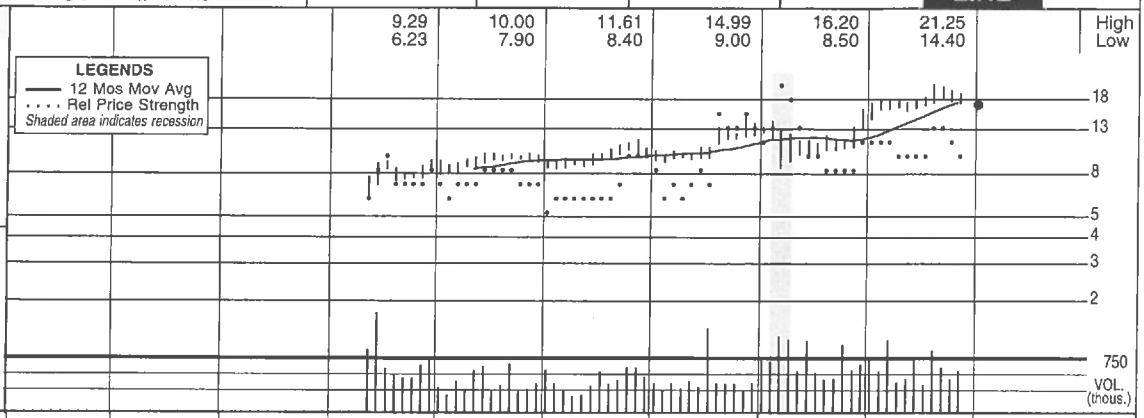
GLOBAL WATER RES. NDQ–GWRS

RECENT PRICE 16.96 | TRAILING P/E RATIO NMF | RELATIVE P/E RATIO NMF | DIV'D YLD 1.7% | VALUE LINE

RANKS

PERFORMANCE	2	Above Average
Technical	3	Average
SAFETY	3	Average
BETA .80		(1.00 = Market)

Financial Strength	B+
Price Stability	85
Price Growth Persistence	80
Earnings Predictability	35



© VALUE LINE PUBLISHING LLC	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022/2023
REVENUES PER SH	--	--	--	1.52	1.59	1.65	1.65	1.71	--	
"CASH FLOW" PER SH	--	--	--	.18	.58	.49	.49	.45	--	
EARNINGS PER SH	--	--	--	d.15	.23	.15	.10	.05	*.10* [A,B]	*.16* [C]*/NA*
DIV'DS DECL'D PER SH	--	--	--	.17	.28	.28	.29	.29	--	
CAP'L SPENDING PER SH	--	--	--	.44	1.06	.22	.52	.40	--	
BOOK VALUE PER SH	--	--	--	.78	.76	1.30	1.15	1.43	--	
COMMON SHS OUTST'G (MILL)	--	--	--	19.58	19.63	21.47	21.54	22.59	--	
AVG ANN'L P/E RATIO	--	--	--	--	40.1	63.9	NMF	NMF	*NMF*	*NMF/NA*
RELATIVE P/E RATIO	--	--	--	--	2.01	3.61	NMF	NMF	--	
AVG ANN'L DIV'D YIELD	--	--	--	2.2%	3.0%	3.0%	2.6%	2.5%	--	
REVENUES ($MILL)	--	--	32.0	29.8	31.2	35.5	35.5	38.6	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	--	--	75.1%	38.8%	45.7%	47.1%	43.2%	42.4%	--	
DEPRECIATION ($MILL)	--	--	8.2	6.3	6.9	7.5	8.4	9.0	--	
NET PROFIT ($MILL)	--	--	21.4	d2.9	4.6	3.1	2.2	1.1	--	
INCOME TAX RATE	--	--	49.1%	--	--	36.5%	34.3%	41.1%	--	
NET PROFIT MARGIN	--	--	66.9%	NMF	14.6%	8.7%	6.3%	2.9%	--	
WORKING CAP'L ($MILL)	--	--	8.0	13.8	.7	7.7	2.2	11.1	--	
LONG-TERM DEBT ($MILL)	--	--	104.7	114.3	114.4	114.5	114.7	112.7	--	
SHR. EQUITY ($MILL)	--	--	20.1	15.2	14.9	27.9	24.7	32.2	--	
RETURN ON TOTAL CAP'L	--	--	20.5%	2.4%	5.5%	4.0%	3.5%	2.6%	--	
RETURN ON SHR. EQUITY	--	--	106.5%	NMF	30.6%	11.1%	9.0%	3.4%	--	
RETAINED TO COM EQ	--	--	106.5%	NMF	NMF	11.1%	NMF	NMF	--	
ALL DIV'DS TO NET PROF	--	--	--	NMF	119%	--	NMF	NMF	--	

[A]*No. of analysts changing earn. est. in last 27 days: 0 up, 0 down, consensus 5-year earnings growth 15.0% per year.* [B]*Based upon one analyst's estimate.* [C]*Based upon one analyst's estimate.*

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	--	4.0%
"Cash Flow"	--	-8.5%
Earnings	--	-50.0%
Dividends	--	1.0%
Book Value	--	24.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/19	7.7	9.2	9.9	8.7	35.5
12/31/20	8.2	9.9	10.8	9.7	38.6
12/31/21	9.3	10.9	11.4		
12/31/22					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/18	.02	.10	.03	--	.15
12/31/19	.02	.04	.05	d.01	.10
12/31/20	.02	d.01	.05	d.01	.05
12/31/21	d.01	.09	.07	*.01*	
12/31/22					

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2019	.072	.072	.072	.072	.29
2020	.073	.073	.073	.073	.29
2021	.073	.073	.073	.073	.29
2022					

INSTITUTIONAL DECISIONS

	1Q'21	2Q'21	3Q'21
to Buy	18	20	30
to Sell	30	27	23
Hld's(000)	7611	7618	7500

ASSETS ($mill.)	2019	2020	9/30/21
Cash Assets	7.5	18.0	21.2
Receivables	1.6	2.1	1.9
Inventory	.0	.0	.0
Other	3.2	3.4	4.4
Current Assets	12.3	23.5	27.5
Property, Plant & Equip, at cost	326.3	340.2	--
Accum Depreciation	92.7	101.3	--
Net Property	233.6	238.9	249.7
Other	20.2	21.0	18.3
Total Assets	266.1	283.4	295.5
LIABILITIES ($mill.)			
Accts Payable	1.0	.5	.5
Debt Due	.1	2.0	4.0
Other	9.0	9.9	11.5
Current Liab	10.1	12.4	16.0

LONG-TERM DEBT AND EQUITY as of 9/30/21

Total Debt $114.9 mill. **Due in 5 Yrs.** NA
LT Debt $110.9 mill.
Including Cap. Leases NA
(78% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability None in '20 vs. None in '19

Pfd Stock None **Pfd Div'd Paid** None

Common Stock 22,649,000 shares
(22% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Global Water Resources, Inc. is a water resource management company that owns, operates, and manages 17 water, wastewater, and recycled water utilities in strategically located communities, principally in metropolitan Phoenix, Arizona. It seeks to deploy its integrated approach, Total Water Management, a term used to mean managing the entire water cycle by owning and operating the water, wastewater, and recycled water utilities within the same geographic areas in order to both conserve water and maximize its total economic and social value. The company uses Total Water Management to promote sustainable communities in areas where growth outpaces the existing potable water supply. Global Water recycles nearly one billion gallons of water annually. In December 2021, Global Water signed a letter of intent to acquire Farmers Water Co., a subsidiary of Farmers Investment Co. Has 79 employees. Chairman, C.E.O. & President: Ron L. Fleming Address: 21410 N. 19th Avenue #220, Phoenix, AZ 85027. Tel.: (480) 360-7775. Internet: www.gwresources.com.

E.B.

January 7, 2022

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 11/30/2021

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
-13.57%	1.63%	35.93%	80.77%	130.98%

© 2021 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-VALUELINE

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 14 of 45

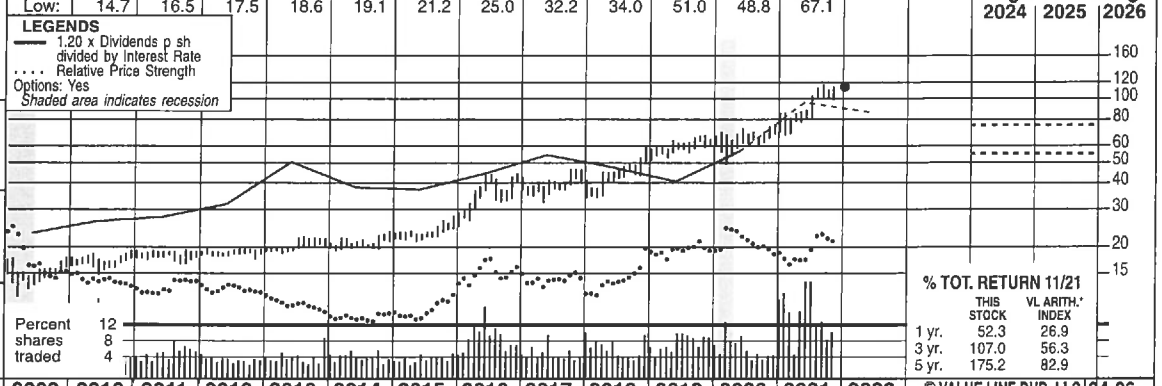
MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 113.69 | P/E RATIO 50.8 (Trailing: 53.4 Median: 23.0) | RELATIVE P/E RATIO 2.67 | DIV'D YLD 1.0% | VALUE LINE

TIMELINESS 3 Lowered 6/4/21
SAFETY 2 New 10/21/11
TECHNICAL 4 Lowered 12/17/21
BETA .70 (1.00 = Market)

High:	19.3	19.4	19.6	22.5	23.7	28.0	44.5	46.7	60.3	67.7	76.1	116.4
Low:	14.7	16.5	17.5	18.6	19.1	21.2	25.0	32.2	34.0	51.0	48.8	67.1

Target Price Range 2024 | 2025 | 2026



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$69-$133	$101 (-10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	75	(-35%)	-8%
Low	55	(-50%)	-15%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	64	71	101
to Sell	67	65	66
Hld's(000)	10712	10852	12996

% TOT. RETURN 11/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	52.3	26.9
3 yr.	107.0	56.3
5 yr.	175.2	82.9

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
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	8.10	*8.30*	*8.45*	Revenues per sh	*9.15*
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	3.25	*3.10*	*3.30*	"Cash Flow" per sh	*3.75*
.71	.82	.87	.89	.72	.96	.84	.90	1.03	1.13	1.22	1.38	1.38	1.96	2.01	2.18	*2.20*	*2.35*	Earnings per sh A	*2.75*
.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	.78	.81	.86	.91	.98	1.04	1.11	*1.18*	Div'd Decl'd per sh B■	*1.35*
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	6.04	*5.50*	*5.50*	Cap'l Spending per sh	*6.25*
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	19.81	*20.85*	*21.15*	Book Value per sh	*22.20*
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	17.47	*17.50*	*17.75*	Common Shs Outst'g C	*18.00*
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	30.1	*41.7*		Avg Ann'l P/E Ratio	*24.0*
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	1.58	1.56	*2.24*		Relative P/E Ratio	*1.30*
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%	1.6%	1.2%		Avg Ann'l Div'd Yield	*2.1%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $273.3 mill. **Due in 5 Yrs** $43.7 mill.
LT Debt $266.5 mill. **LT Interest** $7.5 mill.
(Total interest coverage: 8.0x)
(43% of Cap'l)

Pension Assets-12/20 $88.9 mill.
Oblig. $115.9 mill.
Pfd Stock $2.4 mill. **Pfd Div'd:** $.1 mill.

Common Stock 17,497,015 shs.
as of 10/29/21

MARKET CAP: $2.0 billion (Mid Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
102.1	110.4	114.8	117.1	126.0	132.9	130.8	138.1	134.6	141.6	*145*	*150*	Revenues ($mill)	*165*
13.4	14.4	16.6	18.4	20.0	22.7	22.8	32.5	33.9	38.4	*39.0*	*42.0*	Net Profit ($mill)	*49.5*
32.7%	33.9%	34.1%	35.0%	34.5%	34.0%	32.7%	2.8%	2.8%	2.8%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
6.1%	3.4%	1.9%	1.7%	1.9%	2.7%	3.1%	1.4%	3.4%	3.9%	*2.5%*	*2.5%*	AFUDC % to Net Profit	*2.5%*
42.3%	41.5%	40.4%	40.5%	39.4%	37.9%	37.5%	37.8%	41.5%	44.0%	*42.0%*	*40.5%*	Long-Term Debt Ratio	*38.5%*
56.6%	57.4%	58.7%	58.8%	59.8%	61.5%	61.8%	61.6%	58.2%	55.7%	*57.5%*	*59.5%*	Common Equity Ratio	*61.5%*
312.5	316.5	321.4	335.8	345.4	355.4	370.7	404.1	556.7	621.5	*630*	*630*	Total Capital ($mill)	*655*
422.2	435.2	446.5	465.4	481.9	517.8	557.2	618.5	705.7	796.6	*865*	*875*	Net Plant ($mill)	*900*
5.2%	5.4%	5.9%	6.3%	6.6%	7.1%	6.9%	8.9%	6.7%	6.8%	*6.5%*	*7.0%*	Return on Total Cap'l	*8.0%*
7.5%	7.8%	8.7%	9.2%	9.6%	10.3%	9.8%	12.9%	10.4%	11.0%	*10.5%*	*11.0%*	Return on Shr. Equity	*12.5%*
7.5%	7.8%	8.7%	9.3%	9.6%	10.3%	9.9%	13.0%	10.4%	11.1%	*10.5%*	*11.0%*	Return on Com Equity	*12.5%*
1.0%	1.4%	2.4%	3.1%	3.5%	4.3%	3.8%	7.0%	5.4%	5.8%	*5.0%*	*5.5%*	Retained to Com Eq	*6.5%*
87%	83%	73%	67%	63%	58%	62%	46%	48%	48%	*50%*	*50%*	All Div'ds to Net Prof	*49%*

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	2.2	4.5	5.3
Other	26.9	29.6	35.3
Current Assets	29.1	34.1	40.6
Accts Payable	23.3	30.4	17.3
Debt Due	27.2	9.3	6.8
Other	14.5	17.1	68.4
Current Liab.	65.0	56.8	92.5

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	2.0%	2.0%	*2.0%*
"Cash Flow"	7.5%	10.5%	*3.5%*
Earnings	9.0%	12.5%	*5.0%*
Dividends	3.0%	5.0%	*5.5%*
Book Value	5.5%	8.0%	*3.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
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	39.9	34.6	141.6
2021	32.5	36.7	39.9	*35.9*	*145*
2022	*34.0*	*38.0*	*41.0*	*37.0*	*150*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.27	.52	.74	.43	1.96
2019	.39	.49	.66	.46	2.01
2020	.44	.55	.72	.47	2.18
2021	.39	.62	.65	*.54*	*2.20*
2022	*.47*	*.58*	*.75*	*.55*	*2.35*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.22375	.22375	.22375	.24	.91
2019	.24	.24	.24	.2562	.98
2020	.2562	.2562	.2562	.2725	1.04
2021	.2725	.2725	.2725	.290	
2022					

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 2020, the Middlesex System accounted for 59% of operating revenues. At 12/31/20, the company had 348 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 2.0% of the com. stock; BlackRock Inst. Trust Co., 7.8% (4/21 proxy). Add.: 485 C Route 1 South, Suite 400, Iselin, NJ 08830. Tel.: 732-634-1500. Int.: www.middlesexwater.com.

The investment community continues to hold Middlesex Water stock in high regard. Shares of the regulated water utility have risen 8% in value since our full-page report in early October, propelling the equity back to all-time high territory. Sustained market support can most aptly be linked to an increased adoption of a flight-to-safety investment strategy, as Middlesex's third-quarter financial showing was relatively unimpressive. On balance, the recent valuation gives us pause. To that end, we think the stock may encounter a bit of resistance around the $115 price point.

Profit growth was probably modest in 2021, but should improve this year. Subsequent to weaker-than-expected earnings of $0.65 per share in the September period, we are shaving a dime from our full-year 2021 forecast, to $2.20 per share. Higher operating expenses, namely labor and production costs, as well as flat revenues, on a year-over-year basis, weighed on the result. Nevertheless, we think net income can expand 7% this year, to $2.35 per share, supported by decent organic revenue growth, increased stability in the labor market, and prospects for a healthier economic backdrop.

The board of directors lifted its quarterly dividend payout 6%, to $0.29 per share. While the raise is encouraging, the current yield is hovering around 1.0%, which is significantly lower than the broader market, as well as the stock's historical average annual return.

Spending on infrastructure upgrades ought to remain a key long-term objective. Specifically, replacing aging pipelines and undertaking projects to secure water distribution and treatment facilities are likely. This suggests further rate hikes (management has a request currently pending with New Jersey regulators) are probable down the road.

The equity lacks investment appeal, at present. Middlesex stock is neutrally ranked for relative year-ahead price performance (Timeliness: 3). Looking at the 18-month and 3- to 5-year time horizons, nearly all of the growth we envision appears to already be factored into the recent quotation, despite considerably boosting our price-to-earnings multiple.

Nicholas P. Patrikis *January 7, 2022*

(A) Diluted earnings. Next earnings report due early February.
(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	85
Price Growth Persistence	75
Earnings Predictability	85

© 2021 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-VALUELINE

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 15 of 45

SJW GROUP NYSE-SJW

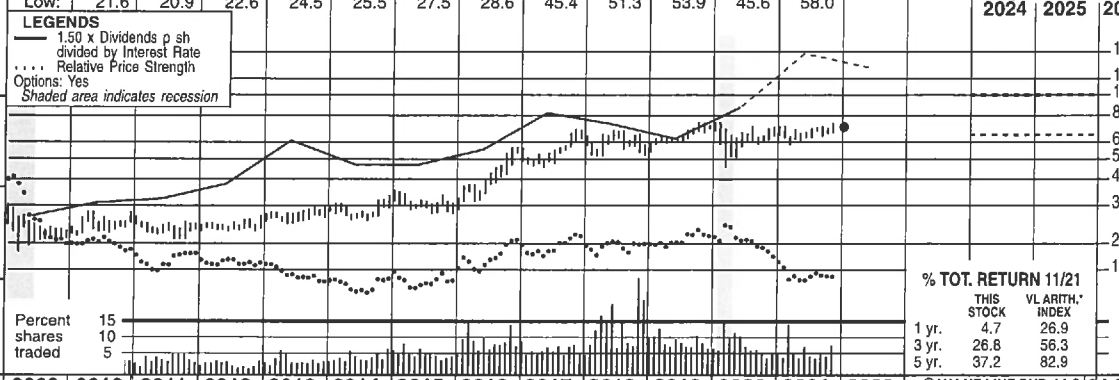
RECENT PRICE 70.57 | P/E RATIO 34.1 (Trailing: 37.5 Median: 21.0) | RELATIVE P/E RATIO 1.79 | DIV'D YLD 1.9% | VALUE LINE

TIMELINESS 4 Lowered 8/13/21
SAFETY 3 New 4/22/11
TECHNICAL 3 Lowered 12/17/21
BETA .80 (1.00 = Market)

High:	28.2	26.8	26.9	30.1	33.7	35.7	56.9	69.3	68.4	74.5	75.0	73.7
Low:	21.6	20.9	22.6	24.5	25.5	27.5	28.6	45.4	51.3	53.9	45.6	58.0

Target Price Range 2024 | 2025 | 2026

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)
$59-$105	$82 (15%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	100	(+40%)	11%
Low	65	(-10%)	Nil

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	87	81	81
to Sell	73	64	53
Hld's(000)	20963	21472	22567

Percent shares traded 15 10 5

% TOT. RETURN 11/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	4.7	26.9
3 yr.	26.8	56.3
5 yr.	37.2	82.9

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
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	19.77	*19.35*	*20.15*	Revenues per sh	*22.15*
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	5.28	*3.55*	*4.15*	"Cash Flow" per sh	*5.30*
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	2.14	*1.90*	*2.50*	Earnings per sh A	*3.65*
.53	.57	.61	.65	.66	.68	.69	.71	.73	.75	.78	.81	1.04	1.12	1.20	1.28	1.36	*1.44*	Div'd Decl'd per sh B■	*1.72*
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	7.44	*6.75*	*7.00*	Cap'l Spending per sh	*7.50*
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	32.12	*35.00*	*36.65*	Book Value per sh	*40.85*
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	28.56	*30.00*	*30.00*	Common Shs Outst'g C	*30.00*
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	30.0	*35.2*		Avg Ann'l P/E Ratio	*23.0*
1.05	1.27	1.77	1.58	1.91	1.85	1.33	1.30	1.37	.59	.84	.82	.95	1.77	2.55	1.56	*1.89*		Relative P/E Ratio	*1.30*
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%	2.0%	2.0%		Avg Ann'l Div'd Yield	*2.1%*
						239.0	261.5	276.9	319.7	305.1	339.7	389.2	397.7	420.5	564.5	*580*	*605*	Revenues ($mill)	*665*
						20.9	22.3	23.5	51.8	37.9	52.8	59.2	38.8	38.7	61.5	*57.0*	*75.0*	Net Profit ($mill)	*110*
						41.1%	41.1%	38.7%	32.5%	38.1%	38.8%	36.7%	20.6%	25.3%	12.0%	*21.0%*	*21.5%*	Income Tax Rate	*21.0%*
						--	--	--	--	--	--	--	--	2.0%	1.5%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*1.5%*
						56.6%	55.0%	51.1%	51.6%	49.8%	50.7%	48.2%	32.7%	59.1%	58.4%	*57.0%*	*53.0%*	Long-Term Debt Ratio	*38.0%*
						43.4%	45.0%	48.9%	48.4%	50.2%	49.3%	51.8%	67.3%	40.9%	41.6%	*43.0%*	*47.0%*	Common Equity Ratio	*62.0%*
						607.9	610.2	656.2	744.5	764.6	855.0	894.3	1320.7	2173.6	2204.7	*2450*	*2350*	Total Capital ($mill)	*1975*
						756.2	831.6	898.7	963.0	1036.8	1146.4	1239.3	1328.8	2206.5	2334.9	*2450*	*2565*	Net Plant ($mill)	*2775*
						4.9%	5.0%	5.0%	8.3%	6.3%	7.4%	7.9%	3.9%	2.5%	4.0%	*3.0%*	*3.5%*	Return on Total Cap'l	*6.0%*
						7.9%	8.1%	7.3%	14.4%	9.9%	12.5%	12.8%	4.4%	4.3%	6.7%	*5.5%*	*7.0%*	Return on Shr. Equity	*9.0%*
						7.9%	8.1%	7.3%	14.4%	9.9%	12.5%	12.8%	4.4%	4.3%	6.7%	*5.5%*	*7.0%*	Return on Com Equity	*9.0%*
						3.1%	3.3%	2.8%	10.2%	5.7%	8.6%	8.2%	1.8%	.5%	2.7%	*1.5%*	*3.0%*	Retained to Com Eq	*4.5%*
						61%	59%	62%	29%	42%	31%	36%	60%	88%	59%	*72%*	*58%*	All Div'ds to Net Prof	*47%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $1446.3 mill. **Due In 5 Yrs** $22.4 mill.
LT Debt $1420.0 mill. **LT Interest** $50.0 mill.
(LT Interest Coverage: 3.7x)
(59% of Cap'l)

Pension Assets-12/20 $278.1 mill.
Oblig. $386.1 mill.
Pfd Stock None.
Common Stock 29,882,182 shs.

MARKET CAP: $2.1 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	17.9	9.3	16.2
Accts Receivable	36.3	58.1	65.2
Other	67.8	59.9	74.1
Current Assets	122.0	127.3	155.5
Accts Payable	34.9	34.2	37.4
Debt Due	22.3	76.2	26.3
Other	177.4	240.4	203.6
Current Liab.	234.6	350.8	267.3

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.0%	2.0%	*5.5%*
"Cash Flow"	5.5%	2.0%	*5.5%*
Earnings	7.0%	-.5%	*15.0%*
Dividends	6.0%	10.0%	*6.0%*
Book Value	8.5%	12.5%	*4.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
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	165.9	135.6	564.5
2021	114.8	152.2	166.9	*146.1*	*580*
2022	*125*	*155*	*175*	*150*	*605*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.06	.62	.76	.38	1.82
2019	.21	.47	.33	.34	1.35
2020	.08	.69	.91	.46	2.14
2021	.09	.69	.64	*.48*	*1.90*
2022	*.18*	*.77*	*.90*	*.65*	*2.50*

Cal-endar	QUARTERLY DIVIDENDS PAID BD■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.28	.28	.28	.28	1.12
2019	.30	.30	.30	.30	1.20
2020	.32	.32	.32	.32	1.28
2021	.34	.34	.34	.34	1.36
2022					

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 (3/21 proxy). Chairman & CEO: Eric Thornburg. Incorporated: California. Address: 110 West Taylor Street, San Jose, CA 95110. Telephone: (408) 279-7800. Internet: www.sjwater.com.

SJW Group delivered softer-than-anticipated third-quarter results. The regulated water operator generated revenues of $167 million, roughly matching the previous-year haul and missing our mark by about $8 million. Likewise, earnings of $0.64 per share for the September period came in well short of consensus estimates, contracting notably on both an annual and sequential basis. Higher production costs, administrative fees, and maintenance expenses weighed on the bottom line, while a year-over-year decline in customer usage kept a lid on revenue growth. All things considered, we now think SJW finished 2021 with revenues of $580 million (down $10 million from our previous call) and share net of $1.90 (down $0.30).

The stock has risen modestly in price over the past three months, but continues to trade in a relatively tight range. Shares of SJW have ping-ponged between $60 and $70 for much of 2021 and are essentially flat for the year, in comparison to the S&P 500 Index's +20% return over the same time frame. At this juncture, the equity is unfavorably ranked for relative year-ahead price performance (Timeliness: 4) and, thus, probably won't appeal to subscribers with a short-term horizon.

An asset acquisition has recently been tabbed. The company's Texas subsidiary, Canyon Lake Water Service Company, completed its purchase of Kendall West and Bandera East water and wastewater utilities. Overall, the transaction likely added around 1,600 service connections and over 4,000 customers in the high-growth region.

Long-term operating prospects should hold up well. In addition to a potentially healthier economic backdrop, increased water consumption, and a wider customer base, SJW has several rate hike requests pending with regulators in California, Connecticut, and Maine and, if approved, should provide a moderate top-line boost.

Even so, investors with a 3- to 5-year holding period would be wise to defer capital allocations at the recent quotation. Total return potential over the pull to mid-decade is unenticing, despite the stock's slightly above-average dividend yield.

Nicholas P. Patrikis *January 7, 2022*

(A) Diluted earnings. Excludes nonrecurring losses: '05, $1.09; '06, $16.36; '08, $1.22; '10, $0.46. GAAP accounting as of 2013. Next earnings report due early February. 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	80
Price Growth Persistence	70
Earnings Predictability	45

© 2021 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-VALUELINE

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 16 of 45

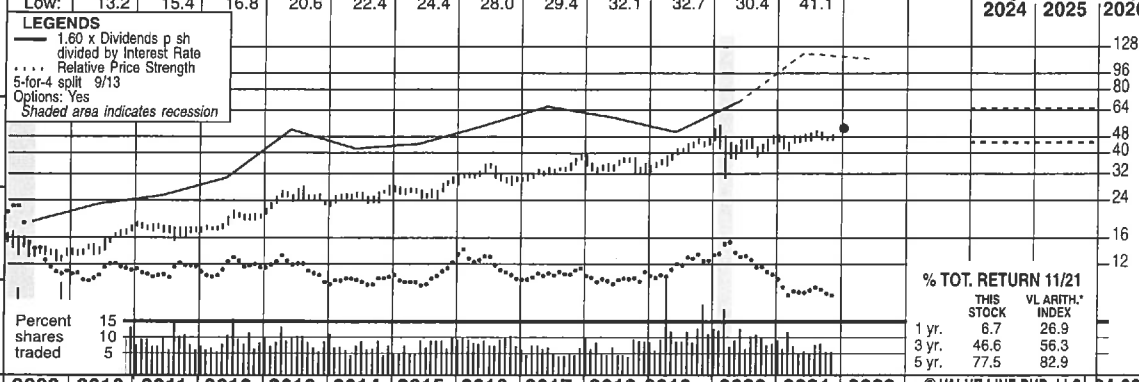
ESSENTIAL UTIL. NYSE-WTRG

RECENT PRICE 52.55 | P/E RATIO 31.5 (Trailing: 32.2 Median: 23.0) | RELATIVE P/E RATIO 1.66 | DIV'D YLD 2.1% | VALUE LINE

TIMELINESS 3 Lowered 7/30/21
SAFETY 3 Lowered 1/8/21
TECHNICAL 4 Raised 1/7/22
BETA .95 (1.00 = Market)

High:	18.4	19.0	21.5	28.1	28.2	31.1	35.8	39.6	39.4	47.3	54.5	52.7
Low:	13.2	15.4	16.8	20.6	22.4	24.4	28.0	29.4	32.1	32.7	30.4	41.1

Target Price Range 2024 | 2025 | 2026



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$45-$80	$63 (20%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	65	(+25%)	7%
Low	45	(-15%)	-1%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	258	244	245
to Sell	238	231	223
Hld's(000)	176001	171680	174820

% TOT. RETURN 11/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	6.7	26.9
3 yr.	46.6	56.3
5 yr.	77.5	82.9

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
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	5.96	*7.30*	*8.00*	Revenues per sh	*8.70*
.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	2.21	*2.70*	*2.85*	"Cash Flow" per sh	*3.05*
.57	.56	.57	.58	.62	.72	.83	.87	1.16	1.20	1.14	1.32	1.35	1.08	1.04	1.12	*1.65*	*1.80*	Earnings per sh A	*2.00*
.32	.35	.38	.41	.44	.47	.50	.54	.58	.63	.69	.74	.79	.85	.91	.97	1.04	*1.12*	Div'd Decl'd per sh B■	*1.40*
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	3.41	*4.00*	*4.00*	Cap'l Spending per sh	*3.75*
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	19.09	*20.45*	*21.80*	Book Value per sh	*24.15*
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	245.39	*253.00*	*254.50*	Common Shs Outst'g C	*270.00*
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	39.6	*28.7*		Avg Ann'l P/E Ratio	*27.0*
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	2.08	2.06	*1.54*		Relative P/E Ratio	*1.50*
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%	2.2%	2.2%		Avg Ann'l Div'd Yield	*2.8%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $5708.7 mill. **Due in 5 Yrs** $1102 mill.
LT Debt $5598.7 mill. **LT Interest** $203.0 mill.
(52% of Cap'l)

Pension Assets-12/20 $426.8 mill.
Oblig. $486.2 mill.

Pfd Stock None
Common Stock 252,742,882 shares
as of 10/22/21

MARKET CAP: $13.3 billion (Large Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
712.0	757.8	768.6	779.9	814.2	819.9	809.5	838.1	889.7	1462.7	*1850*	*2040*	Revenues ($mill)	*2350*
144.8	153.1	205.0	213.9	201.8	234.2	239.7	192.0	224.5	284.8	*415*	*455*	Net Profit ($mill)	*540*
32.9%	39.0%	10.0%	10.5%	6.9%	8.2%	6.6%	- -	6.6%	6.6%	*3.0%*	*6.0%*	Income Tax Rate	*7.0%*
- -	- -	1.1%	2.4%	3.1%	3.8%	6.3%	6.8%	7.2%	4.5%	*6.0%*	*7.5%*	AFUDC % to Net Profit	*6.0%*
52.7%	52.7%	48.9%	48.5%	50.3%	48.4%	50.6%	54.4%	43.1%	54.0%	*53.0%*	*56.0%*	Long-Term Debt Ratio	*55.0%*
47.3%	47.3%	51.1%	51.5%	49.7%	51.6%	49.4%	45.6%	56.9%	46.0%	*47.0%*	*44.0%*	Common Equity Ratio	*45.0%*
2646.8	2929.7	3003.6	3216.0	3469.5	3587.7	3965.4	4407.8	6824.2	10192	*11000*	*12400*	Total Capital ($mill)	*14500*
3612.9	3936.2	4167.3	4402.0	4688.9	5001.6	5399.9	5930.3	6345.8	9512.9	*10175*	*10875*	Net Plant ($mill)	*12300*
6.9%	6.6%	8.0%	7.8%	6.9%	7.6%	7.1%	5.5%	4.2%	3.7%	*4.5%*	*5.0%*	Return on Total Cap'l	*5.5%*
11.6%	11.0%	13.4%	12.9%	11.7%	12.7%	12.2%	9.6%	5.8%	6.1%	*8.0%*	*8.5%*	Return on Shr. Equity	*8.5%*
11.6%	11.0%	13.4%	12.9%	11.7%	12.7%	12.2%	9.6%	5.8%	6.1%	*8.0%*	*8.5%*	Return on Com Equity	*8.5%*
4.6%	4.3%	6.7%	6.1%	4.7%	5.6%	5.1%	2.1%	.9%	1.1%	*3.0%*	*3.0%*	Retained to Com Eq	*3.0%*
60%	61%	50%	52%	60%	56%	59%	79%	84%	82%	*63%*	*62%*	All Div'ds to Net Prof	*70%*

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	1868.9	4.8	9.7
Receivables	67.1	154.8	108.2
Inventory (AvgCst)	18.4	58.4	113.8
Other	58.3	162.2	120.8
Current Assets	2012.7	380.2	352.5
Accts Payable	74.9	177.5	163.8
Debt Due	130.8	162.6	110.0
Other	113.1	263.8	242.2
Current Liab.	318.8	603.9	516.0

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	2.0%	2.0%	*10.0%*
"Cash Flow"	4.5%	1.0%	*6.5%*
Earnings	5.5%	-1.5%	*10.0%*
Dividends	7.5%	7.5%	*7.5%*
Book Value	9.5%	11.5%	*6.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
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	348.6	474.0	1462.7
2021	583.6	397.0	361.9	*507.5*	*1850*
2022	*610*	*435*	*425*	*570*	*2040*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.29	.37	.44	d.02	1.08
2019	.09	.25	.38	.28	1.04
2020	.21	.29	.22	.40	1.12
2021	.72	.32	.19	*.42*	*1.65*
2022	*.73*	*.33*	*.29*	*.45*	*1.80*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.2047	.2047	.219	.219	.85
2019	.219	.219	.2343	.2343	.91
2020	.2343	.2343	.2507	.2507	.97
2021	.2507	.2507	.2682	.2682	
2022					

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 2020, Aqua Amer. provided water and wastewater services to about 5 million people in PA, OH, TX, IL, NC, NJ, IN, VA NS WS. Employed 3,180 Acquired AquaSource, 7/13; North Maine Utilities, 7/15; and others. Water respn. for 65% of revenues in 2020; residential, 39%; commercial, 10%; industrial, wastewater & other, 16%. Gas 35%. Off. & dir. own less than 1% of the common stock; Vanguard, 10.1%; BlackRock, 10.0%; Canadian Pension Plan about 8.8% (5/21 proxy). Pres. & CEO: Christopher Franklin. Inc.: PA Addr.: 762 W Lancaster Ave., Bryn Mawr, PA 19010. Tel.: 610-525-1400. Int.: www.essential.co.

Essential Utilities probably finished 2021 in decent shape. In the third quarter, net income came in less than was expected due to damage done by Hurricane Ida and a surprise rise in payroll costs. Nevertheless, we think the water and gas utility will post share earnings of $1.65 this year, significantly above the $1.12 figure posted in 2020. For 2022, we think a 9% rise to $1.80 is very obtainable. The good showing would be the result of fewer expenses related to the 2020 Peoples Gas merger and some rate relief.

A major rate case is pending in Pennsylvania. A water subsidiary of Essential (Aqua Pennsylvania) filed a petition last summer seeking to recover approximately $1.1 billion in funds it has spent on replacing aging pipelines and upgrading other assets. Should the utility be granted its full request, bills of customers in the service area could increase by 17% for water use and almost double that for wastewater. Though these rate hikes would raise residents' monthly payments, the investment was required to improve the company's water infrastructure. We don't expect a decision to be made until midyear, at the earliest.

Expansion of the rate base also continues to generate profit growth. Much like American Water Works, Essential has taken advantage of the fragmented industry to make many acquisitions. With over 50,000 individual water districts in the U.S., there is quite a bit of inefficiency in the group. By absorbing smaller entities, Essential can provide the needed capital to modernize facilities while also cutting expenses meaningfully. In 2021 alone, the company's closed and pending transactions totaled over $500 million. The largest is the $277 million purchase of DELCORA, a wastewater facility (currently being contested). When all of the deals are completed, Essential's customer base will increase by over 240,000.

Shares of the stock have done well over the past three months. The value of the equity has climbed 11% since our last report in October. As a result, the stock's year-ahead Timeliness rank has dropped one notch to 3 (Average). Over the pull to 2024-2026, long-term total rerun potential is also not enticing.

James A. Flood *January 7, 2022*

(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 February. (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: 9/30/21, $2.396 bill./$9.48 a share.

Company's Financial Strength	B+
Stock's Price Stability	90
Price Growth Persistence	65
Earnings Predictability	60

© 2021 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-VALUELINE

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 17 of 45

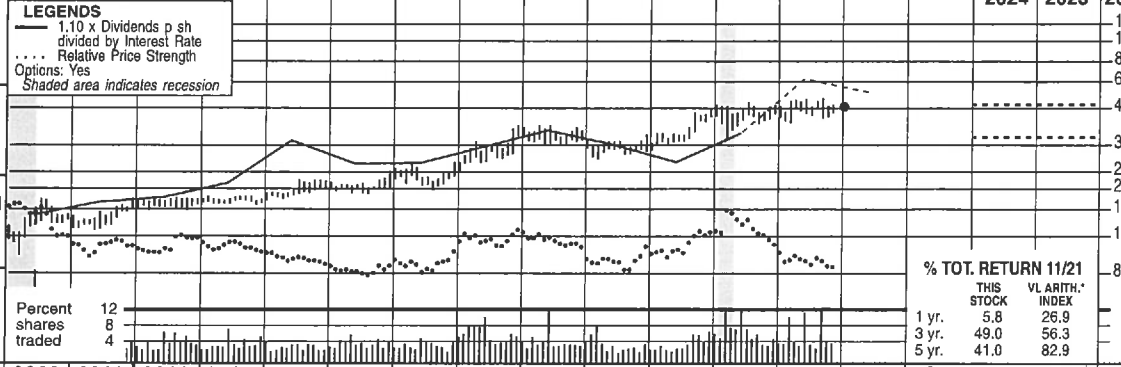
YORK WATER NDQ-YORW

RECENT PRICE 48.66 | P/E RATIO 35.3 (Trailing: 38.3 / Median: 28.0) | RELATIVE P/E RATIO 1.86 | DIV'D YLD 1.6% | VALUE LINE

TIMELINESS 3 Lowered 1/15/21
SAFETY 3 Lowered 7/17/15
TECHNICAL 3 Raised 11/26/21
BETA .85 (1.00 = Market)

High:	18.0	18.1	18.5	22.0	24.3	26.7	39.8	39.9	36.1	47.3	51.3	53.8
Low:	12.8	15.8	16.8	17.6	18.8	19.7	23.8	31.7	27.5	30.3	34.6	40.7

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



Target Price Range 2024 | 2025 | 2026

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$39-$70	$55 (10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+5%)	2%
Low	35	(-30%)	-6%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	38	51	51
to Sell	56	43	39
Hld's(000)	5518	5416	5241

Percent shares traded 12 8 4

% TOT. RETURN 11/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	5.8	26.9
3 yr.	49.0	56.3
5 yr.	41.0	82.9

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
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	4.12	*4.25*	*4.40*	Revenues per sh	*5.10*
.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*	*2.10*	"Cash Flow" per sh	*2.45*
.56	.58	.57	.57	.64	.71	.71	.72	.75	.89	.97	.92	1.01	1.04	1.11	1.27	*1.35*	*1.40*	Earnings per sh A	*1.65*
.42	.45	.48	.49	.51	.52	.53	.54	.55	.57	.60	.63	.65	.67	.70	.73	.76	*.79*	Div'd Decl'd per sh B	*1.00*
1.69	1.85	1.69	2.17	1.18	.83	.74	.94	.76	1.10	1.11	1.03	1.95	--	.16	.09	*1.35*	*1.45*	Cap'l Spending per sh	*1.85*
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	10.97	*11.55*	*11.90*	Book Value per sh	*12.90*
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	13.06	*13.00*	*13.00*	Common Shs Outst'g C	*12.80*
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	35.7	*35.4*		Avg Ann'l P/E Ratio	*25.0*
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	1.80	1.83	*1.90*		Relative P/E Ratio	*1.40*
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%	1.6%	*1.6%*		Avg Ann'l Div'd Yield	*2.4%*
						40.6	41.4	42.4	45.9	47.1	47.6	48.6	48.4	51.6	53.9	*55.0*	*57.0*	Revenues ($mill)	*65.0*
						9.1	9.3	9.7	11.5	12.5	11.8	13.0	13.4	14.4	16.6	*17.5*	*18.2*	Net Profit ($mill)	*21.0*
						35.3%	37.6%	37.6%	29.8%	27.5%	31.3%	25.9%	15.7%	13.5%	10.8%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
						1.1%	1.1%	.8%	1.8%	1.6%	1.9%	6.7%	1.7%	2.5%	3.2%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*1.5%*
						47.1%	46.0%	45.1%	44.8%	44.4%	42.6%	43.0%	42.5%	41.3%	46.3%	*44.5%*	*42.5%*	Long-Term Debt Ratio	*37.5%*
						52.9%	54.0%	54.9%	55.2%	55.6%	57.4%	57.0%	57.5%	58.7%	53.7%	*55.5%*	*57.5%*	Common Equity Ratio	*62.5%*
						180.2	184.8	188.4	189.4	196.3	198.7	209.5	219.5	228.7	266.8	*270*	*270*	Total Capital ($mill)	*265*
						233.0	240.3	244.2	253.2	261.4	270.9	288.8	299.2	313.2	343.6	*355*	*370*	Net Plant ($mill)	*405*
						6.4%	6.4%	6.5%	7.4%	7.6%	7.2%	7.5%	7.3%	7.4%	7.1%	*7.5%*	*7.5%*	Return on Total Cap'l	*9.0%*
						9.5%	9.3%	9.3%	11.0%	11.5%	10.4%	10.9%	10.6%	10.7%	11.6%	*11.5%*	*11.5%*	Return on Shr. Equity	*13.0%*
						9.5%	9.3%	9.3%	11.0%	11.5%	10.4%	10.9%	10.6%	10.7%	11.6%	*11.5%*	*11.5%*	Return on Com Equity	*13.0%*
						2.5%	2.4%	2.4%	3.9%	4.4%	3.4%	4.0%	3.8%	4.0%	5.0%	*5.0%*	*5.0%*	Retained to Com Eq	*5.0%*
						73%	74%	74%	64%	62%	67%	63%	64%	62%	57%	*56%*	*56%*	All Div'ds to Net Prof	*61%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $132.2 mill. **Due in 5 Yrs** $42.5 mill.
LT Debt $132.2 mill. **LT Interest** $5.5 mill.
(47% of Cap'l)

Pension Assets12/20 $56.3 mill.
Oblig. $54.1 mill.

Pfd Stock None

Common Stock 13,102,924 shs.

MARKET CAP: $650 million (Small Cap)

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	--	5.0	--
Accounts Receivable	4.4	5.2	3.9
Inventory (Avg. Cost)	1.0	1.0	1.4
Other	4.0	5.1	4.9
Current Assets	9.4	16.3	10.2
Accts Payable	3.4	6.5	7.5
Debt Due	6.5	--	--
Other	5.3	5.5	5.7
Current Liab.	15.2	12.0	13.2

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.0%	2.5%	*4.5%*
"Cash Flow"	6.0%	5.5%	*6.0%*
Earnings	6.0%	5.5%	*6.5%*
Dividends	3.5%	4.0%	*6.0%*
Book Value	4.5%	4.5%	*4.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
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	14.3	13.4	53.9
2021	13.1	13.8	14.5	*13.6*	*55.0*
2022	*13.7*	*14.3*	*15.0*	*14.0*	*57.0*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.20	.26	.29	.29	1.04
2019	.22	.28	.35	.26	1.11
2020	.31	.32	.36	.28	1.27
2021	.28	.35	.36	*.36*	*1.35*
2022	*.30*	*.36*	*.38*	*.36*	*1.40*

Cal-endar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.1666	.1666	.1666	.1733	.673
2019	.1733	.1733	.1733	.1802	.70
2020	.1802	.1802	.1802	.1874	.73
2021	.1874	.1874	.1874	.1949	
2022					

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, 2020, the company's average daily availability was 35.6 million gallons and its service territory had an estimated population of 202,000. Has more than 72,600 customers. Residential customers accounted for 66% of 2020 revenues; commercial and industrial (26%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 108 full-time employees at 12/31/20. President/Chief Executive Officer: J.T. Hand. Officers/directors own 1.3% of the common stock (3/21 proxy). Address: 130 East Market Street, York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

York Water reported third-quarter financial results roughly in line with expectations. Revenues of $14.5 million improved modestly year over year, thanks to a wider customer base and higher distribution system improvement charges to its customers. On the earnings front, the company posted net income of $0.36 per share, which was a penny shy of our call but even with the previous-year figure. An uptick in operation and maintenance expenses during the period seemingly kept a lid on growth. On balance, we think York finished 2021 with revenues of $55 million and earnings of $1.35 per share. For the current year, low single-digit top- and bottom-line expansion is likely on tap.

The board of directors increased the quarterly dividend payment 4%, to $0.1949 per share. Indeed, the raise appears consistent with previous-year hikes, and reaffirms the company's commitment to returning capital to shareholders. That said, at recent levels, the dividend yield is slightly below *The Value Line Investment Survey* median.

Long term, we think the operating landscape is bright. Most notably, York ought to continue to invest heavily on infrastructure upgrades in the coming years, with much of its pipes and service lines in need of improvement, on top of completing various wastewater treatment plants and facilities. To wit, York is able to pass along some of these costs to its customers via approved charges from state regulators, suggesting additional rate hikes are in the cards. Moreover, in conjunction with an expanding customer base, prospects for a healthier economic environment are likely to support increased residential and business water consumption.

York Water's investment characteristics do not jump off the page, at present. The stock is ranked to move in line with the broader market averages over the coming six to 12 months (Timeliness: 3). Looking further out, total return potential out to 2024-2026 is limited, as the equity is currently trading near the upper end of our 3- to 5-year Target Price Range. In sum, subscribers seeking exposure to the water utility industry can find better options elsewhere at this juncture.

Nicholas P. Patrikis *January 7, 2022*

(A) Diluted earnings. Next earnings report due early February.
(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	70
Earnings Predictability	100

© 2021 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-VALUELINE

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 18 of 45

EARNINGS PER SHARE

Company Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
American Water Works	$1.72	$2.11	$2.06	$2.39	$2.64	$2.62	$2.38	$3.15	$3.43	$3.91
American States Water Co	$1.12	$1.41	$1.61	$1.57	$1.61	$1.62	$1.88	$1.72	$2.28	$2.33
Artesian Resources	$0.83	$1.13	$0.94	$1.07	$1.26	$1.41	$1.51	$1.54	$1.60	$1.79
California Water Service Group	$0.86	$1.02	$1.02	$1.19	$0.94	$1.01	$1.40	$1.36	$1.31	$1.97
Global Water Resources						[1]	$0.23	$0.15	$0.10	$0.05
Middlesex Water Co	$0.84	$0.90	$1.03	$1.13	$1.22	$1.38	$1.38	$1.96	$2.01	$2.18
SJW Group	$1.11	$1.18	$1.12	$2.54	$1.85	$2.57	$2.86	$1.82	$1.35	$2.14
Essential Utilities	$0.83	$0.87	$1.16	$1.20	$1.14	$1.32	$1.35	$1.08	$1.04	$1.12
York Water Company	$0.71	$0.72	$0.75	$0.89	$0.97	$0.92	$1.01	$1.04	$1.12	$1.27
Mean (History & Estimates)										
Median (History & Estimates)										
Average of Mean & Median										
Average for Period or Estimates										

Source: Exhibit DHC-4

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 19 of 45

EARNINGS PER SHARE

		EARNINGS PER SHARE: HISTORY						EPS: ESTIMATES		
		10-YEAR	10-YEAR	5-YEAR	5-YEAR	3-YEAR	3-YEAR			
Company Name	**2021**	Compound	Simple	Compound	Simple	Compound	Simple	ValueLine	Zacks	Yahoo!
American Water Works	$4.25	9.47%	10.08%	10.16%	10.95%	10.50%	10.53%	6.66%	1.96%	8.25%
American States Water Co	$2.45	8.14%	8.82%	8.63%	9.49%	12.52%	13.30%	5.63%	*6.85%*	6.70%
Artesian Resources	$1.81	8.11%	8.88%	5.12%	5.19%	5.53%	5.63%	5.45%		4.00%
California Water Service Group	$2.30	10.34%	12.09%	17.89%	19.84%	19.14%	21.15%	2.61%	*-3.54%*	11.70%
Global Water Resources	$0.10					-12.64%	5.56%	36.80%	3.56%	15.00%
Middlesex Water Co	$2.20	10.11%	10.63%	9.78%	10.79%	3.93%	3.98%	5.74%	*14.42%*	2.66%
SJW Group	$1.90	5.52%	13.62%	-5.86%	-0.72%	1.44%	7.16%	17.73%	*26.98%*	5.70%
Essential Utilities	$1.65	7.11%	8.60%	4.56%	6.72%	15.17%	17.10%	4.93%	1.52%	6.40%
York Water Company	$1.35	6.64%	6.82%	7.97%	8.03%	9.09%	9.13%	5.14%	*3.10%*	4.20%
Mean (History & Estimates)		8.18%	9.94%	7.28%	8.79%	7.19%	10.39%	10.08%	6.86%	7.18%
Median (History & Estimates)		8.13%	9.48%	8.30%	8.76%	9.09%	9.13%	5.63%	3.33%	6.40%
Average of Mean & Median		8.15%	9.71%	7.79%	8.77%	8.14%	9.76%	7.85%	5.09%	6.79%
Average for Period or Estimates		8.93%		8.28%		8.95%				

Historical Average **8.72%**

Estimate Average **6.58%**

Overall Average **7.65%**

Source: Exhibit DHC-4

italics-one-yr estimates

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 20 of 45

SALES/REVENUE

In $ millions

italicized = last quarter estimated

Company Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
American Water Works	$2,666.20	$2,876.90	$2,901.90	$3,011.30	$3,159.00	$3,302.00	$3,357.00	$3,440.00	$3,610.00	$3,777.00
American States Water Co	$419.30	$466.90	$472.10	$465.80	$458.60	$436.10	$440.60	$436.80	$473.90	$488.20
Artesian Resources	$62.10	$70.60	$69.10	$72.50	$77.00	$79.10	$82.20	$80.40	$83.60	$88.10
California Water Svc. Group	$501.80	$560.00	$584.10	$597.50	$588.40	$609.40	$666.90	$698.20	$714.60	$794.30
Global Water Resources					$32.00	$29.80	$31.20	$35.50	$35.50	$38.60
Middlesex Water Co	$102.10	$110.40	$114.80	$117.10	$126.00	$132.90	$130.80	$138.10	$134.60	$141.60
SJW Group	$239.00	$261.50	$276.90	$319.70	$305.10	$339.70	$389.20	$397.70	$420.50	$564.50
Essential Utilities	$712.00	$757.80	$768.60	$779.90	$814.20	$819.90	$809.50	$838.10	$889.70	$1,462.70
York Water Company	$40.60	$41.40	$42.40	$45.90	$47.10	$47.60	$48.60	$48.40	$51.60	$53.90

Mean (History & Estimates)
Median (History & Estimates)

Average of Mean & Median
Average for Period or Estimates

Source: Exhibit DHC-4

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 21 of 45

SALES/REVENUE

In $ millions

italicized = last quarter estimated

		HISTORICAL SALES/REVENUE GROWTH						SALE3S/REV ESTIMATES	
		10-YEAR		5-YEAR		3-YEAR			
Company Name	2021	Compound	Simple	Compound	Simple	Compound	Simple	ValueLine	Yahoo!
American Water Works	*$3,965.00*	4.05%	4.07%	3.73%	3.74%	4.86%	4.8%	5.44%	*0.09%*
American States Water Co	*$510.00*	1.98%	2.08%	3.18%	3.23%	5.31%	5.3%	6.05%	*4.10%*
Artesian Resources				2.73%	2.76%	2.34%	2.4%		*2.20%*
California Water Svc. Group	*$820.00*	5.03%	5.11%	6.12%	6.17%	5.52%	5.6%	1.93%	*3.80%*
Global Water Resources				3.82%	6.80%	7.37%	7.5%		*9.80%*
Middlesex Water Co	*$145.00*	3.57%	3.63%	1.76%	1.81%	1.64%	1.7%	3.28%	*10.50%*
SJW Group	*$580.00*	9.27%	9.70%	11.29%	11.90%	13.43%	14.2%	3.48%	*4.30%*
Essential Utilities	*$1,850.00*	10.02%	11.37%	17.67%	19.86%	30.27%	32.3%	6.16%	*6.70%*
York Water Company	*$55.00*	3.08%	3.11%	2.93%	2.96%	4.36%	4.4%	4.26%	*3.60%*
Mean (History & Estimates)		5.29%	5.58%	5.91%	6.58%	8.34%	8.70%	4.37%	5.01%
Median (History & Estimates)		4.05%	4.07%	3.73%	3.74%	5.31%	5.33%	4.26%	4.10%
Average of Mean & Median		4.67%	4.82%	4.82%	5.16%	6.83%	7.01%	4.32%	4.56%
Average for Period or Estimates		4.82%		4.99%		6.92%			

Historical Average	Estimate Avg.	Overall Avg.
5.58%	**4.44%**	**5.01%**

Source: Exhibit DHC-4

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 22 of 45

DIVIDENDS PER SHARE

Company Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
American Water Works	$0.90	$1.21	$0.84	$1.21	$1.33	$1.47	$1.62	$1.78	$1.96	$2.15
American States Water Co	$0.55	$0.64	$0.76	$0.83	$0.87	$0.91	$0.99	$1.06	$1.16	$1.28
Artesian Resources	$0.76	$0.79	$0.82	$0.85	$0.87	$0.90	$0.93	$0.96	$0.98	$1.01
California Water Service Group	$0.62	$0.63	$0.64	$0.65	$0.67	$0.69	$0.72	$0.75	$0.79	$0.85
Global Water Resources						$0.17	$0.28	$0.28	$0.29	$0.29
Middlesex Water Co	$0.73	$0.74	$0.75	$0.76	$0.78	$0.81	$0.86	$0.91	$0.98	$1.04
SJW Group	$0.69	$0.71	$0.73	$0.75	$0.78	$0.81	$1.04	$1.12	$1.20	$1.28
Essential Utilities	$0.50	$0.54	$0.58	$0.63	$0.69	$0.74	$0.79	$0.85	$0.91	$0.97
York Water Company	$0.53	$0.54	$0.55	$0.57	$0.60	$0.63	$0.65	$0.67	$0.70	$0.73

Mean (History & Estimates)
Median (History & Estimates)

Average of Mean & Median
Average for Period or Estimates
Source: Exhibit DHC-4

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 23 of 45

DIVIDENDS PER SHARE

		DIVIDENDS PER SHARE						DPS ESTIMATES	
		10-YEAR HISTORY		5-YEAR HISTORY		3-YEAR HISTORY			
Company Name	2021	Compound	Simple	Compound	Simple	Compound	Simple	ValueLine	
American Water Works	$2.36	10.12%	11.80%	9.93%	9.93%	9.86%	9.86%	7.06%	
American States Water Co	$1.40	9.79%	9.88%	9.00%	9.00%	9.72%	9.72%	9.33%	
Artesian Resources				3.03%	3.03%	2.79%	2.79%		
California Water Service Group	$0.92	4.03%	4.05%	5.92%	5.94%	7.05%	7.05%	5.74%	
Global Water Resources	$0.29			11.27%	13.66%	1.18%	1.19%		
Middlesex Water Co	$1.11	4.28%	4.31%	6.50%	6.51%	6.85%	6.85%	5.02%	
SJW Group	$1.36	7.02%	7.24%	10.92%	11.23%	6.69%	6.69%	6.05%	
Essential Utilities	$1.04	7.60%	7.60%	7.04%	7.04%	6.96%	6.96%	7.71%	
York Water Company	$0.76	3.67%	3.68%	3.82%	3.82%	4.29%	4.29%	7.10%	
Mean (History & Estimates)		6.64%	6.94%	7.49%	7.80%	6.15%	6.15%	6.86%	
Median (History & Estimates)		7.02%	7.24%	7.04%	7.04%	6.85%	6.85%	7.06%	Overall Average
Average of Mean & Median		6.83%	7.09%	7.27%	7.42%	6.50%	6.50%	**6.96%**	**6.95%**
Average for Period or Estimates		6.96%		7.34%		6.50%		Avg. Estimate	

Source: Exhibit DHC-4

Historical Average **6.94%**

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 24 of 45

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 25 of 45

DCF SUMMARY

5.81%	Book value g	(see Exhibit DHC-3)
7.65%	Earnings g	(see Exhibit DHC-5)
5.01%	Sales/Revenue	(see Exhibit DHC-6)
6.95%	Dividend g	(see Exhibit DHC-7)
6.35%	Average g	
1.88%	DIV Y	(see Exhibit DHC-10)
7.68%	g +DIV Y	
0.06%	DIV Y * (g/2)	
7.74%	=DCF	

Dividend Yields	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
American Water Works	3.10%	3.40%	2.00%	2.50%	2.50%	2.00%	2.00%	2.10%	1.70%	1.60%	1.40%
American States Water Co	3.20%	3.10%	2.70%	2.60%	2.20%	2.20%	2.00%	1.80%	1.50%	1.60%	1.70%
Artesian Resources			3.70%	3.90%	3.80%	3.10%	2.50%	2.60%	2.70%	2.80%	
California Water Svc. Group	3.40%	3.50%	3.10%	2.80%	2.90%	2.30%	1.90%	1.80%	1.50%	1.70%	1.50%
Global Water Resources											
Middlesex Water Co	4.00%	4.00%	3.70%	3.70%	3.30%	2.30%	2.20%	2.10%	1.60%	1.60%	1.20%
SJW Group	2.90%	3.00%	2.70%	2.60%	2.50%	2.00%	1.90%	1.90%	1.90%	2.00%	2.00%
Essential Utilities	2.80%	2.80%	2.40%	2.50%	2.60%	2.30%	2.40%	2.40%	2.20%	2.20%	2.20%
York Water Company	3.10%	3.10%	2.80%	2.80%	2.60%	2.10%	1.90%	2.10%	1.90%	1.60%	1.60%
Mean Yield	3.21%	3.27%	2.89%	2.93%	2.80%	2.29%	2.10%	2.10%	1.88%	1.89%	1.66%

Ten-year Maximum 4.00% (2011)
Ten-year Minimum 1.20% (2021)

Source: Exhibit DHC-4)

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 26 of 45

FALL AND RECOVERY OF DIVIDEND YIELDS

Company Name	Dividend Yield in ValueLine*	Forward Dividend Yield‡	Increase	Highest Yield†	Highest Minus ValueLine	Forward Yield's % Below Highest
American Water Works	1.40	1.61	0.21	3.40	2.00	47%
American States Water Co	1.50	1.69	0.19	3.20	1.70	53%
Artesian Resources	2.30	2.32	0.02	3.90	1.60	59%
California Water Svc. Group	1.30	1.70	0.40	3.40	2.10	50%
Global Water Resources	1.70	1.94	0.24	2.20	0.50	88%
Middlesex Water Co	1.00	1.20	0.20	4.00	3.00	30%
SJW Group	1.90	2.26	0.36	3.00	1.10	75%
Essential Utilities	2.10	2.34	0.24	2.80	0.70	84%
York Water Company	1.60	1.82	0.22	3.10	1.50	59%
Average	1.64	1.88	0.23	3.22	1.58	61%

*Exhibit DHC-4
‡Yahoo!Finance 02/10/22
† Exhibit DHC-9 table of historical figures

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 27 of 45

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 28 of 45

RETROSPECTIVE CEM

Company Name	Beta	Book Value 5 Yr Growth Rate	Industry	Div Yield
U S Lime and Minerals	0.65	8.0	Metals & Mining (Div.)	0.5%
Activision Blizzard Inc	0.65	11.0	Entertainment Tech	0.6%
Micropac Industries Inc	0.65	5.5	Semiconductor	0.6%
Dollar General Corporation	0.65	7.5	Retail Store	0.8%
Logitech International SA	0.65	15.5	Computers/Peripherals	1.3%
IF Bancorp Inc	0.65	4.5	Thrift	1.4%
Security Federal Corporation	0.65	7.5	Bank	1.4%
Greene County Bancorp Inc	0.65	14.0	Thrift	1.4%
First National Corp	0.65	12.0	Bank	2.1%
Monarch Cement Co	0.65	11.0	Building Materials	2.1%
Southern Michigan Bancorp Inc	0.65	3.0	Bank (Midwest)	2.4%
Erie Indemnity Company	0.65	8.0	Insurance (Prop/Cas.)	2.5%
JM Smucker Company	0.65	5.0	Food Processing	2.8%
Eagle Financial Services Inc	0.65	6.0	Bank	3.2%
Conagra Brands	0.65	9.5	Food Processing	3.5%
QNB Corp	0.65	6.0	Bank	3.9%
Norwood Financial Corp	0.65	4.0	Bank	4.1%
Verizon Communications Inc	0.65	22.0	Telecom. Services	4.8%
NASB Financial Inc	0.65	8.0	Thrift	5.0%
Balchem Corp.	0.70	13.0	Chemical (Specialty)	0.4%
MarketAxess Holdings	0.70	17.5	Brokers & Exchanges	0.7%
Internet Initiative Japan Inc	0.70	1.0	Telecom. Services	1.3%
FUJIFILM Holdings Corporation	0.70	3.0	Foreign Electronics	1.4%
Southern Missouri Bancorp Inc	0.70	15.0	Thrift	1.5%
Target Corp	0.70	1.5	Retail Store	1.7%
Houlihan Lokey	0.70	10.5	Investment Banking	1.7%
Bank of the James Financial Group Inc	0.70	6.0	Bank	1.8%
Guaranty Federal Bancshares Inc	0.70	5.0	Thrift	1.8%
Lancaster Colony Corporation	0.70	7.5	Food Processing	2.0%
Premier Inc.	0.70	18.0	Healthcare Information	2.1%
Colony Bankcorp Inc	0.70	10.0	Bank	2.4%
First Community Corp	0.70	8.5	Bank	2.5%
BEO Bancorp	0.70	8.0	Bank	2.5%
Mid Penn Bancorp Inc	0.70	13.0	Bank	2.6%
Peoples Financial Services Corp	0.70	4.5	Bank	3.1%
F and M Bank Corporation	0.70	4.0	Bank	3.3%
Natl HealthCare Corp.	0.70	5.0	Medical Services	3.4%
LCNB Corp	0.70	5.5	Bank (Midwest)	4.1%
Juniata Valley Financial Corp	0.70	3.5	Bank	5.4%
Alico Inc	0.70	7.0	Food Processing	5.6%
Coca-Cola Consol.	0.75	15.5	Beverage	0.2%
Progressive Corp.	0.75	14.0	Insurance (Prop/Cas.)	0.4%
Hingham Institution for Savings	0.75	15.5	Thrift	0.6%
Murphy USA Inc	0.75	9.0	Retail (Hardlines)	0.6%
Ormat Technologies Inc	0.75	9.5	Power	0.7%
PriceSmart	0.75	1.0	Retail Store	1.0%
Werner Enterprises Inc	0.75	9.5	Trucking	1.1%

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 29 of 45

RETROSPECTIVE CEM

Company Name	Beta	Book Value 5 Yr Growth Rate	Industry	Div Yield
Utah Medical Products Inc	0.75	9.0	Med Supp Invasive	1.2%
Becton Dickinson and Company	0.75	20.5	Med Supp Invasive	1.3%
MAXIMUS Inc	0.75	17.0	Industrial Services	1.5%
Pathfinder Bancorp Inc	0.75	9.5	Thrift	1.6%
CSG Systems International Inc	0.75	2.0	IT Services	1.8%
Tyson Foods	0.75	11.0	Food Processing	2.0%
CH Robinson Worldwide Inc	0.75	12.0	Industrial Services	2.1%
Miller Industries Inc	0.75	8.5	Heavy Truck & Equip	2.2%
Hawthorn Bancshares Inc	0.75	8.0	Bank (Midwest)	2.3%
NewMarket Corporation	0.75	7.5	Chemical (Specialty)	2.5%
Employers Holdings Inc	0.75	11.5	Insurance (Prop/Cas.)	2.6%
Landmark Bancorp Inc	0.75	7.5	Thrift	2.7%
Digital Realty Trust Inc	0.75	17.0	R.E.I.T.	3.0%
CCFNB Bancorp Inc	0.75	3.0	Bank	3.1%
Wayne Savings Bancshares Inc	0.75	5.5	Thrift	3.2%
Oil Dri Corp of America	0.75	5.0	Chemical (Specialty)	3.2%
Croghan Bancshares Inc	0.75	6.5	Bank (Midwest)	3.4%
Ames National Corp	0.75	4.5	Bank (Midwest)	4.2%
West Pharmaceutical Services Inc	0.80	10.0	Med Supp Non-Invasive	0.2%
Danaher Corp	0.80	6.0	Diversified Co.	0.3%
AAON Inc	0.80	12.0	Machinery	0.6%
New York Times Co	0.80	6.5	Publishing	0.7%
Waste Connections	0.80	18.0	Environmental	0.8%
Marten Transport Ltd	0.80	9.5	Trucking	1.0%
Elbit Systems Ltd	0.80	9.5	Aerospace/Defense	1.1%
Stepan Company	0.80	9.0	Chemical (Specialty)	1.2%
Johnson Outdoors Inc	0.80	12.5	Recreation	1.4%
Waste Management	0.80	6.0	Environmental	1.5%
Novo Nordisk	0.80	7.0	Drug	1.5%
McCormick and Co	0.80	13.5	Food Processing	1.5%
Equinix Inc	0.80	18.5	R.E.I.T.	1.6%
Canterbury Park Holding Corp	0.80	8.0	Hotel/Gaming	1.6%
Acme United Corp	0.80	7.5	Med Supp Non-Invasive	1.7%
Quest Diagnostics Inc	0.80	8.0	Medical Services	1.8%
Comcast Corporation	0.80	11.5	Cable TV	2.0%
Prudenital Bancorp Inc of Pennsylvania	0.80	5.0	Thrift	2.0%
American Tower Corporation	0.80	4.5	Wireless Networking	2.3%
Bank of Botetourt Buchanan V	0.80	6.0	Financial Svcs. (Div.)	2.3%
Autohome Inc	0.80	19.0	Internet	2.5%
First Capital Inc	0.80	6.5	Thrift	2.5%
AmeriServ Financial Inc	0.80	3.0	Bank	2.6%
United Bancshares Inc	0.80	7.0	Bank (Midwest)	2.6%
Intel Corporation	0.80	8.5	Semiconductor	2.7%
ESSA Bancorp Inc	0.80	2.5	Thrift	2.7%
Codorus Valley Bancorp	0.80	6.5	Bank	2.7%
ACNB Corporation	0.80	8.0	Bank	3.1%
Park National Corp	0.80	5.5	Bank (Midwest)	3.1%

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 30 of 45

RETROSPECTIVE CEM

Company Name	Beta	Book Value 5 Yr Growth Rate	Industry	Div Yield
Summit State Bank	0.80	5.0	Bank	3.1%
Toyota Motor Corporation	0.80	7.5	Automotive	3.3%
CompX International Inc	0.80	7.5	Machinery	3.7%
Sanofi	0.80	1.0	Drug	3.8%
Escalade Inc	0.80	7.0	Diversified Co.	4.1%
National Bankshares Inc	0.80	4.5	Bank	4.1%
Safety Insurance Group Inc	0.80	3.5	Insurance (Prop/Cas.)	4.5%
New York Community Bancorp Inc	0.80	1.0	Thrift	5.6%
Wipro Ltd	0.85	8.0	IT Services	0.2%
Thermo Fisher Scientific Inc	0.85	9.0	Precision Instrument	0.2%
Chemed Corporation	0.85	11.0	Diversified Co.	0.3%
Bio-Techne Corp.	0.85	9.5	Biotechnology	0.3%
Helios Technologies	0.85	18.5	Diversified Co.	0.5%
Morningstar Inc	0.85	22.0	Asset Management	0.5%
Verisk Analytics Inc	0.85	27.5	Information Services	0.6%
Agilent Technologies	0.85	3.5	Precision Instrument	0.6%
Landstar System Inc	0.85	11.0	Trucking	0.6%
MGP Ingredients	0.85	18.5	Beverage	0.6%
Pool Corporation	0.85	12.0	Recreation	0.7%
Warrior Met Coal Inc	0.85	10.0	Metals & Mining (Div.)	0.8%
Independence Holding Company	0.85	13.0	Insurance (Life)	0.8%
Microsoft Corporation	0.85	9.5	Computer Software	0.8%
Tractor Supply Co	0.85	8.0	Retail Building Supply	1.0%
Jack Henry and Associates Inc	0.85	8.5	IT Services	1.1%
Rollins Inc	0.85	11.5	Industrial Services	1.3%
AptarGroup Inc	0.85	5.0	Packaging & Container	1.3%
Silgan Holdings Inc	0.85	11.5	Packaging & Container	1.3%
Hawkins Inc	0.85	4.5	Chemical (Diversified)	1.4%
AO Smith Corp	0.85	6.5	Machinery	1.5%
Embassy Bancorp Inc	0.85	10.0	Bank	1.5%
Taiwan Semiconductor Manufacturing Co Ltd	0.85	12.5	Semiconductor	1.5%
Sound Financial Bancorp Inc	0.85	6.5	Bank	1.5%
Northrop Grumman Corp Holding Co	0.85	7.0	Aerospace/Defense	1.6%
Canadian National Railway Co	0.85	6.5	Railroad	1.6%
Broadridge Fin'l	0.85	8.5	Information Services	1.6%
Hershey Company	0.85	7.0	Food Processing	1.8%
Enterprise Bancorp Inc	0.85	9.0	Bank	2.0%
Mondelez International Inc	0.85	1.0	Food Processing	2.0%
ManTech International Corporation	0.85	3.5	IT Services	2.1%
Community West Bancshares	0.85	6.5	Bank	2.1%
Standard Motor Products Inc	0.85	7.0	Auto Parts	2.1%
Peoples Bancorp of N C Inc	0.85	7.5	Bank	2.4%
Fidelity D and D Bancorp Inc	0.85	8.0	Bank	2.6%
Cambridge Bancorporation	0.85	11.5	Bank	2.7%
Watsco Inc	0.85	8.0	Retail Building Supply	2.8%
NBT Bancorp	0.85	5.5	Bank	2.9%
Nobility Homes Inc	0.85	8.0	Diversified Co.	3.1%

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 31 of 45

RETROSPECTIVE CEM

Company Name	Beta	Book Value 5 Yr Growth Rate	Industry	Div Yield
First Guaranty Bancshares Inc.	0.85	7.0	Bank	3.2%
Crown Castle International Corporation	0.85	7.5	Wireless Networking	3.2%
Camden National Corporation	0.85	7.5	Bank	3.2%
Bank South Carolina Corp	0.85	6.0	Bank	3.4%
United Bancorp Inc Ohio	0.85	6.0	Bank (Midwest)	3.5%
Walgreens Boots	0.85	2.0	Retail Store	3.6%
Lake Shore Bancorp Inc	0.85	3.0	Thrift	3.8%
Territorial Bancorp Inc	0.85	2.0	Bank	3.8%
Waterstone Financial Inc	0.85	6.0	Thrift	3.9%
Healthcare Realty Trust Inc	0.85	2.0	R.E.I.T.	4.0%
Community Bancorp Inc	0.85	6.5	Bank	4.1%
Agree Realty Corp	0.85	12.0	R.E.I.T.	4.3%
AT&T	0.85	6.0	Telecom. Services	7.8%
PerkinElmer Inc	0.90	8.5	Precision Instrument	0.2%
CSW Industrials	0.90	5.0	Petroleum (Producing)	0.5%
ICF International Inc	0.90	8.0	Industrial Services	0.6%
ResMed Inc	0.90	7.5	Med Supp Non-Invasive	0.7%
Cable One	0.90	19.0	Cable TV	0.7%
Sherwin Williams	0.90	27.0	Retail Building Supply	0.8%
Power Integrations Inc	0.90	9.5	Semiconductor	0.8%
Caseys General Stores Inc	0.90	15.5	Retail/Wholesale Food	0.8%
Friedman Industries Inc	0.90	1.0	Steel	0.8%
Exponent Inc.	0.90	6.5	Information Services	0.9%
Chase Corp	0.90	14.0	Building Materials	1.1%
AudioCodes Ltd	0.90	8.5	Telecom. Equipment	1.1%
Brown Forman Corp (Class B)	0.90	4.5	Beverage	1.1%
Cerner Corp	0.90	7.0	Healthcare Information	1.2%
Heidrick and Struggles International Inc	0.90	1.5	Human Resources	1.4%
Republic Services Inc	0.90	2.5	Environmental	1.4%
Selective Insurance Group Inc	0.90	10.0	Insurance (Prop/Cas.)	1.5%
Abbott Laboratories	0.90	3.5	Med Supp Non-Invasive	1.5%
Commerce Bancshares Inc	0.90	8.5	Bank (Midwest)	1.5%
Cboe Global Markets	0.90	57.5	Brokers & Exchanges	1.6%
FirstCash Holdings	0.90	15.5	Financial Svcs. (Div.)	1.7%
Booz Allen Hamilton Holding Corporation	0.90	29.5	Industrial Services	1.7%
Amdocs Ltd	0.90	4.0	IT Services	1.9%
Duke Realty Corporation	0.90	10.0	R.E.I.T.	1.9%
Lakeland Financial Corp	0.90	10.0	Bank (Midwest)	2.0%
Air Products and Chemicals Inc	0.90	8.5	Chemical (Diversified)	2.1%
Eagle Bancorp Montana Inc	0.90	7.5	Thrift	2.1%
German American Bancorp Inc	0.90	13.0	Bank (Midwest)	2.2%
Eastgroup Properties Inc	0.90	11.0	R.E.I.T.	2.2%
Alexandria Real Estate Equities Inc	0.90	9.5	R.E.I.T.	2.3%
PS Business Parks Inc	0.90	1.5	R.E.I.T.	2.5%
Ingredion Incorporated	0.90	5.5	Food Processing	2.7%
Trustmark Corp	0.90	4.0	Bank	2.8%
Tompkins Financial Corporation	0.90	6.0	Bank	2.8%

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 32 of 45

RETROSPECTIVE CEM

Company Name	Beta	Book Value 5 Yr Growth Rate	Industry	Div Yield
Westamerica Bancorporation	0.90	5.5	Bank	2.9%
Arrow Financial Corporation	0.90	7.5	Bank	3.0%
City Holding Co	0.90	9.0	Bank	3.0%
Farmers National Banc Corp	0.90	10.0	Bank (Midwest)	3.0%
Southside Bancshares Inc	0.90	10.0	Bank	3.1%
Northfield Bancorp Inc	0.90	2.0	Bank	3.1%
FutureFuel Corp	0.90	2.5	Chemical (Diversified)	3.2%
Armanino Foods of Distinction Inc New	0.90	17.5	Food Processing	3.3%
Horace Mann Educators Corporation	0.90	4.5	Financial Svcs. (Div.)	3.3%
LXP Industrial Trust.	0.90	1.0	R.E.I.T.	3.4%
Community Trust Bancorp Inc	0.90	6.0	Bank	3.6%
Franklin Financial Services Corp	0.90	4.0	Bank	3.8%
First Bancorp Inc	0.90	5.5	Bank	4.0%
First Interstate BancSystem Inc	0.90	9.0	Bank	4.2%
Citizens and Northern Corp	0.90	3.0	Bank	4.5%
Fresenius Medical ADR	0.90	7.5	Medical Services	4.7%
Healthcare Services Group Inc	0.90	9.0	Industrial Services	4.8%
Cooper Companies Inc	0.95	8.0	Med Supp Non-Invasive	0.0%
White Moutains Insurance Group Ltd	0.95	11.0	Insurance (Prop/Cas.)	0.1%
Old Dominion Freight Line Inc	0.95	17.0	Trucking	0.3%
Simulations Plus Inc	0.95	39.5	Computer Software	0.6%
Tetra Tech	0.95	3.5	Environmental	0.6%
UniFirst Corp	0.95	8.5	Industrial Services	0.6%
Brown and Brown Inc	0.95	10.5	Financial Svcs. (Div.)	0.6%
St Joe Company	0.95	1.0	Engineering & Const	0.7%
Xilinx Inc	0.95	1.0	Semiconductor	0.8%
J B Hunt Transport Services Inc	0.95	16.5	Trucking	0.8%
Estee Lauder Companies Inc	0.95	5.0	Toiletries/Cosmetics	0.8%
Franklin Electric Co Inc	0.95	6.5	Electrical Equipment	0.8%
Omega Flex Inc	0.95	8.5	Metal Fabricating	0.9%
Ball Corp	0.95	19.0	Packaging & Container	0.9%
Expeditors International of Washington Inc	0.95	6.5	Industrial Services	1.0%
LeMaitre Vascular Inc	0.95	13.5	Med Supp Invasive	1.0%
Intercontinental Exch.	0.95	6.5	Brokers & Exchanges	1.1%
Dolby Laboratories Inc	0.95	6.0	Entertainment Tech	1.2%
Accenture Plc New	0.95	20.5	IT Services	1.2%
First Financial Bankshares Inc	0.95	12.5	Bank	1.2%
Vail Resorts	0.95	9.0	Hotel/Gaming	1.3%
MSA Safety	0.95	5.0	Machinery	1.3%
Matson Inc	0.95	17.0	Maritime	1.3%
Marsh and McLennan Companies Inc	0.95	4.0	Financial Svcs. (Div.)	1.4%
Unity Bancorp Inc	0.95	14.0	Bank	1.4%
Service Corp International Inc	0.95	8.5	Industrial Services	1.5%
Gentex Corp	0.95	8.0	Auto Parts	1.5%
Kforce Inc.	0.95	8.5	Human Resources	1.5%
CME Group Inc	0.95	3.5	Brokers & Exchanges	1.6%
SAP AE	0.95	8.0	Computer Software	1.7%

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 33 of 45

RETROSPECTIVE CEM

Company Name	Beta	Book Value 5 Yr Growth Rate	Industry	Div Yield
Gorman Rupp Co	0.95	2.0	Heavy Truck & Equip	1.7%
Infosys Limited	0.95	3.0	IT Services	1.7%
Analog Devices Inc	0.95	15.0	Semiconductor	1.7%
Stock Yards Bancorp Inc	0.95	9.0	Bank	1.8%
Assurant Inc	0.95	11.0	Financial Svcs. (Div.)	1.9%
Open Text Corp	0.95	14.5	E-Commerce	1.9%
GATX Corp	0.95	11.5	Railroad	2.1%
Hackett Group Inc	0.95	7.0	Industrial Services	2.1%
Bankwell Financial Group Inc	0.95	6.5	Bank	2.2%
CVS Caremark Corporation	0.95	8.0	Retail Store	2.2%
Fastenal Co	0.95	7.5	Retail Building Supply	2.2%
Garmin Ltd	0.95	7.0	Electrical Equipment	2.2%
Hanover Insurance Group Inc	0.95	4.5	Insurance (Prop/Cas.)	2.3%
International Flavors and Fragrances Inc	0.95	25.0	Chemical (Specialty)	2.3%
Salisbury Bancorp Inc	0.95	1.0	Bank	2.3%
Superior Group of Companies	0.95	12.5	Industrial Services	2.3%
First Financial Corporation	0.95	5.5	Bank (Midwest)	2.4%
Republic Bancorp Inc	0.95	6.0	Bank	2.5%
Extra Space Storage	0.95	4.5	R.E.I.T.	2.6%
Carters Inc	0.95	5.0	Apparel	2.6%
First Financial Northwest Inc	0.95	4.5	Bank	2.6%
Chemung Financial Corporation	0.95	5.5	Bank	2.7%
Packaging Corp	0.95	15.5	Packaging & Container	3.0%
C and F Financial Corp	0.95	6.0	Bank	3.0%
American National Bankshares Inc	0.95	5.0	Bank	3.0%
Koninklijke Philips NV	0.95	1.0	Foreign Electronics	3.1%
West Bancorporation Inc	0.95	6.0	Bank (Midwest)	3.2%
CVB Financial Corp	0.95	11.5	Bank	3.2%
First Community Bancshares Inc	0.95	4.5	Bank	3.3%
Heritage Financial Corp	0.95	8.5	Bank	3.4%
Kearny Financial	0.95	4.5	Thrift	3.4%
Macatawa Bank Corporation	0.95	8.5	Bank (Midwest)	3.5%
Telephone and Data Systems Inc New	0.95	2.0	Telecom. Services	3.6%
MSC Industrial Direct Co Inc	0.95	2.5	Machinery	3.6%
Strategic Education	0.95	52.0	Educational Services	4.4%
Penns Woods Bancorp Inc	0.95	3.5	Bank	5.3%
United Security Bancshares	0.95	7.0	Bank	5.4%
Northwest Bancshares Inc	0.95	1.0	Thrift	5.6%
Consolidated Tomoka Land Co	0.95	19.5	Diversified Co.	6.7%
Brit. Am. Tobacco ADR	0.95	49.5	Tobacco	7.0%
Altria Group Inc	0.95	30.0	Tobacco	7.2%

	Mean	Median	Average of Mean & Median
Source: Value Line database	9.08	7.50	**8.29**

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 34 of 45

PROSPECTIVE CEM

Company Name	Ticker	Beta	Industry	Book Value Proj 3 To 5 Year Growth Rate	DIV Yield
Activision Blizzard Inc	ATVI	0.65	Entertainment Tech	13.0	0.6%
Dollar General Corporation	DG	0.65	Retail Store	6.0	0.8%
Logitech International SA	LOGI	0.65	Computers/Peripherals	22.5	1.3%
Royal Gold Inc	RGLD	0.65	Precious Metals	4.0	1.4%
Colgate Palmolive Co	CL	0.65	Household Products	65.0	2.2%
Erie Indemnity Company	ERIE	0.65	Insurance (Prop/Cas.)	11.5	2.5%
JM Smucker Company	SJM	0.65	Food Processing	4.5	2.8%
Conagra Brands	CAG	0.65	Food Processing	6.5	3.5%
Balchem Corp.	BCPC	0.7	Chemical (Specialty)	9.5	0.4%
MarketAxess Holdings	MKTX	0.7	Brokers & Exchanges	15.5	0.7%
Target Corp	TGT	0.7	Retail Store	9.0	1.7%
Houlihan Lokey	HLI	0.7	Investment Banking	13.5	1.7%
Lancaster Colony Corporation	LANC	0.7	Food Processing	8.0	2.0%
Premier Inc.	PINC	0.7	Healthcare Information	6.0	2.1%
Procter and Gamble Co	PG	0.7	Household Products	7.0	2.1%
Kimberly Clark Corp	KMB	0.7	Household Products	78.5	3.2%
Unilever PLC	UL	0.7	Food Processing	10.0	4.1%
Coca-Cola Consol.	COKE	0.75	Beverage	13.0	0.2%
Progressive Corp.	PGR	0.75	Insurance (Prop/Cas.)	10.0	0.4%
Murphy USA Inc	MUSA	0.75	Retail (Hardlines)	15.5	0.6%
Ormat Technologies Inc	ORA	0.75	Power	5.5	0.7%
PriceSmart	PSMT	0.75	Retail Store	5.0	1.0%
Werner Enterprises Inc	WERN	0.75	Trucking	11.5	1.1%
Becton Dickinson and Company	BDX	0.75	Med Supp Invasive	5.0	1.3%
MAXIMUS Inc	MMS	0.75	Industrial Services	9.5	1.5%
Eli Lilly and Co	LLY	0.75	Drug	18.0	1.6%
CSG Systems International Inc	CSGS	0.75	IT Services	7.0	1.8%
Tyson Foods	TSN	0.75	Food Processing	8.5	2.0%
CH Robinson Worldwide Inc	CHRW	0.75	Industrial Services	7.0	2.1%
PepsiCo Inc	PEP	0.75	Beverage	6.0	2.5%
NewMarket Corporation	NEU	0.75	Chemical (Specialty)	7.5	2.5%
Digital Realty Trust Inc	DLR	0.75	R.E.I.T.	5.5	3.0%
Amgen Inc	AMGN	0.75	Biotechnology	9.0	3.4%
West Pharmaceutical Services Inc	WST	0.8	Med Supp Non-Invasive	12.0	0.2%
Danaher Corp	DHR	0.8	Diversified Co.	10.0	0.3%
AAON Inc	AAON	0.8	Machinery	17.5	0.6%
New York Times Co	NYT	0.8	Publishing	10.5	0.7%
Waste Connections	WCN	0.8	Environmental	4.0	0.8%
Elbit Systems Ltd	ESLT	0.8	Aerospace/Defense	11.5	1.1%
Stepan Company	SCL	0.8	Chemical (Specialty)	7.5	1.2%
Waste Management	WM	0.8	Environmental	5.0	1.5%
Novo Nordisk	NVO	0.8	Drug	8.5	1.5%
McCormick and Co	MKC	0.8	Food Processing	9.0	1.5%
Equinix Inc	EQIX	0.8	R.E.I.T.	7.5	1.6%
Quest Diagnostics Inc	DGX	0.8	Medical Services	9.0	1.8%
Comcast Corporation	CMCSA	0.8	Cable TV	9.5	2.0%
United Parcel Service	UPS	0.8	Air Transport	46.0	2.0%
Public Storage	PSA	0.8	R.E.I.T.	5.0	2.3%
American Tower Corporation	AMT	0.8	Wireless Networking	4.0	2.3%
Intel Corporation	INTC	0.8	Semiconductor	4.0	2.7%
Pfizer Inc	PFE	0.8	Drug	4.5	3.0%
Park National Corp	PRK	0.8	Bank (Midwest)	5.0	3.1%
Toyota Motor Corporation	TM	0.8	Automotive	5.0	3.3%

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 35 of 45

PROSPECTIVE CEM

Company Name	Ticker	Beta	Industry	Book Value Proj 3 To 5 Year Growth Rate	DIV Yield
Merck and Co Inc	MRK	0.8	Drug	4.0	3.5%
Sanofi	SNY	0.8	Drug	5.5	3.8%
Ennis Inc.	EBF	0.8	Office Equip/Supplies	3.0	5.3%
New York Community Bancorp Inc	NYCB	0.8	Thrift	3.5	5.6%
Thermo Fisher Scientific Inc	TMO	0.85	Precision Instrument	11.0	0.2%
Chemed Corporation	CHE	0.85	Diversified Co.	11.0	0.3%
Bio-Techne Corp.	TECH	0.85	Biotechnology	4.5	0.3%
Ferrari N.V.	RACE	0.85	Automotive	17.0	0.4%
Helios Technologies	HLIO	0.85	Diversified Co.	10.0	0.5%
Verisk Analytics Inc	VRSK	0.85	Information Services	11.5	0.6%
Agilent Technologies	A	0.85	Precision Instrument	12.5	0.6%
MGP Ingredients	MGPI	0.85	Beverage	20.5	0.6%
Pool Corporation	POOL	0.85	Recreation	29.5	0.7%
Warrior Met Coal Inc	HCC	0.85	Metals & Mining (Div.)	7.0	0.8%
Microsoft Corporation	MSFT	0.85	Computer Software	14.5	0.8%
Tractor Supply Co	TSCO	0.85	Retail Building Supply	9.5	1.0%
Jack Henry and Associates Inc	JKHY	0.85	IT Services	7.5	1.1%
Rollins Inc	ROL	0.85	Industrial Services	8.0	1.3%
AptarGroup Inc	ATR	0.85	Packaging & Container	9.0	1.3%
Silgan Holdings Inc	SLGN	0.85	Packaging & Container	19.5	1.3%
AO Smith Corp	AOS	0.85	Machinery	6.0	1.5%
Taiwan Semiconductor Mfg. Co Ltd	TSM	0.85	Semiconductor	8.0	1.5%
Northrop Grumman Corp Holding Co	NOC	0.85	Aerospace/Defense	23.0	1.6%
Broadridge Fin'l	BR	0.85	Information Services	14.0	1.6%
Hershey Company	HSY	0.85	Food Processing	22.0	1.8%
Mondelez International Inc	MDLZ	0.85	Food Processing	4.5	2.0%
ManTech International Corporation	MANT	0.85	IT Services	5.5	2.1%
Standard Motor Products Inc	SMP	0.85	Auto Parts	9.5	2.1%
Johnson and Johnson	JNJ	0.85	Med Supp Non-Invasive	13.5	2.6%
Texas Instruments Incorporated	TXN	0.85	Semiconductor	24.0	2.6%
Watsco Inc	WSO	0.85	Retail Building Supply	6.0	2.8%
National Fuel Gas Co	NFG	0.85	Natural Gas (Div.)	8.5	3.1%
Crown Castle International Corporation	CCI	0.85	Wireless Networking	5.5	3.2%
Walgreens Boots	WBA	0.85	Retail Store	8.0	3.6%
Healthcare Realty Trust Inc	HR	0.85	R.E.I.T.	11.0	4.0%
AT&T	T	0.85	Telecom. Services	5.5	7.8%
PerkinElmer Inc	PKI	0.9	Precision Instrument	19.0	0.2%
CSW Industrials	CSWI	0.9	Petroleum (Producing)	10.5	0.5%
ResMed Inc	RMD	0.9	Med Supp Non-Invasive	22.0	0.7%
Cable One	CABO	0.9	Cable TV	6.5	0.7%
Sherwin Williams	SHW	0.9	Retail Building Supply	11.5	0.8%
Power Integrations Inc	POWI	0.9	Semiconductor	14.5	0.8%
Caseys General Stores Inc	CASY	0.9	Retail/Wholesale Food	10.0	0.8%
Exponent Inc.	EXPO	0.9	Information Services	6.5	0.9%
AudioCodes Ltd	AUDC	0.9	Telecom. Equipment	20.0	1.1%
Brown Forman Corp (Class B)	BFB	0.9	Beverage	7.0	1.1%
Cerner Corp	CERN	0.9	Healthcare Information	4.5	1.2%
AmerisourceBergen Corp	ABC	0.9	Med Supp Non-Invasive	12.0	1.4%
Heidrick and Struggles Internat'l Inc	HSII	0.9	Human Resources	11.0	1.4%
Republic Services Inc	RSG	0.9	Environmental	7.5	1.4%
Selective Insurance Group Inc	SIGI	0.9	Insurance (Prop/Cas.)	8.0	1.5%
Abbott Laboratories	ABT	0.9	Med Supp Non-Invasive	6.0	1.5%
Commerce Bancshares Inc	CBSH	0.9	Bank (Midwest)	8.0	1.5%

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 36 of 45

PROSPECTIVE CEM

Company Name	Ticker	Beta	Industry	Book Value Proj 3 To 5 Year Growth Rate	DIV Yield
Cboe Global Markets	CBOE	0.9	Brokers & Exchanges	13.0	1.6%
FirstCash Holdings	FCFS	0.9	Financial Svcs. (Div.)	6.0	1.7%
Booz Allen Hamilton Holding Corp.	BAH	0.9	Industrial Services	17.5	1.7%
BWX Technologies	BWXT	0.9	Power	11.0	1.7%
Sensient Technologies Corp	SXT	0.9	Food Processing	5.0	1.8%
Amdocs Ltd	DOX	0.9	IT Services	6.0	1.9%
Duke Realty Corporation	DRE	0.9	R.E.I.T.	4.0	1.9%
Air Products and Chemicals Inc	APD	0.9	Chemical (Diversified)	9.0	2.1%
Alexandria Real Estate Equities Inc	ARE	0.9	R.E.I.T.	11.0	2.3%
Cisco Systems Inc	CSCO	0.9	Telecom. Equipment	9.0	2.6%
Ingredion Incorporated	INGR	0.9	Food Processing	6.5	2.7%
Fresenius Medical ADR	FMS	0.9	Medical Services	5.5	4.7%
Mercury General Corp	MCY	0.9	Insurance (Prop/Cas.)	5.0	4.9%
Holly Energy Part.	HEP	0.9	Pipeline MLPs	10.0	7.9%
Cooper Companies Inc	COO	0.95	Med Supp Non-Invasive	17.0	0.0%
Old Dominion Freight Line Inc	ODFL	0.95	Trucking	13.5	0.3%
Apple Inc	AAPL	0.95	Computers/Peripherals	16.0	0.5%
Tetra Tech	TTEK	0.95	Environmental	10.5	0.6%
UniFirst Corp	UNF	0.95	Industrial Services	6.5	0.6%
Brown and Brown Inc	BRO	0.95	Financial Svcs. (Div.)	3.5	0.6%
St Joe Company	JOE	0.95	Engineering & Const	6.5	0.7%
Aon PLC	AON	0.95	Financial Svcs. (Div.)	23.5	0.8%
Xilinx Inc	XLNX	0.95	Semiconductor	9.0	0.8%
J B Hunt Transport Services Inc	JBHT	0.95	Trucking	15.0	0.8%
Estee Lauder Companies Inc	EL	0.95	Toiletries/Cosmetics	5.5	0.8%
Franklin Electric Co Inc	FELE	0.95	Electrical Equipment	7.5	0.8%
Ball Corp	BLL	0.95	Packaging & Container	16.5	0.9%
Expeditors Internat'l of Washington Inc	EXPD	0.95	Industrial Services	7.0	1.0%
Intercontinental Exch.	ICE	0.95	Brokers & Exchanges	11.0	1.1%
Dolby Laboratories Inc	DLB	0.95	Entertainment Tech	5.5	1.2%
Accenture Plc New	ACN	0.95	IT Services	16.0	1.2%
Vail Resorts	MTN	0.95	Hotel/Gaming	9.0	1.3%
MSA Safety	MSA	0.95	Machinery	9.0	1.3%
Matson Inc	MATX	0.95	Maritime	22.5	1.3%
Marsh and McLennan Companies Inc	MMC	0.95	Financial Svcs. (Div.)	15.5	1.4%
Service Corp International Inc	SCI	0.95	Industrial Services	14.0	1.5%
Gentex Corp	GNTX	0.95	Auto Parts	6.5	1.5%
Kforce Inc.	KFRC	0.95	Human Resources	11.0	1.5%
CME Group Inc	CME	0.95	Brokers & Exchanges	6.5	1.6%
SAP AE	SAP	0.95	Computer Software	6.5	1.7%
Gorman Rupp Co	GRC	0.95	Heavy Truck & Equip	9.5	1.7%
Infosys Limited	INFY	0.95	IT Services	7.5	1.7%
Analog Devices Inc	ADI	0.95	Semiconductor	24.0	1.7%
Assurant Inc	AIZ	0.95	Financial Svcs. (Div.)	7.5	1.9%
Open Text Corp	OTEX	0.95	E-Commerce	3.0	1.9%
GATX Corp	GATX	0.95	Railroad	6.5	2.1%
CVS Caremark Corporation	CVS	0.95	Retail Store	9.0	2.2%
Fastenal Co	FAST	0.95	Retail Building Supply	6.5	2.2%
Garmin Ltd	GRMN	0.95	Electrical Equipment	5.5	2.2%
Hanover Insurance Group Inc	THG	0.95	Insurance (Prop/Cas.)	9.5	2.3%
Internat'l Flavors and Fragrances Inc	IFF	0.95	Chemical (Specialty)	9.0	2.3%
Extra Space Storage	EXR	0.95	R.E.I.T.	5.0	2.6%
Carters Inc	CRI	0.95	Apparel	15.0	2.6%

PROSPECTIVE CEM

Company Name	Ticker	Beta	Industry	Book Value Proj 3 To 5 Year Growth Rate	DIV Yield
Packaging Corp	PKG	0.95	Packaging & Container	13.0	3.0%
3M Company	MMM	0.95	Diversified Co.	9.0	3.4%
MSC Industrial Direct Co Inc	MSM	0.95	Machinery	5.5	3.6%

	Mean	Median	Average of Mean & Median
Prospective CEM	10.86	9.00	9.93
Retrospective CEM (Exhibit DHC-11)			8.29
Overall CEM result			**9.11**

Source: Value Line database

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 37 of 45

βs

Company Name	Ticker	β
American Water Works	AWK	0.85
American States Water Co	AWR	0.65
Artesian Resources	ARTNA	0.75
California Water Service Group	CWT	0.70
Global Water Resources	GWRS	0.80
Middlesex Water Co	MSEX	0.70
SJW Group	SJW	0.80
Essential Utilities	WTRG	0.95
York Water Company	YORW	0.85
	mean	0.78
	median	0.80
	average of mean & median	0.79

source: Exhibit DHC-4

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 38 of 45

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 39 of 45

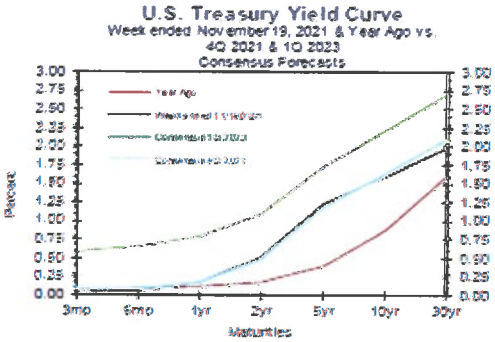
2 ■ BLUE CHIP FINANCIAL FORECASTS ■ DECEMBER 1, 2021

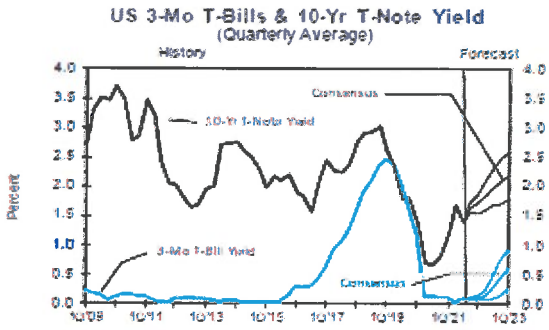
Consensus Forecasts of U.S. Interest Rates and Key Assumptions

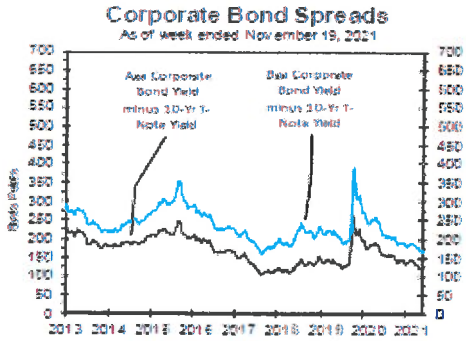
Interest Rates	History: Average For Week Ending Nov 19	Nov 12	Nov 5	Oct 29	Average For Month Oct	Sep	Aug	Latest Qtr 3Q 2021	Consensus Forecasts-Quarterly Avg. 4Q 2021	1Q 2022	2Q 2022	3Q 2022	4Q 2022	1Q 2023
Federal Funds Rate	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.1	0.1	0.1	0.3	0.4	0.6
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.3	3.3	3.3	3.4	3.5	3.7
LIBOR, 3-mo.	0.16	0.15	0.14	0.13	0.13	0.12	0.12	0.13	0.2	0.2	0.3	0.4	0.6	0.7
Commercial Paper, 1-mo.	0.06	0.05	0.07	0.06	0.05	0.05	0.05	0.05	0.1	0.1	0.2	0.3	0.5	0.6
Treasury bill, 3-mo.	0.05	0.05	0.05	0.06	0.05	0.04	0.05	0.05	0.1	0.1	0.1	0.2	0.4	0.6
Treasury bill, 6-mo.	0.06	0.07	0.07	0.06	0.06	0.05	0.06	0.05	0.1	0.1	0.2	0.3	0.5	0.7
Treasury bill, 1 yr.	0.18	0.16	0.15	0.14	0.11	0.08	0.07	0.08	0.2	0.2	0.3	0.4	0.6	0.8
Treasury note, 2 yr.	0.53	0.48	0.45	0.48	0.39	0.24	0.22	0.23	0.5	0.6	0.7	0.8	1.0	1.1
Treasury note, 5 yr.	1.24	1.17	1.14	1.18	1.11	0.86	0.77	0.80	1.2	1.3	1.4	1.5	1.6	1.7
Treasury note, 10 yr.	1.60	1.53	1.54	1.59	1.58	1.37	1.28	1.32	1.6	1.7	1.9	2.0	2.1	2.2
Treasury note, 30 yr.	1.98	1.90	1.95	2.00	2.06	1.94	1.92	1.93	2.1	2.2	2.3	2.5	2.6	2.7
Corporate Aaa bond	2.82	2.72	2.77	2.80	2.85	2.72	2.72	2.72	2.7	2.9	3.1	3.2	3.4	3.6
Corporate Baa bond	3.29	3.18	3.22	3.25	3.31	3.16	3.16	3.16	3.4	3.6	3.8	4.0	4.2	4.4
State & Local bonds	2.56	2.56	2.60	2.61	2.59	2.67	2.64	2.64	2.4	2.6	2.7	2.9	3.0	3.1
Home mortgage rate	3.10	2.98	3.09	3.14	3.07	2.90	2.84	2.87	3.1	3.2	3.4	3.5	3.7	3.8

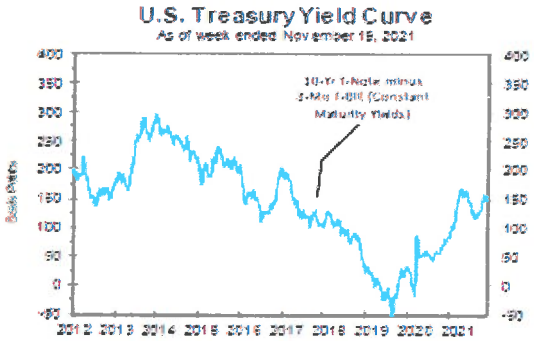
Key Assumptions	History: 4Q 2019	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021	3Q 2021	Consensus Forecasts-Quarterly: 4Q 2021	1Q 2022	2Q 2022	3Q 2022	4Q 2022	1Q 2023
Fed's AFE $ Index	110.5	111.4	112.4	107.3	105.2	105.4	102.9	105.0	106.5	106.9	106.8	106.6	106.3	106.1
Real GDP	1.9	-5.1	-31.2	33.8	4.5	6.3	6.7	2.1	5.1	4.4	3.8	3.3	2.6	2.4
GDP Price Index	1.5	1.6	-1.5	3.6	2.2	4.3	6.1	5.9	4.6	3.4	2.8	2.7	2.5	2.5
Consumer Price Index	2.6	1.0	-3.1	4.7	2.4	3.7	8.4	6.6	5.6	3.3	2.9	2.6	2.5	2.4
PCE Price Index	1.7	1.3	-1.6	3.7	1.5	3.8	6.5	5.3	4.5	2.9	2.5	2.5	2.3	2.3

Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index, PCE 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, GDP Price Index and PCE Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index history is from the Department of Labor's Bureau of Labor Statistics (BLS).









ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 40 of 45

For example, the annual arithmetic mean return of large-cap stocks was 10.2% over the 1926–20 period, while the annual arithmetic mean return of small-cap stocks was 11.9%.

Note that this increased return comes at a price: risk (as measured by standard deviation) increas from 19.8% for large-cap stocks to 31.5% for small-cap stocks. The relationship between risk an return is a fundamental principle of finance. History tells us that small companies are riskier th large companies. Investors are compensated for taking on this additional risk by the higher retur provided by small companies.

Exhibit 7.1: Summary Statistics of Large-Cap Stocks and Small-Cap Stocks (%) 1926–2019

	Geometric Mean (%)	Arithmetic Mean (%)	Standard Deviation (%)
Large-Cap Stocks	10.2%	12.1%	19.8%
Small-Cap Stocks	11.9%	16.3%	31.5%

Source of underlying data: Morningstar, Inc. Used with permission. All rights reserved. Calculations by Duff & Phelps. © Duff & Phelps. Series used. (i) "IA SBBI® US Large Stock TR USD Ext" series. The "IA SBBI® US Large Stock TR USD Ext" return series is essentially t S&P 500 index. (ii) IA SBBI® US Small Stock TR USD series. For detailed information about these series, see Chapter 3, "Description of t Basic Series".

The differences in the performance of large-cap stocks and small-cap stocks can have importa implications for investors. Exhibit 7.2 is a graphical depiction of the value of $1 invested at the e of 1925 in large-cap and small-cap stocks and held through December 31, 2019 (a total of years).

Exhibit 7.2: The Value of $1 Invested in Large-Cap and Small-Cap Stocks, 1926–2019 Index (Year-end 1925 = $1.00)

Source of underlying data: Morningstar, Inc. Used with permission. All rights reserved. Calculations by Duff & Phelps. © Duff & Phelps. Series used. (i) "IA SBBI® US Large Stock TR USD Ext" series. The "IA SBBI® US Large Stock TR USD Ext" return series is essentially the S&P 500 index. (ii) IA SBBI® US Small Stock TR USD series. For detailed information about these series, see Chapter 3, "Description of the Basic Series".

Source: SBBI yearbook 2021

MARGINS OF LOWER DEBT, LOWER β COMPANIES

Selection Criteria: Book Value g: 3.50-9.25; LTD/Capital:1%-53.33%; Beta:.40-.72
Accessed March 2, 2022 from Value Line

Company Name	Book Value 5 Yr Growth Rate	% LTD/Capital	Beta	Operating Margin
Akamai Technologies Inc	7.0	30.96	0.65	38.0
Alico Inc	7.0	33.32	0.70	27.2
Artesian Resources Corporation	4.0	45.65	0.70	47.8
Bonso Electronics International Inc	6.5	13.75	0.50	11.6
Costco Wholesale Corporation	6.5	29.13	0.60	4.2
Dollar General Corporation	7.5	38.28	0.65	12.2
AMCON Distributing Co	5.0	38.56	0.60	1.3
Daily Journal Corp	5.0	11.61	0.60	9.0
Emergent BioSolutions	9.0	36.76	0.70	35.3
Erie Indemnity Company	8.0	7.32	0.65	14.2
Energy Services of America Corp.	7.5	20.66	0.65	3.3
FTI Consulting Inc	7.5	16.97	0.70	13.5
General Mills Inc	8.0	50.82	0.60	21.0
ImmuCell Corporation	4.0	23.61	0.45	7.0
Newmont Corp.	3.5	19.24	0.60	47.8
Natural Grocers by Vitamin Cottage Inc	6.5	30.07	0.50	5.6
Nuvera Communications Inc.	6.5	34.99	0.65	42.0
Regency Affiliates Inc	5.5	26.17	0.55	28.8
Rand Worldwide Inc	9.0	14.58	0.65	12.7
Sanderson Farms Inc	9.0	1.73	0.55	16.0
Seaboard Corp	6.0	15.63	0.70	5.9
Sprouts Farmers Market	5.0	22.81	0.55	8.1
JM Smucker Company	5.0	30.21	0.65	22.9
Meridian Bioscience	8.5	15.45	0.70	26.6
Village Super Market Inc	5.0	21.21	0.45	3.3
Wheaton Precious Met.	4.0	3.30	0.60	69.7
Willamette Valley Vineyards Inc	7.5	8.39	0.70	25.0
World Wrestling Entertainment	7.0	5.29	0.60	26.4
Means/Averages	**6.45**	**23.09**	**0.61**	**20.94**

Source: Value Line database

Average if Book g <6 **24.57**

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 41 of 45

EXCERPT (4 pp.) OF CHAIR POWELL'S PRESS CONFERENCE: OPENING STATEMENT. Underlining made for emphasis – not in the original]

Transcript of Chair Powell's Press Conference
January 26, 2022

CHAIR POWELL. Good afternoon. At the Federal Reserve, we are strongly committed to achieving the monetary policy goals that Congress has given us: maximum employment and price stability. Today, in support of these goals, the Federal Open Market Committee kept its policy interest rate near zero and stated its expectation that an increase in this rate would soon be appropriate. The Committee also agreed to continue reducing its net asset purchases on the schedule we announced in December—bringing them to an end in early March. As I will explain, against a backdrop of elevated inflation and a strong labor market, our policy has been adapting to the evolving economic environment, and it will continue to do so.

Economic activity expanded at a robust pace last year, reflecting progress on vaccinations and the reopening of the economy, fiscal and monetary policy support, and the healthy financial positions of households and businesses. Indeed, the economy has shown great strength and resilience in the face of the ongoing pandemic. The recent sharp rise in COVID cases associated with the Omicron variant will surely weigh on economic growth this quarter. High-frequency indicators point to reduced spending in COVID-sensitive sectors, such as travel and restaurants. And activity more broadly may also be affected as many workers are unable to report for work because of illness, quarantines, or caregiving needs.

Fortunately, health experts are finding that the Omicron variant has not been as virulent as previous strains of the virus, and they expect that cases will drop off rapidly. If the wave passes quickly, the economic effects should as well, and we would see a return to strong growth. That said, the implications for the economy remain uncertain. And we have not lost sight of the January 26,

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 42 of 45

2022 fact that for many afflicted individuals and families, and for the health-care workers on the front lines, the virus continues to cause great hardship.

The labor market has made remarkable progress and, by many measures, is very strong. Job gains have been solid in recent months, averaging 365,000 per month over the past three months. Over the past year, payroll employment has risen by 6.4 million jobs. The unemployment rate has declined sharply, falling 2 percentage points over the past six months to reach 3.9 percent in December. The improvements in labor market conditions have been widespread, including for workers at the lower end of the wage distribution, as well as for African Americans and Hispanics.

Labor demand remains historically strong. With constraints on labor supply, employers are having difficulties filling job openings, and wages are rising at their fastest pace in many years. While labor force participation has edged up, it remains subdued, in part reflecting the aging of the population and retirements. In addition, some who would otherwise would be seeking work report that they are out of the labor force because of factors related to the pandemic, including caregiving needs and ongoing concerns about the virus. The current wave of the virus may well prolong these effects. Over time, there are good reasons to expect some further improvements in participation and employment.

Inflation remains well above our longer-run goal of 2 percent. Supply and demand imbalances related to the pandemic and [to] the reopening of the economy have continued to contribute to elevated levels of inflation. In particular, bottlenecks and supply constraints are limiting how quickly production can respond to higher demand in the near term. These problems have been larger and longer lasting than anticipated, exacerbated by waves of the virus.

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 43 of 45

While the drivers of higher inflation have been predominantly connected to the dislocations caused by the pandemic, price increases have now spread to a broader range of goods and services. Wages have also risen briskly, and we are attentive to the risks that persistent real wage growth in excess of productivity [growth] could put upward pressure on inflation. Like most forecasters, we continue to expect inflation to decline over the course of the year.

We understand that high inflation imposes significant hardship, especially on those least able to meet the higher costs of essentials like food, housing, and transportation. In addition, we believe that the best thing we can do to support continued labor market gains is to promote a long expansion, and that will require price stability. We are committed to our price-stability goal. We will use our tools both to support the economy and a strong labor market and to prevent higher inflation from becoming entrenched. And we'll be watching carefully to see whether the economy is evolving in line with expectations.

The Fed's monetary policy actions have been guided by our mandate to promote maximum employment and stable prices for the American people. As I noted, the Committee left the target range for the federal funds rate unchanged and reaffirmed our plan, announced in December, to end asset purchases in early March. In light of the remarkable progress we've seen in the labor market and inflation that is well above our 2 percent longer-run goal, the economy no longer needs sustained high levels of monetary policy support. That is why we are phasing out our asset purchases and why we expect it will soon be appropriate to raise the target range for the federal funds rate.

Of course, the economic outlook remains highly uncertain. Making appropriate monetary policy in this environment requires humility, recognizing that the economy evolves in

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 44 of 45

unexpected ways. We'll need to be nimble so that we can respond to the full range of plausible outcomes. With this in mind, we will remain attentive to risks, including the risk that high inflation is more persistent than expected, and are prepared to respond as appropriate to achieve our goals.

To provide greater clarity about our approach for reducing the size of the Federal Reserve's balance sheet, today the Committee issued a set of principles that will provide a foundation for our future decisions. [In] these high-level principles, [we] clarify that the federal funds rate is our primary means of adjusting monetary policy and that reducing our balance sheet will occur after the process of raising interest rates has begun. Reductions will occur over time in a predictable manner primarily through adjustments to reinvestments so that securities roll off our balance sheet. Over time, we intend to hold securities in the amounts needed for our ample-reserves operating framework, and in the longer run, we envision holding primarily Treasury securities.

Our decisions to reduce our balance sheet will be guided by our maximum-employment and price-stability goals. In that regard, we will be prepared to adjust any of the details of our approach to balance sheet management in light of economic and financial developments. The Committee has not made decisions regarding the specific timing, pace, or other details of shrinking the balance sheet. And we will discuss these matters in upcoming meetings and provide additional information at the appropriate time.

To conclude: We understand that our actions affect communities, families, and businesses across the country. Everything we do is in service to our public mission. We at the Federal Reserve will do everything we can to achieve our maximum-employment and price-stability goals. Thank you. I look forward to your questions.

ELECTRONICALLY FILED - 2022 March 10 4:08 PM - SCPSC - Docket # 2021-324-WS - Page 45 of 45