

**CAPITAL ASSET PRICING MODEL (CAPM) COST OF COMMON EQUITY ESTIMATES
FOR WATER PEER GROUP, INCLUDING AMERICAN WATER, BASED ON 20-YEAR US TREASURY**

| | (1) | (2) | (3) | | (4) | |
|-------------------------------------|---------------------------------|-------------|----------------------------|--------------|---|--------------|
| Company Name | 20-Year Risk Free Rate | Beta | Market Risk Premiums | | CAPM Cost of Common Equity Range | |
| American Water Works Company | 4.26% | 0.88 | 5.00% | 6.00% | 8.65% | 9.53% |
| American States Water Company | 4.26% | 0.74 | 5.00% | 6.00% | 7.98% | 8.72% |
| California Water Service Group | 4.26% | 0.77 | 5.00% | 6.00% | 8.10% | 8.86% |
| Essential Utilities, Inc. | 4.26% | 0.81 | 5.00% | 6.00% | 8.34% | 9.15% |
| Middlesex Water Company | 4.26% | 0.75 | 5.00% | 6.00% | 8.00% | 8.75% |
| SJW Group | 4.26% | 0.68 | 5.00% | 6.00% | 7.68% | 8.37% |
| Average | | <u>0.77</u> | | | <u>8.13%</u> | <u>8.90%</u> |

Column 1 = Average of last 3 Months of 20-Year Treasuries obtained from the St. Louis Federal Reserve website at <https://fred.stlouisfed.org/series/GS20>

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole. I used a template provided by S&P Market Intelligence that calculates raw betas based on the Value Line approach. However, instead of using five years of data, I used four years of data. I then adjusted the raw beta using the following Blume formula:
Adjusted Beta = 0.35 + 0.67 * Unadjusted Beta

Column 3 = The market risk premium is similar to historical spreads and estimates provided by sources, such as Kroll.

Column 4 = (Column 1 + (Column 2 * Column 3)).

**CAPITAL ASSET PRICING MODEL (CAPM) COST OF COMMON EQUITY ESTIMATES
FOR WATER PEER GROUP, INCLUDING AMERICAN WATER, BASED ON 30-YEAR US TREASURY**

| | (1) | (2) | (3) | | (4) | |
|-------------------------------------|---------------------------------|--------------------|----------------------------|--------------|---|---------------------|
| Company Name | 30-Year Risk Free Rate | Beta | Market Risk Premiums | | CAPM Cost of Common Equity Range | |
| American Water Works Company | 4.19% | 0.88 | 5.00% | 6.00% | 8.58% | 9.46% |
| American States Water Company | 4.19% | 0.74 | 5.00% | 6.00% | 7.91% | 8.65% |
| California Water Service Group | 4.19% | 0.77 | 5.00% | 6.00% | 8.02% | 8.79% |
| Essential Utilities, Inc. | 4.19% | 0.81 | 5.00% | 6.00% | 8.26% | 9.08% |
| Middlesex Water Company | 4.19% | 0.75 | 5.00% | 6.00% | 7.93% | 8.68% |
| SJW Group | 4.19% | 0.68 | 5.00% | 6.00% | 7.61% | 8.29% |
| Average | | <u>0.77</u> | | | <u>8.05%</u> | <u>8.82%</u> |

Column 1 = Average of last 3 Months of 30-Year Treasuries obtained from the St. Louis Federal Reserve website at <https://fred.stlouisfed.org/series/GS20>

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole. I used a template provided by S&P Market Intelligence that calculates raw betas based on the Value Line approach. However, instead of using five years of data, I used four years of data. I then adjusted the raw beta using the following Blume formula:
Adjusted Beta = 0.35 + 0.67 * Unadjusted Beta

Column 3 = The market risk premium is similar to historical spreads and estimates provided by sources, such as Kroll.

Column 4 = (Column 1 + (Column 2 * Column 3)).

CAPITAL ASSET PRICING MODEL (CAPM) COST OF COMMON EQUITY ESTIMATES FOR WATER PEER GROUP, INCLUDING AMERICAN WATER, BASED ON KROLL NORMALIZED RISK-FREE RATE

| | (1) | (2) | (3) | (4) |
|-------------------------------------|----------------------------------|-------------|---------------------------|----------------------------|
| Company Name | Kroll Recommended Risk-free Rate | Beta | Kroll Market Risk Premium | CAPM Cost of Common Equity |
| American Water Works Company | 4.44% | 0.88 | 5.00% | 8.83% |
| American States Water Company | 4.44% | 0.74 | 5.00% | 8.16% |
| California Water Service Group | 4.44% | 0.77 | 5.00% | 8.27% |
| Essential Utilities, Inc. | 4.44% | 0.81 | 5.00% | 8.51% |
| Middlesex Water Company | 4.44% | 0.75 | 5.00% | 8.18% |
| SJW Group | 4.44% | 0.68 | 5.00% | 7.86% |
| Average | | <u>0.77</u> | | <u>8.30%</u> |

Column 1 = Kroll Most Recent Guidance on Normalized Risk-free Rate as of June 16, 2022
[Recommended U.S. Equity Risk Premium and Corresponding Risk-Free Rates \(kroll.com\)](#)

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole. I used a template provided by S&P Market Intelligence that calculates raw betas based on the Value Line approach. However, instead of using five years of data, I used four years of data. I then adjusted the raw beta using the following Blume formula:
 Adjusted Beta = 0.35 + 0.67 * Unadjusted Beta

Column 3 = Kroll's guidance as of June 6, 2024 on equity risk premium to be used in conjunction with normalized risk-free rate.
[Kroll Lowers its Recommended U.S. Equity Risk Premium to 5.0%, Effective June 5, 2024](#)

Column 4 = (Column 1 + (Column 2 * Column 3)).